Perspectives on Divine Action: Reflections on the Theological Legitimacy of Approaches to Divine Action in the V.O./C.T.N.S. Series "Scientific Perspectives on Divine Action."

Author	Simon J. S. Cross.
College	St. Stephen's House.
Date	Trinity, 2017.

No. of Pages	360
No. of words	99, 718

DPhil. Thesis

Table of Contents

Introduction 5
Overview of the VO/CTNS Series 8
Some Preliminary Considerations 18

Chapter 1.

How Can We Talk About Divine Action? 31
Is it Possible to Describe Divine Action? 32
The Meaning(s) of "Causal Joint" 37
Language and the Sociology of Knowledge 38
Agreeing a Language of Divine Action: Choices and Consequences 43
How Vocabulary and Trope Reflect (and Determine) Theories of Divine Action 57
Summary 64

Chapter 2.

Divine Action and the Biblical Data 67
Outlining the Role of Biblical Hermeneutics 68
Scientism as an Alternative Hermeneutical Perspective: Some Problems 70
The Challenges of Biblical 'Data' 72
Charting Some of the Historical and Sociological Influences on Contemporary Hermeneutics 86
Demythologised 'Liberal' Hermeneutics: Rudolf Bultmann 88
Demythologised 'Evangelical' Hermeneutics: The 'Biblical Theology' Movement 94
Charting the Possibility of Revelation. 108
Summary 118

Chapter 3.

Divine Action and the Natural Data.....121
Action, Cause, and Explanation.....122
Does God Need 'Gaps' to Act?.....127
Theological Responses to Methodological-naturalism.....143
Reconnecting Methodological-naturalism and Transcendence.....153
What Counts as an 'Adequate' Explanation?.....163
Summary.....166

Chapter 4.

Divine Action and the "Problem of Evil.".....169
Evil: A Real-World Example.....171
The Theological "Problem of Evil".....175
Theodicy in the VO/CTNS Series.....189
Remythologising 'Evil'.....210
Summary.....215

Chapter 5.

Transcendence, Immanence and the Role of Contemporary Cultural Frames.....217
This Secular Age.....218
Transcendence and Methodological-naturalism Revisited.....236
Transcendence and Epistemology:
Evaluating Clayton's Call for "Traction".....251
Summary.....259

Chapter 6.

A "new neo-Orthodoxy?" Comparing and Contrasting William Stoeger John Polkinghorne and Robert Russell on Natural Theology. 261

William Stoeger's Theological Perspective on Divine Action 263

John Polkinghorne's Theological Perspective on Divine Action. 273

A "new neo-Orthodoxy?" Phillip Jacobs' Analysis of the VO/CTNS Series. 285

Summary 293

Chapter 7.

Vernon White's Concept of Universal Special Divine Action (USDA) 295

White's USDA. 299

Co-ordinating Immanence and Transcendence 317

Responses to White's theory of USDA 323

Summary 325

Chapter 8.

Evaluating the Completed Map 327

Framing Future Dialogue 331

Conclusion 339

Bibliography 343

Introduction

As I write these words there hang, on the walls of St. John's College Durham, a collection of lithographs, by Salvador Dali, owned by the University of Durham. The collection comprises 104 images created between 1964 and 1965 illustrating verses of the biblical story from Genesis to the ascension. One of these lithographs is the depiction of Christ's crucifixion stylised with a specific item of scientific apparatus in Dali's mind: the cloud chamber.

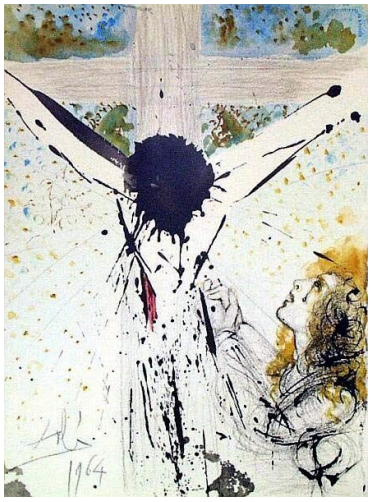


Fig. 1. Dali lithograph. Used by Permission.

In 1911 Charles Wilson began using his artificial 'cloud chamber' to explore electrical charging in the atmosphere. Following Ernest Rutherford's experiments with radiation, Wilson went on to demonstrate how ions produced by two types of Rutherford's atomic particles could produce visible condensation trails in one of his

cloud chambers.[1] More sophisticated Bubble and spark chambers now routinely track the trajectories of theoretical particles below the threshold of human visual acuity.

It strikes me that Dali's lithograph serves as a particularly appropriate icon for the discussion that follows. Let me explain how. The crucifixion is the *sine qua non* of the interface between creation and divine action, and yet even this pivotal moment is shot through with ambiguity.[2] As John's Gospel puts things,

> [27] "Now my soul is troubled. And what should I say — 'Father, save me from this hour'? No, it is for this reason that I have come to this hour. [28] "Father, glorify your name." Then a voice came from heaven, "I have glorified it, and I will glorify it again." [29] The crowd standing there heard it and said that it was thunder. Others said, "An angel has spoken to him." [30] Jesus answered, "This voice has come for your sake, not for mine.[3]

So, which was it? The unmediated voice of God? But God has no voice box. The voice of an angel? But who, or what, are angels and how can *they* speak? A natural phenomenon? Even granting the premise this was a divine act, the challenges involved in answering the question "How did this happen?" are obvious and should alert us to challenges in distinguishing between the message (divine action) and the medium (events in the created order).[4] Yet in science no less than in Christianity, not everything can be "seen" directly. In fact, 'Unobservable entities are now fundamental

---

[1] Andrea Sella, "Wilson's Cloud Chamber," Royal Society of Chemistry, Accessed September 9, 2016. https://www.chemistryworld.com/opinion/wilsons-cloud-chamber/8765.article.

[2] Dali's lithograph might therefore serve as iconic in second sense, for there has been much debate about the degree to which he held an authentic Christian faith.

[3] John 12:27-30. [All Bible references NRSV unless otherwise stated]

[4] This is hardly a recent realisation. The New Living Translation renders Ecclesiastes 11:5 'Just as you cannot understand the path of the wind or the mystery of a tiny baby growing in its mother's womb, so you cannot understand the activity of God, who does all things.'

to a great deal of science and especially physics', says James Ladymann.[5] The cloud chamber does *not* show the fundamental particle it is configured toward revealing but, rather, visual evidence for a particle that is forever beyond the experimenter's own senses. Is divine action like that? Is it *always* directly unobservable? That is a central question this thesis shall explore.

Granted divine action occurs, there will be better and worse ways to understand and describe it. No perfect way, no comprehensive way, no unambiguous way, but neither in a way that must be limited to the categories of scientific (methodological-natural) principle alone, or at least that is what I will argue. Consequently, this thesis maps key issues to help evaluate the options: theological perspectives for conceiving divine action. All of which condenses into a primary research question: "How may we speak "well" about divine action?"

Maps need a scale, whether it be the micron scale of, say, a section of the human genome, or the cosmological scale of galaxies and universes. One the test of a good map is whether it captures everything at its chosen scale. The map I propose to produce is, to coin a metaphor, "aerial". A map of continents rather than, say, a map of a local park. It purposefully informs at the scale of mountain ranges rather than molehills. After all, as the famous first view of "Earthrise", taken as Apollo 8 circled the moon in December 1968 demonstrates, valuable perspectives are possible at every scale.

[5] James Ladymann, "Does Physics Answer Metaphysical Questions?," in *Philosophy of Science: Royal Institute of Philosophy Supplement: 61*, ed. Anthony O'Hear (Cambridge: CUP, 2007), p. 180.



Fig. 2. “Earthrise” Apollo 8. NASA, 1968, public domain,

Some views, then, can be sweeping and yet informative, even while divulging topography that warrants other maps at other scales as well.

Overview of the VO/CTNS Series

In 1988, to celebrate the three hundredth anniversary of the publication of Newton’s *Principia,* Pope John Paul II sponsored a study week to strengthen and deepen the dialogue between science and theology.[6] This proved the genesis for a six volume, twenty-year programme of conferences co-sponsored by the Vatican Observatory (VO) and the Centre for Theology and the Natural Sciences (CTNS). Each topic was linked by the subtitle “Scientific Perspectives on Divine Action.”[7] A further co-

[6] The resulting essays were published in George V. Coyne, Robert J. Russell, and William R. Stoeger, *Physics, Philosophy and Theology: A Common Quest for Understanding* (Vatican City State: Vatican Observatory/CTNS, 1988).

[7] Robert J. Russell, Nancey C. Murphy, and C. J. Isham, *Quantum Cosmology and the Laws of Nature: Scientific Perspectives on Divine Action* (Vatican City State: Vatican Observatory/CTNS, 1993); Robert J. Russell, Nancey C. Murphy, and A. R. Peacocke, *Chaos and Complexity: Scientific Perspectives on Divine Action*, 2nd ed. (Vatican City State: Vatican Observatory/CTNS, 2000); Robert J. Russell, William R. Stoeger, and Francisco J. Ayala, *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action* (Vatican City State: Vatican Observatory/CTNS, 1998); Robert J. Russell, *Neuroscience and the Person: Scientific Perspectives on Divine Action* (Vatican City State: Vatican Observatory/CTNS 1999); Robert J. Russell, Specola vaticana., and Center for Theology and the Natural Sciences., *Quantum Mechanics: Scientific Perspectives on Divine Action* (Vatican City

sponsored volume was published under the subtitle 'Scientific Perspectives on the Problem of Natural Evil' [*PNE*] in 2007.[8] The overall goal was to foster profitable engagement and innovative mutual interaction in the fields of philosophy, theology, and natural science, although Henrick Neils Gregersen suggests that 'from a theological-contextual point of view the series can […] be seen as a constructive attempt to overcome the crisis of both liberal and neo-orthodox Protestant theology'.[9] Beginning with *Physics, Philosophy and Theology: A Common Quest for Understanding* [PPT] (1988), six further volumes resulted over the following two decades,

- *Quantum Cosmology and the Laws of Nature* [hereafter, *QCLN*] (1993).
- *Chaos and Complexity* [*CC*] (1995).
- *Evolutionary and Molecular Biology* [*EMB*] (1998).
- *Neuroscience and the Person* [*NP*] (1999).
- *Quantum Mechanics* [*QM*] (2001). And finally,
- *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress* [*TY*] (2007).

Additionally, the VO/CTNS also sponsored a volume called

- *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil* [PNE] (2008).

State: Vatican Observatory/CTNS, 2001); Nancey C. Murphy and William R. Stoeger, *Scientific Perspectives on Divine Action Twenty Years of Challenge and Progress* (Vatican City State: Vatican Observatory/CTNS, 2009).

[8] Nancey C. Murphy et al., *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, Scientific Perspectives on the Problem of Natural Evil (Vatican City State: Vatican Observatory/CTNS, 2007).

[9] Henrick Neils Gregersen, "Special Divine Action and the Quilt of Laws: Why the Distinction between Special and General Divine Action Cannot Be Maintained," in *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress*, ed. Robert J. Russell, Murphy Nancey, and William R. Stoeger (Vatican City State: Vatican Observatory/CTNS, 2007), p. 185.

In his contribution to (*TY*), Stoeger summarises four main theories of divine action [TDAs] from this scientific perspective.[10] The first approach, which attracted much attention in the VO/CTNS series, posits God acting through the opportunities provided by quantum indeterminacy.[11] The second posits God acting in a 'top-down' or 'whole-part' manner.[12] A third approach denies that determinism, whether at the quantum or classical level, rules out God's activity within history.[13] Finally, the Fourth approach argues there is enough ontological difference between our abstracted and instrumental human 'secondary' causal laws and underlying regularities and relationships for God to act as 'primary' cause without violating those underlying law-like relations.

Several distinct theological perspectives direct the series, but Philip Clayton observes in the concluding volume that,

> I am not sure that one can find in these volumes any defense of […] evangelical theism or an orthodox-theistic theory of divine action. This omission is unfortunate, since this has been the dominant view in the history of Christian theism and is the numerically dominant view among Christians outside of Europe today (including not only the United States but also most of the non-Western world).[14]

---

[10] Despite individual preferences, no contributor held that these TDAs serve as competitive, exclusive, or even comprehensive explanations of divine action.
[11] E.g., Robert J. Russell, "Divine Action and Quantum Mechanics: A Fresh Perspective," in *Quantum Mechanics: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, et al. (Vatican City State: Vatican Observatory/CTNS, 2001).
[12] E.g., A. R. Peacocke, "The Sound of Sheer Silence: How Does God Communicate with Humanity?," in *Neuroscience and the Person: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, et al. (Vatican City State: Vatican Observatory/CTNS, 1999).
[13] E.g., Keith Ward, "God as a Principle of Cosmological Explanation," in *Quantum Cosmology and the Laws of Nature: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, Murphy Nancey, and C. J. Isham (Vatican City State: Vatican Observatory/CTNS, 1993).
[14] Philip Clayton, "Toward a Theory of Divine Action That Has Traction," in *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress*, ed. Robert J. Russell, Murphy Nancey, and S.J. William R. Stoeger (Vatican City State: Vatican Observatory/CTNS, 2007), p. 103.

Clayton is surely right about this historical and numerical significance, and so this represents a potentially significant omission. Nonetheless, the perspective(s) he names involve contentious and, potentially, conflicting identities, and raise important and sometimes problematic questions of definition. Consequently, it is necessary to clarify the kind of perspective Clayton would seem to have in view.

The O.E.D. defines orthodoxy as 'following or conforming to the traditional or generally accepted rules or beliefs of a religion, philosophy, or practice'. There is an obvious historical component to orthodoxy when used in this sense, and to that extent the terms 'orthodox-theism' and 'traditional-theism', if not identical, certainly share enough features to imply a strong overlap.

Orthodoxy could then be defined using the various Councils and established creeds of the first millennia that arose as a response to social, political, and philosophical pressures forcing Christianity to clarify its boundaries and core beliefs.[15] Alister McGrath observes that the Nicaean creedal affirmation concerning the Incarnation, for example, 'can be seen as the climax of a long, careful, and exhaustive process of theological reflection and exploration.'[16] McGrath casts the results in terms of an "intellectual scaffolding" which has to be created around revelation rather than discovered as revelation. This scaffolding bears and reflects philosophical as well as theological considerations even while it supports something inherently mysterious, and in the first millennium it was Greek philosophical thought,

[15] Ryan Nash, for example, defines traditional Christianity by reference to the first seven Councils, culminating in A.D. 787. Ryan R. Nash, "Calvinism, Reformed Protestantism, and Bioethics: Are the Controversies Predestined?," *Christian bioethics: Non-Ecumenical Studies in Medical Morality* 20, no. 1 (2014), footnote 3, p. 137.
[16] Alister E. McGrath, *Heresy: A History of Defending the Truth* (London: SPCK, 2009). p. 25.

whether primarily Platonic or Aristotelian, that served as the superstructure for such reflection.

What then are the distinctive features of Western classical or orthodox theism? It is usually linked with scholastic theology and St. Thomas Aquinas. I shall defer detailed consideration of Aquinas' interpretation of Aristotelian causality: the four causes; *formal*, *material*, *efficient*, and *final*, until chapter 3. For now, I shall concentrate on Aquinas' relation of theology and philosophy and the resulting conception of God. Aquinas rejected Anselm's ontological argument, denying that the existence of God could ever be self-evident to the human mind. We can however *infer* God's existence rationally from careful inspection of the world around us. Aquinas consequently accepts Aristotle's philosophical approach in which metaphysics is the science of 'being' beyond any specific mode of that being.[17]

How though to protect the Divine mystery? Aquinas does so by distinguishing a third linguistic alternative between univocity and equivocation. This intermediate way is the way of analogy and Aquinas argues that God is an analogical 'being' who acts as 'primary' cause, bringing the world into existence *ex nihilo* and sustaining it in being. Sustenance includes those 'secondary' causes that are identifiable to science, but science is oblivious to primary cause. Aquinas also makes a second crucial distinction, this time between *act* and *potency* (potentiality), also to be discussed later, that has theological implications for understanding divine action. For if God is understood as *pure* act a route opens in the famous *five ways* to identifying God with

[17] Feser helpfully illustrates this distinction. Taking the essence of phoenix to mean a bird that regenerates itself through spontaneous combustion then '…if it is possible to understand the essence of a thing without knowing whether it exists, its act of existing (if it has one) must be distinct from its essence as a metaphysically separate component of the thing.' Edward Feser, *Aquinas: A Beginner's Guide* (London: Oneworld, 2009), p. 29.

the transcendent qualities of Aristotelian metaphysics.[18] Open theism and kenotic Trinitarianism both offer contemporary criticisms of this conception of divine character and action, and I shall explore those debates more fully as the thesis progresses. Nonetheless, Feser observes that,

> Though the idea of divine simplicity might seem odd or eccentric to some contemporary readers, it is historically speaking the mainstream view of God's nature within the classical theistic tradition, being defended not only by Aquinas, but by thinkers as diverse as St. Athanasius, St. Augustine, St. Anselm. Maimonides, Avicenna, and Averroes, to name just a few. It is affirmed in such councils of the Roman Catholic Church as the Fourth Lateran Council (1215) and Vatican I (1869-1870).[19]

Though not the only theological perspective defended in antiquity, this suggests a working definition of "orthodox-theism" that holds divine atemporality, aseity etc., as necessary features of a TDA.

What might Clayton have in mind when he notes the absence of an evangelical-theist perspective? Its etymological roots lie in εὐαγγέλιον (*euangelion)* the Greek term for "good news". This transliteration exists in the middle ages where, for example, Isaiah was described as the evangelical prophet.[20] But in the sixteenth century it came to be used more specifically within the Protestant Reformation of those remonstrants that rejected late-medieval ecclesial corruption in the light of certain key theological values. The historian David Bebbington has developed an

---

[18] Feser points out that 'while it is sometimes claimed that Aquinas agreed with thinkers like Moses Maimonides that our knowledge of God is purely negative, […] this was not in fact his view; indeed, he explicitly repudiates it (*ST* 1.13.2). The *via negativa* obviously only gives us negative knowledge of God, but the *via causaliatis* and the *via eminentia* give us some positive knowledge too', ibid., p. 122.
[19] Ibid., p. 127.
[20] Mark A. Noll, "What Is "Evangelical?", in *The Oxford Handbook of Evangelical Theology*, ed. Gerald R. McDermott (Oxford: Oxford University Press, 2010), p. 21.

influential quadrilateral definition of post-Reformation evangelicalism with the following characteristics.[21]

1. *Conversionism*. This entails a personal appropriation of salvation and a concomitant turning away from sin, but also a collective effort in spreading the gospel to others.
2. *Activism.* In one sense, this clearly flows from conversionism, but Bebbington points out how this also transformed the role of clergy in the late eighteenth century, from gentry concerned primarily with administering sacramental service, to more industrious kinds of pastoral work.[22]
3. *Biblicism*. Bebbington notes a preference for resolving doctrinal questions by appeal to the teaching of the NT epistles rather than the gospels, but seldom to the extent of obscurantism. Evangelicals agree that the Bible is the inspired word of God, though there are disagreements over the implications of that inspiration.[23]
4. *Crucicentrism*. The cross links fall and salvation in a particularly dominant way. Bebbington notes how 'the standard view of Evangelicals was that Christ died as a substitute for sinful mankind. […] Belief in a substitutionary atonement originally distinguished Evangelicals from even the strictest divines of other schools.'[24]

It must be emphasised, however, that even common themes allow for significant theological diversity within the emerging Evangelical fold. Thus, Noll notes how in Wesleyanism, the Arminian understanding of free will 'balanced' the strict Calvinism of some early evangelicalism, 'and thereby helped to establish a long-lasting agenda for intra-evangelical theological debate.'[25] This enduring debate over the nature of freedom and its relation to divine action features heavily in the background of discussion in the VO/CTNS series.

---

[21] David Bebbington, *Evangelicalism in Modern Britain: A History from the 1730s to the 1980s* (London: Unwin Hyman, 1989), pp. 2-17.
[22] Ibid., p. 11.
[23] Ibid., p. 13.
[24] Ibid., p. 15.
[25] Noll., p. 27.

As Mark Noll and others argue, however, appeal to Scripture as the bedrock of epistemic authority is a crucial hallmark of evangelical-theism, as reflected in the order of the nine founding commitments of the Evangelical Alliance, established in 1846.[26]

1. The Divine inspiration, authority, and the sufficiency of Holy Scripture.
2. The right and privacy of private judgement in Scriptural interpretation.
3. The Unity of the Godhead in the Trinitarian Persons.
4. The utter depravity of human nature as a consequence of the Fall.
5. The Incarnation and the atoning work of the Son, and His mediatorial intercession.
6. Justification by faith alone.
7. The role of the Holy Spirit in conversion and sanctification.
8. Immortality of the soul, resurrection of the body, judgement of the world and the eternal blessedness of the righteous and eternal judgement of the wicked.
9. Divine institution of Christian ministry and the perpetual obligation of Baptism and the Lord's Supper.

We have already observed the link between Greek philosophical transcendentals and the divine character as timeless, unmoved, and therefore impassible in orthodox-theism. This view of God has come under sustained pressure from two quarters in the last century. First, continued philosophical discussion of the relation between human freedom and causal determinism.[27] Secondly, a Trinitarian emphasis on the social relations of the Godhead and their implications for the human and Divine

[26] This list is taken with small modifications from that offered by Noll, p. 29. Bebbington also highlights an increasing awareness of the role of sociological characteristics in addition to intellectual characteristics in differentiating fundamentalism from evangelicalism or liberalism. Chapter 5 will show how this sociological dimension of epistemology proves pivotal to understanding the form of the VO/CTNS series.

[27] In addition to the discussion to come see, Alan R. Rhoda, "Generic Open Theism and Some Varieties Thereof," *Religious Studies* 44, no. 2 (2008), pp. 225-234; Niels Henrik Gregersen, "Deep Incarnation and Kenosis: In, with, under, and As: A Response to Ted Peters," *Dialog* 52, no. 3 (2013), pp. 251-62.

relationship.[28] This has generated a tension between philosophical and biblical portrayals of God that has sparked fierce debate amongst evangelicals, culminating in the Evangelical Theological Society (ETS) adopting the Chicago Statement on Biblical Inerrancy.[29] The procedure, and demands, of biblical interpretation are thus of central importance to the theological debate about divine action. As the preface to the ETS Chicago Statement puts it,

> The authority of Scripture is a key issue for the Christian Church in this and every age. Those who profess faith in Jesus Christ as Lord and Saviour are called to show the reality of their discipleship by humbly and faithfully obeying God's written Word. To stray from Scripture in faith or conduct is disloyalty to our Master. Recognition of the total truth and trustworthiness of Holy Scripture is essential to a full grasp and adequate confession of its authority.[30]

How then may we clarify the difference between orthodox-theism and evangelical-theism? As Clayton rightly observes, in the VO/CTNS series '*there is vast disagreement on the epistemic rights of theologians.*'[31] This disagreement follows, in turn, from what Clayton sees as the core problem the series faced, 'the relationship between science, metaphysics and theology.'[32]

---

[28] Clark H. Pinnock et al., *The Openness of God: A Biblical Challenge to the Traditional Understanding of God* (Downers Grove, Illinois: Intervarsity Press, 1994). For a defense of open theism see *inter alia*, John Sanders, *The God Who Risks: A Theology of Providence* (Downers Grove: InterVarsity Press, 1998); Gregory A Boyd, *God of the Possible: A Biblical Introduction to the Open View of God* (Ilinois: Baker Books, 2000). For its rejection see *inter alia*, Millard J. Erickson, *God the Father Almighty: A Contemporary Exploration of the Divine Attributes* (Grand Rapids: Baker Books, 1998). Bruce A. Ware, *God's Lesser Glory: A Critique of Open Theism* (Leicester: Apollos, 2000).
[29] Evangelical Theological Society, "The Chicago Statement on Biblical Inerrancy," Accessed September 20, 2017. http://www.etsjets.org/files/documents/Chicago_Statement.pdf. For a pithy overview of the dispute and its legacy see Jeff Robinson, "Is open Theism Still a Factor 10 years After the ETS Vote? Accessed September 20, 2017. https://www.thegospelcoalition.org/article/is-open-theism-still-a-factor-10-years-after-ets-vote
[30] ETS, "Chicago Statement", p. 1.
[31] Clayton, *Towards a Theory of Divine Action*, p. 92.
[32] Ibid., p. 96ff.

What is the relation of philosophy to science, and is divine action best understood philosophically or biblically? The debate over open theism within evangelicalism illustrates the difference this makes to discussion of divine action, because the open theist derives a metaphysical vision of God from her reading of Scripture that is significantly at odds with the interpretation of those same scriptures a Thomist will offer. This question will be taken up more fully in chapter 2.

Given the (necessarily) simplifying aim of clarifying terms rather than resolving complex issues, we can distinguish three broad positions on the relation between Scripture and philosophy. In the liberal perspective, Revelation is subsumed as a sub-species of epistemology to be judged using philosophical tools and analysis. In the orthodox and classical tradition of Aquinas, philosophy may furnish additional truths about God - of a limited, but nonetheless valid, kind. This implies, however, that philosophy can also signal and offer corrections to defective interpretations of Scripture. In the contemporary evangelical tradition, however, Scripture holds the preeminent epistemic role in view of the evangelical understanding of inerrancy and Revelation. But metaphysics is unavoidably present in all theorising. Hence the tensions – and potential differences – between orthodox-theism and evangelical theism in evaluating Scripture as well as scientific perspectives on divine action.

Clayton rightly, in my view, identifies epistemology as the crux for evaluating the perspectives in the series, although I will demur from his route to resolving the conflicts. His co-identification of orthodox-theism and evangelical-theism is too broadly drawn and has needed clarification. More importantly, however, that clarification will help in showing not only how biblical interpretation is central to theological perspectives on divine action, but why Clayton is right to note the absence

of what he labels an evangelical-theist or orthodox theist (hereafter, (*e-t/o*-t)) perspective in VO/CTNS series.[33]

Some Preliminary Considerations

Though I think it possible to do so, this thesis will not defend the metaphysical assumption that God exists. I have already indicated another methodological choice: to draft a "map" of divine action, with its concomitant choice of scale.

A further methodological decision reflects my own strengths and weaknesses. I have no formal scientific education beyond secondary school, but I do have formal theological education. So, I will not critique the theoretical legitimacy of any scientific theory. Instead, and in view of the fundamental challenges involved in conceiving divine action noted at the very outset, I shall evaluate aspects of some of the main philosophical, hermeneutical, and theological perspectives that superintend the series' arguments.

A third methodological choice also needs highlighting. Given the breadth of topics covered: a total of 91 chapters by 51 different authors, a degree of conceptual abstraction and illustrative sampling is unavoidable. Consequently, I propose critically to appraise the theological perspective on divine action embodied by four representative contributors: Wesley Wildman, Robert Russell, John Polkinghorne, and William Stoeger S.J.

[33] One academically respectable technique would be to label this an "(*e-t/o*-t) model", but I forswear that approach for reasons that will become clear in chapter 1.

Wesley Wildman is a theologian and philosopher with a first-class degree in mathematics and a Ph.D. in philosophy of religion. Wildman contributed articles to *CC, EMB, NP, TY,* and the post series volume (*PNE*). His theological perspective is selected because, almost uniquely among contributions to the series, he adopts a staunchly apophatic theological approach, interpreting Christianity through the philosophical lens of the Modern Secular Interpretation of Humanity (MSIH).

Robert Russell holds a Ph.D. in experimental physics, is ordained in the United Church of Christ, and founder of CTNS. Russell was therefore on the steering committee for the VO/CTNS series. He is chosen because he steadfastly defends the possibility of identifying divine action objectively, and the need for ontological gaps in which for God to act without violating ordinary background causal relations.

John Polkinghorne is a prominent member of the small group of 'scientist-theologians' who have been highly influential in the arena over the past forty years.[34] Polkinghorne has a Ph.D. in physics, is an ordained Anglican Priest, and contributed articles to *PPT, CC, QCLN, and QM*. Much of his work explores what Austin Farrer called the 'causal joint' that connects divine action with the world.[35] Polkinghorne does this through the theological lens of *kenosis*. While sharing Russell's ambition to find ontological openness for divine action, he prefers chaos theory to quantum indeterminism for locating that space. Polkinghorne is chosen to determine whether, as an orthodox Anglican, he in fact represents that (*e-t/o-t*) theological perspective that Clayton insists is absent.

[34] Other names commonly associated with this title being Arthur Peacocke, and Ian Barbour.
[35] Austin Farrer, *Faith and Speculation: An Essay in Philosophical Theology, Containing the Deems Lectures for 1964* (London: Black, 1967).

William Stoeger is a cosmologist with a Ph.D. in astrophysics and an ordained Jesuit priest. Stoeger was also on the VO/CTNS steering committee although, as we shall see, his theological preference for primary and secondary cause differs in important ways from Russell's non-interventionist approach. His orthodox but Catholic theological perspective is engaged to contrast with Polkinghorne's, and to illuminate significant differences between the Catholic, (*e-t/o-t*), and the theological perspective of Russell and Polkinghorne.

The demands of space necessitate bracketing out some important themes and issues. Consequently, I will not discuss miracles, angels, the nature of time, or for that matter fundamental theological categories like eschatology. I will concentrate instead on a narrower range of issues because of their significance for interpretation, crucicentrism and implications for soteriology. I am looking specifically for absence or difference rather than similarity or overlap, but this risks a wrong impression, so let me affirm from the start that, in Christ, more unites the faithful than divides them, whatever their specific denomination or theological tradition. This is no less true in the VO/CTNS series. In his preface to Mere Christianity, C.S. Lewis points out that 'the questions which divide Christians from one another often involve points of high Theology or even of ecclesiastical history, which ought never to be treated except by real experts'. Recognising the problems and pitfalls of engaging in border disputes he then writes,

> It is at her centre, where her truest children dwell, that each communion is really closest to every other in spirit, if not in doctrine. And this suggests that at the centre of each there is a something, or a Someone, who against all

> divergencies of belief, all differences of temperament, all memories of mutual persecution, speaks with the same voice.[36]

This is a crucial point because the demands of space force me to gloss over substantial areas of theological agreement in order to look for gaps and to evaluate differences that would support Clayton's evaluation, but this necessarily comes at the expense of acknowledging common concern about, for example, the centrality of the Trinity, Incarnation, Cross, or eschatology.[37] This unavoidable imbalance must not be taken to imply unalloyed criticism of either individual perspectives or the series as a whole.

I propose, then, not only to determine to what extent Clayton's assessment is correct but also to suggest how that perspective might inform the VO/CTNS debate, assisting the task of speaking as well as possible about divine action.

To summarise the conclusions, I will argue the following: that Clayton is correct and an important theological perspective is absent from the VO/CTNS series. This (*e-t/o-t*) perspective has been marginalised for large scale sociological and philosophical reasons, but when those reasons are more closely scrutinised this marginalisation proves less metaphysically justified than its absence might imply.

Moreover, from this (*e-t/o-t*) theological perspective, Wildman's apophatic rejection of Revelation and personal analogy and his reliance on the anthropology of the Modern Secular Interpretation of Humanity (MSIH) is too stark and, ultimately,

---

[36] I grateful to Andrew Pinsent for pointing out to me Lewis's way of expressing both solidarity and difference within different theological communions. See Lewis, C. S., *Mere Christianity* (London: Collins, 2012). The first quote is from p. viii, the second, p. xii.

[37] The series itself brackets out aspects of divine action such as grace, and the demands of space force me to also bracket out any extended discussion of miracles or the possibility of disembodied agents such as angels.

philosophically anthropocentric. Robert Russell's theory of non-interventionist objective special divine action (NIODA) is theologically difficult in the context of *creatio ex nihilo,* because it rests on a problematically analytic distinction between 'general' and 'special' divine action and a theologically questionable ontology of quantum indeterminism. John Polkinghorne might be thought closest to providing the (*e-t/o*-t) perspective Clayton says is absent in the VO/CTNS series, but Polkinghorne's theological perspective rests on a philosophically problematic interpretation of *kenosis* and a 'free-process' ontology that comes perilously close to a process-theological metaphysical theodicy. These differences of perspective all stem from differing interpretations of 'cause'.

Beyond these specific difficulties, three larger theological concerns arise. First, a concern with the attention being paid to the work that language itself is performing in the VO/CTNS context. Secondly, a concern about science's right to epistemically constrain theology's capacity to say *more* than science itself can about divine action. And finally, a concern with the way the series' scientific perspective is used to trump traditional doctrinal beliefs.

A few key concepts are worth highlighting for the discussion to follow. First, the distinction between general divine action (GDA) and special divine action (SDA).

GDA/SDA. Over the centuries, various theological traditions have developed a diverse taxonomy for describing divine activity. These include not only general distinctions of providence such as that between primary and secondary cause, but also special providences such as miracles. SDA also includes broader theological ideas like grace, inspiration, and for some traditions the creation of the human soul, that are inherently beyond the scope of methodological-natural investigation and therefore

absent from the series' primary discussions. Moreover, the Incarnation is usually seen as a unique kind of SDA. This methodological focus on 'scientific perspectives' in the VO/CTNS series thus restricts the scope of discussion to a restricted range of investigation with unavoidable consequences for the scope of this thesis also. This methodologically induced imbalance is offset, if only to a limited extent, by defending the value of narrative and literature for broadening the terms of discussion about divine action. Yet even this less bracketed approach cannot exhaust the theological meaning(s) of divine action *per se*.

Indeed, even this restricted domain presents a challenging landscape. How shall we understand primary cause? And how shall we regard, for example, biblical accounts of SDA? If, by SDA, we mean to refer to events beyond the course of ordinary natural explanation alone, a few philosophical responses – with theological implications - are possible. First, we could psychologise the account's meaning, or otherwise confer on it no realist connotation. Secondly, we may follow Hume in regarding such accounts as entailing 'a violation of the laws of nature'.[38] If these laws are understood as rationally inviolable, the biblical account will then be laid aside as epistemically unwarranted. A third approach sees laws of nature as mere approximations of a deeper, as yet unrecognised, reality. We may then follow Aquinas in regarding the event as brought about specially by God exceeding the [known] productive power of nature.[39] A fourth philosophical alternative posits God acting to bring SDA about in ontological 'gaps' that one philosophical interpretation of quantum indeterminism, for example, takes to be a feature of the created order.

[38] David Hume and P. F. Millican, *An Enquiry Concerning Human Understanding*, Oxford World's Classics (Oxford: OUP Oxford, 2007), p. 83.
[39] Aquinas, *Summa Theologiae*, 1, q. 105, aa. 6-8.

For the purposes of this thesis, my working definition of SDA will be 'a divine action that can be grounded both ontologically and relationally in some realist sense.' I will therefore argue that SDA is 'real', but that to be 'special' it must also be distinguishable by an inherently relational component. I will also argue, however, that this ontological sense of 'real' divine action *per se* - which is more than mere divine appropriation of natural action - is inherently mysterious. We may describe it analogically but we cannot model it using natural cognates.

Given its significance for contemporary discussion of divine action, how analytic the GDA/SDA distinction can be and whether it is, ultimately, a sorites-type paradox will also prove a significant issue.

Transcendence/Immanence. Like GDA, transcendence refers to a non-physical realm, and one thus beyond the reach of scientific instrumentation. Transcendence grounds existence and is, therefore, a metaphysical philosophical concept. As such, it may, or may not, exist. Immanence refers to material reality and is, theoretically at least, available to scientific instruments.

Methodological-naturalism/Revelation. The tension between transcendence and immanence finds a corollary in the tension between methodological-naturalism and Revelation.[40] Methodological-naturalism is a principle of scientific investigation, although whether it really can be bracketed off from metaphysical naturalism will also prove an important question. Revelation can be rendered with or without the capital letter depending upon whether it refers to a particularised act of divine revelation or the unified act of divine Revelation as a transcendent whole. This meta-act of divine

[40] The term 'methodological-naturalism' is rendered with and without the joining hyphen depending on the author. For stylistic consistency, I will, wherever possible, use the term as a compound in order more clearly to differentiate it from metaphysical naturalism even though, as chapter 3 will show, this difference may prove to be semantic rather than epistemic.

Revelation is preserved canonically and doctrinally reflected upon in the historical and doctrinal body of Tradition. Whether divine revelation is possible and how to relate the data of science to the data of R/revelation is a perennial tension.

Hermeneutics/habitus. Two final terms are worth introducing at the outset. Hermeneutics considers the theoretical framework that attends interpretation. Science and theology both deal with 'data', and since 'data' always requires interpretation, attention needs to be paid not only to what hermeneutical stance an individual or communion adopts, but also why they prefer that interpretative approach. This 'Why?' demands a broader consideration of the role that sociology plays, both at the level of the community, and for the individual. We each hold a constellation of views about transcendence; immanence; what might count as revelatory; and the scope of Revelation; that gives rise to a 'hermeneutical stance'. This constellation involves not just belief but also praxis, and it exceeds reason alone. It will be referred to collectively as *habitus.*

With these basic terms and distinctions introduced, let me now offer an overview of the thesis' structure. Since one cannot map what cannot be recognised or represented, chapter 1 queries the role of language *per se* for representing Divinity and transcendence. The inherent tension language possesses and its capacity to intimate transcendence is illustrated by juxtaposing Rowan Williams' exploration of 'the edge of words' with Nicholas Saunders bleak assessment that the VO/CTNS signifies a 'crisis' for contemporary theology. I suggest why Saunders may have been driven to such a bold, if negative, viewpoint, concluding that, however unavoidably provisional and partial language remains, it remains metaphysically possible to ground the claim that speech about God can be truthful. I then tentatively explore how best to frame that speech, suggesting the dialogue on divine action might be served by

a renewed analysis of its dominant tropes and sociological influences, and emphasising the value of deploying a plurality of epistemic sources for framing dialogue about divine action.

Given the influence of Scriptural interpretation to differing theological perspectives, chapter 2 presses the conclusion that we *can* speak truthfully about God to ask, "How do we do so?" The multi-levelled methodological demands of biblical hermeneutics illustrate how tensions between immanence and transcendence generate a range of theological choices at each level - choices illustrated in the differing hermeneutical stances of Wildman, Russell and Polkinghorne and their differences from the (*e-t/o-t*) perspective. Bultmann's demythologisation; the Biblical Theology movement; Open theism; and kenotic theology and philosophy in the late twentieth century are also discussed to provide deeper context. I conclude that the demands of language and revelation suggest fully demythologised TDAs are inadequate to the transcendent 'data' that the (*e-t/o-t*) perspective reflects. Vanhoozer is introduced to exemplify a theologically adequate, remythologising biblical hermeneutic from this (*e-t/o-t*) perspective.

Chapter 3 explores the limits of methodological-naturalism for talking about divine action. In the VO/CTNS series, tensions between transcendence and immanence coalesce around a debate over the meaning, and scope, of divine 'cause' that is charted by evaluating how Wildman, Russell and Polkinghorne answer the question of whether God needs 'gaps' in which to act. I pick up questions and concerns about the meaning of 'action' identified in the two previous chapters to argue that the boundary between methodological-naturalism and metaphysical speculation is poorly defined in the VO/CTNS series. I then draw on the speech-act work of Nicholas Wolterstorff to demonstrate that efficient causation alone cannot

exhaust the meaning of ‘cause’ when considering potential TDAs, illustrating thereby why Gregory Dawes, in his investigation of methodological-naturalism, is right to conclude that science cannot rule out divine action *in principle*.

The problem of evil is a major background concern for many contributors to the VO/CTNS series and, though this presents something of an organisational difficulty, it renders the topic too important to defer. Yet evil is easily exacerbated if treated only in abstract, intellectual terms. Consequently, chapter 4’s discussion is framed around an immanent test case: the crash of an Air France Concorde in July 2000. This chapter charts three main theological perspectives on evil; apophaticism of the kind Wildman postulates; the Augustinian approach by which evil is a contingent consequence of an angelic and human “Fall”; and an Irenaean developmental theodicy, in which evil and suffering are necessary consequences of the “only way” creation can be “free”. The accident provides a test case for evaluating how the apophaticism of Wildman and the free-process defense of Polkinghorne (the latter almost universally endorsed by contributors to *PNE*) cash out. The role of Revelation and Tradition, particularly in light of Vanhoozer’s programmatic remythologisation is then brought into service in potential partnership with Russell’s idea of creative mutual interaction (CMI), to reject a thoroughly demythologised doctrine of the Fall in pursuit of scientific ‘traction’ and to call, instead, for a remythologisation that adequately maintains the core doctrinal relation between agential and natural evil represented by Revelation and Tradition. I argue that accommodating the (*e-t/o-t*) perspective raises a tricky question about the historical particularity of the Fall that deserves further thought.

In each chapter thus far, a tension between immanence and transcendence motivates disparate theological perspectives. In chapter 5 this tension is itself brought

squarely into the foreground to evaluate its provenance and its form. Drawing on recent sociological theories of secularisation and its effects on epistemology, detailed by Charles Taylor and Peter Harrison, I plot the theological approaches of Wildman, Russell and Polkinghorne, allowing me to pick up several themes from earlier chapters, including, again, the nature and scope of freedom and causation. This deeper background serves to highlight historical and sociological factors shaping individual and communal preferences for particular TDAs, and for relating science to theology. Ultimately, I argue that there are strong grounds for challenging Philip Clayton's insistence that any theologically adequate TDA must entail certain forms of traction with the scientific perspective.

Charting these large-scale, and deeper background, "unthought" influences on the VO/CTNS series allows me to clarify whether Clayton is right that the (*e-t/o-t*) perspective is unrepresented in the series. The answer entails remapping the centre of VO/CTNS debate – the meaning of cause - at a more precise scale, and chapter 6 achieves this by comparing Stoeger's Catholic theological perspective with Polkinghorne's Anglican perspective, again highlighting the importance of metaphysical commitments to faith claims. I then draw on Philip Jacobs's analysis of the VO/CTNS series to clarify how Polkinghorne differs from Russell as well as Stoeger, but conclude that no view represents an (*e-t/o-t*) perspective.

Given the (*e-t/o-t*) perspective *is* missing from the VO/CTNS series, how though to remedy its absence and to what benefit? Chapter 7 begins by positing the core demands of an (*e-t/o-t*) TDA, and where Wildman's, Russell's and Polkinghorne's approaches might fall short in some area. Vernon White's important, but, in my view, under-appreciated overtly theological contribution in *The Fall of the Sparrow,* and his more recent writings, are then jointly evaluated to show how his

TDA of universal special divine action (USDA) better meets the theological demands of this (*e-t/o-t*) TDA.

To summarise the conclusion: we speak 'well' about divine action when we preserve paradox, recognising the pressure we place on the words we use: a principle that rules out both univocity *and* the two languages perspectives. But in that case, Nicholas Saunders's depiction of the VO/CTNS series as engendering a crisis for contemporary theology is rather overdrawn. Picking up on themes identified in the series own concluding volume, I therefore emphasise three key ingredients for fruitful dialogue; attention to transcendence; to the philosophical limits of methodological-naturalism; and to the work that the words we use for describing divine action are being asked to perform. Ultimately, I conclude that the (*e-t/o-t*) perspective has been marginalised for large scale philosophical and sociological reasons rooted largely in the Enlightenment and producing a world structure that frames the VO/CTNS series' dialogue in a very specific way. But when *this* broader "unthought" world structure is itself evaluated, it transpires that those reasons adduced for discounting the (*e-t/o-t*) valuation of Revelation and Tradition are far less metaphysically secure than the series' single, common, frame should be taken to imply.

Chapter 1

How Can We Talk About Divine Action?

How can we talk about divine action? In 2002 Nicholas Saunders presented a detailed but highly negative evaluation of the findings of the VO/CTNS series. He introduces the conclusion to his book by asking: 'Would it be correct to argue [considering his assessment] that the prospects for supporting anything like the 'traditional understanding' of God's activity in the world are extremely bleak?' His unswerving reply,

> To a large extent the answer to this question must be yes. *In fact it is no real exaggeration to state that contemporary theology is in crisis.* […] a wide range of doctrine is dependent on a coherent account of God's action in the world, and we simply do not have anything other than bold assertions and a belief that SDA takes place.[1]

Yet, by contrast, Rowan Williams in his 2013 Gifford Lectures: *The Edge of Words*, makes the following observation.

[1] Nicholas Saunders, *Divine Action and Modern Science* (Cambridge: CUP, 2002), p. 215. Here and throughout the essay italics are original unless specified.

> Revelation does not fill a gap, but shows why the gap is there, not resolving difficulty but offering a perspective in which difficulty is what makes sense and what we must become accustomed to.[2]

My purpose in this chapter is not only to show why I think Williams' understanding of revelation challenges Saunders conclusion with considerable force, but also to show why Saunders was driven to such a bold, if negative, viewpoint. I will then indicate how dialogue on divine action might be served by a renewed analysis of the way that, in language, form and content are intimately connected and suggest the value of additional ways of framing the conversation with the potential to shed new light on old problems.

To do so, however, the argument will need to navigate two related steps. First, it must show how to ground the claim that speech about God, no matter how provisional or partial, can nonetheless be true. Secondly, it must show how to frame that speech to represent divine action well.

Is it Possible to Describe Divine Action?

The challenge in referring to "God" is whether it is possible to denote what cannot be isolated, abstracted, or directly compared with *any* other object or substance. Thomas Paine's influential Eighteenth-century pamphlet *The Age of Reason* addresses the finitude and caprice of trying. To Paine the problem with the Bible is that the

> … continually progressive change to which the meaning of words is subject, the want of universal language which renders translation necessary [and

[2] Rowan Williams, *The Edge of Words: God and the Habits of Language* (London: Bloomsbury, 2014), p. 180.

> copying errors, are] evidences that human language, whether in speech or in print, cannot be the vehicle of the Word of God.[3]

But are the short, stiff, restraining leash of positivism or the severing of *every* ontological attachment in the face of arbitrary 'language games' the only options? Positivism, whether logical or empirical, places excessive emphasis on embodiment by limiting all knowledge to the bodily capacities of reason (ration), and sensory experience (heat, light, sound etc.), alone. Equally, however, insisting upon a totalising arbitrariness in language is a *non-sequitur*, consumed in the performatively self-contradictory argument that *all* language is arbitrary, except, of course, the language of the claim itself.

More recently, therefore, Rowan Williams has argued that 'representing' God is neither impossible nor a 'marginal eccentricity' but is, instead, consistent with 'the more familiar and less acknowledged oddities' of language itself.[4] This is not to suggest that meaningful representation is trivially straightforward. Williams recognises the problem such 'oddities' reflect, endorsing Michael Leunig's claim that 'the word "God" cannot be grasped scientifically, rationally, or even theologically without it exploding. It can only be held lightly and poetically.'[5] Representation is, moreover, a freighted concept, though Williams is fully attuned to the metaphysical issues he explores, summarising his meaning thus,

> … my own use of [the term] 'representation' is meant to draw attention to the interesting fact that we can claim to be speaking truthfully about many aspects of our environment without actually trying on every occasion to reproduce or

[3] Thomas Paine, *The Age of Reason. Part the First Being an Investigation of True and Fabulous Theology* (London: R. Carlile, 1826), p. 16.
[4] Williams, *Edge of Words*, p. x.
[5] Ibid., p. 34.

> imitate it. To say that a form of words or images 'represents' reality is to leave ourselves free to recognise that language may be truthful even when it is not descriptive in the strict sense.[6]

Yet how shall we found truth claims? In the case of divine action, we must first ground the possibility of representing the Divine *per se* and, only then, ground the form(s) that our language choices adopt.

One philosophical strategy holding particular significance for dialogue about divine action is the appeal to causal language and the argument that 'God', understood as cause of causes, provides the best explanation of existence *per se*. This is reflected theologically in the familiar motif of the Genesis creation narratives and the opening chapter of John's gospel, but recent developments in fundamental physics and cosmology reaffirm the enduring presence of what we would now label 'transcendent' questions about cause: questions that impinge on science.[7]

An alternative to rational discovery of God is the appeal to divine self-disclosure through revelation. The reformed epistemology of Alvin Plantinga, for example, insists that revelatory belief is properly basic and need not rest upon additional premises or arguments.[8] In response to objections that, if so, then epistemologically speaking "anything goes", such as Richard Dawkins's polemically exemplified Flying Spaghetti Monster,[9] Plantinga argues that 'theory must accommodate itself to our practical judgements, not the other way around.'[10] Thus,

---

[6] Ibid., p. x-xi.
[7] For a relatively recent exploration of the way these causal questions are influencing contemporary cosmology see Alexei V. Nesteruk, "The Quest for Transcendence in Theology and Cosmology," in *The Blackwell Companion to Science and Christianity*, ed. J. B. Stump and Alan G. Padgett (Oxford: Wiley-Blackwell, 2012), pp. 554-64.
[8] Alvin Plantinga, *God and Other Minds: A Study of the Rational Justification of Belief in God* (New York: Cornell University Press, 1990).
[9] Richard Dawkins, *The God Delusion* (London: Bantam Press, 2006).
[10] Alvin Plantinga, *Warranted Christian Belief* (New York: Oxford University Press, 1999), p. 134.

talking about divine action is justified even where the *detailed* content of that representation may turn out to be incomplete. In short, Plantinga's account suggests that, as Jay Wood puts it, talk of God reflects a belief that 'parallels [other] perceptual beliefs'.[11]

Of course, these are not dichotomous choices. It is perfectly possible to combine empirical and revelatory data with philosophical principle. Indeed, it is now more commonly appreciated that the classical proofs offered by Anselm and Aquinas were never meant to be logically unassailable arguments for God's existence but to show what kinds of argument follow *from* the biblical revelation of God's nature.

Yet, even granting the conceptual barrier is surmountable, a practical barrier remains: *how* to represent the unreproducible? Contemporary epistemology recognises two fundamental constraints upon human modes of knowing: that we are embodied, and that we are social knowers.

Granting Williams is correct, we can only represent a *transcendent* God using figurative language such as metaphor and analogy. I shall explore the role of linguistic tropes, and particularly the relationship between metaphor and model in theology and science in due course. It is worth noting immediately, however, Janet Soskice's important observation that criticism of the role of metaphor in religious language is ultimately an attack on the possibility of any metaphysics.[12] Her conclusion that, if we do not insist metaphorical references are un-revisable or exhaustive, we are on the same ground as the scientific critical-realist, complements and supports Williams's argument that conversation about God becomes distinctly possible.[13]

---

[11] W. Jay Wood, *Epistemology: Becoming Intellectually Virtuous* (Leicester: Apollos, 1998), p. 169.
[12] Janet Martin Soskice, *Metaphor and Religious Language* (Oxford: Clarendon, 1985), p. 144.
[13] Ibid., p. 141.

As Clive Cazeaux points out, explanations of how our knowledge 'fits' the world are *necessarily* metaphorical because epistemology is 'Without a field of its own that is open to direct inspection and, therefore, without a vocabulary that would correspond to this God's-eye view'. Consequently, 'epistemology can only proceed by drawing its terms metaphorically from other areas of discourse.' Metaphor is thus central to 'the mapping and organisational procedures we employ in perception at large.'[14]

The body supplies an interpretative epistemological framework for ontological data and becomes, consequently, of pivotal importance in how we describe whatever is external. But that means causal language is a *mediated* construct. Ian McGilchrist helpfully illustrates this principle by emphasising how sensory experience depends upon change. "Our sensory nerves quickly 'fatigue' and we become accustomed, for example, to a smell or a sound. Our senses respond to the difference *between* values – to relative, not absolute values".[15] Rather than accessing the epistemically objective 'view from nowhere', to coin Nagel's evocative terminology, we have only the subjective view from within our own body, it follows that we inevitably generate metaphorical language like "seeing", "mapping", "navigating", "feeling', "connecting", "joining", "exploring" and so on. But granted even a minimal kind of ontological realism, the analogies that personal (embodied) experience generates can nonetheless be, potentially, authentically evidential.

[14] Clive Cazeaux, *Metaphor and Continental Philosophy: From Kant to Derrida*, Routledge Studies in Twentieth-Century Philosophy (New York: Routledge, 2007), p. 144.
[15] Iain McGilchrist, *The Master and His Emissary: The Divided Brain and the Making of the Western World* (New Haven, Connecticut: Yale University Press, 2009), p. 97.

The Meaning(s) of "Causal Joint"

Importantly for this discussion, therefore, the significance of embodiment may help to explain why, and not just how, '*joint*' provides such an influential analogy for the dialogue on divine action. Cazeaux points out that the metaphor of 'cutting nature at the joints' is originally attributed to Plato's the *Phaedrus*. Its contemporary influence is often attributed to Austin Farrer.[16] The metaphor can, however, be interpreted ontologically or epistemologically. If we understand it ontologically, then the joints we discover as we explore the world are 'external' and the mind is not arbitrarily or analogically devising these distinctions because nature possesses its own joints. Investigation involves cataloguing that objective *external* reality.

Conversely, however, Cazeaux points out that we could adopt Kant's theory of knowledge and, instead, see the body itself as unavoidably framing the way nature, while remaining independent of us, appears, and responds to investigation. This is not necessarily anti-realist but rather, as Cazeaux summarises it, a reflection of the fact that 'the way that objects appear to us is *created but not wholly determined* by our perspective or intervention.'[17] Williams, McGilchrist, and Cazeaux all appeal to Merleau-Ponty's phenomenological theory of knowledge and Cazeaux uses it to exemplify a 'jointed' Kantian epistemology. Merleau-Ponty offers the way we use our hands to illustrate his own thinking. It is, he writes, only when 'my hand takes its place among the things it touches, is in a sense one of them, opens finally upon a

[16] Farrer.
[17] Cazeaux, p. 141. For an illuminating illustration of this issue see, Kai Niebert, Sabine Marsch, and David F. Treagust, "Understanding Needs Embodiment: A Theory-Guided Reanalysis of the Role of Metaphors and Analogies in Understanding Science," *Science Education* 96, no. 5 (2012): pp. 849-97. *Cf*., McGilchrist, *The Master and His Emissary,* pp. 111-15.

tangible being of which it is also a part' that the mind can sense an object.[18] As Cazeaux summarises the situation,

> Whereas a joint, from a realist perspective, refers to a division between self-similar kinds in a mind-independent world, from the point of view of Merleau-Ponty's 'embodied' [critical]-realism,[19] it is conceptualised as the basic ontological articulation or interlocking out of which experience and the world-which-is-experienced arise.[20]

Thus, we face a choice. Empirical and phenomenological approaches treat *ontology* with equal seriousness but differ crucially in how they understand epistemological access to that ontology. Consequently, while a scientist like Polkinghorne may champion 'bottom up' verisimilitude, how to ground his claim that 'epistemology is the reliable guide to ontology' is far from straightforward.[21] It turns out that the *ontology* of any putative causal joint connecting primary and secondary causation, or GDA and SDA, is open to significantly different interpretations by those who nonetheless share the same broadly critical-realist *epistemic* approach.

Language and the Sociology of Knowledge

Building on McGilchrist's observation that change is fundamental to our experience, it follows that comparison offers a *prima facie* route to forming understanding.

---

[18] Cited in Cazeaux, p. 142. There is an interesting corollary here with Paul's appeal to the body as a metaphor for the church in 1 Corinthians, chapter 12.
[19] I have modified this quote to provide more clarity. Cazeaux actually writes 'anti-realism' but he is contrasting Merleau-Ponty's position with 'realism' and the rest of the quote indicates how Merleau-Ponty distinguishes between experience and the world-which-is-experienced. This, in my view, mirrors the term 'critical-realism' preferred in the VO/CTNS series.
[20] Cazeaux, p. 143.
[21] J. C. Polkinghorne, *Theology in the Context of Science* (London: SPCK, 2008), p. 55.

Consequently, the role of metaphor and analogy becomes pivotal because choice of metaphor influences the kinds of comparisons that can be made. This raises a yet deeper question about the social dimension of knowing: do communities share a common language because their members end up seeing the same thing, or do they share a common language because their members end up seeing things the same way? After all, as McGilchrist points out, metaphors are both a cause, and an effect, of our understanding.[22] They are, in a sense, a jump into the unknown where 'our first leap determines where we land.'[23] A paradigm example is the contemporarily dominant metaphor of the brain as a 'computer' with its attendant language of neural programming and the brain's processing architecture. This metaphor may persuade because it is, itself, embedded in a broader sociological framework or 'root' metaphor of the world as a machine. Yet, as McGilchrist goes on to point out,

> The catch is that to those who have bought into this model [of the body as a machine] as the way to illumination, everything about the body will come to look more and more mechanical, and so the model comes to seem more and more apt: the original choice seems confirmed as a perfect fit.[24]

Surveying historical approaches to metaphor Soskice shows how, from the Enlightenment until well into the twentieth century, metaphor was regarded as adornment or rhetorical flourish at best, and defective or parasitic (itself a striking metaphor) at worst. But what, then, are the implications for scientific language and the meaning of 'model'? The scientific community's *ambition* is realist - to denote or describe ontology in a maximally realist sense. One might argue, therefore, that

[22] *Cf.*, McGilchrist, pp. 162-75.
[23] Ibid., p. 97.
[24] Ibid., p. 98.

science should reject all descriptive flourish, any embellishments that obscure or distort the 'glass mirror' of epistemology in which ontology is weakly reflected. Such was the view of Thomas Sprat who, in his Seventeenth Century *History of the Royal Society* denounced the 'vicious abundance' of figurative language in contrast to 'strict logic'.[25] Similarly, Thomas Hobbes endorsed the criticism of metaphors, notwithstanding their ubiquity all the way back to Cicero, bemoaning their use 'instead of words proper'.[26]

This rejection of non-literal denotive language may happen rather crassly, as with Richard Dawkins dismissal of Anselm's and Aquinas's sophisticated philosophical treatments of God by invoking a putative 'flying spaghetti monster'. Yet, as Alan Wall points out, retreat to purely mathematical formulations intelligible to only a handful of specialists would leave science 'hermetically sealed' within its own specialisms. As Wall emphasises, 'there is not a "poet's language" which can be dispensed with, to be replaced instead by a 'scientist's language'. Rather, he suggests, that 'the intelligent writer' exploits 'this inherent figurativeness of language, this metaphoric shape-changing energy inherent in language itself'.[27] Soskice and Williams, it should be noted, endorse Hilary Putnam's claim that the 'realist explanation, in a nutshell, is not that language mirrors the world but that *speakers* mirror the world; i.e. their environment – in the sense of *constructing a symbolic representation of that environment*.'[28] This suggests the 'bottom up' approach cannot begin with pristine data, however empirical it claims to be. But, perhaps more importantly, Soskice is right to argue that,

---

[25] Alan Wall and Goronwy Tudor Jones, *Myth, Metaphor and Science* (Chester: Chester Academic Press, 2009), p. 36.
[26] Soskice, p. 67.
[27] Wall and Tudor Jones, p. 36.
[28] Soskice, p. 136. *Cf.*, Williams *Edge of Words.*

> The descriptive vocabulary which any individual uses is, in turn, dependent on the community of interest and investigation in which he finds himself, and the descriptive vocabulary which a community has at its disposal is embedded in particular traditions of investigation and conviction. [29]

Is there any defense against self-reinforcing epistemic tendencies as certain metaphors come to dominate a community's discourse? Both science and theology would reply that the (respective) community *validates* specific metaphorical leaps. This process may occur intra-disciplinarily or inter-disciplinarily.[30] But McGilchrist's comments on the brain/computer metaphor serve a cautionary note that sociological waters run deep and highlight the risk that common contemporary analogies, however regnant, may prove parochial or even problematic once set against a deeper historical, philosophical, or sociological context. This brings us back to Saunders.

I began this chapter with Saunders because, though his evaluation of the various TDAs in the VO/CTNS series is impressively detailed and closely argued, his conclusion is emblematic of a frame of reference influencing some of the contemporary science-theology discourse on divine action. Saunders's trenchant insistence that his survey signalled a "crisis" for theology overlooks the significance of Williams's argument that language, including that of divine action, can be truthful without being strictly descriptive. In contrasting the biblical representation of divine action with scientific causal language, Saunders privileges science as denoting a *more* realist epistemology. Science tends to deploy analogy and metaphor heuristically: to

---

[29] Soskice, p. 149.

[30] One obvious example being the critiques of the metaphor of Divine Kingship in feminist and liberation theologies in the latter half of the twentieth century. Importantly, however, these often serve to correct or limit metaphorical meaning, rather than overturn it completely. Similarly, science is a public endeavour, methodologically contingent upon communal validation of experimental result in the process of peer review.

emphasise similarity rather than explore difference. But this methodological impetus risks limiting truth claims to a reduced range of almost exclusively mechanical and empirical causes.

This inter-disciplinary tension between the demands of transcendence and immanent empiricism has theological consequences that remain at the very heart of the contemporary debate over divine action because the bottom-up approach is particularly susceptible to positivist, reductive, or philosophically naturalist distortion. In fact, Soskice goes as far as to say,

> Few contemporary English-language writers on religious language are free from a residual empiricism which, whatever the intentions of its proponents, is fundamentally incompatible with traditional, transcendental Christianity'.[31]

How well either Saunders or the scientist-theologians grapple with transcendent questions, or with metaphor's intrinsic tension in the face of the realist ambition of methodological-naturalism, is a central concern of this thesis. Williams pithily captures both the problem and its solution when he says that

> It is not […] that there are unrepresentable realities that would ground what we say if only we could get at them; it is that the way we know and understand is by representing, and then risking the form of our representation in shared discourse as time unfolds.[32]

[31] Soskice, p. 142.
[32] Williams, *Edge of Words,* p. 80.

Having now cleared the philosophical ground enough to give us somewhere to "put our feet" - and highlighted the significance of having feet to put there - let me turn to consider the contemporary language of divine action in more detail.

Agreeing a Language of Divine Action: Choices and Consequences

Over the past four decades, the language choices of a relatively small community of philosophers and 'scientist-theologians' have strongly influenced the *form* of the discussion of divine action. Outlining the common language terms this discussion has settled upon enables us to chart some underlying influences upon this frame of reference. I will argue that distinguishing between GDA and SDA is potentially problematic, that Langdon Gilkey's implied demand for a univocal language seamlessly uniting science and theology is misguided, and that Farrer's term 'causal joint' now functions as dead metaphor, unhelpfully masking its own analogical weakness. Consequently, it would be helpful to coin fresh metaphors and analogies, different imaginative perspectives to preserve the inherent disjuncture between immanence and transcendence, potentially stimulating new dialogical insights.

Gilkey offers a good starting point because his book *Maker of Heaven and Earth*[33] and, in particular, his 1961 paper *Cosmology, Ontology, and the Travail of Biblical Language* tackle the language problems inherent in describing divine action head on, and his paper represents something of a landmark in the field.[34] Gilkey

[33] Langdon Gilkey, *Maker of Heaven and Earth: The Christian Doctrine of Creation in the Light of Modern Knowledge* (Lanham, Maryland: University Press of America, 1958).
[34] Langdon Gilkey, "Cosmology, Ontology, and the Travail of Biblical Language," *The Journal of Religion* 41, no. 3 (1961): pp. 194-205.

bemoaned the fact that the so-called Biblical-Theology movement of his day seemed to inhabit a schizophrenic world.

> The denial of wonders and voices has thus shifted our theological language from the univocal to the analogical. Our problem is, therefore, two-fold: (a) We have not realized that this crucial shift has taken place, and so we think we are merely speaking the biblical language because we use the same words. We do use these words, but we use them analogically rather than univocally, and these are vastly different usages. (b) Unless one knows in some sense what the analogy means, how the analogy is being used, and what it points to, an analogy is empty and unintelligible; that is, it becomes equivocal language.[35]

Gilkey identifies the by now familiar fact that representing a transcendent God imposes pressure on language. Classically, as already observed, this pressure was alleviated by appeal to negation or analogy.[36] Thus, although 'God is the source of space, time and being; He is not literally an actor within that context. Our words about Him are, therefore, symbols and analogies because […] the source of all finite existence cannot be spoken of in the literal terms of a finite existent without absurdity.'[37] These linguistic devices preserve the relevance and validity of theological concepts because to know God at all is to know in human categories – however limited and imperfect. But,

> The phrases "God acts" and "God speaks," whatever they may ultimately mean to us, do not signify the wonders and voices of ancient days. As we have seen, it is no good repeating the abstract verbs "to act" and "to speak," if we have no intelligible referents with which to replace the vanished wonders and voices; […] therefore, we must also try to understand what we might mean in systematic theology by the general activity of God.[38]

---

[35] Ibid., p. 196.
[36] Gilkey, *Maker of Heaven and Earth*, p. 324.
[37] Ibid., p. 346.
[38] Gilkey, *Cosmology, Ontology and the Travail*, p. 204.

Thus, we return to the familiar problem: the (philosophical) difficulty in claiming a truth function for analogy. How can we know in what sense the 'is' aspect in 'is like' applies?[39]

Ian Barbour addresses this question for both science and theology, first in *Issues in Science and Religion*, and then more fully again in *Myths, Models and Paradigms.* Barbour's approach in *Issues* draws mainly from linguistic analysis in British philosophy following the demise of positivism.[40] For Barbour, the 'separation of science and religion as complementary languages is indeed a valid starting point or "first approximation" for representing the relations between them.' There is not, however, 'an absolute separation of spheres, […] there are significant possibilities for dialogue' because both scientific and religious language are, Barbour claims, 'realist and referential in intent: in neither case can one remain satisfied with "useful fictions."'[41] Two points are worth highlighting in response. First, Barbour's evaluation in *Issues* is limited to 'linguistic analysis'.[42] Emphasising how metaphors are used but not how they work is, as we shall see, somewhat problematic. It can misunderstand metaphor's potency for putting language 'under pressure', as Williams phrases it, by combining disjuncture with similarity, and makes the difference between good and bad metaphor harder to categorise or explicate.

A further risk is that ambiguous terms become univocally fixed, or 'dead' through repetition. To give an obvious example; the commonplace belief that

---

[39] In this thesis I will adopt Soskice's distinction of analogy from metaphor, itself a redirection of Goodman's language. Analogy, more than metaphor, is 'a matter of teaching an old word new tricks – of applying a new label to an old way.' The ever-present challenge is how to retain the sense of difference and nuance in key terms like 'model', metaphor' and 'analogy' even while acknowledging large elements of overlap – especially given their deployment by writers whose primary concern is not to preserve technical differences but to communicate ideas idiomatically. See Soskice, chapter 4. This quote is from p. 64.

[40] Ian G. Barbour, *Issues in Science and Religion* (London: SCM, 1966), p. 164.

[41] Ibid., pp. 4-5.

[42] Barbour, *Issues*, pp. 243-48.

electrical current flows ignores an important dissimilarity because we don't literally have to build power generation plants at the highest geographical point of the grid. Electricity only 'flows' analogically. Such traps obscure the function of metaphor in scientific discourse falsely extinguishing a crucial difference between metaphor and model. Indeed, it is somewhat striking how model has become almost ubiquitous as the trope for discussion of divine action, whereas the paradigm depiction of divine action in the gospels is not model at all: it is parable. Nonetheless, Barbour marks an important transition, for subsequent debate over divine action adopts, almost without exception, the epistemic framework of 'model' for both its scientific and theological forms.[43] Given the influence of model as representational vehicle in this contemporary debate it is worth exploring the concept in some depth. Barbour, in *Issues*, begins by defining analogy as,

> … an observed or postulated similarity between two situations. (Two entities are defined as similar if some of their characteristics are the same and others are different […]. As an aid to enquiry, analogy is the extension of patterns of relationship drawn from one area of experience to coordinate other types of experience.[44]

From this initial premise, and following Black, Barbour then goes on to argue that, 'a model in science is a systematic analogy postulated between a phenomenon whose laws are already known and one under investigation.'[45] Barbour then uses the rest of the chapter to defend and explore model as a source for scientific theories. The problem is that his approach limits metaphor to comparison unduly suppressing the

---

[43] 'Model' does not appear in Gilkey's index, while in *Issues* the term is listed fifteen times, and recurs throughout the book. Soskice addresses the role of model in theology, but not without offering her own criticism. Soskice, chapter 6, esp. pp. 103ff.
[44] Barbour, *Issues*, p. 158.
[45] Ibid.

negative pole. Systematic analogising multiplies the presence of suppressed "*is not like's*", tempting us to gloss over potentially crucial differences.

In *Myths, Models and Paradigms* Barbour discusses the nature of 'model' further.[46] For Barbour, religious models possess an analogical rather than literal origin. Nonetheless, they are more than 'useful fictions', serving instead as symbolic representations. Moreover,

> Religious models appear to be more influential than the formal beliefs and doctrines derived from them, whereas scientific models are subservient to theories, even though a model may outlast a series of theories developed from it. Theories are the instrument for specifying positive and negative analogy, and for correlating observations.[47]

Theologically speaking, however, this conflates 'model' with 'root metaphor'. In theological language, metaphor and analogy must bear a greater pressure, working in a less secure manner than in science, since one cannot univocally attribute God's transcendent qualities to anything finite. Science can, therefore, deploy "systematic analogy" with less risk; less 'pressure' on each of the model's terms, because scientific models always compare two things that are natural and finite.[48] Religious analogies entail far bolder, less secure, comparisons. Model and metaphor are not the same. But in that case treating the word 'model' univocally for both disciplines, masks a subtle, but significant, difference in the work that language performs in each case.

---

[46] Ian Barbour, *Myths, Models and Paradigms: The Nature of Scientific and Religious Language* (London: SCM, 1974), p. 69ff.
[47] Ibid., p. 69.
[48] The collapse of the wavefunction in quantum mechanical theory, for example, is deeply mysterious, but the words 'collapse' and 'wave' are finite and familiar.

Janet Soskice, in *Metaphor and Religious Language* is rightly critical of Barbour's understanding of metaphor as involving *only* comparison. She argues, instead, that models use metaphors as 'projective conventions' generating or illuminating a third view with an inherent tension in which similarity and dissimilarity are present. Something serves as a model, then, 'when it is viewed in terms of its resemblance, real or hypothetical, to some other object or state of affairs' Soskice argues, concluding elliptically that a model 'is defined by its use as a model.' Things get rather trickier, however, when Soskice insists that "Metaphors arise when we speak on the basis of models."[49] Thus, for Soskice, the comparison of the brain and the computer is a model, but the subsequent coining of neural programming is metaphorical because 'strictly speaking, "programming" has not the same sense when used in terms of brains as it does with computers.'[50] I would argue, however, that this inverts the order of the connection being forged for, surely, models arise only as, or after, we sense the value of a metaphor? So, what energises this association? McGilchrist makes the same point when he says that 'Metaphor (subserved by the right hemisphere) comes *before* denotation (subserved by the left). This is,' he points out, 'a historical truth in the sense that denotative language, even philosophical and scientific language, are derived from metaphors founded on immediate experience of the tangible world.'[51]

This, it seems to me, highlights a particularly striking problem in the VO/CTNS series discourse on divine action. While model and metaphor are closely

[49] This and previous quote, Soskice, p. 101.
[50] Ibid., p. 55.
[51] McGilchrist, p. 118.

related they also exhibit crucial differences. Thus, in *Poetic Truth,* Austin Farrer argues that,

> the scientist analyses the world into factors which in his view compose it. When in science we ask, "What is such-and-such a thing?" we really mean, into what pattern of parts or system of factors can it be analysed? For this purpose metaphors are not particularly useful. Many technical scientific terms are metaphors, but that doesn't really help the scientific quest.[52]

This supports my contention that scientific models suppress the '*is not'* like pole of the analogy, but even then, metaphor is not so easily abolished. In a short but insightful book *Myth, Metaphor and Science,* Alan Wall reminds us that Wittgenstein once called the English language a graveyard of dead metaphors.[53] An unrecognised metaphor does not die, it becomes a cliché: everybody knows electricity *flows.* As Wall helpfully observes, however,

> Blindness to metaphor: this is everywhere the problem. The biggest metaphors we live inside tend to become invisible, and we take them for reality. Perhaps this is what Plato was getting at with his allegory of the cave-dwellers taking the shadows on the wall for reality. […] Wittgenstein, in a brilliant piece of analysis in *The Brown Book,* shows how Augustine's difficulties about the meaning of time in *The Confessions* all stem from his sense of time as a river. Because this metaphor is built so deeply into Augustine's psyche, he does not believe it is a metaphor at all; merely an accurate description of reality, an expression of knowledge.[54]

Yet precisely because the scientific *raison d'etre* is realist: to eliminate, *so far as possible,* the gap between epistemology and ontology, it is an ambition that also

---

[52] Cited in Soskice, p. 100.
[53] Wall and Tudor Jones, p. 41.
[54] Ibid., p. 77.

risks falsely closing the gap between immanence and transcendence. It risks turning metaphor into simile. Cast in Kantian terms, Saunders might be said to have constrained the ontic in response to a noetic limitation. Scientific language has an innate tendency, therefore, to prefer simile and to kill, rather than preserve, its own metaphors. We have already noted the contemporary 'model' of the brain as computer. But in suppressing the projective element of the metaphor in favour of its 'systematic development' as model, science for many people today, proves that the brain is nothing *more* than a wet warm computer.

While defending the role of models in theology, Soskice argues that a sharper demarcation is required between scientific and theological models. This is a suggestion I strongly endorse.[55] Moreover, I would extend to theological models Hesse's argument that literary [and, by extension, theological] metaphors *should* be imperfect, whereas scientific models will always seek a 'perfect metaphor' whose referent is also in the domain of the explanandum.[56] A perfect metaphor would become a simile, but it is impossible to fully represent transcendence using immanent categories of comparison and explanation alone. Wall makes a similar distinction in pointing out that 'metaphor in science seeks to familiarise, whereas in literature, it tends to defamiliarise'.[57] The same principle applies to metaphor's theological use.

I also wonder whether the contemporary emphasis on 'model' explains why scientist-theologians like Polkinghorne and Russell reject the Thomist conception of primary causation? Is the inability to deploy a *scientifically* comprehensible 'model' of double-agency an underlying reason for Polkinghorne's dismissal of Farrer's

[55] Soskice, p. 116.
[56] Cited in Herwi Rikhof, *The Concept of Church: A Methodological Inquiry into the Use of Metaphors in Ecclesiology* (London: Sheed and Ward, 1981), p. 152.
[57] Wall and Tudor Jones, p. 87.

approach?[58] Whatever the analogical or metaphorical distinction between primary and secondary cause, there is simply no option for modelling primary – transcendent – causation in terms of secondary causal cognates. Yet Polkinghorne insists that causality *must* be a 'zero-sum game'.[59]

I query, too, whether Farrer's phrase 'causal joint' has now become cliché? Does it now function univocally, skewing the search for scientific perspectives by framing the problem in a particular way? Thus, for scientists like Stephen Hawking models are heuristic or instrumental, only their utilitarian function denotes their significance.[60] This suppresses, however, the significance of formal cause in its Aristotelian sense. It also suppresses the "*is not like*" pole of metaphor. Thus, Iris Yobb's claim that 'genuine metaphors are models' is surely flawed. [61] As Williams argues, some things can be spoken of metaphorically but not modelled because good metaphors are 'true' in ways that defy substitution. More fundamentally still, as we shall see in chapter 3, Nicholas Wolterstorff's careful investigation of speech act theory in relation to divine action strongly challenges the claim that causation should be limited to scientifically verifiable causal categories alone.

In every theological model of God, the 'tenor', to borrow from I. A. Richards, must be taken transcendently, whereas in a methodological-natural scientific model both the 'tenor' and the 'vehicle' are immanent. Divine transcendence exercises an

---

[58] Arguably, the inability to 'model' primary cause in secondary-causal terms is a problem to Polkinghorne because the univocity of 'cause' serves as an unrecognised premise in the argument against Thomism he lays out on pp. 94-98. See J. C. Polkinghorne, "Kenotic Creation and Divine Action," in *The Work of Love: Creation as Kenosis*, ed. J. C. Polkinghorne (Grand Rapids, Michigan: SPCK, 2000).
[59] Polkinghorne, *Theology in the Context of Science* (London, SPCK, 2008), p. 57.
[60] Stephen Hawking argues that the very best we can hope for epistemologically is to construct a 'model-dependent reality', see Stephen Hawking and Leonard Mlodinow, *The Grand Design* (New York: Bantam Books, 2010), p. 45ff.
[61] Iris M. Yob, "Religious Metaphor and Scientific Model: Grounds for Comparison," *Religious Studies* 28, no. 04 (1992): p. 476.

overt constraint on theological tendencies toward naïve realism, but methodological-naturalism offers no such counterbalance, tempting a collapse of metaphor and analogy into realism and simile; a difference obscured by apparently univocal use of the term 'model' in both disciplines.[62] It is, perhaps, this failure to preserve and represent sufficiently the transcendent aspects of divine action that renders the putatively realist 'thought experiments' of Polkinghorne and 'what ifs' of Russell of limited interest to many theologians.

Arguably, it is the tension between realist *ambition* in scientific theorising and the theological impetus to *preserve,* while still representing, transcendence 'at the edge of words', that might explain the lack of engagement by theologians with modern scientific theorising. This, rather than the supposed lack of curiosity or technical competency that Polkinghorne hypothesises and bemoans.[63]

Moreover, if scientific investigation is limited by methodological-naturalism to the finite and material, but, as Saunders and others argue, scientific causal explanations must also constrain theology, then we are, in fact, closer to a now discredited form of natural theology in the VO/CTNS series than might at first appear despite the series' claims to have rejected precisely that approach.[64] No wonder the results have proven rather stunted and unsatisfactory to theologians more widely.[65] After all, the disputed ontology behind the quantum statistical formalism may provide a paradigm example of a model's explanatory terminus but, even then, we still cannot label this terminus a 'causal joint' with any confidence.

---

[62] This is why I have avoided calling the (*e-t/o-t*) designation a 'model'. (*Cf.*, p. 18 above).
[63] Polkinghorne, *Theology in the Context of Science*. See esp., introduction and chapter 1.
[64] This possibility will receive a more thorough appraisal in chapter 5.
[65] See for example the analysis in Wesley J. Wildman, "The Divine Action Project, 1988-2003," in *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress*, ed. Robert J. Russell, William R. Stoeger S.J., and George Coyne, S.J. (Vatican City State: Vatican Observatory/CTNS, 2008).

There is, to adopt Williams's phrase, an important change of register between a heuristic model and a projective metaphor. This is not to argue that truth claims about divine action are impossible. That would, itself, be a totalising claim. They are, however, formidably difficult. As Williams argues, after Kant two lessons must be acknowledged:

> First […] any claim to *know* God has to negotiate its way around a set of unprecedentedly sharp cautions about projecting beyond the material realm any of the mechanisms of physical relatedness, and, second, [the need to methodologically track] where and how language about God 'comes in' in relation to the undeniable and irresoluble inadequacies of description in terms of physical relatedness alone.[66]

Williams is especially helpful because he patiently but systematically shows *how* language transcends its own limits. We can stretch meaning and extend truth by deploying devices like metaphor and paradox, but any discussion of the divine properly and *necessarily* takes us beyond, in Williams's delightfully evocative phrase, the 'edge of words'. It is my contention that the absence of knockdown arguments to resolve ontological, and so possibly transcendent, questions ought to give rather more cause for pause to those on the *scientific* end of the science-theology hyphen than is sometimes the case. It is not for theology alone to probe the edge of words. Yet it is hard to read the debates in the VO/CTNS series about specific models of divine action without developing the conviction they privilege, however subconsciously, the 'realism' end of the critical-realism hyphen. No matter how understandable the sociological inculcation of naturalism in the scientific method, it remains a category error if methodological-naturalism is then surreptitiously exported into judgements

[66] Williams, *Edge of Words,* pp. 13-14.

about metaphysical questions. But method and metaphysic are intimately related. Saunders, for instance, insists that,

> The fact is that any intellectually honest theologian must appreciate that the wide-ranging demands of faith are simply not satisfied by the current state of the art of theological scholarship [of divine action]. […] What theologians need to do is to work ever harder to press on with these seemingly intractable problems and in the process become more scientifically aware. For it is only through a detailed understanding of the claims made by science, the assumptions behind the laws of nature, and the philosophy of determinism, that theology will continue to progress into the twenty-first century.[67]

This judgement clearly privileges the scientific road to philosophical realism and yet, within the VO/CTNS series, it represents a far from idiosyncratic tenor. But surely the "intractable problems" Saunders recognises point us towards epistemic shores and ontological waters offering a bracingly cold soak for the "intellectually honest" whether they be scientist or theologian.

In fact, it is interesting to contrast Saunders conclusion with Williams's (almost) last words, that 'Revelation does not fill a gap, but shows why the gap is there, not resolving difficulty but offering a perspective in which difficulty is what makes sense and what we must become accustomed to.'[68] Williams goes on to draw the inference that natural theology *is* possible, but only in the rather constrained terms of locating and mapping difficulties. Williams's analysis brilliantly elucidates why the hyphen in 'critical-realism' depends upon mutual 'epistemic trust' rather than a discourse of epistemic power.[69] Put more prosaically, every academic discipline can

---

[67] Saunders, p. 216.
[68] Williams continues 'I use the word 'difficulty' here where it is tempting to use 'mystery'; but the trouble with 'mystery' is that is has become irredeemably bound up […] with an evasion of questions that could be perfectly well answered with avoidable vagueness.' Williams, *Edge of Words*, p. 180.
[69] Ibid., p. 182.

ask some questions that cannot be answered without a change of key, and some questions that cannot be answered within the categories and capabilities of the discipline that raises them *alone*. Understood in these terms, Saunders's conclusion identifies not the 'crisis' of a failed project, but the far more exciting prospect of the opportunity for conversation between faith and ration to find a new register; to forge a new and novel path; to chart a different map with all the challenges and discoveries that pertain.

As I have already argued, science, in preferring model to metaphor always *hopes* to collapse metaphor into simile. Yet, as Williams points out, it is not as easy, nor as seamless, to move from metaphor to model as much of the current discussion would suggest. Thus, there are real risks attendant in blithely accepting Polkinghorne's aphorism that "epistemology models ontology". Models in what specific sense? This is a bolder claim than 'epistemology is analogous to ontology' let alone 'epistemology is a metaphor for ontology'. Williams is surely right, therefore, to observe that

> Thus, I suspect we ought to be a bit more cautious about the distinction between what is capable of being 'naturalised' and what remains mysterious. […] what can be naturalised, in the sense of being rendered as a set of soluble problems, does not lend itself to final or definitive representation any more than anything else […] there will always be another possible representation, another possible way of locating the phenomena.[70]

[70] Ibid., pp. 77-78.

There may be another way to illustrate both how, and why, the hermeneutical approach of the VO/CTNS dialogue achieved somewhat limited theological ends, by comparing it to the search for the historical perspective on Jesus.

Sandra Schneiders, in laying out her proposal for a contemporary hermeneutic of biblical interpretation, points out that the 'fundamental assumption [behind every one of the historical quests for Jesus] works out of a basically positivist historical model'.[71] There are some interesting corollaries between the epistemological limitations of the historian and the scientist worth noting. First, investigating the historical and natural world both entail a degree of simplifying abstraction. But that abstraction results, secondly, in only partial information about the subject of investigation.[72] Thirdly, community plays a crucial role in determining the epistemological context within which to assess immanent and transcendent questions. Investigation, as previously observed, is not epistemically free standing, and Schneiders, too, is attuned to the role of the community in constructing representations.

> The point of H.-G. Gadamer's masterwork, *Truth and Method,* is that when method controls thought and investigation the latter may lead to accurate data but it does not lead to truth. Method, understood as a pre-established set of procedures for investigating some phenomenon, in fact not only *attains* its object but *creates* its object. In other words, it determines *a priori* what kind of data can be obtained and will be considered relevant.[73]

---

[71] Sandra Marie Schneiders, *The Revelatory Text: Interpreting the New Testament as Sacred Scripture* (San Francisco: Harper, 1991), p. xxiii.

[72] An illustration might help to clarify the difference between points one and two. We can only observe distant galaxies using a variety of techniques that depend upon the electromagnetic spectrum. But the results of those interrogations provide information that is then interpreted according to electro-magnetic theory. The following (third) point carries an implied consequence that theory can (and sometimes does) change.

[73] Schneiders, p. 23.

Thus Schneiders' argument that 'The historian deals only with "historical" material, i.e., events that take place within the framework of time, space, and causality. [whereas] Much about the Jesus story exceeds these coordinates', applies equally to methodologically-naturalist models of divine action.[74] If, then, the Jesus of the gospels is a literary representation of a *truth* that defies comprehensive denotive description, might we not also insist that scientific TDAs are simplified abstractions representing a transcendent *truth* that defies any fully immanent-causal *modelling*?

Seeing and Saying: How Vocabulary and Trope Reflect (and Determine) Theories of Divine Action

Much ink has been spilled over the ontology, epistemology, and methodology for conceiving divine action, but the methodological success of science on its own finite and physicalist ground must not convert naïvely into constraint upon transcendent Divine possibility. It is debateable to what extent Gilkey is correct to insist that the mighty acts and speech of God were interpreted literalistically or univocally in history. For one thing, the injunction of the first commandment on graven images ought to give pause for thought to those who attribute faux epistemic naivety to believers in antiquity. Biblical anthropomorphisms of God have long been recognised as analogical and so Williams is surely right to insist we 'play the process false when we understand the attribution literally and, rather than recognising our likeness to God, circumscribe God by human limitations.'[75] We and our language are embodied, while God is not. Williams, once again, artfully illustrates the step change demanded

[74] Schneiders, p. xxv.
[75] Williams, *Edge of Words* p. 28.

by transcendence and intimated in ideas like *creatio ex nihilo*, primary cause, theodicy, and indeed in the very word "God":

> […] the process we are seeking to characterise is one in which we are brought to a point where to go on speaking at all requires a shift of expectation, away from the assumption that there will be a point of descriptive closure, […]. This happens when a descriptive account which is correct or sustainable as far as it goes leaves out of consideration what we most want to talk about: to carry on a conversation or exploration, we have to jettison the mode of discourse we have so far taken for granted.[76]

This is not, I must emphasise, to deny - either in Williams' or my own view - the worth, or methodology, of science *per se*. It is, rather, to flag up how formidably challenging the task of investigating and understanding divine action is, and to signal risks that dialogue without careful attention to the potential limits of *all* description holds. Science can raise transcendent but it cannot answer them by the lights of its own immanent methodological-natural limits without seeking retreat from the 'edge of words' and collapsing language back into purely immanent, and therefore finite, modes of attribution and designation. Some depictions, whether theological, artistic, or musical, cannot be translated without remainder while nonetheless representing truth.[77]

In *Models of God,* Sallie McFague argues the failure of theologians to engage in 'metaphorical or heuristic theology' apart from the original biblical 'triumphalist, monarchical, patriarchal' metaphors and models, is a serious deficiency of modern

---

[76] Ibid., p. 9.
[77] Paul Minear offers a thoughtful exploration of this point in, *The Bible and the Historian* (Abingdon: OUP, 2002), pp. 25-38.

theology.[78] Without entering judgement on the detail of McFague's argument, I want to suggest a similar charge might be laid against the language of the science-theology dialogue about divine action. Namely, that such dialogue has not only been shaped, but also constrained, by two dominant but now outmoded models: two dead metaphors of divine action; that of the mechanical joint, and that of a dualistic or analytic distinction between 'general' and 'special' divine action.

Consequently, I want to explore some new metaphors that might truthfully represent divine action from a fresh perspective. This move involves intentionally modest claims but it seems warranted for two related reasons. First, because, as McFague, with admirable economy, puts it 'we should not camouflage our ignorance [of the divine] by either petrifying our metaphors or forgetting that our concepts come from metaphors.'[79] Secondly, and for that very reason, Williams reminds us that;

> Odd as it sounds, our (quasi) representing of God is least off the mark when we are the furthest from anything that looks like a fully coherent schema. Which is not an excuse for slackness, but an implicit plea for our words about God to be – as it were - carefully calculated shocks. This is simply to repeat Aquinas's point early in the *Summa* (a point originally articulated by Pseudo-Dionysius) that the 'crudest' metaphors for God are often the most successful, just because no-one could mistake them for accurate depictions.[80]

There is also a symmetry here between the heuristic and constructive exploration of theology and the 'what if' or 'thought experiment' of science. Good metaphors are experiments in representation that carry the ring of truth without obscuring their ultimate inadequacy. '[T]he best metaphors' McFague insists 'are

---

[78] Sallie McFague, *Models of God: Theology for an Ecological Nuclear Age* (London: SCM, 1987), p. xi.
[79] Ibid., p. x.
[80] Williams, *Edge of Words,* pp. 148-49.

always giving both a shock and a shock of recognition'.[81] But, again, it is worth observing that the paradigm method for administering such shocks theologically is not through models, but rather parables.

By extension then, other creative metaphors and analogies might also provide fruitful opportunities. Arthur Peacocke, for example, has coined a metaphor around the musical fugue to capture one aspect of divine action,[82] and David Bentley Hart, in *The Beauty of the Infinite. The Aesthetics of Christian Truth* argues that

> Christian talk of an analogy between the being of creatures and the being of God is something like speaking of the irreducible difference between the being of a work of art and the creative being of the artist (which is not, surely, an arbitrary relationship, any more than it is "necessary").[83]

A similar scheme, and one the next chapter will explore at greater length, is Kevin Vanhoozer's development of Dorothy Sayer's analogy of God as author. In Vanhoozer's hands this analogy is recast in terms of *theo-drama*.[84]

A third reason for exploring alternatives is the challenge of distinguishing between GDA and SDA. Gilkey insists that

> … if we are to give content to the biblical analogy of a mighty act, and so to our theological concepts of special revelation and salvation, we must also have

---

[81] McFague, p. 35.
[82] A. R. Peacocke and Ann Pederson, *The Music of Creation* (Minneapolis: Fortress Press, 2006), pp. 30-33.
[83] Cited in Rowan Williams, *Grace and Necessity: Reflections on Art and Love* (London: Continuum, 2005), p. 166.
[84] Kevin J. Vanhoozer, *Remythologizing Theology: Divine Action, Passion, and Authorship*, Cambridge Studies in Christian Doctrine (Cambridge: Cambridge University Press, 2010).

> some understanding of the relation of God to general experience, which is the subject of philosophical theology.[85]

It is debateable, however, whether this way of the problem only reflects a modern distinction. To insist, as Gilkey seems to me to do here, that divine action must be understood *either* as general or as special implies a disjuncture that would not have occurred to a historical audience. Neither can it be sustained for the contemporary audience, for where specifically is the 'joint' that differentiates SDA from GDA? Any attempt to answer such an enquiry with a concrete causal example dies the death of a thousand qualifications. As previously suggested, it is a kind of sorites paradox, for we might just as easily ask for the distinction between a pile of sand and a sand dune. The word "pile" and the word "dune" can represent the same object truthfully, but they are distinguished between by more than a single grain of sand either way.

Because both terms can represent truthfully, we might find better ways to convey their distinctive usefulness, rather than simply abandoning them altogether. One option, for example, might be by extending Hans-Georg Gadamer's distinction between an 'object' and a 'work' of art. Thus, mirroring Schneider's hermeneutical approach to transcendent Revelation, we too could recast Gadamer's idea [with the square brackets containing my interpolation] in the following way;

> The art object [General Divine Action] is only truly a work of art [Special Divine Action] when it is being contemplated, heard, or played. In other words, whereas the art object has continuous existence as a physical entity [General Divine Action], the work of art [Special Divine Action] has an intermittent mode of being. It is actualised in the act of appreciation. Between

[85] Gilkey, *Cosmology, Ontology and the Travail*, pp. 204-5.

> such acts it "lapses" into nonbeing. It perdures as a possibility inherent in the object [General Divine Action], and this is what makes the object itself valuable. The object [General Divine Action] not only grounds the possibility of existence of the work of art but stabilises its meaning in such a way that each valid actualisation [of Special Divine Action] is related to every other valid actualisation in recognisable ways.[86]

In other words, divine action is only 'special' to those who recognise it as such. Apart from that relationship, it lapses as SDA, but it continues to exist as GDA.

Having parsed the distinction between GDA and SDA in a dichotomous subjective/objective manner, the VO/CTNS series initially saw no significant difficulty in positing an 'objective' interpretation of SDA. But this begs the question. Suppose I spill the milk while making a cup of tea, which then pools in a particular configuration on the work-surface beside the cup and saucer. All I see is a puddle of white, but you see a profoundly moving image of a mother and daughter that will influence your future relationship with your own estranged daughter. Could this event ever be categorised as 'objective' SDA? By whom; and by what criteria? As Schneiders rightly reminds us 'faith is an objectively grounded but nonnecessary response to that which is disclosed in and through phenomena that can be but need not be experienced as disclosive of the divine'.[87]

In the spirit of imaginative refiguring, let me suggest two other metaphors, of a more spatial nature that offer a non-jointed distinction between GDA and SDA. The

---

[86] Schneiders, p. 42. This appropriation of Gadamer's thinking recognises SDA necessarily has a relational component without reducing its status to an arbitrary psychological level - where the ghost of Feuerbachian liberal theology roams. SDA is ontologically grounded in GDA, but is also grounded by a community that recognises valid actualisation. This offers a very interesting approach for interpreting the episode in John 12 with which the thesis opens. It also elegantly fits White's TDA of universal special divine action.

[87] Ibid., p. 51.

first comes from photography, the second exploits the topological properties of the Möbius strip.

In a photograph the lens opens to capture all the light available within the frame of the sensor, but unless that light is coincident with the focal length of the lens it will arrive at the sensor not as a point of light, but as a 'circle of confusion'. Points are sharp to the eye and in focus, while circles of confusion register as blur. The focussed points of light are not, however, a different material than the circles that are blurred. Neither eye nor camera lens can render the image sharp at *all* focal lengths simultaneously, nor can any eye/lens ever capture *every* focal length due to practical/material constraints. By analogy then, SDA is not objectively different from GDA but emerges when a lens includes the subject and is set to the right focal length. This metaphor frees us from a 'jointed' distinction between GDA and SDA. It also protects against undue anthropocentrism, suggesting a 'defense' (or theodicy) by implying that we would see the same level of detail (what we label SDA) at every focal length if only we had sufficient acuity, but that the limits of human 'vision' prevent us from achieving this. If this analogy stands, there is no need to seek ontological gaps for divine action, occasionalism can be cast as the false attempt to eliminate every circle of (causal) confusion, while deism represents an equally mistaken attempt to maximise depth of field at the expense of precise focus at *any* focal length.

Finally let me posit a metaphor by which SDA/GDA and the primary/secondary causal distinction need not be jointed or analytic because they share, metaphorically, the topology of a Mobius strip. We may trace the contours looking for the border, the break, the disjuncture, the joint etc., but there simply isn't

one. The terms appear to be orientable when, in fact, our eyes deceive us and when we trace the contours with our fingers, we discover a single non-orientable plane.

Summary

This chapter has charted the role of language, beginning with Nicholas Saunders rather bleak assessment of the possibility of talking about divine action in view of the findings of the "scientific perspective" of the VO/CTNS series. And yet, as Rowan Williams helpfully reminds us, the words we use in describing even mundane experiences possess a curious "edge". Certain combinations of word-ideas induce a kind of "pressure"; a pressure intimating a transcendent realm beyond the immanent limits of scientific methodological-natural enquiry. And even while noting how Rudolf Otto and George Steiner have influentially discussed this phenomenon in the academy, we should acknowledge how the mystical tradition long recognised this "edge" of words.[88] Language seems geared towards disclosing a transcendent dimension if only we will pay careful enough attention to the variety and function of common, but key, linguistic tropes; negation, metaphor, analogy, narrative, parable, and so on.

Nonetheless, the combinations we settle upon and the ways we collectively frame our language reflect the fact that we are embodied, social, knowers. Thus, a community that values 'model' primarily as an explanatory tool has steered the discourse on divine action throughout the VO/CTNS series. Its preferred 'models'

[88] Rudolf Otto, *The Idea of the Holy: An Inquiry into the Non-Rational Factor in the Idea of the Divine and Its Relation to the Rational*, trans. John W. Harvey (London: Oxford University Press, 1926); George Steiner, *Real Presences* (Chicago: University of Chicago, 1989).

imply an objectively identifiable 'causal joint'; one that allows investigators to analytically distinguish between GDA and SDA.[89] There are, however, risks with this methodological approach, for it distinguishes inadequately between model and metaphor, and may unduly privilege methodological-natural explanation by grounding truth-worthiness within diminished univocal and empirical categories of cause. Moreover, it is arguable that 'causal joint' has become a dead metaphor, unhelpfully restricting the imaginative leap that language of divine action demands if it is not reductively to collapse back into univocal immanence alone.

Having measured language's capabilities in abstract principle, we can now move on to apply those insights to the more concrete contexts in which the VO/CTNS discussion of divine action happens: theology and science. I have previously observed the priority ascribed to biblical interpretation in the evangelical tradition, and reflected in the Bebbington quadrilateral, but also intimated the tensions and challenges biblical interpretation presents even within the (*e-t/o-t*) communion. To that end, let us start with the Bible. I turn, therefore, to a more detailed survey of the biblical 'data'; that continent's topography, if you will; drawing on several of the arguments of this opening chapter to show how the Bible is a credible partner in the search for truth because it may provide additional epistemic resources beyond those available to methodological-naturalism alone.

[89] Russell and Polkinghorne are both careful to insist they are *not* claiming to locate the causal joint. But then why concentrate on any specific domain at all, let alone those with putative causal gaps? It seems to me that the methodological framing of the VO/CTNS series, at least for those authors endorsing the causal joint metaphor and any form of NIODA, performatively reverses such denials.

Chapter 2

Divine Action and the Biblical Data

Despite the global prevalence of evangelicalism with its high regard for the Bible, there are many outside the church who now assume the Bible is discredited; that it has nothing substantial to contribute to human knowledge. Consequently, this chapter will evaluate whether – and how - the Bible's characterisation of divine action can contribute to our knowledge of God; critiquing, in the process, an epistemology that dispenses with the Bible altogether: scientism. Yet, granted a legitimate epistemic role for the Bible, a second task then emerges; that of establishing the proper interpretive process for dealing with the raw data.

In this chapter a variety of interpretive perspectives are illustrated by plotting aspects of the hermeneutical approaches of Russell, Wildman, and Polkinghorne. These interpretive preferences are then plotted in relation to historical developments in hermeneutics; identifying in the process, once more, a sociological dimension to belief that will demand further analysis as the thesis progresses. The survey reveals some common hermeneutical assumptions among contributors to the VO/CTNS series, but also, from an (*e-t/o-t*) perspective, some potential theological concerns.

Can those concerns still be satisfied? The key question for believers and non-believers alike is "What is Revelation?"[1] I will therefore identify a philosophical approach to Revelation that can ground the (*e-t/o-t*) perspective. Finally, I will pick up, more fully, Vanhoozer's analogical hermeneutic of authorial *Theo-drama* (briefly alluded to at the end of the previous chapter) suggesting it offers a scientifically consonant and theologically satisfying (*e-t/o-t*) perspective that analogically balances the biblical and theological pressure to preserve divine transcendence without compromising creaturely immanence.

Outlining the Role of Biblical Hermeneutics

A collation of every biblical instance of divine action arranged systematically, perhaps by typology, would be very helpful. Such an undertaking would, however, require topographical charting at too fine a scale for this thesis. In fact, the demands of scale require me to bracket out both first and second order questions and, instead, concentrate on those third order issues that influence consideration of biblical data in the aggregate. First order issues concern provenance (manuscript copy fidelity), language (grammar and translation) and exegesis (the original sense). Second order issues relate to metadata; identifying thematic approaches and identifying overarching themes like salvation history, and covenant.[2] But they also give rise to third order

[1] I differentiate between 'revelation' and 'Revelation'. The former refers to particular events, the latter to a (putative) single overarching trans-temporal divine act that is disclosed in the interpretive community's reflective identification and preservation of 'orthodox' doctrine; contained in, but not necessarily identical to, Tradition.

[2] It is regrettable that the demands of space prevent me from engaging more concretely with this second level, not least because it would allow me to affirm more clearly consonance and overlap among the various communions and theological perspectives under consideration. Again, the significance of the Trinity, crucicentrism, and eschatology provide a wealth of agreement that cannot be adequately reflected upon in the space available.

questions of a philosophical and, ultimately, metaphysical kind. The full gamut can be gathered together under the general rubric of hermeneutics.[3] More prosaically, we might say that metaphysics is concerned with deciding what to *believe*, while hermeneutics is concerned with *deciding* what to believe. The two cannot be entirely separated, but neither are they identical. [4]

In deciding how to interpret, say, the doctrine of the Fall in light of Genesis and Romans, a suite of judgements must be made about historical, linguistic, and textual issues. To these must be added further judgements about trope, (E.g., how do history, mythology and poetry relate?), the weight to give to Tradition (historical-communal interpretation), and so forth. Beyond those are philosophical questions concerning epistemology and ontology, Revelation/revelation, and the ontological status of the laws of nature. Resolving these myriad issues is collectively termed 'hermeneutics' and it follows that choices at each stage of the process give rise to a range of differing perspectives. Thus, individuals and indeed communities can be said to adopt a specific 'hermeneutical stance'. But at the third order scale it becomes important to pay attention not only to the content of a given hermeneutical stance - some of which may only be implied - but broader extra-biblical factors that motivate choices of perspective. The tension, already highlighted, between the transcendent

[3] Vanhoozer, perhaps echoing Aristotle's naming of metaphysics as 'first philosophy' inverts the numbering system I employ here deploying the term 'first theology' and defining it as the 'coordinated construal of God, scripture and hermeneutics that distinguishes one theological approach from another. Whether God and Scripture can be clinically abstracted from hermeneutics or not, I certainly mean by 'hermeneutics' to encompass this broader network of issues. On 'first theology' see Vanhoozer, p. 15.
[4] Biblical Hermeneutics is a dauntingly large, and ever burgeoning, field and I can offer no more than a very superficial overview. For a sense of the central principles and the variability of interpretive schemes see *inter alia* Richard N. Soulen and R. Kendall Soulen, *Handbook of Biblical Criticism*, 4th ed. (Louisville: Westminster John Knox Press, 2011); Colin E. Gunton, Stephen R. Holmes, and Murray Rae, *The Practice of Theology: A Reader* (London: SCM, 2001); John Goldingay, *Models for Interpretation of Scripture* (Grand Rapids, Michigan: W. B. Eerdmans, 1995).

demands of Revelation and the immanent demands of methodological-naturalism is not easily balanced or trivially resolved.

Scientism as an Alternative Hermeneutical Perspective: Some Problems

Despite the arguments of the previous chapter on the embeddedness of transcendence in language itself, there remain those who insist that it falls to science, alone, to answer life's definitive questions.

Stephen Hawking's *The Grand Design*, for example, proclaims the subtitle '*New Answers to the Ultimate Questions of Life'*. Hawking begins with the remarkably bold assertion that 'Philosophy is dead. [It] has not kept up with modern developments in science, particularly physics. Scientists have become the bearers of the torch of discovery in our quest for knowledge.'[5] The irony of Hawking then devoting nearly two hundred pages to proffer an instrumental 'bootstrapping' epistemology, that is itself highly philosophically contentious, should not be lost on anyone.[6] Moreover, Hawking's blasé equivocation of the word "nothing" with the quantum background illustrates a problematic inattention to the significance of language that flies in the face of the careful mapping of the last chapter. Such science, bereft as it is of an ear for even the hint of transcendence beyond its own methodological-natural back yard, risks isolating itself from truth in its fullness.

---

[5] Hawking and Mlodinow, p. 5.

[6] 'Bootstrapping' in the sense of raising yourself up by pulling your own bootstraps upward. Bootstrapping is the term applied to a temporally closed causal circle in which later causal processes are both caused by, and themselves the cause of, earlier causal processes. Despite its currency in some communities of cosmology, it is philosophically contentious. For further introduction see P. C. W. Davies, *God and the New Physics* (London: Penguin Books, 1990), esp. pp. 47-49, and chapters 12 and 16.

Whatever the perceived overlap or common ground, science cannot totally subsume philosophy, or ethics, or theology.

But "Why?" the now familiar question perseveres, should science take theology of *all* things seriously? Valid as this question might seem to modern ears, it is profoundly parochial from a historical perspective.[7] Catalogued according to the influential fourfold typology Ian Barbour coined in the 1970s, the fashionable but flawed and historically anachronistic '*conflict*' typology has been thoroughly tried and found wanting.[8] For the critical-realist '*independence*' fails also, because a single unified ontology refutes mutually contradictory explanations of, say, miracles. Language is, after all, more than a game.

There is, nonetheless, an ongoing tension between Barbour's two remaining typologies: '*dialogue'* and '*integration*'. Can science and theology enjoy mutually creative dialogical interaction? Or will enduring explanatory conflicts only be resolved by one discipline or the other "taking itself off", so to speak, "and having a bit more of a think?" The ongoing tension between dialogue and integration has operative consequences that make it a central issue for this thesis.[9]

---

[7] Peter Harrison, *The Territories of Science and Religion* (Chicago, Illinois: University of Chicago Press, 2015).

[8] Barbour initiated much of the discussion by presenting a fourfold relational typology consisting of *Conflict, Independence, Dialogue*, and *Integration.* See E.g. Barbour, (1974). For a banal appropriation of the conflict typology see Dawkins. Alister McGrath provides a sceptical critique of Dawkins in Alister E. McGrath, *Dawkins' God: Genes, Memes, and the Meaning of Life* (Oxford: Blackwell, 2005), especially chapter 4.

[9] This tension will receive explicit discussion in chapter 5.

The Challenges of Biblical 'Data'

Granting that theology *is* a potentially credible partner in the search for truth it follows that it has additional epistemic resources beyond those available to methodological-naturalism alone. The primary source is, of course, those depictions of God and divine action contained in the Bible.[10] But there is also the data of communal historical reflection on those biblical narratives at the individual and corporate (including international) level. Much of this reflection is codified in doctrine and its systematic application as communal tradition; hence the ancient Tridentine formulae of Scripture and Tradition. This is not to suggest, however, that the process is straightforward or the results universally agreed. It gives rise, as already observed, to communities with different perspectives.

But what counts as divine action? This is a formidably tricky question to answer because, absent the totalising possibility of occasionalism by which there is only divine action, as soon as one tries to distinguish between 'special' divine action and the warp and woof of ordinary life and history, the boundaries dissolve into an unfathomable blur. God 'miraculously' parts the sea for Israel's exodus (Exodus 13:17-14:29), but is also implicated in Joseph's sale into slavery some four hundred years earlier; 'Even though you intended to do harm to me, God intended it for good, in order to preserve a numerous people, as he is doing today' (Genesis 50:20, *cf.*, Genesis 37:18-36). So, should the choice of Joseph's brothers count as a divine act or merely a 'workaround'; divine accommodation? Does God really change his mind because of King Hezekiah's prayer (2 Kings 20:1-6)? Does God act to determine the

[10] The precise content of the biblical canon varies across traditions, among textual variants, and, not least, through the demands of translation. This discussion limits itself to the Protestant canon, although the principles and examples considered may recur in what that tradition would consider *extra*-biblical sources such as those in, for example, the Catholic apocrypha.

outcome of every throw of the lot (Proverbs 16:33), or only specific acts of divination such as the casting of the Urim and Thummin (E.g., 1 Samuel 14:36-41), and the selection of a replacement for Judas (Acts 1:21-26).

And there are far stranger examples of apparent divine action; Jacob's wrestling a mysterious stranger in the stream at Jabbok (Genesis 32:22-30); God's appearing to Elijah as the "sound of sheer silence" (1 Kings:19:11-13); and God apparently inciting David to sin by prompting him to commission a census (2 Samuel 24:1-17),[11] Theoretical questions, too, press themselves upon the contemporary mind almost immediately: are miracles like the parting of the Red Sea; or the stopping of the waters of the river Jordan; or turning water into wine; or walking on water, really possible? Did these events, or others like them, really happen? Where is the boundary between history and fiction? Do the floods, famines and pestilence, or the rise and fall of Kingdoms recorded in the prophetic books count as SDA (God's exceptional action) or GDA (the prophet's *seeing* the divine in otherwise 'natural' processes). Just how "hands off" is GDA? And how, for that matter, should we relate divine action to creaturely action? How, in sum, must transcendence and immanence be related?

A 2013 article by Russell on evolutionary theory serves as a useful example of the current relationship between science and theology from the perspective of a believing scientist in the VO/CTNS series. Noting that there is 'no sure and unproblematic move from nature to its Divine Creator', Russell outlines three broad options for an epistemological stance for relating divine action to modern

[11] Commenting on this story, Walter Brueggemann observes, '"Yahweh incited." This exceedingly problematic assertion is not unlike "Yahweh hardened the heart of Pharaoh" (Exodus 10:1, 20). […] We do not know the ways of God. This first verse lies outside the narrative action and bears witness to God's inscrutability. […] David (like Job) must play his role in a theological drama that is much larger than he is.' Walter Brueggemann, *First and Second Samuel*, Interpretation: A Bible Commentary for Teaching and Preaching (Louisville, Kentucky: John Knox Press, 1990), p. 351.

evolutionary theory.[12] First, there is the axiological approach in which qualities of beauty, joy and goodness demand some account of nature beyond its material constitution alone. Yet, for a contemporary culture where Tennyson's famous invocation of nature as 'red in tooth and claw' is rendered in ever-higher definition with each new David Attenborough documentary on the BBC the axiological knife, as Russell acknowledges, cuts both ways. Secondly, therefore, he points to 'natural theology' in the guise of Romans 1:19-20 and Paul's appeal to nature as evidencing Divine existence. But, as Russell promptly argues, 'natural theology' is also far from unproblematic for, in addition to sustained philosophical critique at the hands of Hume and others, neo-Darwinian evolution's capacity for what Francisco Ayala labels teleonomy, or 'design without a designer'[13] means that natural theology is now a largely discredited option. Consequently, the third epistemological stance Russell identifies posits a 'theology of nature'.

This is, Russell observes, the approach favoured by most contemporary scholars in the field of science and theology and in the context of evolutionary theory is usually called 'theistic evolution'. In contrast to natural theology, which begins with an examination of the world, 'theology of nature' begins with fundamental tenets of faith and then, in the Anselmian tradition of *fides quaerens intellectum*, asks what insights science can bring to clarify and improve our understanding of Divine nature and activity.

For the rational and intellectual underpinning of this approach, Russell adopts an *epistemic* hierarchy developed by Arthur Peacocke, with fundamental physics

---

[12] Robert J. Russell, "Recent Theological Interpretations of Evolution," *Theology and Science* 11, no. 3 (2013): p. 172.
[13] Francisco J. Ayala, "Darwin's Greatest Discovery: Design without Designer," *Proceedings of the National Academy of Sciences of the United States of America* 104 (2007): pp. 8567-73.

occupying the lowest rung and theology at the top. Russell argues that the truth claims of disciplines occupying higher rungs are not limited to, but are necessarily constrained by, the findings of disciplines hierarchically below them. Theology, occupying the top most level, is constrained by the findings of every lower level.[14] From this arrangement it follows that, for Russell, new discoveries in physics or biology mean that

> The task of theologians is to rethink their heritage of Scripture, creed and tradition in terms of contemporary culture, it is particularly relevant [for theology to engage with science and philosophy in order to] discover the effects these changes can have on our own theological agenda.[15]

For Russell, this rethinking of theological heritage can take two distinct forms; a necessary "now that…" and a speculative "what if…?" form. In the first case, theology must respect the epistemic constraints that follow from the findings of disciplines lower in the hierarchy. In the case of evolution, for example, theology cannot afford to ignore the implications of the scientific status of, say, the mitochondrial DNA.[16] Similarly, in physics, theology cannot afford to ignore the implications of quantum properties like entanglement, irrespective of ongoing debates about the underlying ontology.

---

[14] Responding to methodological comments by Murphy, Russell says that 'for various historical reasons I have been relying on Arthur Peacocke's understanding of the relations between the disciplines, which traces back to the 1970s and 1980s. […] this constraints-with-irreducibility interpretation I find immensely valuable. It allows me, for example, to argue that theology, residing at the top of Peacocke's diagram, is maximally constrained by the sciences.' Robert J. Russell, "Cosmology from Alpha to Omega: Response to Reviews," *Zygon* 45, no. 1 (2010): p. 240.
[15] Russell, "Quantum Physics in Philosophical and Theological Relationship", (*PPT)*, p. 343.
[16] Dennis R. Venema and Scot McKnight, *Adam and the Genome* (Grand Rapids: Brazos Press, 2017), pp. 62-65.

There is, however, an obvious tension between constraint from below and irreducibly novel epistemic contribution at each new level in the hierarchy. How should theology deal with, for example, the tension between the methodological-naturalism of science and the role of Revelation in faith claims? To Russell, the two need not be inimical, but he consistently and staunchly defends the legitimacy of methodological-naturalism in science on the *theological* grounds that;

> Historically, methodological naturalism is based on a combination of the doctrine of creation [*sic*] ex nihilo and the Greek logos tradition. According to the former, God freely created the world out of no prior matter or laws, and thus the world is contingent. Hence knowledge about the world is empirical and empirical knowledge requires experimentation. According to the latter, the world is rational and intelligible, and its processes can be represented by mathematics.[17]

Russell comments upon his own hermeneutical approach in an article for *EMB*, where his exploration of special providence (SDA) through genetic mutation is described as;

> … a project in constructive theology, with special attention to a theology of nature. This hypothesis should be taken not as a form of natural theology, nor one of physical-theology, and most certainly not an argument from design. Instead it is part of a general constructive Trinitarian theology pursued in the tradition of *fides quaerens intellectum*, whose warrant and justification lie elsewhere and which incorporates the results of science and the concerns for nature into its broader framework mediated by philosophy.[18]

---

[17] Russell, "Recent Theological Interpretations of Evolution," p. 171.
[18] Russell, "Special Providence and Genetic Mutation," in *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action*, ed. Robert John Russell, William R. Stoeger S.J., and Francisco J. Ayala (Vatican City State: Vatican Observatory/CTNS, 1998), p. 196.

That this is labelled ‘constructive’ highlights Russell’s second approach for engaging science and theology: the “what if…?” approach that speculatively engages the implications and consequences of scientific theories.

The difference between consonance and constraint is, however, potentially significant, for, by what criteria should we adjudicate between the felicitous co-incidence of consonance and the constraining ‘bottom up’ demand that theology must “re-think” its theological heritage? A hierarchical ‘bottom up’ epistemology surely places fundamental physics *first* if it constrains theology’s ability to challenge or reject the philosophical implications of a regnant scientific theory; even if that theory contradicts central tenets of the faith. Yet, as Clayton sees it ‘Theological language has traction only if it makes claims that can be impacted, either positively or adversely, by the results of philosophical critique, historical-critical research, or by scientific knowledge.’[19] Russell and Clayton were among those who preferred ‘traction’ to ‘consonance’ throughout the VO/CTNS series.[20] This is, of course, also the hermeneutical stance that motivates Saunders’s concern for the theological consequences of the VO/CTNS series.

Russell has subsequently developed a yet richer conception wherein traction is one component in a more complex relationship he labels ‘Creative Mutual Interaction’ (CMI).[21] Considering historical developments in theology, and Barbour’s typologies, Russell now suggests theology might offer science ideas to serve as the seedbed for

[19] The fullest exposition of this approach, which was adopted by most contributors to the series can be found in Clayton’s article “Towards a Theory of Traction”, in (*TY)*.
[20] For a good overview of the scope of traction and contributions to the VO/CTNS series see; Kile Jones, "Falsifiability and Traction in Theories of Divine Action," *Zygon* 45, no. 3 (2010): pp. 575-89.
[21] Robert J. Russell, *Cosmology: From Alpha to Omega: The Creative Mutual Interaction of Theology and Science* (Minneapolis, Minnesota: Fortress Press, 2008).

research programmes. Murphy provides a very helpful summary of Russell's eightfold division of approaches in CMI thus;

1. Scientific theories may serve as data that place *constraints* on theology.
2. Scientific theories may serve as *supporting* data for theology in so far as they are explained theologically.
3. *Philosophical interpretations* of scientific theories may serve as data for theology.
4. Scientific theories may serve as data for theology when they are incorporated into a *philosophy of nature.*
5. Scientific theories may function *heuristically* in the inspiration of theological theories.
6. Theology may provide some of the philosophical assumptions underlying science.
7. Theological theories may function heuristically in the construction of scientific theories.
8. Theological theories may lead to 'selection rules' within the criteria of theory choice; that is, for choosing among existing scientific theories that all explain the available data, or for deciding what set of data the theory should seek to explain.[22]

CMI certainly refines Barbour's original fourfold typology.[23] It is also more nuanced than any of the forms of traction Clayton proposed in the VO/CTNS series.[24] Nonetheless significant challenges remain.

First, we must ask again how, precisely, hierarchical constraint is determined. As the previous chapter shows, this hermeneutical stance is vulnerable to a reductive

[22] Nancey Murphy, "Creative Mutual Interaction: Robert John Russell's Contribution to Theology and Science Methodology," in *God's Action in Nature's World: Essays in Honour of Robert John Russell*, ed. Ted Peters and Nathan Hallanger (Aldershot: Ashgate, 2006), p. 40.
[23] Murphy writes 'In my judgement, [CMI] preserves everything of value in the earlier works he cites, while solving a number of outstanding problems. Even more important is the fact that from the perspective of Russell's theory we can see why his predecessors' views succeeded to the extent that they did, and fell short at just the points where they failed.' Ibid., p. 44.
[24] For a more detailed exposition of Clayton's approach to traction, see chapter 5.

collapse from critical-realism into a performatively realist epistemology. As we shall see, Moltmann's demythologised immanent Trinity appeals to scientist-theologians in a way that Barth's radical appeal to Revelation and the transcendent opacity of God does not, and Moltmann, after all, overtly collapses the economic and immanent trinity.[25] Quasi-realist language can mask a shared but implicit constraint on transcendence that begins methodologically but functions metaphysically. But using methodologically-naturalised theories to constrain transcendence in theology as well is an illicit philosophical move.

Secondly, there is troublingly little scope in Russell's eight-fold scheme for theology to ground its hermeneutical demands upon Revelation as an independent but legitimate source of truth. There is a potential tension between (3) philosophical interpretations of scientific theories serving as data for theology and (6) theology providing some of the philosophical assumptions underlying science. Yet Russell grounds both in philosophy. Principle number (8); that theological theories *may* lead to 'selection rules' within the criteria of theory choice; that is, *for choosing among existing scientific theories that all explain the available data*, or for deciding what set of data the theory should seek to explain, seems particularly restrictive for, as we have consistently noted, scientific theories – like 'history' – are neither pristine nor philosophically neutral epistemological windows onto an underlying ontology. CMI seems, in practice, to exclude Revelation on *a priori* grounds that beg a transcendent question. Again, however, this has operative consequences for how we interpret biblical Revelatory truths like the doctrine of the Fall in light of scientific theories like

[25] Moltmann writes "… I found myself bound to surrender the traditional distinction between the immanent and economic Trinity, according to which the cross comes to stand only in the economy of salvation, but not within the immanent Trinity", Moltmann, *Trinity and the Kingdom of God*, p. 160, cited in Vanhoozer, p. 110.

the neo-Darwinian synthesis.[26] There is an implied hermeneutical stance at play here by which Russell seems to argue *truth* is only accessible via a *rational* epistemic hierarchy with the mathematical-realism of fundamental physics providing the clearest, 'objective', perspective on ontology.

Wesley Wildman is among a number of contributors to the VO/CTNS series who agree that transcendent metaphysical issues are vital for discussing the nature of divine action.[27] Endorsing the critical-realist position, he categorises himself as a Neoplatonist,[28] preferring the term ultimacy 'because' he is, as he puts it, 'most interested in ultimate reality and think[s] that God is a valuable but potentially parochial name for it.'[29] Thus, for Wildman, the source of ultimacy is "God" not as a being, but rather as explanation for the 'ground of nature's being, […] its axiological and ontological depth structures.'[30] Wildman contrasts this with both process and 'supernatural' (i.e., miraculous) theological cosmologies, insisting that;

> The story of cosmic evolution severely strains the supernatural cosmology and naturally suggests a very different kind of ultimate reality, which is one of the main motivations for the ground-of-being cosmology. The deity in any theistic formulation of a ground-of-being cosmology would have to be morally ambiguous; the fecund source of both order and chaos, weal and woe, because such a God would be the deep structure of the world as we encounter it.[31]

---

[26] As I will argue in chapter 5, if hierarchical constraint is granted uncritically, then metaphysics enjoys freer rein in science than it does in theology. This might account for the way teleonomy in the neo-Darwinian synthesis is taken to trump any revelatory appeal to teleology.
[27] See *inter alia*; John Polkinghorne, "The Metaphysics of Divine Action," in (*CC*), pp. 147-57; William R. Stoeger, "Contemporary Physics and the Ontological Status of the Laws of Nature," in (*QCLN*), pp. 207-34; Owen Thomas, "Metaphysics and Natural Science," *Theology and Science* 7, no. 1 (2009): pp. 31-45. For a contrasting view of metaphysics see. Nancey Murphy, "Supervenience and the Nonreducibility of Ethics to Biology," in (*EMB*), pp. 463-91.
[28] Wildman, (*TY*), p. 137.
[29] Wesley J. Wildman, "Behind, between, and Beyond Anthropomorphic Models of Ultimate Reality," *Philosophia* 35 (2007): pp. 407-25. *Cf*., (*NP*), p. 407.
[30] "The Import of Physical Cosmology for Philosophical Cosmology," *Theology and Science* 6, no. 2 (2008): p. 202.
[31] Ibid., p. 207.

It is worth asking, however, whether Wildman adopts a deceptively realist hermeneutical stance here, for he only allows the critical-realist knife to cut one way. Why must we accept his claim that the *deep structure* of the world is as morally ambiguous as he insists our anthropomorphic assessments render it? Why should finite, immanent, human *critical*-realism entail conflict and discord *all* the way down, rather than harmony and resolution as ontologically, and transcendently, more basic?

And what, in that case, is the provenance of the biblical data and its language of divine character and action? Wildman believes that 'religiousness is not the primary drive for the evolution of human cognitive traits, […] their application to religion is an evolutionary side effect [and that] the popularity of highly anthropomorphic forms of personal theism is [consequently] troubling.'[32] It is no surprise therefore, to learn that Wildman rejects revelation.[33]

> My working hypothesis is that there is no supernatural revelation, because there is no supernatural being to convey it, and no supernatural realm to house it. Rather, revelation is best understood as found in every moment of human insight, in the depths of nature, and in the emergence of intense value that nature supports.[34]

I am not sure what to make of this argument. The article from which it comes has a somewhat puckish tone and it would be reasonable, I suspect, to interpret Wildman's invocation of 'every moment of human insight' as rhetorical flourish. Far more problematic, however, is justifying the epistemic intuition by which this 'intense value' emerges because if religious experiences are evolutionary by-products, how is

---

[32] Wildman, "Behind, between, and Beyond," p. 421.
[33] Wildman, "Comparative Natural Theology," *American Journal of Theology and Philosophy* 27, no. 2 & 3 (2006): p. 174, footnote 3.
[34] Wildman, "Behind, between, and Beyond," p. 410.

this intense value – or any other axiological intuition for that matter – anything other than a mere evolutionary spandrel or exaptation, and no reflection of the universe's underlying ontology?[35] It is not at all clear to me how Wildman can sufficiently ground 'this evolutionary birthright'; the human capacity to interrogate and interpret clues to the universe's deep structures.[36] Yet, as we have already seen, Wildman rejects Biblical personalist language about God. Thus, he writes,

> I contend that this personalistic focus in the doctrine of God is excessive. It is a post-Reformation distortion, deeply linked to the "turn to the subject" in modern philosophy and theology. It also tends to reflect the economic and social values of middle-class suburban white Protestants. I am unwilling to allow the general category of theism to be held hostage to what I hope amounts to a passing trend in the history of Western Protestant theology.[37]

Wildman's assessment of the situation strikes me as verging on caricature. Certainly, God is not a man (Numbers 23:19) but anthropomorphism is deeply embedded in the language of the Bible. Again, therefore, a familiar problem emerges; discerning the proper limit of analogy and the pressure language must exert in demanding analogical relation to God, yet resist in avoiding collapse into univocal anthropomorphism. Wildman seems to falsely disallow any pressure toward the personal pole. And so, in *The Import of Physical Cosmology for Philosophical Cosmology* Wildman declares that,

---

[35] Exaptation is the process by which an organism's features acquire functions for which they were not originally adapted or selected. A spandrel is a by-product of the evolution of another characteristic, rather than a direct result of adaptive selection.
[36] Wildman, "The Import of Physical Cosmology…", pp. 208-9.
[37] Wesley J. Wildman, "Incongruous Goodness, Perilous Beauty, Disconcerting Truth: Ultimate Reality and Suffering in Nature," in *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, ed. Nancey Murphy, Robert J Russell, and S.J. William R. Stoeger (Vatican City State: Vatican Observatory/CTNS, 2007), pp. 267-94.

> Proponents of ground-of-being cosmology are deeply frustrated with the supernatural cosmology's convenient distancing of God's moral character from the morally ambiguous interplay of chance-like and law-like processes uncovered by the modern natural sciences, […]. If God's purposes were what the salvation narratives of supernatural theisms say, then God would have created the way Genesis described, or the way C.S. Lewis pictures it in *The Chronicles of Narnia*, with Aslan singing creatures out of the ground and into existence.[38]

On the contrary; I would suggest that this judgment, ironically, again betrays an excessive anthropocentrism of its own. The entire argument rests on an enthymeme in which the moral worth of the whole creation is subject to Wildman's unspoken but presumably utilitarian axiological calculus. Wildman, it turns out, eschews an avowed ontological agnosticism to insist, instead, that the "deep structure" of the world is every bit as morally ambiguous as the human encounter with it suggests. Yet how, precisely, is his assessment *metaphysically* justified?

To give Wildman his due, he acknowledges that alternatives and ambiguities abide. Thus, in an article on the possibility of natural theology he says that;

> Metaphysics is not completely arbitrary, solely a matter of taste and tradition; natural theology properly understood shows that this view is mistaken. But we also need to resist the fantasy that ultimacy metaphysics is exhaustively rational in the sense that every question can be decided. Correspondingly, we should heartily embrace the inchoate forces that dispose us to prefer one hypothesis over another, one aesthetic sensibility to another, one way of balancing criteria rather than another. [39]

I would endorse Wildman's claim about the limits of 'ultimacy' and the constraints of human ration for metaphysics; limits imposed by experience and the

---

[38] Wildman, "Incongruous Goodness, Perilous Beauty," p. 207.
[39] Wildman, "Comparative Natural Theology," p. 190.

inchoate processes by which we each settle on our own hermeneutical stance, replete with all its idiosyncrasies and preferences. Exploring transcendence inevitably forces us to the edge of words: to paradox and ambiguity. But, as I have been careful to argue, it does not follow that *anything* goes. Wildman is also right, therefore, to observe that philosophical and theological preferences cannot function from the outside in. He fittingly grants that we 'always *begin* in the middle' when analysing religious experiences and traditions.[40] This signifies the role of what the ancients called *habitus*, that confluence of principles, experiences and character that shapes the whole framework of our beliefs.

John Polkinghorne consistently rejects the classical view of God, and the relation of primary and secondary cause famously expounded by, for example, Thomas Aquinas.[41] Compatibilism is, he maintains, an act of fideism involving 'no more than the imposition of a mysterious theological gloss on natural process.'[42] Not only does Classical theism pay insufficient attention, in his view, to 'becoming' as an important ontological category,[43] but also,

> the stronger one's account of divine action, the more perplexing must become the problems of evil and suffering in the world […] it seems to me that the ascription of all that happens to God's primary causality faces this difficulty in a peculiarly acute form.[44]

---

[40] Wildman, "Behind, Between and Beyond," p. 418.
[41] Ignacio Silva has recently shown how Polkinghorne seems to understand Aquinas only insofar as Austin Farrer expounds the concept of double agency, and that Farrer's exposition displays some weaknesses in relation to Aquinas's actual views. See Ignacio Silva, "Thomas Aquinas Holds Fast: Objections to Aquinas within Today's Debate on Divine Action," *The Heythrop Journal* 54, no. 4 (2013): pp. 658-67.
[42] J. C. Polkinghorne, *Scientists as Theologians: A Comparison of the Writings of Ian Barbour, Arthur Peacocke & John Polkinghorne* (London: SPCK, 1996), p. 31; *Science and Christian Belief: Theological Reflections of a Bottom-up Thinker* (London: SPCK, 1994), pp. 81-82.
[43] Polkinghorne, *Scientists as Theologians,* (1996), pp. 31-33.
[44] Polkinghorne, *Scientists as Theologians,* p. 32.

Suggesting that 'one might define [Panentheism] as stating that the world in some sense exists in God, but that he in his divine nature exceeds the world' Polkinghorne rejects both the whole part panentheism of Arthur Peacocke and the process panentheism of Ian Barbour.[45] Process theology, in particular, he argues, 'seems to be restricted to the role of a powerless pleading from the margins of occurrence. […] Just as the Tyrant cannot be the God of love, so the Persuader is too much in thrall to his creation to be the ground of hope.'[46] Polkinghorne also rejects the 'B' theory of time and divine timelessness, on the grounds they entail an insufficiently 'personal' depiction of God and an inadequate account of the nature of history. Consequently, Polkinghorne adopts what might be called a kenotic hermeneutical stance.[47] 1979's *Science and Providence* illustrates this *kenotic* approach in the following way,

> If God is the origin of all that is, he is consistent with all that is, and this means that a great deal of his purposive activity will be hidden in the structure of scientific law. […] The God who is the ground of physical process is inescapably a *deus absconditus*, a hidden God. This is the area where Christian theism is "necessarily tinged with deism."[48]

Nonetheless, in his contribution to 2000's *The Work of Love,* Polkinghorne writes 'I have come to believe that the Creator's kenotic love includes allowing divine special providence to act as a cause among causes.'[49]

---

[45] Ibid.
[46] Ibid., p. 33.
[47] In *kenosis*, a Greek term in the Christological hymn of Philippians 2:7 is extrapolated to posit divine self-limitation in the full Godhead.
[48] J. C. Polkinghorne, *Science and Providence: God's Interaction with the World*, 1st Shambhala ed. (Boston, Maryland: New Science Library, 1989), p. 45.
[49] Polkinghorne, "Kenotic Creation and Divine Action," p. 104.

Unfortunately, this change of tack strikes me as deeply problematic. For one thing, as Ignacio Silva correctly points out, this ontology would make God accessible to scientific enquiry, reintroducing the problem of the God-of-the-gaps with a vengeance.[50] But the question of *how* God acts is, in any case, not resolved, Polkinghorne merely shifts any causal 'joint' up one metaphysical step, since the question remains *how* an immaterial God can affect a material cause?

Charting Some of the Historical and Sociological Influences on Contemporary Hermeneutics

Hermeneutics is a vast field that has bifurcated into a plurality of methodological approaches. My deliberately (aerial) survey can do no more, therefore, than chart a very truncated and selective overview of some central issues of relevance to the contributions that appear in the VO/CTNS series. A brief historical outline will help to map out subsequent discussion.[51]

In an outstanding book *The Territories of Science and Religion,* Peter Harrison charts, with forensic detail, the separation of science from religion over the centuries following Scholasticism.[52] In the medieval period, and following its development by the Church Fathers, interpretation of the Bible commonly followed a fourfold scheme: *historical* (in the modern, largely literalistic, sense), *tropological* (that is figuratively, as moral guidance), *analogical* (promising and/or faintly echoing heaven), and

[50] Ignacio Silva, "Great Minds Think (Almost) Alike: Thomas Aquinas and Alvin Plantinga on Divine Action in Nature," *Philosophia Reformata* 79 (2014): p. 16.
[51] Such brisk pencil sketches are a risky business. Nonetheless, as Graham Ward points out, several possible historical narratives share a broadly similar plot structure with which this account conforms. See Graham Ward, "Barth, Modernity and Postmodernity," in *The Cambridge Companion to Karl Barth*, ed. John Webster (Cambridge: CUP, 2000).
[52] Harrison.

allegorical (which tended to place Christ at the centre).Various pressures came to bear upon this approach in subsequent centuries.

Intellectual pressure came from the Enlightenment appeal to the power of rational thought; advocated by figures like Hobbes and Descartes and vindicated, apparently, in the lawful truths of the "new" mathematics and mechanics of Newton, and the discoveries of the newly founded Royal Society.

Social pressure came from the Reformation and Counter-Reformation, and from increasing secularisation in the political realm; challenging not only the authority of Church and Tradition, thereby increasingly privatising interpretation. Romanticism, challenged the notion of a rationally attainable utopia, replacing it with a developmental worldview grounded in Hegel's dialectical materialism and a progressive view of 'history' vindicated, seemingly, by Darwin's ground-breaking theory of evolution. These changes lay the foundation for the emergence of a socio-politically useful "conflict" narrative of the relationship between faith and reason around the end of the 19th Century.[53] This was true especially when 'religion' was construed in terms of the Tridentine formula of Catholic ecclesial authority.[54]

I have already suggested a potential correlation between the historical perspective on Jesus and the scientific perspective on divine action. In the case of biblical studies, this newly minted historical-critical approach arguably attained its

---

[53] see *inter alia*; Colin Archibald Russell, *Science and Religious Belief: A Selection of Recent Historical Studies* (Sevenoaks: Hodder and Stoughton in association with the Open University Press, 1973); Alister McGrath, *Dawkins' God: Genes, Memes, and the Meaning of Life*, (Oxford: Blackwell, 2005), pp. 140-46; Harrison, pp. 171-75 & 94-98.

[54] Brueggemann follows a similar plot line in tracing the historical dimensions of old testament scholarship, highlighting three aspects of modernity: an epistemological shift associated with the rise of science, an epistemological shift associated with philosophical advances culminating in the dominance of positivism, and an epistemological shift towards reason as the arbiter between competing faith claims in the political as well as ecclesiastical realm. See Walter Brueggemann, *Theology of the Old Testament: Testimony, Dispute, Advocacy* (Minneapolis: Fortress Press, 2005), pp. 7-10.

apotheosis with Julius Wellhausen's *Prolegomena to the History of Israel*,[55] and William Wrede's *Task and Methods of New Testament Theology*. Wrede, for example, insisted upon 'the strictly historical character' of credible New Testament interpretation, because 'for logical thinking there can be no middle position between inspired writings and historical documents. […] Like every other real science, New Testament theology has its goal simply in itself, and is totally indifferent to all dogma and systematic theology.'[56] Thus a fault line emerges dividing 'faith' from 'reason'. A fault line Walter Brueggemann insists is still active today 'under the unhappy labels of so-called liberals (developmentalists) and conservatives (absolutists).'[57]

Demythologised 'Liberal' Hermeneutics: Rudolf Bultmann

Rudolf Bultmann's early 20th Century programme for demythologising theological interpretation of scripture offers an archetypal 'liberal' (and increasingly anthropological) approach that embraces the rationalism and the privatisation of faith we have just charted.[58] For Bultmann, "history" is a discrete intellectual discipline that 'cannot be broken by the interference of supernatural powers from beyond the world.'[59] He goes on,

---

[55] Julius Wellhausen, *Prolegomena to the History of Israel* (Atlanta, Georgia: Scholars Press, 1994).
[56] William Wrede, "The Tasks and Methods of 'New Testamanent Theology'," in *The Nature of New Testament Theology: The Contribution of William Wrede and Adolf Schlatter*, ed. Robert Morgan (London: SCM, 1973), p. 69. The same argument was made in reference to the Old Testament by J. P. Gabler. See Brueggemann, p. 13 footnote 32.
[57] Brueggemann, *Theology of the Old Testament*, p. 11.
[58] Rudolf Bultmann, *Jesus Christ and Mythology* (New York: Charles Scribner's Sons, 1958).
[59] Rudolf Bultmann and Schubert Ogden, *New Testament and Mythology: And Other Basic Writings* (London: Fortress Press, 1984), p. 147.

> While, for example, the Old Testament narrative talks about God's intervention in history, the science of history cannot assert such an act of God […] To be sure, as the science of history it may not assert that such faith is an illusion and that there is no act of God in history. But *as science it cannot itself perceive such an act* and proceed as though such had occurred; it can only leave *everyone free to decide whether [or not] he or she wants* to see an act of God in a historical event that it itself understands in terms of the event's immanent historical causes. [Italics added for emphasis.][60]

For Bultmann, the *kerygma* (proclamation) of the New Testament revolves around a set of *myths* rather than historically particularised events. It is not, he argues, that God does not act, but that God *only* acts inwardly; that we encounter God in an internal world of response to the Word and word of God provoked by the realisation of our existential fragility. Proper interpretation means to Bultmann, as McKintosh nicely summarises things, to 'read back out of the mythological language the meaning for our own era which correlates with its meaning for the era of its authors.'[61] Persuasive though some might find Bultmann's epistemology here it will strike others as a question begging exercise; for how, precisely, are we to close the epistemological gap between the generations? Bultmann's famous thesis that the *kerygma* of Easter was a resurrection of faith in formerly dispirited followers rather than the resurrection of Jesus actual body imposes a (culturally) Modern and, as we shall discover in the next chapter, increasingly questionable restriction on the ontological possibilities surrounding the Easter event. This risks reversing the cart and horse by naively superimposing the (supposedly) only possible meaning we perceive in our own era, upon the era of the original author and audience.

---

[60] Ibid., p. 148.
[61] Mark Allen McIntosh, *Mystical Theology: The Integrity of Spirituality and Theology* (Oxford: Blackwell, 1997), p. 121.

Bultmann's concern, it should be re-emphasised, was not to deny that God might exist – or indeed act. It was, rather, to protect the transcendence of God and avoid treating Him as an object like other (created) objects. Bultmann's God is not an object in the universe and therefore only acts inwardly, affecting (private) cognition. Another summary, this time Vanhoozer's, is apt; Bultmann's 'Demythologising is best viewed as a strategy for translating biblical statements about God into existential statements about human being.'[62] This hermeneutical stance mirrors Wildman's apophatic theological perspective in the way both constrain epistemic access to transcendence.

But if we reduce God's realm of activity from the world 'out there' to the private and inner dimension of psychological experience, why stop there? Why shouldn't all talk of God be merely internally generated projection? The biblical data – and all theology – would then belong, properly, to the 'science' of anthropology. Such reductive interpretations of Christianity belong, famously, to the 'masters of suspicion'; Marx, Nietzsche, Freud and Feuerbach, who see no God behind or beyond those aspects of the self (ego or whatever) that are, for them, the true reference and causal motive behind the biblical writings and all religious language. 'It was Hegel' Vanhoozer says, 'who perfected the translation of biblical representations into philosophical conceptualisations – *Vorstellung* into *Begriff*, *mythos* into *logos* – without remainder.' [63] Similarly, in the view of Feuerbach and his heirs', theology is only anthropology and the Bible is only anthropomorphism. Thus, in the preface to the second edition of *Essence of Christianity* Feuerbach writes;

[62] Vanhoozer, p. 15.
[63] Ibid., p. 35.

> Not to invent but to discover, "to unveil existence," has been my sole object; to *see* correctly, my sole endeavour. It is not I, but religion that worships man, although religion, or rather theology, denies this; it is not I, an insignificant individual, but religion itself that says: God is man, man is God; it is not I, but religion that denies the God who is *not* man, but only an *ens rationis,* […] I have only found the key to the cipher of the Christian religion, only extricated its true meaning from the web of contradictions and delusions called theology...[64]

The challenge, posed variously by Bultmann and Feuerbach, is far from trivial for it raises metaphysical questions that do not admit of incontrovertible answers.[65] What are the limits of ration, embodiment, and finitude? Is there a gap between the noetic and the ontic? Is divine self-revelation in humanly cognisable terms even possible? Such questions have clearly carried us a long way from first order questions about a particular divine act like the crossing of the Jordan in Joshua 3-4, and their resolution through philology or archaeology. They belong to the third order philosophical and metaphysical level at which theological interpretations must wrestle with the tension between immanence and transcendence.

Here, then, we can helpfully return to Wildman, who provides a contemporary example of a 'demythologised' hermeneutical stance toward the biblical 'data' that draws on Bultmann's claim that God is forever beyond reach, and Feuerbach's insistence that the most theology can accomplish is to provide anthropological data for self-understanding.

In Wildman's view, the sciences, collectively, furnish methodology and data consistent enough to be characterised as a 'modern secular interpretation of humanity'

---

[64] Ludwig Feuerbach, *The Essence of Christianity*, 2nd ed., English and Foreign Philosophical Library (London: Trübner, 1881), p. x.

[65] Vanhoozer points out that Karl Barth 'encouraged his students to begin their studies by reading Feuerbach'. Vanhoozer, p. 20 footnote 82.

(MSIH). The 'MSIH is a large-scale interpretation of human beings that transcends any one scientific, social-scientific, or humanities discipline and yet is shared currency of thought for most thinkers in all of these disciplines.'[66]

In Wildman's view, a four-stage hermeneutical process defines the social-linguistic context of religious practice. Initial descriptions of ultimacy help to formulate the expectations and experiences of others culminating in a common grammar which, finally, constrains and codifies later descriptions of ultimacy.[67] Following a Bultmannian logic, Wildman insists the MSIH does not exhaust every possibility for understanding the human condition, although he insists that consistency with the MSIH should be a requirement for any additional claims. Note how here, again then, we find the possibility of consonance (the MSIH does not exhaust every possibility) collapsed into constraint; necessary consistency.

Conceding that the MSIH is 'somewhat philosophical in character', Wildman insists it is a 'minimalist interpretation' that 'presents human beings as religiously concerned in various ways but does not venture to a position on the reality of gods or on the efficacy of paths of liberation that correspond to those human concerns.'[68] Thus, a 'posture of neutrality' underpins the MSIH properly understood.[69]

Yet the fact that atheistic philosophies appropriate the content of the MSIH more easily than religious philosophies ought, surely, to call into question the timbre of this avowed neutrality and ostensible philosophical minimalism. The MSIH derives

---

[66] Wesley J. Wildman, "A Theological Challenge: Coordinating Biological, Social, and Religious Visions of Humanity," *Zygon* 33, no. 4 (1998): p. 572.
[67] Wesley J. Wildman and Leslie A. Brothers, "A Neuropsychological-Semiotic Model of Religious Experiences," in *Neuroscience and the Person: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, et al. (Vatican City State: Vatican Observatory/CTNS, 1999), p. 351.
[68] Wildman, "A Theological Challenge: Coordinating Biological, Social, and Religious Visions of Humanity," p. 572.
[69] Ibid.

from “somewhat philosophical” presuppositions that scientists are seldom trained to identify or critically evaluate, but the distinction between ‘minimalism’ and a more thoroughgoing philosophical reductionism is far from self-evident. Does rejecting the possibility of divine self-revelation counts as a ‘minimalist interpretation’ or a maximalist metaphysical claim?

Wildman seems to acknowledge this problem implicitly when, in classifying the various theological perspectives adopted by various contributors to the VO/CTNS series, he traces divisions to ‘two competing theological instincts.’ On the one hand, underlying faith claims and, on the other, strong enough alignment with scientific theory to produce traction. Wildman believes this tension between what we might rather crudely label “creedability” or “credibility” is, to some extent, ‘an issue of taste or rational style.’[70] Frankly, I have some sympathy with his assessment. For, while rational argument is invaluable for broadly clearing and preparing the metaphysical and theological ground, there are no knockdown arguments on either side. Personal proclivities and aesthetic sensibilities (*habitus*) therefore play, it seems to me, a decisive role over which *specific* theological bed the individual theologian finally chooses to make for herself; sometimes we are drawn to a particular philosophical-theological interpretation for reasons we cannot fully articulate. There are, consequently, important insights in Wildman’s theological perspective on the VO/CTNS series. His strongly apophatic stance is helpful for identifying and alerting us to crudely immanentised realist hermeneutical stances.

Nevertheless, I remain unconvinced by Wildman’s wholesale rejection of both revelation and analogically personal attributes for God precisely because these are

[70] Wildman, "The Divine Action Project, 1988-2003," p. 147.

integral to the biblical record. We may readily grant, in some support of Wildman's position, an excessively simplistic interpretation of the *imago Dei* in some traditions. Nonetheless, the *imago* has always been a component of Hebrew anthropology. Moreover, Christology points to an authentic apprehension of the divine being that long predates any Reformation 'turn to the person.'[71] There is also a rational case for accepting, with critical care, the significance of biblical language about God; not as anthropomorphised projection, but as anthropomorphised divine self-revelation: 'Reformed epistemology.'[72]

Demythologised 'Evangelical' Hermeneutics: The 'Biblical Theology' Movement

Demythologising has not been limited to the 'liberal' theological perspective. As previously observed; by the end of the 19th Century 'history' and 'progress' had become dominant cultural and philosophical themes. Consequently, second order questions began to draw increasingly on the first order work of scholars who saw themselves primarily as historians and history as a methodological-natural scientific discipline. Two counter strategies developed among those rejecting this liberal subsumption of biblical data into anthropology and sociology. The first rejected the hegemony of "history", reappropriating revelation as a legitimate alternative epistemic route to truth. The second, looked for credible historical evidence to support biblical narratives of divine action. Karl Barth's figure dominates the landscape of the

[71] David Fergusson, *The Cosmos and the Creator: An Introduction to the Theology of Creation* (London: SPCK, 1998), pp. 13-18.
[72] In Plantinga's epistemology, for example, revelation plays an important metaphysical role, not as fideism, but as a properly basic rational belief. See Plantinga's 'Reason and Belief in God' in James F. Sennett, *The Analytic Theist: An Alvin Plantinga Reader* (Grand Rapids, Michigan: W. B. Eerdmans, 1998), p. 159.

first option – the return to revelation - and we will chart his contribution and its significance in due course. First though, it will be helpful to mark out the rise of the Biblical Theology movement and its influence on the emergence of other evangelical hermeneutical approaches, like 'open theism' and biblical 'fundamentalism'.

19th Century scholars, trained in historical criticism and culturally conditioned to believe in progress, uniformly assumed that dominant categories of Israel's theological reflection were formulated late in the nation's development. But Martin Noth strongly challenged this interpretation early in the 20th century, stressing a distinctiveness in the promises of God from the very beginning of Hebrew self-identification. Noth's influence in both German and American scholarship can be seen in the work of scholars like Gerhard von Rad, and the American archaeologist W. F. Albright. Brueggemann's observation of Albright's own significance is worth quoting at some length.

> Albright's work was presented as inductive research. That is, he took the archaeological-historical data as he found them and discovered that in compelling ways the data confirmed the biblical claim of Israel's distinctiveness in the historical process. Recently Burke Long has provided evidence that Albright's inductive archaeology was driven from the beginning by a deep commitment to and trust in the theological insistence of the biblical text itself concerning the cruciality of Yahweh and the distinctiveness of Israel. Such an argument does not greatly detract from Albright's work. Rather it reminds us of what should have been recognised all along: there is no innocent "history"; all "history" carries with it some theological intentionality. This is equally true for those scholars who now expose the ideology operative in the Albrightian synthesis. [73]

[73] Brueggemann, *Theology of the Old Testament,* p. 24. Brueggemann goes on to insist that despite the conflicts of detail between the Albright school and the German schools of Noth and Alt, both 'performed service in the same enterprise'.

A particularly influential contribution to this empirical-theological method was G. E. Wright's 1952 book, *God Who Acts: Biblical Theology as Recital.* Wright's thesis was that, since God is known by his actions, the Biblical data comprises 'a confessional recital of his acts, together with the teaching accompanying those acts, or inferred from them in the light of specific situations which the faithful confronted.'[74] In other words, what Ancient Israel knew of God depended upon the occasions on which he revealed himself.

The risk, however, is that if God remains invisible, then rationally immanentised methodological explanations simply evacuate divine action of its distinctive content. So, for example, Wright's explanation of the divine provision of quail for Israel in the desert by positing birds exhausted from a long journey over open water, will strike some precisely as a kind of Bultmannian confessional recital; perfectly explicable without recourse to divine action *per se*. It was this mixture of conservative and liberal interpretation of biblical accounts of divine action that prompted Gilkey's now widely cited repost, bemoaning the inability of historical and archaeological theology to navigate Gotthold Lessing's "ugly ditch" between the transcendent truths of 'religion' and the contingently immanent truths of 'history'.[75]

The latter part of the 20th Century marks another notable change of emphasis in theology pressuring the classical view of God, rooted in the transcendent qualities of Greek philosophy, by a more Trinitarian and overtly relational emphasis. Once again, the scale of the map I am constructing necessitates an "aerial" view that must omit finer detail, but certain features stand out even from altitude: the horrors of war

[74] Ernest G.Wright, *God Who Acts: Biblical Theology as Recital*, Studies in Biblical Theology (London: SCM Press, 1952), p. 85.
[75] See Gilkey, "Cosmology, Ontology and the Travail," pp. 197-98. Lessing was highlighting what he saw as an inviolable gap between rational and empirical truth.

and especially World War 1 and Auschwitz deeply challenged the optimistic myth of human progress; an increasing awareness of the limitations of 'history' as a pristine and objective window on the past; the profound challenges to Laplacian determinism and other Victorian scientific certainties wrought by Einstein's monumental theories of special and then general relativity; and of course the advent of a profoundly post-Newtonian quantum mechanics. All these and more have conspired to challenge the 'turn to the self' of Modern epistemology and suggest, instead, a post-Modern 'turn to the selves', postulating 'relation' as ontologically and epistemologically central.

This renewed pressure on the limits of epistemology: the ugly ditch (and note the mixture of both aesthetic and embodied language) between Kant's noetic and ontic realms, has encouraged some to reject metaphysics altogether, and such pressures have by no means left theology untouched. Rather, they have prompted a significant re-evaluation of the relationship between God and creation.

Two strategies, in particular, deserve highlighting in the context of the VO/CTNS series: open theism and kenotic theism.

Open theism reflects a continuing trend, towards the end of the 20th Century, to hermeneutically re-interpret biblical references to God's character and action in anthropocentric, but potentially univocal, terms by appeal to the biblical text's "plain" meaning. After all God is, so the argument goes, more like a shepherd (Psalm 23:1), than he is like a rock (Psalm 31:2).

In the open-theistic theological perspective, the God of classical Christianity has been too heavily embedded in Greek philosophical categories which, while provoking some helpful theological insights and certainly helping the early Christian

church to evangelise Greco-pagan culture, also represent, in the words of the introduction to an important collection of essays;

> a certain theological virus that infected the Christian doctrine of God making it ill […]. The virus so permeates Christian theology that some have come to take the illness for granted, attributing it to divine mystery, while others remain unaware of the infection altogether.[76]

Theology has, or so this open-theist hermeneutical stance insists, been falsely captivated by a Greek philosophy that has held it shackled for too long. It should be noted, however, that the Hellenic distortion thesis has itself come under criticism even more recently.[77] Nonetheless, two basic convictions underlie open theism's hermeneutical approach, says Richard Rice. First, love is the most definitive quality we can attribute to God. But, secondly, authentic love must be sensitive and responsive.[78] Gregory Boyd is another proponent of open theism, insisting that the Greek metaphysic, in which permanence is superior and change entails imperfection, is philosophically flawed.[79] Boyd specifically ties the hermeneutical change of perspective embraced in open theism to its, in his view, greater affinity with contemporary science.[80] To that end Boyd claims that 'fundamental processes are unidirectional and irreversible', that atomism has been 'completely abandoned' in

---

[76] Pinnock, *The Openess of God,* pp. 8-9.
[77] For a representative open-theist exposition of the Hellenistic thesis see e.g., John Sanders, "Historical Considerations," in *The Openness of God: A Biblical Challenge to the Traditional Understanding of God*, ed. Clark H. Pinnock, et al. (Downers Grove, Illinois: IVP, 1994), pp. 59-100. For critiques of the same thesis see *inter alia,* James F. Keating, and Thomas White, O.P., "Divine Impassibility in Contemporary Theology," in *Divine Impassibility and the Mystery of Human Suffering*, ed. James F. Keating, and Thomas White, O.P. (Grand Rapids, Michigan: W. B. Eerdmans, 2009), pp. 3-7; Vanhoozer, pp. 82ff, esp. 90-92;
[78] Richard Rice, "Biblical Support for a New Perspective," in *The Openness of God: A Biblical Challenge to the Traditional Understanding of God*, ed. Clark H. Pinnock, et al. (Downers Grove, Illinois: IVP, 1994), pp. 11-58.
[79] Boyd, p. 17.
[80] Ibid., pp. 107-11.

favour of 'microscopic dynamic events', and that both the quantum realm and chaos theory involve an "intrinsic" (*ontological)* indeterminism and unpredictability respectively.

While we may grant that Boyd is not a scientific specialist and that his work is aimed at a general readership there are, nonetheless, important, and contestable issues at stake over the ontology of those scientific horizons to which he appeals. Why some real-world processes are unidirectional and irreversible even though their mathematically 'lawful' modelling is entirely reversible remains an enduring mystery, scientifically speaking.

More significantly, the intrinsic indeterminism to which Boyd appeals for his required openness may, in fact, be either ontological *or* epistemological in nature, depending upon how one chooses to *interpret* the outcomes of the quantum formalism (itself a deterministically-mathematically describable formula).[81] Similarly, while it is true that chaotic systems are 'inherently' unpredictable, their evolution is entirely classically deterministic in nature. The challenge chaotic systems pose is a result of our inability to specify their initial conditions with sufficient accuracy and the computing power to track the system's subsequent [deterministic] evolution.[82] But whether the same limitation(s) apply to God is precisely what is in question. Some Open theists may claim that science incontestably reveals a post-Hellenic ontology of transcendence but tensions – and questions - remain.

---

[81] d'Espagnat, *Veiled Reality: An Analysis of Present-Day Quantum Mechanical Concepts* (Orsay, Paris: Westview Press, 2003), esp. chapters 10, 13.

[82] Wesley J. Wildman and Robert John Russell, "Chaos: A Mathematical Introduction with Philosophical Reflections," in *Chaos and Complexity: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, Nancey Murphy, and Arthur R. Peacocke (Vatican City State: Vatican Observatory/CTNS, 1995). Polkinghorne's appeal to chaotic ontology is examined in chapters 5 and 6.

It was observed in the introduction that Open theism has proven fractious within the evangelical communion. Open theist titles reflect the authority vested in Scripture that the Bebbington quadrilateral emphasises; presenting themselves as "biblical" challenges and "biblical" introductions. To that end Clark Pinnock too seeks to overcome what he regards as 'distortions caused by excessive Hellenization' in Scriptural interpretation and instead 'do greater justice to mutuality and relationality in [the biblical portrayal of] both the triune God and the God-human covenant.'[83] Pinnock draws on the work of Richard Rice and others to ground a doctrine of God that is more relational and less hidebound to those false Greek philosophical ideals that, he argues, have derailed systematic theology ever since.

> A striking example of this is the way [early theologians experimenting with revelation and the Greek ideal of deity] distorted the divine self-ascription "I AM WHO I AM" (Ex 3:14). This text, which points to the living God of the exodus was transmuted into a principle of metaphysical immutability […] enabling theologians like Philo and Origen to link a changeless Greek deity with the God who acts in history.[84]

To Pinnock, contemporary Trinitarianism insists both that God is self-sufficient (unlike process theism) and yet open to His creation through love (unlike classical theism). Freely divine creation includes creatures with free will to whom the Creator is present both transcendently and immanently in a dialectical way.[85] He argues therefore that 'the picture of God that I receive from the Bible is of One who

---

[83] Clark H. Pinnock, "Systematic Theology," in *The Openness of God*, ed. Clark H. Pinnock, et al. (Downers Grove, Illinois: IVP, 1994), p. 101.
[84] Ibid., p. 106.
[85] Ibid., p. 110.

takes risks and jeopardises his own sovereignty in order to engage in historical interactions with created reality.'[86]

Pinnock's theological background stems from more conservative evangelical roots, while Thomas J. Oord reaches an Open perspective from a Reformed Arminian and Wesleyan background that asserts prevenient grace but also affirms incompatibilist free will.[87] Again, like Pinnock, Oord insists that 'to me, it's important to start exploring the doctrine of creation with Scripture',[88] using in Oord's case the exegetical work of scholars like Terence Fretheim, Walter Brueggemann and J. Richard Middleton to argue that the Old Testament does not support the historically orthodox doctrine of *creatio ex nihilo.*[89] Using Christology to ground biblical anthropomorphisms of God's character, Oord argues for an 'essential *kenosis*' in which *kenosis* means 'self-giving, others empowering love'.[90] Such love is 'essential' because it is the preeminent attribute of God's nature.

Both Pinnock's and Oord's hermeneutics are motivated, in part, by the conviction that comprehensive divine foreknowledge is impossible with incompatibilist freedom in creation. Consequently, they posit God's knowledge of the future as different in quantity but not in kind. God is time-bound in an A-series universe where the future is necessarily unspecified even for Him. This vexing topic will be deferred to chapter 7. [91]

---

[86] Ibid., p. 125.
[87] Thomas Jay Oord, *The Uncontrolling Love of God: An Open and Relational Account of Providence* (Downers Grove: IVP, 2015).
[88] Thomas Jay Oord, "God Always Creates out of Creation in Love: *Creatio Ex Creatione a Natura Amoris*," in *Theologies of Creation: Creatio Ex Nihilo and Its New Rivals*, ed. Thomas Jay Oord (New York: Routledge, 2015), p. 109.
[89] Ibid., p. 119.
[90] Ord, *The Uncontrolling Love of God*, pp. 133-59.
[91] Time in the 'A' theory is understood as a series of tensed temporal positions in continual transformation. In the 'B' series, there is a tenseless whole. For a good overview of the issues and a

In the Open theist perspective, certain scriptures must be allowed to challenge Tradition and, as Pinnock sees it,

> Modern culture can actually assist us in this task because the contemporary horizon is more congenial to dynamic thinking about God than is the Greek portrait. […] Modern thinking has more room for a God who is personal (even tripersonal) than it does for a God as absolute substance. We ought to be grateful for those features of modern culture which make it easier to recover the biblical witness.[92]

Both Pinnock and Oord constantly use Scripture to ground their interpretive perspectives but as the equally scripturally motivated responses in Bruce Ware's *God's Lesser Glory,* and by Vanhoozer and others indicate, there is enough variety in Scripture to allow strongly divergent interpretive paradigms to contest the mantle "biblical".[93]

An underlying challenge is the problematic fact that the cultural knife cuts equally well both ways. Pinnock may be right; modern culture may indeed help to overturn a regrettable historical distortion. But it may just as feasibly present a false seduction; a temptation to, as one evangelical title not so subtly implies, forsake *The Truth Once Entrusted to the Saints*?[94] So what relationship should interpretation and Tradition bear? These are difficult matters, defying unambiguous resolution and forcing attention onto the sociological dimensions of theology. In that regard Open theism has proven divisive in evangelicalism. After a decade of dispute, Pinnock and

---

flavour of the many challenges in any attempt to reconcile God and time. See Gregory E. Gannssle, *God and Time: Four Views* (Downers Grove, Illinois: IVP, 2001).

[92] Pinnock, "Systematic Theology," p. 107.

[93] Ware; John M. Frame, *No Other God: A Response to Open Theism* (Phillipsburg: P&R, 2001); Keating; Vanhoozer, pp. 82ff, esp. 90-92.

[94] Geoffrey Grogan, *The Faith Once Entrusted to the Saints?: Engaging with Issues and Trends in Evangelical Theology* (Nottingham: Inter-Varsity Press, 2010).

Richard Rice only narrowly survived a vote on expulsion from the Evangelical Theological Society,[95] And Oord has more recently found himself in uncomfortable territory.[96]

While particular cultural and metaphysical dimensions motivate choices to prioritise one kind of data and marginalise another, the data for and against God's temporality or aseity and so on can be equally "biblical".[97] Charting the nature of language in Chapter 1 has shown why we cannot simply appeal naively to what the bible "says'" but must engage in the altogether more demanding task of discerning what biblical language *represents.* Perhaps the most we can say for now is that, after some wrestling over the issue, it would seem Open theism is not the dominant (*e-t/o-t*) theological perspective at present. For that reason, and without settling the question, it will be laid aside as a core ingredient of the (*e-t/o-t*) perspective in evaluating the VO/CTNS series, although it is adopted by Polkinghorne among others and Arminian theology continues to offer important resources for evaluating Creatorly and creaturely relations that influence many in the evangelical and Reformed communion.

Finally, while Open theism's theology is often nuanced, we should observe one risk of naively univocalising Scripture. Albeit in stark contrast to both Pinnock and Oord; and the theological perspective of the ancients; and the implications of contemporary literary and hermeneutical theory; not to mention the geo-physical sciences; in some hands every word of the Bible becomes *literalistically* true, such that the world is around 4000 years old.[98] Anthropomorphisms of divine action are

---

[95] See pp. 15-17 in the introduction to this thesis.
[96] Bill Roberts, "Northwest Nazarene professor shares views on God, loses academic freedom," Idaho Stateman, August 14, 2016, accessed September 27, 2017, http://www.idahostatesman.com/news/local/education/article95597627.html
[97] E.g., Ware.
[98] Matthew Guest, "The Plausibility of Creationism: A Sociological Comment," in *Reading Genesis after Darwin*, ed. David Wilkinson and Stephen C. Barton (Oxford: OUP, 2009), pp. 217-36.

then read off in the same way. But there is an obvious problem of coherence in flatly univocalising divine anthropomorphisms. If God is, at this very moment, literalistically relenting and feeling sorrow in response to a situation involving you, or me, then he must literalistically be feeling jealous; angry; vengeful; happy; and every other possible emotion about the other 7.4 billion situations (and counting) and; since he is locked in the temporal present; doing so simultaneously. Surely this corollary presses the desired univocity to destruction?

Appropriations of *Kenosis* extend beyond Open theism, however, and so the term demands closer investigation. As previously described, World War II and the ramifications of death camps like Auschwitz posed a profound problem for anthropology and Christianity alike. Consequently, theologians like Karl Rahner and Jürgen Moltmann examined the biblical data from what, taking its warrant from *kenosis;* Jesus' act of self-emptying described in Philippians 2:6-8; has come to be called the "kenotic-Trinitarian" theological perspective.

Yet when Paul speaks of *kenosis* in Philippians, what work is the word being asked to perform? And under what potentially transcendent second or third order pressures? Here, it seems, scientists, philosophers, and theologians are rightly dependent upon biblical scholars to take sufficient account of first order questions of genre and exegesis before engaging in higher order hermeneutical/canonical or transcendent theological speculation. Most commentators agree, however, and most versions typographically embody the view, that Paul offers here an early Christological hymn.[99] The key verb occurs in verse 7 where 'εκένωσεν' is translated

[99] Homer Kent for example says, 'there is no problem in seeing the passage as the incorporating of an earlier Christian hymn […]. However, Paul himself could write highly poetic passages (as Rom 8:35-39 and 1 Cor. 13 show), and the exposition will demonstrate that the content is harmonious with Pauline thought, without any need for resorting to pagan concepts' in Frank E. Gaebelein and J. D.

as "emptied himself". But other references across all the Gospels clearly suggest divine powers remained with the earthly Jesus.[100] Moreover, the other uses of the word *ekenosen* (Rom 4:14, 1 Cor 1:17, 9:15, 2 Cor 9:3) are uniformly metaphorical in their context.

The roots of this modern appropriation of *kenosis* are well enough known to be sketched onto the map I am charting, relatively briefly. It was the 19th Century German Protestant theologian Gottfried Thomasius who argued that the divine Logos set aside his divine *metaphysical* attributes in Christ. Alister McGrath points out that, in England, it was the desire to defend the humanity of Christ that motivated some theologians to advocate a kenotic theology but, as McGrath and others point out, Dietrich Bonhoeffer's interpretation dramatically influenced the role of *kenosis* in mid-20th Century theology.[101] In a letter to Eberhard Bethge on the 16th of July 1944, Bonhoeffer briefly surveys the historical (Enlightenment) development of 'the non-religious interpretation of biblical concepts; I can see the problem,' he writes, 'but solving it is a different matter.'[102] Bonhoeffer then goes on to write;

> And we cannot be honest unless we recognise that we have to live in the world *etsi deus non daretur*. [as if God does not exist …] God would have us know that we must live as men who manage their lives without him. […] Before God and with God we live without God. God lets himself be pushed out of the world on to the cross. He is weak and powerless in the world, and that is precisely the way, the only way, in which he is with us and helps us. Matthew 8:17 makes it quite clear that Christ helps us, not by virtue of his omnipotence, but by virtue of his weakness and suffering.[103]

Douglas, *The Expositor's Bible Commentary: With the New International Version of the Holy Bible. Vol. 11, Ephesians-Philemon* (London: Pickering & Inglis, 1978), p. 99.

[100] Within the Gospel of John alone we find important examples at John 1:14, 48; 5:19-24; 10:30; 11:41; and 13:1-3.

[101] Alister E. McGrath, *Christian Theology: An Introduction*, 3rd ed. (Oxford: Blackwell Publishers, 2001), p. 284.

[102] Dietrich Bonhoeffer, *Letters and Papers from Prison* (London: SCM, 2001), pp. 131-34.

[103] Ibid., p. 134.

This passage prompts, however, difficult – perhaps uncomfortable - questions about the pressure Bonhoeffer's immediate experience was exerting on his theological perspective. He writes in the context of his own imprisonment, the rise of National Socialism, and the tensions surrounding the Confessing Church and the Barmen Declaration. One can only greet his situation with pathos and compassion. And yet excluding divine action from history leads inexorably to deism. Furthermore, there is a crucial difference between living "as if" we are without God and living "because" we are without God. The Gospel does not end on Good Friday, nor even on the third day, and National Socialism would, shortly after these words were penned, end abruptly; just as the Hebrew nation were ultimately delivered from Egypt, and the worldwide Church exhibits an apparently inextinguishable perdure. Co-sufferer, judge, and deliverer do not have to be mutually contradictory perspectives on the divine character. Unless one insists, of course, that love and power are mutually (ontologically) exclusive.

Given Moltmann's influence on the theological perspectives of Russell, Polkinghorne, Barbour, Peacocke, and perhaps others in the VO/CTNS series, it is worth paying attention to his theological perspective. Moltmann inverts the historical-theological centrality of the Cross by considering what it might mean for God's person.[104]

> … the time has finally come for differentiating the Father of Jesus Christ from the God of the pagans and the philosophers (Pascal) in the interest of Christian

[104] 'We have said that the crisis of relevance and the crisis of identity are complementary to each other. […] We can now define this double crisis more closely with regard to Christian faith, by saying that each of these crises is simply a reflection of the other; and that both crises can be reduced to a common denominator. Christian theology must be theology of the cross, if it is to be identified as Christian theology through Christ. But the theology of the cross is a critical and liberating theory of God and man. Jürgen Moltmann, *The Crucified God: The Cross of Christ as the Foundation & Criticism of Christian Theology* (Minneapolis, MN: Fortress Press, 1993), p. 25.

> faith. […] For this faith must […] bring about a fundamental change in the orders of being of metaphysical thought and the value tables of religious feeling. It must think of the suffering of Christ as the power of God and the death of Christ as God's potentiality. Conversely, it must think of freedom from suffering and death as a possibility for man. […] If this presupposition holds, the death of Jesus cannot be understood at all in theological terms. Rather, faith must take an opposite course and 'understand God's Godness from the event of this death'.[105]

In other words, Moltmann's God can only be God *via eminentiae,* not *via analogia*: by expressing love in a univocal sense. For him the 'unmoved Mover' would be a 'loveless Beloved'. A classically omnipotent God would be incomplete; unable to experience helplessness or powerlessness. Such omnipotence cannot be loved; only feared. Such a God would, Moltmann believes, be without destiny and loved by no one. 'A man who experiences helplessness, a man who suffers because he loves, a man who can die, is therefore a richer being than an omnipotent God who cannot suffer, cannot love and cannot die.'[106] Moltmann locates his hermeneutical warrant via the same route as 19th century theologians like Thomasius, but then applies *kenosis* to the whole of the Trinity.

> The Word 'becomes flesh' but the Spirit 'indwells'. If we keep this dogmatically useful distinction in mind, we can – and indeed must – talk about a kenosis of the Spirit. The Spirit is not one of the powers of God. According to the Christian and Trinitarian understanding he is God himself. If God commits himself to his limited creation, and if he himself dwells in it as 'the giver of life', this presupposes a self-limitation, a self-humiliation and a self-surrender of the Spirit.[107]

---

[105] Ibid., p. 215.
[106] Ibid., p. 223. But why, then, is the fear of the Lord the beginning of wisdom? (Proverbs 9:10).
[107] Jurgen Moltmann, *God in Creation: A New Theology of Creation and the Spirit of God* (Minneapolis, Minnesota: Fortress Press, 1993), p. 102.

But, again, we should notice how important, but implied, metaphysical assumptions orient the hermeneutical stance through which this theological perspective eventuates. Assumptions at odds with those orienting the (*e-t/o-t*) theological perspective; transcendent differences between Creator and creation are reduced or flatly eliminated; freedom and power become binary opposites; Divine love is constrained by, and to, its immanent and anthropocentric dimensions. This generates, but also validates, a heuristic 'model' of Trinitarian theology that convinces precisely because of the way it matches immanent categories of relationship.[108] But the question persists: can divine action exceed (transcend) these immanent co-ordinates? And how would we recognise where or when it did so?

Charting the Possibility of Revelation

Let's return, momentarily, to that short narrative from John's gospel that starts this thesis;

> Then a voice came from heaven, "I have glorified it, and I will glorify it again." The crowd standing there heard it and said that it was thunder. Others said, "An angel has spoken to him." Jesus answered, "This voice has come for your sake, not for mine.[109]

The challenges involved in Scriptural interpretation are now clear. But that is in part because Revelation (with or without the capital) is, itself, unavoidably

[108] For a similar perspective, see W. H. Vanstone, *Love's Endeavour, Love's Expense: The Response of Being to the Love of God* (London: Darton, Longman and Todd, 1977).
[109] John 12:27-30. Many other examples could be adduced. See, for example, Dt. 29:2-4;2 Kings 6:15-17; Mt 16:13-17.

ambiguous. The biblical data consistently illustrates how divine acts of revelation, whether general or special, are open to immanent, *demythologised*, non-divine interpretation and that, moreover, their recognition as divinely originated is *itself* somehow dependent upon the divine will (*Cf*., Romans 1:18-28). This brings us back to G. E. Wright and the unavoidable implication that what strikes some as divine providence will strike others as nothing more than a flock of exhausted Phasianidae (i.e., Quail). But this should hardly surprise us. Revelation and discovery are antithetical in nature.

Paul Ricoeur is surely right, therefore, when he insists that formidable though the question of revelation is, it is also a challenge that cannot be ignored 'if one is not to deny the virtue of *Redlichkeit,* intellectual honesty, that Nietzsche denied to Christians.' Ricoeur then continues;

> But why is the question so formidable? In my opinion, it is not only because it is the last or the first question for faith, but also because it has been obscured by so many false debates that the recovery of a real question in itself constitutes an enormous task.[110]

Brueggemann argues that it was only Karl Barth's revelatory assault on the original liberal philosophical assumptions motivating demythologisation that opened up the ground for those changes in Old Testament study we have just surveyed.[111] Yet Barth's central epistemological insight was, in one sense, disarmingly simple: that in contrast to whatever might be discernible through the window of "faith seeking understanding", the intellectual programme of the Enlightenment narrowed all

---

[110] Paul Ricoeur, *Hermeneutics: Writings and Lectures, Volume 2*, trans. David Pellauer (Cambridge: Polity, 2013), chapter 4. Quotes taken from p. 111.
[111] Brueggemann, *Theology of the Old Testament*, pp. 16, 25.

reference to transcendence by erecting a window whose dimensions were constrained by empirical (embodied) and rational human capacities. Revelation was abolished in favour of discovery, for, to Ricoeur, the Enlightenment assertion of human autonomy explicated in historical-criticism is not a conclusion, but rather a non-negotiable premise at the project's heart.[112] Barth's challenge to Feuerbachian hegemony was therefore as total as it is stark; that we can discover *nothing* of God save whatever God condescends to reveal. It is God who must speak first.[113] Barth, can ground this epistemic stance on two transcendent philosophical truths: God's absolute holiness (otherness), and humanity's postlapsarian epistemological limitations.[114]

Bultmann's concern for protecting the holiness (otherness) of God led him, as already noted, to restrict divine action to the realm of proclamation. But Barth is surely right to insist that the truthfulness of Christianity rests on the *content* as well as the *activity* of speaking; i.e., the truthfulness of declaring God acts *in* this world. This extends the meaning of revelation in an important way; for it entails that (R)/revelation concerns not only what is said, but who is speaking.[115] If, indeed, God speaks *in* the biblical data there are substantial grounds for re-evaluating Wrede's 19th Century claim that there 'can be no middle position between inspired writings and historical documents.' Yet Paul Ricoeur points out that "claim" is an equivocal word. It can mean either an excessive and 'unacceptable *pretention',* or 'an *appeal* that does

---

[112] Trevor Hart insists Barth's response is 'not an anachronistic pre-critical but a properly post-critical', i.e., post-Kantian version of Revelation. See; Trevor Hart, "Revelation," in *The Cambridge Companion to Karl Barth*, ed. John Webster (Cambridge: CUP, 2000), pp. 37-56.
[113] Karl Barth, *The Göttingen Dogmatics: Instruction in the Christian Religion, Volume One* (Grand Rapids, Michigan: W.B. Eerdmans, 1924), § 4 'Man and His Question', p. 69.
[114] Alister McGrath is amongst those who argue that Barth privileges ignorance over bondage in his emphasis on '*knowledge*' in contrast to '*salvation*'. For brief discussion of the issue and references therein see Hart, p. 54.
[115] Karl Barth, *The Church Dogmatics*, vol. 1 (Edinburgh: T&T Clark, 1975), p. 162.

not force one to accept its message.'[116] It will be clear by now why I agree with Ricoeur's assessment that divine revelation more closely resembles the second category than the first, although I would add the concomitant that revelation is ultimately God's gift *alone* to bestow; that we can love God, only because we have first been loved (1 John 4:19); that Lessing's "ugly ditch" is not *only* of Lessing's own making.

Ricoeur has explored the nature of hermeneutics influentially, including in his *Hermeneutics of the Idea of Revelation,* written with the intention of providing 'a concept of revelation and a concept of reason that, without ever coinciding, can at least enter into a living dialectic and together engender something like an understanding of faith.'[117] Looking for a form of data on which to ground his exploration, Ricoeur begins with prophetic discourse; exploring the link between revelation and double authorship as 'the speech of another behind the speech of the prophet'. Sensitive, however, to the narrowness of 'prophetic' and the attendant risks of portraying a demythologised revelation as divine dictation rather than 'something whispered in someone's ear', Ricoeur broadens his survey to examine narrative; apodictic; wisdom; and hymnic discourse. Revelation, examined in these broader settings, takes on a varied hew, serving to 'qualify the events in question as transcendent in relation to the ordinary course of history.' How is this achieved? Ricoeur replies,

> What I am here suggesting is that we should pay more attention to the things recounted than to the narrator and his prompter. We then see that it is within

[116] Paul Ricoeur, "Toward a Hermeneutic of the Idea of Revelation," *The Harvard Theological Review* 70, no. 1/2 (1977), cited in *Hermeneutics: Writings and Lectures, Volume 2* (Cambridge: Polity, 2013) p. 131.
[117] Ricoeur, *Hermeneutics: Volume 2*, p. 112.

> the story itself that Yahweh is designated in the third person as the ultimate *actant* – to use A. -J. Greimas's category – that is, he is one of the characters signified by the narration itself, and intervenes along with the other actants in the goings on. It is not a double narrator, a double speaking subject, but a double actant, and consequently a double object of the story, that we need to think about.[118]

This is an important insight, for it reminds us both/and. God acts (both) in, (and) through, history. Acts in ways both immanently embodied by things that happen to flesh and blood or to fire and water, and also transcendently, in the act of revelation that *this* event occurring to *that* flesh or blood or fire or water is significant for *these* reasons...

Commenting on the wisdom literature, Ricoeur perceptively reminds us that 'Nothing is further from the spirit of the sages than the idea of an autonomy of thinking, a humanism of the good life; in short, of a wisdom in the Stoic or Epicurean mode founded on the self-sufficiency of thought'.[119] This leads Ricoeur to argue that revelation can best be grasped in terms of analogy. But in that case, how accessible is revelation to methodological-natural scientific investigation?

Ricoeur is not a professional theologian, but his philosophical deliberations invite a theological re-examination of possible modes of divine action.[120] One of the most impressive of these is Nicholas Wolterstorff's adoption of speech-act theory to

---

[118] Ibid., p. 116.
[119] Ibid., p. 125.
[120] The linguistic-philosophical approach to revelation of Ricoeur and Wolterstorff differs from what Ricoeur labels the 'rational theology' of philosophers like Richard Swinburne and Alvin Plantinga who ground the possibility of revelation via the tools of analytic philosophy. These are not contradictory options, but whether rational theology is persuasive is very much in the eye of the beholder: a fact that is itself further evidence of the difference between revelation and rational discovery. See e.g., Plantinga, *Warranted Christian Belief*; Richard Swinburne, *Revelation: From Metaphor to Analogy*, 2nd ed. (Oxford: Clarendon, 2007). For an accessible introduction to, and overview of, Bayesian inference see David J. Bartholomew, *God, Chance and Purpose: Can God Have It Both Ways?* (Cambridge: Cambridge University Press, 2008).

ground a credible hermeneutical stance toward divine action.[121] In *Divine Discourse* Wolterstorff begins by denoting a difference between 'manifestational revelation' in which 'the means of revelation is always a *natural sign* of the actuality revealed', and 'propositional revelation'.[122] For example, Rachel might reveal to you the fact that she is nervous by shaking uncontrollably as she lifts the cup of tea to her mouth, or by voicing her emotional state. The first mode of revelation would be 'manifestational', the second 'propositional'. Yet, in the first case, the empirical event that you (rightly) recognise as nerves might also be (mis)interpreted by someone else as clumsiness.

Wolterstorff also explores the variety in modes of speech, highlighting the complexities involved when one agent is *deputed* to speak on behalf of another. Hosea 9:11-17, he argues, exemplifies a movement 'back and forth in just this way between the prophet speaking in the name of God by virtue of having been deputised to do so, the prophet speaking in his own voice but delivering a message from God, and the prophet speaking in his own voice and not delivering a message from God.'[123]

With this broad framework in place Wolterstorff goes on to ask, "What then of the Bible considered as an assemblage?" He concludes that the canon is not simply a collection of God's sayings, but can also be interpreted as a single, unified, work comprised of 'divinely appropriated human discourse.'[124] Whatever one's response to this proposal, note how its possibility challenges the intellectual Enlightenment programme critiqued by Ricoeur earlier, showing how effectively that cultural frame

---

[121] Wolterstorff examines Ricoeur's argument but concludes, rightly, that it represents a univocal rather than analogical hermeneutic. Wolterstorff's own development of the argument is a substantial improvement on Ricoeur's exposition. *Cf.*, Nicholas Wolterstorff, *Divine Discourse: Philosophical Reflections on the Claim That God Speaks*, Wilde Lectures (Cambridge: Cambridge University Press, 1995), p. 62. I am grateful to Alister McGrath for pointing me to Wolterstorff's work and warmly commend it to others.
[122] Ibid., p. 28.
[123] Ibid., pp. 45-46.
[124] Ibid., p. 53.

has narrowed our view of the transcendent; with its window framed only wide enough to envision empirical (embodied) and rational human capacities.

But how do we decide what God is saying? How can we stabilise R/revelation if we are to avoid the charge of merely psychologising it? It was earlier observed that Alister McGrath points out how the early Church took time to explore and develop what he calls the 'intellectual scaffolding to preserve the mystery' [of God] precisely because that scaffolding 'is not itself entirely disclosed through revelation'. He then continues, 'Doctrine is something that is at least partly constructed in response to revelation, in order to safeguard what has been revealed'.[125] This chimes nicely with Barth's understanding of revelation as dynamic rather than static. Hart also captures this idea well when he writes that revelation '… is *in* history, but it is not *of* history. No satisfactory account can be given of its possibility in purely human or historical terms. Apart from God's creative and redemptive act, it has no existence.'[126]

Can we cast this in more concrete terms? Wolterstorff develops Ricoeur's discussion of the performance of a musical score to explore the role of tradition, noting how a 'score's specifications are never sufficient for fully determining its realisations' and that 'there is no other way to traverse that space than by interpretation.' And yet;

> Performers are not thrown entirely onto their own devices for interpretation. They are inducted into interpretive traditions […] For if a score has been repeatedly realised over several centuries, it will almost always be the case that there are for it distinct performance traditions of interpretation. This is what made possible the fascinating dispute […] between those who advocated recovering the interpretation tradition of the Baroque era […] and those who

[125] McGrath, *Heresy,* p. 28.
[126] Hart, p. 44.

> defended continuing to perform it in accord with the late-Romantic tradition.[127]

Baroque music is distinguishable by specific features; features that may be obscured, literally or figuratively speaking, as the original is copied, performatively interpreted, or as musical styles and tastes develop. Hence the value of first order questions for clarifying a genre's interpretive options and traditions. They are integral to discovering what it is that makes Baroque 'Baroque.' This perspective recognises an 'orthodox' core, albeit an orthodoxy with porous, ill-defined, contestable edges. This musical analogy rather happily reflects the (*e-t/o-t*) theological perspective, with its strong valuation of Revelation and Tradition – understood as the historically dominant interpretation - allowing us to now plot that onto the map we are charting also.

Similarly, science too has a pivotal role to play in contributing answers to first order theological questions about the world; its age, geo-physical structure and so forth. But this recognition of the role of the interpretive community in relation to those second and third order questions that inevitably persist, again presses hard on the implications of the VO/CTNS series. For if contributors to the series align themselves as an interpretive community to marginalise, without much discussion, potentially transcendent tenets of the faith – preserved by Revelation and Tradition – to insist that central doctrinal claims must be radically re-interpreted in the light of regnant scientific theorising, contentious questions arise.[128] A musical score can be interpreted in a various ways, but at some point (re)interpretation crosses a line and

---

[127] Wolterstorff, p. 176.
[128] This issue goes, I will argue, to the heart of the contemporary debate on theodicy. See chapter 4

the work becomes a new piece, even if this new interpretation is strongly to be preferred.

Note also a recurring principle at work here: there seems to be a "line" beyond which orthodoxy is lost, and yet defining that point with analytic precision seems to be an impossible task. A problem that also recurs whenever we try to parse between GDA and SDA, or between immanence and transcendence. From this perspective 'objective' is a less helpful category than 'true', for you and I may both observe a performance of the same story but find that a scene, line of dialogue, or dramatic moment, affects us in substantially separate ways. Shakespeare's greatness as a playwright depends upon enough of us recognising his ability, without compelling us also to agree which single play is his greatest. Communal agreement forestalls aesthetic (or epistemic) arbitrariness. But, to pun horribly, in none of these cases is there a "line in the sand" to analytically distinguish the dune from the pile.

Kevin Vanhoozer develops these theological concerns for preserving Revelation in a promising direction, from an (*e-t/o-t*) perspective, with his programmatic attempt to remythologise theology using the hermeneutical stance of '*theo-drama*'. In Vanhoozer's interpretive scheme the Bible is not myth but *mythos*; a complex dramatic whole. Remythologising theology means, Vanhoozer argues, undoing 'what Hans Frei called the "great reversal", that fateful moment when theologians began to see their task as fitting the biblical [data] into the world as understood by modern science and philosophy.'[129] The necessity for just such a reversal is reflected well in Ricoeur's argument that,

[129] Vanhoozer, p. 29.

> If one thing may be said unequivocally about all the analogical forms of revelation, it is that in none of its modalities may revelation be included in and dominated by knowledge. In this regard the idea of something *secret* is the limit-idea of revelation. The idea of revelation is a twofold idea. The God who reveals himself is a hidden God and hidden things belong to him.[130]

We can combine Ricoeur's general insights, modified by Wolterstorff's discerning theological adjustments, with Vanhoozer's claim that the biblical data serves a Revelatory role as '…communicative, a self-presentation that is less noun than verb: *presenting oneself.* The concepts that faith needs to understand this phenomenon may come from theatre studies as much as philosophy.'[131] The deeper epistemic claim here is that there are other routes to "truth" besides methodological-naturalism and historical-critical empiricism.

Finally, let's see how this cashes out in terms of an earlier example. When Rachel was drinking that cup of tea, was she feeling nervous, or acting clumsily, or suffering from Parkinson's, or was she shaking for some reason that we haven't even considered so far? Merely observing the empirical fact of her shaking *risks* leaving us unable to determine its *true* cause. But Rachel is an agent. She could always choose to reveal something about her condition that we could not presently know unless she volunteers to tell us. Methodologically restricting the possible ontologies of Rachel's actions to only whatever *our* epistemological tools can discover or rationally theorise is unduly restrictive. We shall not travel very far in that direction before tumbling into Lessing's ditch.

This entails important limits for what a scientific perspective on divine action may demand of theology. Much indeed at the first order, but ever less as second and

---

[130] Ricoeur, *Hermeneutics: Volume 2*, p. 130.
[131] Vanhoozer, p. 206.

then third order questions present. It gives us call, once again, to baulk at Nicholas Saunders cry of "crisis" for theology because of the VO/CTNS series.

Summary

Chapter one mapped, in outline form, an intriguing but important capacity, embedded in language itself that, words have for putting themselves under pressure and for intimating transcendence; for suggesting that truth sometimes lies at, or even beyond, the edges of particular words, and the 'models' they portray. A capacity that allows us to reject scientism as epistemically inadequate. This chapter builds on those insights, beginning to narrow down the search for ways to speak well about divine action by charting the hermeneutical features of its archetypal form: biblical language and trope.

The first step was to show how choices about data selection and interpretation involve decisions and commitments at a variety of levels; from the technical/philological, to the literary, but also the metaphysical; a process holistically called 'hermeneutics'. Moreover, these choices and their theological perspectives interact iteratively via a "hermeneutical spiral" that generates discrete communities recognisable through their sometimes shared, sometimes differing, stances and perspectives.

Armed with this methodological framework, the hermeneutical stances of Russell, Wildman, and Polkinghorne, were then sketched onto the map and their specific choices and preferences further contextualised by charting their backdrop in broader theological and cultural strands: focussing on liberalism, demythologisation, and *kenosis.* The contentious status of open theism notwithstanding, the results offer

prima facie evidence that the (e-t/o-t) perspective Clayton alludes to is, indeed, missing from the VO/CTNS series.

In fact, two processes are occurring simultaneously as this mapping exercise progresses; for, in addition to mapping the underlying "geography", I am simultaneously plotting a variety of routes across that terrain, noting when, how, and where they diverge from the (*e-t/o-t*) route. To that end, I have highlighted the importance, but relative demise, of R/revelation as a credible route to truth, and its rehabilitation in recent theology via Kant, Ricoeur, and Vanhoozer's remythologisation as theo-drama.

Applying these hermeneutical alternatives to McGrath's metaphor of 'intellectual scaffold', we can now give a greater sense to both the scope of the task, the diversity of plausible alternatives and, therefore, the profound challenge interpreting the biblical 'data' of divine action entails for theology.

The next step is to complete a parallel survey of the way language and philosophy are methodologically related in the scientific context. So, it is to that topic we now turn.

Chapter 3

Divine Action and the Natural Data

Why is speaking "well" about divine action so challenging? Partly, it seems, because of language's capacity for words to add up to more than the sum of their parts, creating – or revealing – new possibilities. Can the methodological-naturalism of science tell us *every*thing there is to know about the world? And, if so, can it do so only in instrumental practice or also in metaphysical theory? More prosaically, are the 'gaps' in contemporary scientific perspectives epistemic or ontological? What counts as evidence; and what, given science's need to exclude and simplify (in order to abstract the relevant data for use in its models), counts as an 'adequate' answer? In the VO/CTNS series these questions condense around the hygroscopic particle of "cause".[1] Consequently, the epistemology and ontology of cause provides an important background domain needing to be charted. Once this underlying geography has been mapped out, alternative theological perspectives can be plotted as a set of possible relations between cause, determinism, and freedom.

[1] Andrew Pinsent has suggested to me that a succinct definition of 'cause' would be "whatever contributes to bringing about the being of a thing (as in 'be-cause')." This definition will be amplified both in this chapter and in chapter 6 below.

Action, Cause, and Explanation

Thus far, I have used the term "divine action" without clarification. While it is relatively straightforward to stipulate that "divine" refers to the God of Christianity, clarifying the meaning of action is more problematic.

As Wildman's apophatic theological perspective demonstrates, it is very hard to see how meaningful discussion is possible in the absence of some 'mechanism' for relating human and divine actions.[2] Moreover, if all human action can be reduced to scientifically accessible efficient-causal relations, how does divine action work even analogically? But, then, what is an "efficient-cause" and can it explain all human action? Just as there are a variety of TDAs, so there are several (sometimes competing) theories of causation.[3] It is important to grasp, therefore, that 'cause' remains philosophically ambiguous enough for James Woodward to comment 'I think it is fair to say that there is less consensus on the topics of explanation and causation in philosophy than there were three or four decades ago.'[4] The existence of alternative theories of causation further complicates the scope of 'action' for methodological-naturalist science which may – or may not – furnish *full* access to Rachel's mind, but that adopts, to re-coin the language of the last chapter, a 'hermeneutical stance' that restricts the meaning of 'cause' to empirical as well as methodologically-natural types.

---

[2] See Wildman, "The Divine Action Project" in (*TY*), p. 141; *Cf.,* Wildman, "Incongruous Beauty" in (*PNE*).
[3] See *inter alia*, Steven A. Sloman, *Causal Models: How People Think About the World and Its Alternatives* (Oxford: Oxford University Press, 2005); James Woodward, *Making Things Happen: A Theory of Causal Explanation* (Oxford: Oxford University Press, 2003); William A. Wallace, *The Modeling of Nature: Philosophy of Science and Philosophy of Nature in Synthesis* (Washington D.C: The Catholic University of America Press, 1996); Gregory W. Dawes, *Theism and Explanation*, Routledge Studies in the Philosophy of Religion (New York: Routledge, 2014).
[4] Woodward, p. 3.

But, what precisely does the term 'methodological-naturalism' mean? as Gregory Dawes points out in *Theism and Explanation,*

> However you define [naturalism], there is no doubt it excludes any reference to a supernatural agent, that is to say, an agent who is not part of the natural world but who can interact causally with it. A methodological naturalist will insist that we must proceed *as if* there were no supernatural agents, while an ontological naturalist will insist that there *are* no such agents.[5]

How have we moved from a Medieval worldview in which God and nature were so intimately connected, to a contemporary investigative stance that entirely excludes God (whether methodologically, or metaphysically) from scientific explanation?

Kenneth Clatterbaugh charts the elimination of much of the Scholastic metaphysical apparatus in the century after Aquinas, and the emergence in its place of an early Modern comprehension of causal relations. He highlights the demise of the traditional four forms of causation: *material; formal; efficient*; and *final*, in favour of the view that 'proper explanations are in terms of true or proper causes of change.'[6] Causes and effects were no longer substances, and causation no longer involved something being "communicated" between cause and effect. William Wallace argues that the contemporary distinction between science and philosophy of nature derives, very largely, from the influence of Descartes and Kant, both of whom were occasionalists.[7] For these thinkers, claiming to know anything beyond the immediate realm of the senses was illegitimate. Metaphysics, in this Enlightenment view,

---

[5] Dawes, *Theism and Explanation*, p. 3.
[6] Cited in Edward Feser, *Scholastic Metaphysics: A Contemporary Introduction* (Heusenstamm, Germany: Editiones Scholasticae, 2014), pp. 51-52 and references therein.
[7] Wallace. *Cf.*, Feser, *Scholastic Metaphysics*, and Harrison, pp 79-81.

becomes a "transcendental illusion" in which that all talk of God, or free will, leads ultimately to antinomy – the mutual contradiction of beliefs that are individually reasonable.[8] Action remained, therefore, a valid category, but the Aristotelian idea of potency (capacity to become something else), because it is invisible to the senses, soon became illegitimate. Feser sums up the historical course of these changes thus,

> Ockham began, Autrecourt furthered, and the early modern occasionalists completed the removal of real causality from the world and its relocation into God. Hume's position is essentially the result of removing God from the picture as well. Nor, where Hume agrees with his predecessors, is the resemblance accidental. As Ott writes, "Hume… [was] directly influenced by Malebranche… […] The old saw that Hume is occasionalism minus God is," Ott Judges, "not too far off the mark."[9]

The result has been a fundamental contraction in the meaning of the word 'cause'; now understood univocally, in terms of mechanical *relations* pushing and pulling observable patients in ways that are "clear and distinct" as Descartes put it, by which he essentially meant measurable and mathematisable. This modern mathematised physics also challenged the Platonic privileging of *stasis* (rest) over *kinesis* (movement) for, as Polkinghorne points out, an important implication of $E=mc^2$ is that energy and mass have become equivalent. Therefore, as Peter Harrison puts it;

> In much the same way that symbolic meanings of nature and scripture were collapsed into a single literal sense, the various causal layers of Aristotelian scholasticism came to be flattened into a single layer of univocal efficient causes. There was one order of meaning – the literal sense – and one level of causation – efficient causation. […] the ultimate effect […] modern science

[8] Wallace, p. 201.
[9] Feser, *Scholastic Metaphysics*, p. 52.

> and theology would come to occupy the same explanatory territory, and this establishes the conditions for competition between them.[10]

Michael Dodds historical outline similarly culminates in the "locking in", as he puts it, of a single narrow conception of cause. He begins with Galileo's claim that the book of the universe is written in the language of mathematics. This view motivated a Renaissance approach to knowledge that valued observable and quantifiable features of the world, deliberately abandoning the search for causes that lay beyond the reach of experimental method. Moreover, the sole category of Aristotelian cause to survive this systematic contraction of knowledge – *efficient* cause – was itself contracted, no longer including, for example, the counsel of leaders but, instead, reduced to only whatever values can be measured and manipulated mathematically.[11] The consequences are well known; culminating in the famous calculating daemon of Laplace that could, given only sufficient knowledge of initial conditions, potentially compute any future state with unalloyed confidence.[12] God was now a redundant hypothesis, the only empirical and rational cause of the late nineteenth century world being Laplace's mechanistic and deterministic one.

Immanuel Kant marks, in Shults's view, the beginning of another important perspectival shift in emphasis; this time away from substance and in favour of relation. Shults points to Kant's tactic of 'explicitly reversing Aristotle in his first critique by making "substance and accidents" a sub-category "of Relation." The same shift is evident in physics: from the Cartesian-Newtonian concept of material

---

[10] Harrison, p. 80. Andrew Pinsent has pointed out to me that scholars, especially those with classical training, characterise scientific causes as *formal* rather than efficient because of their mathematical presentation, although "there are subtle issues involved".
[11] See Michael J. Dodds, *Unlocking Divine Action: Contemporary Science & Thomas Aquinas* (Washington D.C: Catholic University of America Press, 2012), pp. 46-53, and references therein.
[12] Pierre Simon Laplace, *A Philosophical Essay on Probabilities* trans. F.W. Truscott and F.L. Emory, 1st ed. (New York: New York and Company, 1902).

substances to post-Einsteinian concepts of relativity and field theories.'[13] Shults also highlights the transition from being (*to on*) and rest (*stasis*), to difference (*heteron*) and relationship, arguing furthermore that,

> One can also trace a third late modern philosophical trajectory in which alterity (as opposed to identity) is increasingly embraced as a key generative category. Here we can point, for example, to Emmanuel Levinas' emphasis on the primordial relation to the other, which always resists the imperialism of the same, to Jacques Derrida's notion of *differance* and his broader project of deconstruction, to Gilles Deleuze's portrayal of the arrival of the Disparate as the force that generates intensities of difference, and to Paul Ricoeur's reflections on the ipseity of the self as it emerges in relations to others. Each of these thinkers (and others) has been influenced in various ways by Kierkegaard and Heidegger, both of whom privileged the category of difference in their philosophical speculations and psychological analyses of human relationships. [14]

In sum, then, three key differences separate the Medieval and contemporary world view. First, a contraction in the understanding of causal relations, away from Aristotle's fourfold scheme towards a single category: *efficient* causation. A contraction supported by, secondly, a shift in emphasis from substance to relation among the causal relata. And finally, another shift in emphasis, away from similarity, towards the causal significance of difference. These changes will find their counterparts in both scientific and theological thinking, a fact that serves once more to remind us of the sociological dimension to knowledge and the way that philosophy, theology, and science all exhibit a *constructed* dimension by which what counts as knowledge – both 'data' and 'theory' cannot neatly be divorced from their social dimension as ingredients in a *shared* communal practice.

---

[13] F. LeRon Shults, Nancey C. Murphy, and Robert J. Russell, *Philosophy, Science and Divine Action*, Philosophical Studies in Science and Religion, (Leiden: Brill, 2009), p. 6.
[14] Ibid., p. 7.

Does God Need ‘Gaps’ to Act?

Cause, in the contemporary scientific perspective refers almost exclusively to immanent, measurable, and mathematisable relations that, depending on how far back we wish to trace the causal regress *might* admit a range of metaphysical explanations, but which, if they depend upon God at all must do so from a ‘distance’ so to speak. Primary or transcendent cause, if it exists, must not interfere with or overwrite immanently identifiable secondary causes. Consequently, two related concerns would seem to motivate the tenor of much of the discussion in the VO/CTNS series; that God might need some kind of ‘gap’ if He is to act without self-contradiction or without thereby violating creaturely freedom. An ontological gap.

First then, there is a perceived need to avoid the self-contradiction by which God overrides with his right hand (SDA) the general causal laws he upholds with his left hand (GDA).[15]

The doctrine of *creatio ex nihilo* is not threatened in positing such gaps, which might fulfil some good in God’s eyes. For example, ontological gaps might serve, as Arthur Peacocke sees it, as part of a holistic mechanism for producing a maximally fecund creation.[16] Indeterminism, on this view, offers a *practical* device for maximising creative possibility and embodying the entire ‘phase space’ of creation.[17]

---

[15] Russell, “Special Providence and Genetic Mutation,” in (*EMB*), p.192. He continues, ‘[t]o many theologians the connection between special providence and intervention has seemed unavoidable, leaving them with a forced option.’

[16] A. R. Peacocke, "God's Interaction with the World: The Implications of Deterministic "Chaos" and of Interconnectedness and Interdependent Complexity," in *Chaos and Complexity: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, Nancey Murphy, and Arthur R. Peacocke (Vatican City State: Vatican Observatory/CTNS, 1997).

[17] The response to Monod and the debate between Gould and Conway Morris has stimulated a great deal of discussion over the defensibility of teleological explanation and the relationship between chance and providence in evolutionary biology in particular. See passim Jacques Monod and Austryn Wainhouse, *Chance and Necessity: An Essay on the Natural Philosophy of Modern Biology* (London: Collins, 1972); Michael Rota, "Evolution, Providence, and Gouldian Contingency," *Religious Studies* 44, no. 4 (2008): pp. 393-412; Simon Conway Morris, "Darwin's Compass," in *Science and Religion in*

So, whereas Random changes in DNA through, say, the altering of a specific coded string for a gene by the interaction of a sub-atomic particle with a single base, can be interpreted, in Jacques Monod's well known phrase, as 'Pure chance, absolutely free but blind at the very root of the stupendous edifice of evolution'[18], Peacocke and others have subsequently argued that, as David Bartholomew puts it; 'chance offers [God] many advantages which it is difficult to envisage being obtained in any other way.'[19]

A second good, and one that has been the focus of much attention in contemporary discussion, derives from enduring debate over the apparent antinomy between freedom and causation.[20] How freedom pertains to human consciousness, and consciousness relates to brain state, was judged important enough to justify its own volume in the VO/CTNS series, (*NP*). Human moral responsibility is a central tenet of Christianity but what, if anything, *causes* us to be free? We can briefly chart three broad positions. First, some flatly deny freedom, as did the occasionalists of medieval Islam, insisting that all action belongs to God alone who is both the necessary and sufficient cause of all events; or, on another version, who upholds a powerless creation by continuous acts of re-creation.[21] In occasionalism, God *alone* acts as

---

the Twenty-First Century, ed. Russell Re Manning and Michael Byrne (London: SCM, 2013); Niels Henrik Gregersen and Ulf Görman, *Design and Disorder: Perspectives from Science and Theology* (London: T & T Clark, 2002); Wesley J. Wildman, "Evaluating the Teleological Argument for Divine Action," in *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, S.J. William R. Stoeger, and Francisco J. Ayala (Vatican City State: Vatican Observatory/CTNS, 1998).

[18] Monod and Wainhouse, p. 110.

[19] David J. Bartholomew, *God of Chance* (London: SCM, 1984), p. 97. Cf. *inter alia*; Simon Conway Morris, *The Deep Structure of Biology: Is Convergence Sufficiently Ubiquitous to Give a Directional Signal?* (West Conshohocken: Templeton Foundation, 2008).

[20] Again, this is another substantial question in both philosophy and theology with a consequently extensive corpus of material. A useful summary of the central issues can be found in, Timothy O'Connor, "Free Will", *The Stanford Encyclopedia of Philosophy* (Fall 2014 Edition), Edward N. Zalta (ed.), URL= <http://plato.stanford.edu/archives/fall2014/entries/freewill/>
For discussion of this issue in the VO/CTNS Series see *inter alia;* Wildman "The Divine Action Project," in (*TY*), pp. 71-83.

[21]Schmaltz points out that this version of occasionalism is defended by Malebranche in *Entretiens sur la métaphysique*. See, Tad Schmaltz, "Nicolas Malebranche", *The Stanford Encyclopedia of Philosophy*

cause. But, again, it is hard to see how human beings can then have agential and, consequently, moral freedom.[22] The theological grounds for rejecting occasionalism have, therefore, to do with its debilitating consequences for human action.

Secondly, some accounts insist upon causal freedom either in conscious beings alone,[23] or, as is the case with process philosophy, in creation more generally.[24] This view demands an incompatibilist ontology of freedom which insists that, howsoever we conceive God's role in creating, the creation nonetheless possesses liberty of choice as both a *necessary* and *sufficient* cause.[25] Thus, it is suggested, we should look for SDA only via those ontological gaps that offer no such conflict – such as an indeterminist quantum ontology (Russell), or an ontologically open future (Polkinghorne's ontology of chaos theory). Both men adopt a libertarian understanding of human freedom by which human actions cannot be explained wholly in terms of Laplacian efficient-causal determinism but are, at some level in the hierarchy of causal chains, free-standing. This ontology (avoiding divine self-contradiction and incompatibilist agential freedom) motivates non-interventionist special divine action (NIODA).[26]

(Spring 2014 Edition), Edward N. Zalta (ed.), URL= <http://plato.stanford.edu/archives/spr2014/entries/malebranche/>.

[22] Again, however, this is not a knockdown theological argument. E.g., Isaiah 45:9, 'Woe to you who strive with your Maker, earthen vessels with the potter! Does the clay say to the one who fashions it, "What are you making"? or "Your work has no handles"?'

[23] Such is Robert Russell's position in "Divine Action and Quantum Mechanics," in (*QM*).

[24] E.g., Wahlberg writes 'A common strategy in this area is to argue that certain very valuable creaturely attributes could only be exemplified by creatures that are produced by a partly random and uncontrolled process of evolution.' For both anthropocentric and non-anthropocentric forms of the argument see, Mats Wahlberg, "Was Evolution the Only Possible Way for God to Make Autonomous Ceatures? Examination of an Argument in Evolutionary Theodicy," *International Journal for Philosophy of Religion* 77, no. 1 (2015): pp. 37-51.

[25] 'Our survey of several themes in philosophical accounts of free will suggests that a – perhaps the – root issue is that of control. […] But any proposed analysis of free will must also ensure that the process it describes is one that was up to, or controlled by, the agent', O'Connor, section 3, p. 9.

[26] Russell's appeal to NIODA is explored in more detail in chapter 5.

But does God *need* ontological gaps to act 'specially?' And would this 'open' ontology provide, in any case, the kind of freedom desired by incompatibilists? For one thing, ontological indeterminism would seem to violate the principle of *nihil ex nihil fit* (nothing comes from nothing). Moreover, "nothing" does nothing to promote free will. This second problem is illustrated in a useful way in E. J. Lowe's article on *Free Will and Rational Choice*. In defending his own libertarian view of cause and rational action, Lowe insists that 'most actions are *not* event; rather, they are *causings* of events by agents.'[27] Lowe appeals therefore to the notion of 'volition', arguing that

> Volitions, on the present view, are completely *uncaused.* That is to say, exercises of the will are completely *spontaneous.* In this respect (only), they are like manifestations of the radioactive powers of decay possessed by some atoms. A radium atom has a power or capacity to undergo spontaneous radioactive decay: when it does decay, nothing whatever *causes* it to decay. (It is wrong even to say that such events have "probabilistic" causes. [… since] probability is fixed and perfectly insensitive to the atom's environmental conditions and even to such factors as the atom's *age*.)[28]

At least two comments are in order here. First, we should note that, just as Boyd did with respect to Open Theism, Lowe presents a summary of what is essentially the Copenhagen interpretation of the quantum formalism, yet without that qualification or contextualisation and it is regrettable that Lowe does not alert the reader to this fact, for what appears to Lowe indeterminate and statistical may only reflect a course-grained contemporary scientific ontology. A future finer-grained approach might yet identify a deterministic efficient-causal substrate. This is potentially an agential "freedom of the gaps" argument. Suppose, however, that we

---

[27] E. J. Lowe, "Free Will and Rational Choice," in *The Blackwell Companion to Science and Christianity*, ed. J. B. Stump and Alan G. Padgett (Oxford: Wiley-Blackwell, 2012), p. 423.
[28] Ibid., p. 424.

grant Lowe's ontological interpretation *and* his thesis that there is an (only) analogical correlation with those volitions that, on his view, generate the causal processes that culminate in an agent's action. What provides the "*is like*" in this analogy to *explain* or confer that agent's freedom? Nothing, at least so far as I can see. For we may simply ask how an agent driven by 'completely *spontaneous*' ontologically indetermined volition is freer than a fully causally determined agent? Lowe might well reply that he does not mean to press the analogy that far, but in that case the *reason(s)* for Rachel's volition in preferring tea rather than coffee on this occasion are brutely terminated rather than explained.[29] I will return to this problem when analysing Russell's TDA of NIODA more fully, in chapter five.

Perhaps some of the liveliest debates in philosophy and science at present concern the claim to ontological indeterminism at the heart of the standard interpretation of the quantum formalism and potential ontological impediments to final causation posed by 'deviant' causal chains.[30] Is *all* cause probabilistic, or is cause a transitive process? Both views face challenges. Consequently, complex hybrid schemes now permeate the current literature, although, as Schaffer notes, 'no known account of causation – hybrid or otherwise – gets all […] cases right. So it is unclear what hybrid accounts gain in the end.'[31]

---

[29] On cause and freedom *Cf.*, Nancey Murphy, "Divine Action and the Natural Order: Burridan's Ass and Schrödinger's Cat," in *Chaos and Complexity: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, Nancey Murphy, and Arthur R. Peacocke (Vatican City State: Vatican Observatory/CTNS, 1997).

[30] Here engaging labels like *fink*, *misconnection*, and *fizzling* address more technical discussions that lie beyond the scope of this paper, but for general philosophical discussion see Jonathan Schaffer, "The Metaphysics of Causation", *Stanford Encylopedia of Philosophy* (Summer 2014 Edition), Edward N. Zalta (ed.) URL= < http://plato.stanford.edu/archives/sum2014/entries/causation-metaphysics/>, section 2.1 ff. For the relation between modern and Scholastic philosophy in relation to these terms see Feser, *Scholastic Metaphysics*, pp. 47-63.

[31] Schaffer, section 2.1.2.

What has, I trust, become clear by now is that the contemporary presumption that causal relata *must* be empirically measurable, and causal relations mathematisable, is not metaphysically benign. It is a false if seductively simple step, having methodologically excluded a principle, to then deny it metaphysically. Science deals in quanta rather than qualia and does so through the twin devices of isolability and repeatability. But the explanatory challenge is not simply to demonstrate repeatability in relation to two entities like volume and pressure in an enclosed gas, but to explain why that relation pertains. Boyle's law (PV = k) reflects a relation in which pressure is inversely proportional to volume in a closed system at a steady temperature; but how is this law accounted for *as* a law? Feser puts it thus,

> Here the concerns of the metaphysicians and the philosophers of science dovetail. Here also we come full circle, back around to the key notion with which the early moderns, who began the long intellectual trajectory against which recent analytic powers theorists are rebelling, sought to replace the Scholastic notion of causal powers. […] The idea of laws of nature was, then, originally theological [… and] it is an open question whether laws can be made sense of apart from God.[32]

Feser's point is simply that if we eliminate God, a problem persists in the Humean understanding of cause that both Aristotle and Aquinas appreciated and that Dodds draws out very effectively when he observes that

> The added "something" that makes flesh to be flesh rather than just a collection of more basic elements cannot be just another element. It is "not an element but a principle" of the substance and the "Primary cause of its being".

[32] Feser, *Scholastic Metaphysics*, p. 69.

> This is the substantial form that causes primary matter to exist as a substantial whole.[33]

Apart from God, no provenance of this organising principle is offered. The result has been philosophically contentious appeals to 'ontological indeterminism' in which things happen for *no* underlying reason whatsoever, yet with lawful bulk (stochastic) properties; or, metaphysically circular bootstrapping theories that appeal to constituent elements for their own existence; or teleonomy in evolutionary processes by which human experience – in all its varied forms – is a fundamentally meaningless, contingent, outcome of unguided process.

But how convincing are these alternative explanations? To illustrate the philosophical problem with bootstrapping, consider the hydrological cycle in which water follows a self-contained loop from ocean, to sky, to land, and back to the ocean. The hydrological cycle describes the efficient-causal relations *within* itself, but these efficient-causal relations do not, and cannot, explain the existence of the whole. It is a category error to assert that accounting for every member in a set accounts for the existence of the set *qua* a set. It is like saying that, by explaining the phase changes between water's gaseous, liquid, and solid state, or by explaining oceans in terms of rivers, rivers in terms of clouds, and clouds in terms of oceans – we have explained the existence of water. It is, of course, perfectly possible to appeal to the whole system as brute fact, but this is a metaphysical – transcendent – faith claim.

Consequently, neither the methodological presuppositions nor the interpretation of experimental results in science can be completely bracketed off from

---

[33] Dodds, p. 27. Dodds is quoting Aristotle: *Metaphysics*, VII, 17 (1041b 25-31). See also Wallace, pp. 198-205.

third order philosophical considerations. There are no knockdown arguments to adjudicate between, say, the scholastic metaphysical scheme of Aquinas (to be discussed), the bootstrapping metaphysic of Hawking, or the metaphysical naturalism of Richard Carrier.[34] One may appeal to God and *creatio ex nihilo* or one may appeal to the universe's existence as brute fact. But this ambiguity strongly challenges the "presumption of atheism" that dominates some of the literature on science and religion at present. A presumption that, to foreshadow later discussion, reflects a closed world structure (CSW) that merely presupposes transcendence is a chimera.[35]

Thus, the question remains: if not God, then what gives scientific laws their character? In answering that question, sight must not be lost of the work that language is, once more, performing; for the "forces" of "law" and "order" this model; or metaphor; depicts, do not spring into existence from *nihil*: they entail a lawgiver. What, then, validates the "law" model in its scientific context? Contemporary science is inclined simply to sidestep the problem, accepting laws as brute empirical facts or as instrumental truths.[36] Stephen Hawking, for example, argues in *The Grand Design*, for model-dependent realism.[37] Yet his conclusion nicely illustrates the performatively circular philosophical assumptions at the heart of his physicalist and naturalist metaphysical ontology. Thus, in the book's penultimate paragraph he asks

---

[34] Richard Carrier, *Sense & Goodness without God: A Defense of Metaphysical Naturalism* (Indiana: Bloomington, 2005).

[35] Dawes, for example, says that methodological-naturalism '… tells us that in our quest for knowledge we should proceed *as if* ontological naturalism were true. If you accept this definition, then at least in practice methodological and ontological naturalism are indistinguishable. It scarcely matters if you hold to naturalism as a procedural rule or as an ontological commitment. In both cases, it will guide your enquiry, determining what kinds of entities or forces you will posit when offering explanations.' Dawes, *Theism and Explanation*, p. 5.

[36] So too some contemporary philosophers judging by Richard Carrier's choice to devote barely two sides in a four-hundred-page book to the provenance of physical laws; concluding pithily enough that '…physical laws are the inevitable end result of what a universe *is*.' See Carrier, pp. 122-24.

[37] Hawking and Mlodinow, pp. 5-10, and chapter 5.

> Why are the fundamental laws as we have described them? The ultimate theory must be consistent and must predict finite results for quantities that we can measure […] there must be a law like gravity [and] supersymmetry […]. For these reasons, M-theory is the *only* candidate for a complete theory of the universe. […] it will be a model of a universe that creates itself.[38]

How so? An ultimate theory worthy of the name must, indeed, be 'ultimate'. But it is either trivially true, or simply tautological, to insist that the right answer must get the answers right. The only way for Hawking to close his explanatory loop is by appeal to *form* (e.g. consistency, predictive ability, and supersymmetry) as somehow self-necessary, but this patently begs the transcendent metaphysical question: why? And what undergirds *those* desiderata? These same emaciated causal chickens come home to roost in the case of quantum mechanics too, where the dominant 'Copenhagen' interpretation is that quantum events happen for *no* causal reason, and yet with a reliable, statistically certain, regularity. And yet a metaphysical explanation of their provenance is denied.[39] The Scholastic approach, by contrast, recognises not only the mathematisable or mechanical properties of a thing, but also a transcendent or metaphysical essence underlying nature and beyond the reach of methodological-naturalism alone.

Thus, two significant challenges dog a contemporary science stripped of the data of transcendent Revelation, and constrained instead to empirical, mathematisable and mathematisable formal/efficient-causal data: how to explain emergence, and how to explain apparent teleology in the natural world? It is no wonder that, without some

---

[38] Hawking and Mlodinow, pp. 180-81.
[39] Russell is, of course, adamant that God is the explanation for whatever mechanism undergirds the quantum indeterministic ontology, but defends the Copenhagen interpretation of that ontology. See e.g., "Special Providence and Genetic Mutation," in (*EMB*), p. 193.

transcendent metaphysical source, emergence should pose such perplexing issues for methodological-naturalism.[40] It also explains why there remains such intense debate over the status of final cause in relation to non-conscious objects and processes in biology; and whether apparently goal directed processes are teleological or teleonomic in nature.[41]

As Kant demonstrates, accounting for the requisite ontological freedom of action in terms of efficient-causality is difficult both theologically and philosophically, but an alternative remains; adopting instead a compatibilist synthesis in which God is always the necessary cause, but agent liberty is derivatively necessary as well, as a sufficient cause; this is the primary and secondary causal approach of Medieval Scholasticism to be discussed in due course.

The crucial point to grasp here is that method and conclusion are *causally conjoined* every bit as much as, say, mass and caesium. Methodological choices entail sometimes veiled metaphysical implications. And so, in the VO/CTNS series, NIODA generated problems and paradoxes by a methodological distinction between GDA and SDA that, Saunders's evaluation notwithstanding, led most contributors ultimately to accept the philosophical need for a non-nomological ontology of scientific laws.[42] I wish to press the point further, however, and suggest that what motivates the contemporary distinction between GDA and SDA is a Modern distortion – or at least an aberration: the power of human ration alone. It is my contention that a better

---

[40] There is a large and ever burgeoning corpus of material on emergence. For an introduction see e.g., Philip Clayton and P. C. W. Davies, *The Re-Emergence of Emergence: The Emergentist Hypothesis from Science to Religion* (Oxford: Oxford University Press, 2006); Phyllis McKay Illari and Federica Russo, *Causality: Philosophical Theory Meets Scientific Practice* (Oxford: Oxford University Press, 2014).

[41] In addition to those works, already cited, by Monod and Conway Morris see also Ayala, and the excellent discussion of teleology in Wildman, "Evaluating the Teleological Argument for Divine Action", in (*EMB*).

[42] See the articles by Russell, Murphy, Stoeger and Gregersen in (*TY*). *Cf.*, chapter five below.

approach to divine action is to re-appropriate aspects of the richer understanding of causation that prevailed before the Enlightenment, such as those of Thomism, with the expectation that the error in parsing between GDA and SDA lies not with the special acts of God that motivated Gilkey to address the Biblical Theology movement *per se*, but with the modern perception of a God who generally acts deistically, and must engineer ontological gaps to act 'specially' in some independently objective sense. This broader dependence on Tradition is, in my view, a strength of the (*e-t/o-t*) theological perspective, but more on that shortly.

Even limiting divine action to efficient-causal accounts faces, in any case, an epistemological problem. How 'fine-grained' must, the causal chain be? Explanations that pragmatically exclude potential members of the causal chain on the grounds of 'unmanageable proliferation' reflect an epistemology of human finitude, but this should not entail a divine limitation of the same kind. It is this failure to preserve the ontological difference between Creator and creation that reduces God to an immanent object suffering co-secondary-causal relations and therefore *needing* (quantum) ontological gaps to interact "specially" with creation. Moreover, even human action, like human freedom, is not reducible to scientifically accessible efficient-cause without remainder.[43] Perhaps a clearer philosophical take on emergence is required. Especially given that, as Wilson and Sphall put things,

> … it should be admitted that no one really has a very good theory of how mental content plays its role. […] Without some better consensus on this enormous topic, we are not likely to get far on the question of mental causation, and solid progress on the attribution of content may still leave it

[43] Dawes too, for example, rejects reductive or positivist interpretations of physics. Dawes, *Theism and Explanation*, p. 3.

> murky how the contents of attitudes can be among the causal factors that produce behaviour.[44]

I suspect the basic tools for such engagement are more likely to be found in Thomism than process/*kenosis*/ID ontologies. Yet Dawes, again reflecting the closed world structure of methodological-naturalism, insists that the "onus" is on theists to explain divine causation and that, given the many philosophical difficulties attending human causality, this is 'far from easy.'[45] But surely this inverts the inference? The challenge would be a lot harder if philosophers had had spectacular methodological-natural success making sense of our everyday use of cause? Surely the force of Dawe's conclusion should be that *all* bets on cause are risky, not *principally* the theistic wager. If psychology cannot be explained reductively through the transport of ions across neural synapses alone, how much more cautious must we be about delineating the causal dimensions of divine action? Must we, for example, accept Jaegwon Kim's 'Principle of Explanatory Exclusion' by which, 'if there exist two 'complete' and 'independent' explanations of the same event or phenomenon, then one or the other of these alternative explanations must be wrong.'[46] Even if this principle works as a logical operator, it seems inapplicable in practice; for how can we ever be certain that one explanation is wholly 'independent' of the other, let alone 'complete'? Wilson and Sphall emphasise that the issues here are 'complicated and controversial' but go on to say that 'Just as certain function explanations in biology may not reduce to, but also certainly do not compete with, related causal explanations

---

[44] George Wilson and Samuel Shpall, "Action", *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.), URL= <https://plato.stanford.edu/archives/win2016/entries/action/> section 3.
[45] Dawes, *Theism and Explanation*, p. 57.
[46] Jaegwon Kim, "Mechanism, Purpose, and Explanatory Exclusion," *Philosophical Perspectives* 3 (1989), cited in Wilson and Sphall, "Action," section 3.

in molecular biology, so also non-causal reason explanations could be expected to co-exist with neural analyses of the causes of behaviour.'[47] This is surely correct, but it follows *mutatis mutandis*, that the same might be said of divine action. In fact, that, surely, is the bent of 'primary' cause in the orthodox, Scholastic/Thomistic theological perspective?[48]

Since Farrer coined the term in 1967, debate over the nature of a 'causal joint' between divine action and creation has proven highly influential in science-theology dialogue.[49] Farrer acknowledges the tension between transcendent Revelation and immanent creation, asking 'What sense is there in demanding an exact account of an [divine] action which, by hypothesis, is outside our knowledge?' His answer,

> If he is up in traditional philosophy [the philosopher/theologian] can elaborate his refusal by an appeal to the doctrine of analogy. […] we cannot *conceive* it otherwise than in terms of our way, […] But as soon as we try to conceive it in action, we degrade it to the creaturely level and place it in the field of interacting causalities. The result can only be (if we take it literally) monstrosity and confusion.[50]

In other words, our challenge is the now familiar one of resolving analogical action into univocal categories. Farrer therefore explores the idea of action using the 'parable' of recognising a Rembrandt only *after* the artist's style is known *and* the work is complete, illustrating, how, similarly, we experience divine assistance in and

---

[47] Ibid.
[48] Interestingly, this analysis of function and cause contemporarily mirrors Feser's Thomistic exposition of the difference between power and vehicle in the case of opium. See Feser, *Scholastic Metaphysics*, p. 45.
[49] Farrer, p. 64.
[50] Ibid., p. 62.

after the fact of thinking or acting on trust. Thus, according to Farrer, there is a 'causal joint'; but it is a wholly transcendent one.

> … the causal joint (so to speak) between infinite and finite action plays and in the nature of the case can play no part in our concern with God and with his will. We can do nothing about it, nor does it bear on anything we can do. And so, on empirical ground, the question about it is a question which does not arise and may be condemned as no question at all.[51]

Farrer's invocation of a 'causal joint' certainly reflects the fact that language must be put under some pressure to bear the weight of the ideas it is being used to communicate. Yet, for that very reason, we must be mindful that there are subtle issues to resolve around the relationship between action and human embodiment of the kind that Merleau-Ponty alerted us to in the first chapter. For, as Wilson and Sphall crucially ask; 'what could conceivably rationalise *any* set of discriminations between action and non-action as one traces along the pertinent complex causal chains from the initial mind or brain activity, through the bodily behaviour, to the occurrences produced in the agent's wider environment?' Yet again, any putative "line in the sand" begins to look like a chimera. Therefore, as they go on to say,

> …the basis of any discrimination between minimal agency and non-active consequences within the extended causal chains will have to rest on some special feature of the person's guidance: […] The earlier remarks in this section hint at the serious difficulty of seeing how any such routes are likely to provide a rationale for grounding the requisite metaphysical distinction(s).[52]

[51] Ibid., p. 65.
[52] Wilson and Shpall, section 1.

In conscious agents, the ‘standard’ (Humean) version of causal theory, as championed by Donald Davidson, insists that action refers to an event caused by some propositional belief or desire in an agent.[53] In other words, motivational reasons are causes.[54] But in that case cause and action could be inseparable even while they are not identical. Wilson and Sphall therefore identify an issue with ‘cause’ that suggests a problem with uncritical use of the term causal ‘joint’.

> The claim that purposive explanations do or do not *reduce* to suitable counterpart causal explanations is surprisingly elusive. […] Without better agreement about the concept of ‘cause’ itself, the prospects for a resolution of the debate do not appear cheerful.[55]

At this point we can triangulate Merleau-Ponty’s insights on the epistemic limitations of embodiment, observed in chapter 1, with the observations on cause in this chapter. The lack of consensus emphasises the challenges involved, but this should serve as further caution against uncritically framing “causal joint” as the best analogy for comparing creaturely and Creatorly action. Moreover, since we cannot even frame the internal relation between mind and brain adequately yet, it may well be reductive to use a reduced range of immanent efficient-causal relations to rule out divine action even *in principle*. In fact, the ontological nature of scientific “laws” and the metaphysical issues around bootstrapping and first cause emphasise this difficulty, begging a more fundamental question: how far back must we trace the causal regress? Said otherwise, what qualifies as an ‘adequate’ explanation?

---

[53] Donald Davidson, *Essays on Actions and Events* (Oxford: Clarendon Press, 1980).
[54] Lowe, p. 422.
[55] Wilson and Shpall, section 3.

Dawes, rightly in my view, insists that any TDA must posit an agential reason to explain an otherwise "natural" event.[56] But in *Divine Discourse*, Nicholas Wolterstorff defends the claim that God can truthfully be described as an agent with moral rights and duties of the kind language necessitates. Wolterstorff then picks up the central concerns of this chapter by asking whether God can 'causally bring about the generating actions' needed to perform a speech act.[57] Drawing on his investigation of deputising actions, Wolterstorff argues that 'In short, there may be a sizeable number of intermediary deputies and deputisings between the person who generates the generat*ing* action and the person who performs the generate*d* action […].[58] But this implies that our models (epistemically simplified efficient-causal chains) may omit important generative relations.

More pertinently still, Wolterstorff evaluates whether God must "intervene" to "speak". His answer draws heavily from the traditional (*e-t/o-t*) theological perspective to distinguish between creation, sustenance, and concurrence. The latter term because, in addition to *creatio ex nihilo* and *continua*, God must also 'concur' with any creature's exercise of divinely conferred causal powers. Concurrence is an agential relational property. It allows for the activation of *particular* causal powers even if this happens so often under certain circumstances that, epistemically speaking, it *appears* necessary. This contrasts with the Modern nomological and binary perspective by which one event ontologically necessitates another. Wolterstorff concludes,

---

[56] Dawes, *Theism and Explanation*, pp. 69-70.
[57] Wolterstorff, p. 95, and chapter 7.
[58] Ibid., p. 115.

> divine discourse of anything like the range and diversity claimed in the scriptures and traditions of Judaism, Christianity, and Islam, almost certainly requires direct intervention by God in the affairs of human history; and contemporary science provides no good reason for thinking that such intervention does not occur.[59]

Yet, while the collapse of logical positivism[60] in the mid twentieth century ushered in a re-evaluation of the nature of science as a discipline,[61] the common if simplistic view that science offers a comprehensive explanation of the world persists with enduring popularity, as the works of Richard Dawkins and others demonstrate.[62] Yet, as observed previously, the claim that scientific method is the only route to incorrigible knowledge is performatively self-defeating. Feser illustrates the problem nicely when he says

> To break out of this circle requires […] discovering from that extra-scientific vantage point that science conveys an accurate picture of reality – and, if scientism is to be justified, that *only* science does so. But then the very existence of that extra-scientific vantage point would falsify the claim that science alone gives us a rational means of investigating objective reality.[63]

Theological Responses to Methodological-naturalism

With this survey of the contours and dimensions of the scientific interpretation of action charted onto our map, it is now possible to perform some preliminary

---

[59] Ibid., p. 129.
[60] A. J. Ayer, *Language, Truth and Logic* (London: Victor Gollancz, 1936).
[61] E.g., Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 2nd ed. (Chicago, Illinois: University of Chicago Press, 1970).
[62] Dawkins.
[63] Feser *Scholastic Metaphysics*, pp. 10-11.

triangulation to determine how best to orient the scientific and theological continents I am depicting.

We noted Ian Barbour's adoption of process theology in the previous chapter. Its emphasis on the fundamental primacy of change echoes the ancient Heraclitean perspective, but contemporary process perspectives commonly draw on Alfred North Whitehead.[64] Whitehead begins with the metaphysical postulate that *all* of reality has a spiritual and communal dimension. Individual members of the community define themselves by self-organising choices that happen moment by moment. What we then perceive as events, express the outcome of those choices. The theological appropriation of process philosophy is well illustrated in the introduction to Joseph M. Bracken's *Does God Roll Dice*? Having summarily outlined the classical problem of determining what unites the one universe with its many constituent aspects Bracken writes,

> My proposed revision of this classical understanding of the relation between the One and the Many is to the effect that the One is not an intelligible entity *transcendent* of the empirical Many, but rather a structured field of *activity* or law-like environment for the ongoing interplay of the Many with one another over an extended period of time. It is accordingly a more *evolutionary* understanding of the relation between the One and the Many than is supposed in the earlier paradigm.[65] (italics added)

There are certainly echoes here of 'ground-of-being' theologies that in, for example, Wildman's hands, become highly apophatic. But, in that case, and as already observed, the problem of finding even an analogous conception of divine action

---

[64] Alfred North Whitehead, *Process and Reality: An Essay in Cosmology*, Gifford Lectures (Cambridge: Cambridge University Press, 1929).
[65] Joseph A. Bracken, *Does God Roll Dice? Divine Providence for a World in the Making* (Collegeville, Minnesota: Liturgical Press, 2012), p. xii.

becomes deeply problematic: God becomes merely the *process*, or environment. There are certainly some strengths in the conceptual transcendence of the 'ground-of-being' epistemology. It repudiates, for example, the reductively mechanistic scientific view of action that has dominated much of the last three hundred years. But there are also significant ontological modifications. Bracken, for example, echoes an element of the (*e-t/o-t*) position, or at least its Thomist form, when he writes that 'God's power over creation, in other words, is more in terms of empowering creatures to make their own self-constituting decisions rather than in the sense of overpowering the creature.'[66] But note how, in this formulation, power is univocal and so while concurrence still applies, it does so only via divine capitulation to creaturely volition.

Process theology reflects a widespread appropriation of both contemporary scientific ideas and their Enlightenment metaphysical pedigree in other respects, as well. Thus, the One is no longer transcendent but is now on a common ontological plain with creation. Process philosophy repudiates *creatio ex nihilo* and, as observed above, the process commitment to incompatibilism compels Bracken to insist that there can be no possibility of 'forcing it [the creature] to conform to some preordained plan of salvation and redemption.'[67] The eschatological consummation of creation is therefore not guaranteed. God's metaphysical character is now an impersonal 'structured field or law-like environment.' Note also the rejection of (*e-t/o-t*) atemporalism.[68]

But this theological perspective carries a high price, for God is now constrained to fulfilling the role of hopeful persuader. According to Charles

---

[66] Ibid., p. xv., and chapter 4.
[67] Ibid., pp. xv-xvi.
[68] Process theology does not claim that the future is as opaque to God as it is to creatures. Nonetheless, like open theism it puts fundamental limits on divine epistemology that break with the historical formularies in this regard.

Hartshorne, for example, God 'influences all that happens but determines nothing in its concrete particularity.'[69] Yet this means that, as Polkinghorne observes, 'There is divine participation in each event but, in the end, the event itself leads to its own completion. […] this places God too much at the margins of the world, with a diminished role inadequate to the One who is believed to care providentially for creation and to be its ultimate hope for fulfilment.'[70] The precise causal process linking divine lure and creaturely choice is, like primary cause, a metaphysical mystery inaccessible to scientific scrutiny. Worse still, however, divine action, just like human action, becomes constrained by deviant causal chains; masks; finks and so forth. Finally, we may note that the process view is ultimately pantheistic; a perspective provocatively framed by Garrigou-Lagrange and Cummins, who point out the metaphysical consequences of schemes like process philosophy.

> Whereas the pantheism of Parmenides is static, an absorption of the world into God, the pantheism of Heraclitus [and by extension process theology] is evolutionist, and ultimately atheistic, for it tends to absorb God into the world. Cosmic evolution is self-creative. God, too, is forever in the process of becoming, hence will never be God.[71]

Dodds's assessment of process theology is no less scathing. 'Process philosophy', he says, 'therefore comes to birth with an eye to certain assumptions of

---

[69] Cited in Ian G. Barbour, "God's Power: A Process View," in *The Work of Love: Creation as Kenosis*, ed. J. C. Polkinghorne (Grand Rapids, Michigan: W. B. Eerdmans, 2001), p. 13.
[70] J. C. Polkinghorne, *Belief in God in an Age of Science*, Terry Lectures (New Haven, Connecticut: Yale University Press, 2003), p. 56.
[71] Réginald Garrigou-Lagrange and P. Cummins, *Reality: A Synthesis of Thomistic Thought* (St. Louis: St. Louis and Company, 1953), p. 151.

science. [but…] insofar as they involve changing the methodology of science into a metaphysics, [they] are really products not of science but of scientism.'[72]

A little more plotting of specific theological perspectives in the VO/CTNS series is now in order. I have previously articulated Wildman's staunchly apophatic 'ground-of-being' perspective. Ian Barbour is firmly in the process camp.[73] William Stoeger, by contrast, adheres to the Thomist position that we shall revisit in due course. Somewhere on the *kenosis*-as-withdrawal spectrum we find Peacocke, Polkinghorne and Russell.[74]

What then of kenotic and open theologies. How has the scientific world view affected theological interpretation of *kenosis*? The ID, process, and kenotic-perichoretic theological perspectives all reflect a univocal and incompatibilist ontology of causal power. Yet in contrast to ID and process theology's recent provenance, kenotic theology possesses a much longer and varied history of interpretation.[75] Indeed, we get a hint of the complexity that theological mapping at my chosen scale necessarily forgoes when Stephen Pardue writes,

> Intriguingly, the issue [of *kenosis*] has proven divisive within several schools of thought, resisting easy stereotypes: feminist theologians line up on both sides of the dispute, and a lively debate rages among Barth scholars in which kenosis has featured importantly. To complicate matters, discussion of kenosis often centres around Philippians 2, a text with a notoriously knotty (and, in recent history, bloated) history of interpretation.[76]

---

[72] Dodds, p. 115.
[73] Barbour, "God's Power a Process View."
[74] See the contributions by Polkinghorne, Peacocke and Barbour, amongst others, in J. C. Polkinghorne, *The Work of Love: Creation as Kenosis* (Grand Rapids, Michigan: W.B. Eerdmans, 2001). For Russell's position see his main article in (*QM*), especially pp. 293-296 and p. 322.
[75] Stephen Pardue, "Kenosis and Its Discontents: Towards an Augustinian Account of Divine Humility," *Scottish Journal of Theology* 65, no. 03 (2012): pp. 271-88.
[76] Ibid., p. 272. The quote contains several references to other works in illustration and support of its thesis. For more on the Barthian issues *Cf.*, Bruce L. McCormack, "Karl Barth's Christology as a

It is important to emphasise, therefore, that there is a spectrum to kenotic interpretation. Niels Henrik Gregersen, for example, adopts a hierarchical approach to *kenosis* in which God is compatibly the cause of all events at the ontologically open (in his view) quantum level, but nature then takes over the process of self-organisation as we climb the ladder of complexity. In reply to Peters' critique of this position,[77] Gregersen lays out four models of *kenosis*.[78]

First, he suggests the *voluntary abdication* model, exemplified by Simone Weil. Secondly, the *radical metamorphosis* model, exemplified by Thomas Altizer and Gianno Vattimo, in which through the processes of history, God's transcendence becomes creation's immanence. Model three, which Gregersen attributes to Moltmann, Polkinghorne, and Peacocke among others, is that God *kenotically refrains from the exercise of detailed predetermination.* Gregersen points out that this model can see power in either compatibilist or incompatibilist terms and the scientist-theologians are careful to talk about self-limitation rather than ontological deficiency in God. Gregersen's own preference is for his last model; *God neither withdraws from the world nor gives up divine power, but actualises divine love in the* [sic] *history with God's beloved creatures*. *Kenosis* is here the self-realisation of who God eternally is.'[79] The main difference Gregersen observes between model three and four is the latter's overt linkage of *kenosis* with plerosis (πλήρωσις), or divine fullness. Rather than resolving debate over the strengths and weaknesses of each model here, we will postpone judgement until chapter five.

Resource for a Reformed Version of Kenoticism," *International Journal of Systematic Theology* 8, no. 3 (2006): pp. 243-51.

[77] Ted Peters, "Happy Danes and Deep Incarnation," *Dialog* 52, no. 3 (2013): pp. 244-50.

[78] Niels Henrik Gregersen, "Deep Incarnation and Kenosis: In, with, under, and As: A Response to Ted Peters," ibid: pp. 256-57.

[79] Ibid., p. 257.

There are, then, to coin an appropriate geographical metaphor, many streams contributing to the theological catchment area of *kenosis*. But because this chapter is concerned primarily with the relation between theological and scientific perspectives on cause, action, and freedom, let me concentrate on the catchment's main confluence. Ultimately the key question in relation to *kenosis* is: can God and the creation exercise causal power compatibly or must their causal powers compete? Cast in VO/CTNS parlance: does God *need* ontological gaps to act?

A competitive, rather than complementary, causal power ontology describes what Ted Peters pithily calls "the *fixed pie* problem." Peters believes this leads 'incompatibilists either to adopt panentheism, which metaphysically limits God's power to determine events; or, if they wish to defend classical theism, to interpolate the idea of *kenosis*.'[80] Since a pie has a fixed volume, Creator and creature must trade off such that as one slice of power grows the other shrinks. McCormack traces a Lutheran history of kenotic theology and its resurgence, as observed in the previous chapter, under Gottfried Thomasius, where it transmogrified from a '*kenosis of the human nature* – a willed non-use of divine attributes…' to a need for the divine Logos to divest Himself of some of the divine attributes. McCormack argues that this change is a result of the 'historicizing of revelation that took place under the impact of Hegel's philosophical theology…'[81] The same zero-sum principle seems to be at work in Jürgen Moltmann's appeal to *zimzum;* divine 'withdrawal' to make space for creation.[82] This is the perspective favoured by Peacocke, Polkinghorne and Russell.

---

[80] Ted Peters, "Happy Danes and Deep Incarnation," ibid, p. 246. Peters is right that this problem pertains to classical theists defending incompatibilist freedom only.
[81] McCormack, pp. 245-47. Quote taken from p. 45.
[82] Jürgen Moltmann, "God's Kenosis in the Creation and Consummation of the World," in *The Work of Love: Creation as Kenosis*, ed. J. C. Polkinghorne (Grand Rapids, Michigan: W. B. Eerdmans, 2001).

But this univocal causal ontology holds doctrinal consequences that differ from (*e-t/o-t*) theological perspective in one of two ways. Either it metaphysically eliminates God's classical (*e-t/o-t*) attributes, as process theology does; or it constrains, and effectively eliminates, the divine pole of concurrence as kenotic theology often does. Thomasius posits a Trinitarian version of the fixed pie interpretation that is also problematic, for as McCormack explains, this nineteenth century kenotic theology, though dominating in Reformed Scotland until the 1940's, was effectively ended by D. M. Baillie's insightful observation that 'if the second person of the Trinity had to divest himself of any attributes in order to become incarnate (only to take those attributes up again later), then what you had was not a genuine incarnation but only a theophany.'[83]

Kenosis raises another important question about God's relationship to the creation that we can address here. Namely, if *kenosis* is relational, to what extent can creation exert a causal influence on God? What, in short, is the status of divine impassibility? As we have seen, *kenosis* and hiddenness are not necessarily equivalent ideas, and Barbour, rightly in my view, points out that voluntary self-limitation does little to alleviate the problem of theodicy.[84]

One of the consequences of construing contemporary causal relations in the univocal and abridged category of efficient-cause is its tendency, to challenge the traditional (*e-t/o-t*) attributes of God. For, if cause is efficient and efficient causes involve forces and movements and change, then, so the argument goes, to speak of God as immanent but impassable is incoherent at best, if not outright self-contradictory. Pointing to Robert Jenson as a noteworthy exemplar of this

[83] McCormack, p. 246.
[84] Barbour, "God's Power: A Process View," p. 13.

contemporary kenotic perspective, Thomas Weinandy argues that Jenson abandons traditional orthodox theological understanding in several significant ways. First, God's eternality is recast as temporal infinity instead of atemporality. Secondly, for God to actualise Himself temporally in the world necessarily means God is neither unchanging nor unable to experience emotion. Thirdly, therefore, Jenson's God could not be eternally Trinitarian, and instead actualises itself within the unfolding history of the world.[85] Divine passibility finds support among Open theists but differs from the classical strand of the (*e-t/o-t*) perspective, but I shall defer further consideration of these important issues until the discussion of theodicy in the next chapter, and the nature of time in chapter 7.

To what extent predilections for a particular theological perspective are sociologically motivated also remains an unresolved, but important, question. Do the present attractions of *kenosis* or open theism reflect a tendency to dismiss a contemporarily unfashionable Thomism too glibly. Such at least is the argument of contemporary Thomists such as Feser, Dodds, and Ignacio Silva. We shall take this question up again in chapter five also.

Finally, then, let us reconsider this Scholastic scheme to see whether it can still offer philosophical resources for a contemporary (*e-t/o-t*) perspective on divine action in light of the contemporary scientific perspective on cause.

Graham White points out that there was a close but 'complex interconnection between medieval causal theories and medieval ontology.' With the assimilation of Aristotle's philosophy that ontology was almost entirely *hylomorphic*. Substances

---

[85] Thomas G. Weinandy, O.F.M., "God and Human Suffering: His Act of Creation and His Acts in History," in *Divine Impassibility and the Mystery of Human Suffering*, ed. James F. Keating, and Thomas White, O.P. (Grand Rapids: W. B. Eerdmans, 2009), pp. 101-03.

were ‘composites of matter and form, and change was described as the loss of one form and the acquisition of another. Form was not merely, shape, but an active principle: […] Furthermore, in any causal interaction, the allocation of active and passive roles […] tended to be unproblematic.’[86] Why is this distinction between act and potency so axiomatic to the Aristotelian and Thomist metaphysic? Because of its implications for how the tension between scientific and theological perspectives on cause cash out in the VO/CTNS series. Polkinghorne famously avers that ‘epistemology models ontology’, and frequently defends the need for metaphysical judgements. Nevertheless, at no point does he lay out a full metaphysical position of his own. Moreover, his understanding of Thomist metaphysics does not seem to go beyond the writing of Austin Farrer.[87] The strength of Scholasticism is, in this respect, the depth of its engagement with the possible ontologies that human epistemology attempts to ‘model’.[88] It strikes me as appropriate to ask whether the contemporary epistemic reliance upon model suppresses an important ontological ingredient? Does mathematised formal modelling of causal relations unjustifiably exclude other contributing types of cause from the conclusions it draws?

If this is right, then Feser is surely both perceptive and worthy of attention when he argues that, methodologically speaking, much of the current debate takes place on the wrong philosophical level. The problem with Humean analyses is not so much that regularity and counterfactual dependence are not real, but that they are *consequences* of causal relationships rather than nomologically responsible for them;

---

[86] Graham White, "Medieval Theories of Causation," *Stanford Encyclopedia of Philosophy* (Fall 2013 Edition), Edward N. Zalta (ed.) URL= <http://plato.stanford.edu/archives/fall2013/entries/causation-medieval/>
[87] Silva, "Thomas Aquinas Holds Fast," pp. 658-67.
[88] Feser, *Scholastic Metaphysics*, p. 27.

that what is constitutive about cause can only be captured in the language of powers and their manifestations.[89]

Thomism does not cast divine causal powers in *competition* with efficient-causal explanations familiar to contemporary science. It merely does not *limit* them to scientifically accessible categories. Perceived conflicts may simply reflect insufficient awareness that science and Scholasticism are addressing a common topic from differing metaphysical levels. Feser, illustrates this point eloquently using an example from plant chemistry. 'In the case of opium' he writes, 'its specific chemical properties are the vehicle by which its dormitive power is exercised. […] the difference between the metaphysician and the chemist, then, is essentially that the former is concerned with powers and the latter with vehicles.'[90] Yet we can only talk the power that animates the four causes (*material, formal, efficient* and *final*) analogically. It is power of a different metaphysical order than any power accessible to methodological-naturalism.[91]

Reconnecting Methodological-naturalism and Transcendence

To recap briefly: problems in speaking "well" about divine action perdure because even limiting causal philosophical explanation to immanent and mathematisable causes does not eliminate transcendence. Language is too fluid, too enigmatic, too polyvalent. How, for example, should we understand those "laws" that mathematised

[89] Feser, *Scholastic Metaphysics,* pp. 61-62.
[90] Ibid., p. 45.
[91] John F. Wippel, *The Metaphysical Thought of Thomas Aquinas: From Finite Being to Uncreated Being*, Monographs of the Society for Medieval and Renaissance Philosophy (Washington D.C: Catholic University of America Press, 2000), p. 301.

causation describes? Is the law of gravity ontologically basic (a self-evident necessity) or is it ontologically irrelevant (purely an instrumental device).[92] What work is language being asked to perform when positing the existence of "laws" but no law-giver? Two points are worth considering here: first, the apparent conflict between freedom and action; between qualia forever beyond the reach of *any* physical apparatus and physical brain states accessible to an ever-increasing array of instrumentation, is emblematic of a potential conflict between cause and freedom that has a long philosophical pedigree.[93] There may, consequently, be value in reappropriating older theological and philosophical reflections on divine action that have, for whatever reason, faded from prominence in some contemporary communities of interpretation. C*reatio ex nihilo* resists, for example, the kind of metaphysical naturalism that bootstrapping overlays on the immanent methodological-natural data of cosmology.[94]

Secondly, and perhaps relatedly, George Wilson and Samuel Shpall point out that contemporary philosophy lacks consensus about, and tends to reductive analyses of, shared human action.[95] This is potentially significant, because the idea of shared action is clearly at the heart of the classical (*e-t/o-t*) approach to divine action with its distinction between primary cause by which nothing exists apart from God's act(s) of

---

[92] 'Regarding the laws that govern the universe […] there seems to be no single mathematical model or theory that can describe every aspect of the universe. […] Though this situation does not fulfil the traditional physicists' dream of a single unified theory, it is acceptable within the framework of model-dependent realism.' Hawking and Mlodinow, p. 58.
[93] Wesley J. Wildman, "Further Reflections on "the Divine Action Project", *Theology and Science* 3, no. 1 (2005): pp. 71-83.
[94] For examples of scientific models that import a naturalist metaphysic in addition to a naturalist methodology see, P. C. W. Davies, *The Mind of God: Science and the Search for Ultimate Meaning* (London: Simon & Schuster, 1992), chapter 2, esp. pp. 61-72. In addition to Hawking and Mlodinow. see e.g., Dawkins; Victor J. Stenger, *God: The Failed Hypothesis: How Science Shows That God Does Not Exist* (Amherst, New York: Prometheus, 2007).
[95] Wilson and Shpall, p. 23.

creation and sustenance and secondary cause(s) by which God confers authentic causal powers and freedoms on creation.

But note a certain symmetry here between theological and scientific epistemology. Theology begins with textual and philological particulars. Aggregating these allows it to abstract second order relations such as trope or theme. But these must also be integrated with metaphysical considerations to produce a specific theological perspective. A process holistically validated by the historical believing community. Likewise, the scientist begins with a single falling apple. Aggregating empirical experience allows the positing of second order themes or tropes – such as scientific "laws". A process validated by the relevant community. But there remain third order metaphysical decisions as well. Are such laws nomological or are they descriptive: do apples fall *because* of gravity, or does gravity *reflect* the causal powers conferred on windfall apples? Does it matter? Is methodological-natural explanation alone *always* sufficient? Is it always 'adequate', and which community decides?

Again, the question recurs – how wide and how far must we trace causal explanations? Let us return to the example of that windfall apple and ask some clarifying questions. What is more fundamental, is it that which causes the apple to remain always an apple and never become, say, an artichoke, or is it whatever causes the apple to grow, and ripen, until eventually it falls and decays? And, how should we decide? Is the primary source for resolving such existential questions the intellect or sensory experience?

The Eleatic philosophers of the early fifth century B.C. argued that sensory experience is inferior to the mind's capacity to determine logic and truth. Parmenides, for example, reasoned along the following lines: real change requires something new

to come into existence. However, since logically, nothing can come from nothing (*nihil fit ex nihilo*), real change is impossible. By contrast, Heraclitus, prioritising sensory data, famously declared that 'no man ever steps into the same river twice' thereby contending that permanence is the illusion. For Heraclitus, the World, conceived in its entirety, is the only thing that endures. Within this *dynamic monism*, as Edward Feser labels it, there is nothing permanent; only becoming, only change.

In the fourth century BC, Plato refined the Parmenidean focus on permanence with a theory of Forms in which the material world of the senses is but a copy of a changeless, more real, and permanent world. Plato suggested that there are five kinds; Being (*to on*), Rest (*stasis*), Change (*kinesis*), Sameness (*tauton),* and Difference (*heteron*), but Plato privileged rest over change[96] and, according to F. LeRon Shults, Western philosophy generally tends to begin with *being* rather than with relation.[97]

Aristotle, however, rejected both the Platonic/Eleatic and Heraclitean philosophies, arguing that the connection between change and permanence is better understood by positing a relationship between 'act' and 'potency'. Aristotle's four types of causation: *formal, material, efficient*, and *final* all derive from this fundamental relationship between what something *is* (act) and what it can *become* (potency). Scholastic metaphysicians, in turn, defended and refined this Aristotelian distinction. Indeed, Feser judges the idea's significance 'absolutely crucial to the Scholastic approach to questions about the metaphysics of substance, essence, and causation (and for that matter to Scholastic philosophy of nature, philosophical

---

[96] A preference that nonetheless comes under pressure by the time of Ockham for, as Graham White notes, in debating rest and movement concerning a ship at anchor in a flowing river 'Ockham eventually decides that there are only fixed places, but his arguments are not very strong, and one is left with the impression that the very ideas of rest and motion have become somewhat problematic.' See White, "Medieval Theories of Causation," section 1, para. 4, point 2.

[97] Niels Christian Hvidt, "The Historical Development of the Problem of Evil," in *Physics and Cosmology: Scientific Perspectives on Natural Evil,* ed. Nancey Murphy, Robert J Russell, and William R. Stoeger S.J. (Vatican City State: Vatican Observatory/CTNS, 2007), p. 5.

psychology, natural theology and even ethics.)'[98] Given the enduring influence of Aristotelian/Scholastic thinking on theological discussion of divine action, it would be remiss not to chart the Scholastic understanding of cause onto our map in a little more detail.[99]

The role of the four causes - *material, formal, efficient,* and *final* - is, Michael Dodds says, to 'explain two things: why something is what it is, and why it can cease to be what it is and become something else.'[100]

What is it that *connects* the acorn with the oak tree? Or that connects the developing egg of one moment with the foetus of the next? According to Aristotle, and the Scholastic's who followed, at the root of all such relations is 'primary matter'. The 'secondary' matter that is the 'stuff' of the creation that we can sense depends, on this view, on 'primary' matter that has no other property, in itself, than the property of 'existing'.[101] Primary matter must combine with secondary matter to produce a 'form'; a particular 'thing'. Yet primary matter underlies and connects the secondary material of the acorn and the oak so that change is both possible and relational – primary matter is what allows *this* apple to emerge from *that* pip. But primary matter is a transcendent postulate, forever beyond scientific investigation. According to the Scholastics, science investigates secondary matter (in which primary matter inheres) to produce a specific form like, say, an airplane tyre; or jet fuel; or a strip of metal; so, the *material* cause of the Concorde, to pursue the aviation example, is (mainly) aluminium.

---

[98] Feser points out that while the Scholastics all agreed upon the distinction between act and potency Aquinas, Suarez and Scotus disagreed with one another in how to detail the distinction. Feser, *Scholastic Metaphysics*, p. 31ff.
[99] For a brief outline of Eleatic and Heraclitean philosophies and their central weakness from a Scholastic point of view see ibid., pp. 31-36.
[100] Dodds, p. 14.
[101] Feser, *Scholastic Metaphysics,* pp. 171-77.

A *formal* cause is that which gives "stuff" its particular form. Heat is a formal cause of vulcanised rubber. Accidental causes shape their 'patients' in particular, but changeable, ways. Rubber could have many forms, but this particular piece of rubber has, say, the *accidental* form of a tyre for a Concorde. The *substantial* form, conversely, is what makes the rubber of a Concorde tyre good for rolling along the ground. As Aquinas puts things;

> The substantial form differs from the accidental form in this, that the accidental form does not make a thing to be 'simply' [*simpliciter*], but to be 'such' [*secundum quid*], as heat does not make a thing to be simply, but only to be hot.[102]

But change is not arbitrary. Fire, for example, can heat metal, but not ice. Scholastics explained this difference using the terms 'efficient cause' and 'potency'. An *efficient* cause can either bring a thing into existence or change a thing that already exists. Fire is an example of an efficient cause. It can bring heat into existence by changing liquid fuel and oxygen into flame. Contemporary scientific efficient causality is conceived more narrowly than the Scholastic understanding which included, for example, the council of advisors.[103] Potency is what limits the effects of an efficient cause. Fire can consume aluminium but it cannot consume electricity because aluminium and electricity have different potencies. We shall explore this idea further shortly.

Aristotle, drawing heavily on biological examples believed that *final* cause, the 'end' for the sake of which other causes tend, pervades the world. Aquinas argued

---

[102] Aquinas, *Summa Theologica* I, 76, 4, co.
[103] This is the thrust of Dodds's argument in chapter 2 of his book.

that all final causality must be governed, if only indirectly, by an intellect and that anyone rejecting final cause must also reject the fact of divine providence.[104] The difference between the Medieval and modern world is not, therefore, not how to relate efficient to final causation; but rather the extent to which final cause is believed to influence non-conscious agents and processes. We have already noted that the Scholastics allowed the possibility of teleology in all four causes; *material, formal, efficient,* and *final*; but, as Graham White summarises things,

> What sets the medieval period apart from our own is that the medievals saw this pattern of causality as being far more pervasive than we, possibly, would, simply because God was always acting in the world, and most, if not all, of God's actions in the world can be fitted into this pattern: as Scotus says, "only what the efficient cause brings into existence for love of the end is caused by the end"[105]

There is, however, more to be said about the kind of relation that connects change and permanence. As already noted, it is the relation that distinguishes between action and possibility or, in Scholastic language, 'act' and 'potency'. The first of Thomas Aquinas' twenty-four theses says

> Potency and Act so divide being that whatsoever exists either is a Pure Act, or is necessarily composed of Potency and Act, as to its primordial and intrinsic principles.[106]

---

[104] Aquinas writes 'Since natural things themselves lack knowledge, some intellect must pre-exist which orders them to an end in the way an archer gives a certain motion to an arrow so that it tends to a particular end. And just as the impact of the arrow is said to be effected not merely by the arrow but also by the archer, so too every work of nature is said by the philosophers to be a work of intelligence (and not merely of some noncognitive agent).' Wippel, pp. 410-12. This translation is taken from p. 412.

[105] White, "Medieval theories of Causation", section 5, p. 32. White points out that it would be wrong, however, to perceive the medieval literature as unanimous on the extent of final causality.

[106] *Summa Theologiae,* Iª q. 77 a. 1; *Sententia Metaphysicae,* lib. 7 l. 1 et lib. 9 l. 1 et l. 9.

Consequently, pure Act is synonymous with God alone. The distinction between act and potency can be semantic or logical (that is, a distinction in the mind only), but it can also be real (a feature of the world itself). It accounts for the fact that a thing *is* a certain way (act) while simultaneously containing within itself the *potential* (potency or power) to become something else. Furthermore, potency can *itself* be either active or passive.[107] To explain these nuanced ideas, Feser provides the following explanation,

> Pure active potency or power unmixed with any passive potency or potentiality is just pure actuality, and identified by the Scholastics with God; in everything other than God active potency is mixed with passive potency.[108]

If act can exist without inherent potency only in God, then in the created order, no action can be considered apart from a related potency. Such potency can, however, exist in two forms; *actively*, in which case it is called a 'power', or *passively* - as a yet unrealised potency (potential). To Aristotle it was this property of unrealised potency – the possibility of being *some*thing else – that accounts for the continuity that underpins change. Aristotle, as already observed, called this possibility 'primary matter' but, as Dodds emphasises, this term should not be confused with 'matter' as contemporary science understands it – in physicalist terms. As Dodds says, primary matter is a 'principle of possibility' but it is 'a notoriously difficult principle to conceptualize, mostly because "there's no there there."'[109] Primary matter, then, can

---

[107] Scholastic metaphysics offers a plethora of distinctions within distinctions. It must suffice to offer only the broadest overview of its metaphysical system in this essay but, in addition to the comprehensive introduction provided by Feser's *Scholastic Metaphysics*, see Wippel.
[108] Feser, *Scholastic Metaphysics,* p. 39.
[109] Dodds, p. 17.

only be intuited metaphysically, persisting transcendently apart from any particular form embodying it in secondary matter.[110]

Potency is not, however, open-ended. It is not a potency to become *any*thing else. A pip has the potency of an apple but not the potency of an artichoke. Potency is directionally constrained; things have the power to become *some* kinds of other things. Electricity has the potency to become heat, but heat does not have the potency to become electricity. Power, potency, and time combine to furnish directionality in the *actions* (causal powers) of natural objects, from which we infer teleology. And potential could be activated by any of the four causes so that, like Aristotle, the Scholastics understood teleology as integral to each of them.[111]

The key question is, then; in what sense is God the source of act and potency in the world? Since God alone is *pure* active potency, it follows that the causal powers of the creation must be a secondary kind of potency in *some* sense; but in *what* sense? For Medieval occasionalists, like the Islamic scholar Al-Ghazali, God is the only true cause of change. Yet occasionalism, in insisting that God is the *only* cause of events in the World, seems deficient both existentially and theologically. It seems a common-sense truth that *I* am responsible for some of *my* actions, both physically and morally. And so, to Scholastic's like Scotus and Aquinas, God is, instead, the necessary but not always the sufficient cause of actions in creation. The stock example to illustrate their understanding is, as Feser points out, a stick that has the power to move a stone, but only to the extent that it is used by a human agent to that

[110] Feser, *Scholastic Metaphysics*, pp. 160-75, esp. pp. 71ff. With due caution and provisionality in light of the discussion of analogy in the first chapter, it might be that *here* the language of jointedness, if only to indicate the significance of the ontological shift implied by the concept of 'primary matter' could help to signal the dissimilarity between primary and secondary matter.
[111] Ibid., p. 91.

effect.[112] The stick and the human agent are *both* a cause of the rock's being moved by the stick. We may note, therefore, that Scholastic Thomism offers an account more in keeping with contemporary scientific philosophy than occasionalism does, at least insofar as the former confers real causal powers on created things in themselves.[113] Note, however, the linguistic flexibility that allows 'cause' to be used equivocally.

Is there any way that such transcendent claims can be verified empirically: verified scientifically? White argues that, while specifying a metatheory of medieval causality is a complicated issue, Aristotle's *Posterior Analytics* provided the medieval framework for two sorts of proofs; proofs of simple fact (*demonstrationes quia*) and proofs of reasoned fact (*demonstrationes propter quid*). 'In the latter, the syllogisms involved must have a middle term that are *causes* of the state of affairs which is to be demonstrated.' "Reasoned facts" have an important practical consequence for our discussion because, as White then observes, 'it yields a theory of scientific reasoning in which the structure of arguments is intimately tied up with the structure of the causal chains that they demonstrate'.[114] Indeed so, but the need to pursue causal explanation sufficiently broadly is nicely illustrated by Wallace, who writes

> The matter and the form are in the chair when it is finished, but the carpenter is not, and his intention is not there either, except in the sense that an idea or exemplar formed part of that intention and has now materialised the resulting product.[115]

---

[112] Ibid., p. 49ff.
[113] Given the commonly perceived thesis of conflict between science and religion it is noteworthy that, so long as science restricts itself to methodological-naturalism, there turns out to be a remarkable degree of affinity with a Scholasticism. See ibid., p. 44.
[114] White, "Medieval Theories," section 4.2.
[115] Wallace, p. 24.

All of which raises a now familiar epistemological question. How widely, and how far back, must we trace causal relations? 'Epistemology', Polkinghorne insists, 'models ontology.' But models exclude and simplify. So, how do we delineate an 'adequate' explanation?

What Counts as an 'Adequate' Explanation?

Gregory Dawes, in *Theism and Explanation*, defends the epistemological sufficiency of methodological-naturalism, concluding that while there is no "silver bullet" to repudiate every TDA *in principle*, there are overwhelming reasons to reject any TDA *in practice*. He writes,

> … my arguments might give us reason to prefer natural explanations when these are available, and to seek natural explanations when they are not. It follows that a proposed theistic explanation should be, at best, an explanation of last resort. One might argue that this view – that we should abandon the search for natural explanations only *in extremis* – represents a "presumption of naturalism." And so it does. But my point is that such a presumption would be (in principle) defeasible. And it falls short of what most people mean by the "methodological naturalism" of the sciences.[116]

This "presumption of naturalism" and Dawes's claim that any TDA should be a 'last resort' will receive further consideration in chapter five, but the philosophical impossibility of refuting every TDA in *principle* is an important conclusion. Dawes himself illustrates how this conclusion follows in a 'thought experiment', derived

[116] Dawes, *Theism and Explanation,* p. 146.

from Richard Swinburne, concerning a hypothetical poltergeist: a disembodied agent responsible for both the existence and the behaviour of *every* object in a room.

> "We can then ask, "Why did the inkwell fly across the room?" On this scenario, it would be true that "the poltergeist did it." But this proposition lacks empirical content It constitutes nothing more than the beginning of an answer to our question. For if the inkwell had simply fallen to the floor, the same answer could be given. And if the inkwell had not moved at all, the poltergeist would also have been responsible, for he would have chosen to maintain it in existence in its current position. I concede that "the poltergeist did it" would still be an interesting and informative claim. It would be of some interest to know that there *exists* an unembodied, personal agent in control of the room. But this fact alone would not constitute an adequate explanation, since it would not single out the event to be explained from any other event. "Why did the inkwell fly across the room?" "The poltergeist did it." "OK, but why did he do that?" That's the question that needs to be answered."[117]

Dawes concedes that "the poltergeist did it" is an interesting and informative claim, but in that case a solely empirical explanation of the inkwell's movement using immanent (mathematised) "laws of nature" alone, should be *inadequate*: importantly lacking. Moreover, his crucial question "Why?" isn't even admissible to methodological-natural investigation. If the poltergeist is an intentional agent then, as Wolterstorff illustrates, we *might* infer a limited repertoire of possible reasons, but *only* the poltergeist can provide a fully adequate explanation. But if, by Dawes's own argument, TDAs entail an intentional explanation and God is an intentional agent, then the kind of divine self-revelation Wolterstorff defends but Dawes trivially dismisses without argument becomes not merely possible but becomes something *rationally* to be expected.[118] Absent the poltergeist, causal explanation, whether of the

[117] Ibid., p. 45.
[118] Revelation is, Dawes argues, not intersubjectively testable comprising only '…extraordinary claims (which amount to, "How do I know this is true? Because God told me")…', ibid., p. 10. But this ignores the role of community in determining what counts as "extraordinary".

room *per se* or of activity therein, limited as it is to "How?" is eventually impaled either on the horn of "brute" fact, or the horn of infinite regress. Ockham's razor only works with explanations at the same ontological level. Using it to eliminate the poltergeist that accounts for the whole (room, object, and *final* cause) is – *if* said poltergeist exists – an ontologically reductive epistemic misstep.

Acknowledging this *in principle* incompleteness to methodological-natural explanations, Dawes therefore adverts to 'adequate' explanation based upon certain desiderata. Yet, while treating these as *normative,* he asks; 'What makes them explanatory virtues? I don't think I have a satisfactory answer to this question, but then I'm not sure anyone else does, either.'[119] He subsequently concludes that 'Since there exists no definite or exhaustive list of explanatory virtues, we are forced to choose which we shall adopt'.[120] But, surely then, granting God is analogically agential; and Dawes demand, in that case, for agential type explanations of divine actions; it is entirely rational to seek, and include, divine self-revelation in any interpretive schema for evaluating putative divine actions. Subject, of course, to the "peer review" of communal praxis.

And now the problem with methodological-naturalism becomes clearer. For Dawes has already pointed out that '…in practice methodological and ontological naturalism are indistinguishable. […] In both cases, it will guide your enquiry, determining what kinds of entities or forces you will posit when offering explanations'.[121]

---

[119] Ibid., p. 112.
[120] Dawes, *Theism and Explanation,* p. 116.
[121] Ibid., p. 5.

Summary

Let me pause and perform a "position check." Chapter 1 concluded that language is inherently supple; able to represent a realm beyond the obvious, immanent, and mundane; a transcendent "similar, but not the same" dimension to human experience of the world.

Chapter 2 plotted this 'initial fix' against the biblical data, concluding a *prima facie* case can be made that Clayton is right and an (*e-t/o-t*) perspective, at least of the kind clarified in the introduction, *is* missing from the VO/CTNS series. Yet it concluded, also, that demythologising the biblical data to eliminate transcendent divine action in pursuit of "traction" departs from that (*e-t/o-t*) theological perspective on Revelation and, potentially, scriptural interpretation in a way that is philosophically unnecessary.

This chapter, perhaps not surprisingly in view of the recurrent link between philosophy and sociology, charts a parallel process in science: the methodological-natural 'demythologising' of cause and freedom, leading to a univocal, mathematisable, quantifiable ontology, in which mechanical type cause dominates, and power and freedom relate like a "fixed pie" trading volume against one-another. Yet fundamental questions hang unresolved over the role embodiment plays in human action; whether mental volitions can be causal; the epistemological limits imposed by our finitude for discerning how fine-grained causal connections in nature really are; or our susceptibility to 'deviant' efficient-causal chains; let alone shared and deputised action. But, from the theological perspective, the *imago Dei* signifies an important transcendent association between divine action and human action. These all serve to

emphasise the fact that human action and divine action *can* be related, but only analogically.

This expanded range of coordinates can be now be re-plotted to provide a more precise "fix" for evaluating theological perspectives. From this position, the difficulties the VO/CTNS series encountered in 'modelling' divine action are more indicative of the epistemological consequences of methodological-naturalism than an ontological limit that God, too, must overcome by finding some "gap" in, or willing partner, *before* He can act. Moreover, sensitivity to the role of human embodiment in relation to 'action' provokes questions about the strengths and weaknesses of the metaphor of causal 'joint' for communicating the distinction between primary and secondary cause. Similarly, *creatio ex nihilo* challenges not only bootstrapping, but also any contemporary distinction between GDA and SDA that depends too strongly upon a totally autonomous or free-standing creation.

Pursuing this mapping metaphor a little further; philosophical and sociological changes in the meaning of 'cause' operate on an almost tectonic scale, creating parallel and profound pressures in both science and theology. Those topographical consequences have not yet been fully charted and there is one area in particular where these pressures converge. This province is home to what might be called theology's "hard problem": evil. For, if God is concurrently responsible for everything via primary cause, then is God not responsible for the secondary (efficient-causal) evils in the world also? But if God is powerless, then in what respect is he God? How does the scientific (methodological-natural) perspective affect theological approaches to the problem of evil?

Chapter 4

Divine Action and the "Problem of Evil"

My reason for charting at such an expansive scale is that it is so tempting to take for granted or treat as inevitable whatever *seems* to be all around. The scale of discussion is thus a deliberate methodological choice, but at this point it produces an organisational difficulty. Nowhere does the data of transcendent Revelation come under greater pressure from the conflicting data of immanent experience than in the arena of human moral reasoning. Consequently, although more charting of this yet broader context is needed (and will be added, in subsequent chapters), the 'problem of evil' is simply too significant to defer. Like attempting Everest, whatever route to the top one chooses, there is no substitute for starting to climb. But what is evil?

In the midst of distinguishing two concepts of evil, Todd Calder highlights an increasing philosophical interest in the notion over the past thirty years. While in the narrow concept evil is restricted to the actions of moral agents alone, taken in its broader concept, evil,

> picks out any bad state of affairs, wrongful action, or character flaw. The suffering of toothache is evil in the broad sense as is a white lie. Evil in the broad sense has been divided into two categories: natural evil and moral evil.

> […] Evil in the broad sense, which includes all natural and moral evils, tends to be the sort of evil referenced in theological contexts.[1]

The theological problem of evil can be further encapsulated in an ancient, but familiar dilemma: how can there be an all-powerful, all-loving God and yet be evil in the world? Two main theological perspectives provide the underlying topography to be charted: the Augustinian and the Irenaean. A range of now familiar theological perspectives are plotted against them; Wildman's apophatic denial of any analogical agent against whom to lay charges; dualist and process approaches that reject one of the dilemma's terms entirely; and kenotic approaches that re-interpret doctrine to constrain one of the dilemma's terms. These perspectives tend to understand power univocally; as a co-immanent causal power. Yet, once more, we must also take account of still broader influential philosophical and sociological pressures wrought by the Enlightenment, Modernity, and post-Modernity.

Ultimately, I will argue that the *developmental* "only way" theological perspective commonly adopted by all contributors to the VO/CTNS series differs from a culturally important (*e-t/o-t*) *consequentialist* theological perspective in ways that remain metaphysically open to challenge, despite the series' common agreement on its preferred approach.[2] This is a contentious and, frankly, somewhat uncomfortable conclusion. A full defense of that theologically Augustinian perspective and its hermeneutical and metaphysical grounds is beyond the scope of this chapter, however, some specific theological reasons will be given for querying

---

[1] Todd Calder, "The Concept of Evil," *Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.) URL= <https://plato.stanford.edu/entries/concept-evil/> paragraph 2.

[2] By "culturally important" I have in mind not only the complex and multifaceted issues energising the so-called 'culture wars' in North America but also, more broadly, that strand of the (*e-t/o-t*) communion that wishes to defend a particularised interpretation of the Fall for what it sees as reasons of Revelation and Tradition.

the regnant VO/CTNS solution, and for suggesting that theology has more work to do in determining scriptural interpretation and discerning the doctrine of the Fall.

Clearly, there are no easy solutions to "the problem of evil" and it is critical that *any* theological engagement respects the gap between clinical theorising and the ambiguities of personal experience. Consequently, the problem of evil is intentionally embodied using some data from immanent experience. This real-world example serves, I believe, a vital role in clarifying both the ambition, and limits, of theoretical discussions about the 'problem of evil'.

Evil: A Real-World Example

Towards 3pm on the afternoon of Tuesday 25th of July 2000, AF 4590, a chartered Air France Concorde lined up on runway 26 right at Roissy Charles de Gaulle airport, bound for New York with 100 passengers. After passing the maximum safe speed for rejecting the take-off, but shortly before attaining the safe speed for becoming airborne, one of the tyres on the left main landing gear struck a small strip of metal laying on the runway. At least one large piece of disintegrating tyre then ruptured a fuel tank in the left wing of the aircraft and a major fire began almost immediately. The still accelerating Concorde became airborne, but because of projectile damage from the tyre failure, and the fire, both engines on the left-hand side suffered severe problems and the landing gear could not be retracted. This combination of reduced thrust and increased drag meant the aircraft could not accelerate to a safe flying speed, or climb more than about 200 feet above the ground. Approximately one minute later the aircraft became uncontrollable and crashed onto a hotel. All 109 people aboard the Concorde died, as did 4 people on the ground. The French BEA (accident

investigation branch) published a full report in 2002.[3] So, what, or who, was responsible for this accident?

Human factors play a significant role in the accident's causal chain. The metal strip found on the runway was traced to a Continental Airlines DC10 that had departed about five minutes before the Concorde. This metal 'wear strip' had undergone improper maintenance procedures; that fact signifying a wider cultural failure in the maintenance division at Continental. The report also uncovered historical safety concerns over high speed tyre failures on the Concorde that had not been prioritised or well-coordinated between the operators and manufacturer. These aspects raise difficult questions about the nature of moral evil, its relation to material-efficient cause and about divine action in relation to human agential freedom.

The investigation also produced a detailed reconstruction of much of the efficient-causal chain of events between the tyre hitting the metal strip and the aircraft's final destruction. These include physical reconstruction of the affected tyre; the aircraft wreckage; modelling of the consequences of debris impact on the superstructure and fuel cells of the left wing; potential causes for the fire; the thrust/drag effects of the burning fuel/air mixture on the affected operating engine(s); and the aerodynamic forces that, together with the deficiency in thrust and materials degradation, accounted for the aircraft's inability to remain airborne. These factors and the way variable wind conditions affected runway use over the critical period, raise difficult questions about 'natural' evil and the potential for divine action in quantum/chaotic environments.

[3] Bureau Enquêtes-Accidents, "Accident on 25 July 2000 at La Patte D'oie in Gonesse (95) to the Concorde Registered F-BTSC Operated by Air France," ed. Bureau Enquêtes-Accidents (Paris, France 2002).

But taken together, these causal chains beg questions of a transcendent nature. Questions about whether the metal strip falling where and when it did and the Concorde tyre running over it was just "dumb luck"; about how seamlessly a free-will and a free-process defense connect; about whether such accidents are the only way God can achieve greater purposes; about whether and when God could have foreseen this chain of events; and whether and how God could, or indeed should, have prevented it?

Theologising about divine action, or evil, in the context of this Air France Concorde accident is, rightly, a daunting prospect. Merely providing an analytic or speculative assessment of divine (in)action in the context of such personal grief and perplexity would be to engage in the wrong kind of discourse. Wrong enough, as Terrence Tilley forcefully argues, to constitute an evil of its own kind.[4] And yet transcendent Revelatory truths need to relate to this kind of immanent experience if they are to prove meaningful. This tension is difficult to resolve satisfactorily, but a totalising apophatic silence seems equally inadequate. The search may, or may not, yield a comprehensive explanation, but ultimately it is, in any case, a search for *meaning* in suffering.[5] How then to proceed?

Tilley distinguishes between defense and theodicy, defining defense, contemporarily at least, as the minimalist claim that God's existence is not logically contradicted by the existence of evil. Theodicy, in Tilley's view, is the altogether

[4] Terrence W. Tilley, "Problems of Theodicy: Background," in *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, ed. Nancey Murphy, Robert J Russell, and S.J. William R. Stoeger (Vatican City State: Vatican Observatory/CTNS, 2007); *The Evils of Theodicy* (Washington D.C: Georgetown University Press, 1991).

[5] Vernon White has suggested, in conversation, that meaning is often more important than explanation in the context of suffering and evil. The limits of explanation are discussed again in chapter 6.

more ambitious process of assembling '… a theory that gets God "off the hook" for the evil in God's creation.' Thus, Tilley acerbically observes how

> At first glance, theodicy seems to have the assertive illocutionary point. Although theodicists carefully cultivate a style that requires the reader to pay homage to the fear and trembling with which theodicists approach their work, they see their task as representing with sufficient accuracy the way things are. Some are more modest than others, but none denies that his or her purpose is to get matters straight, to show things how they really are (despite appearances), to tell *the truth*.[6]

Rather than balm for the enquiring theologian's soul, this is a caustic rejoinder to those who would participate in the 'Enlightenment obsession with reducing the muddy and mixed to the clear and distinct'.[7] Similarly, Rowan Williams, in his thoughtful and nuanced discussion of the tension between speech and silence in *The Edge of Words*, quotes approvingly Alain Badiou's identification of evil as the naming of that which is unnameable.[8]

How then should we proceed; defense or theodicy?[9] Tilley's assessment of both the method, and putative madness, in contemporary theodicy contains enough truth to draw blood but parsing between options in too clinical or binary a manner presses his distinction too far; it may be enough to find meaning, not demand comprehensive explanation. Thus, the border between defense and theodicy is, in a way that is becoming all too familiar, porous if not downright obscure. Moreover, as

---

[6] Tilley, "Problems of Theodicy," p. 45.
[7] Ibid.
[8] Cited in Williams, *The Edge of Words*, p. 164.
[9] Not only is the point at which defense becomes theodicy impossible, it seems to me, to delineate, but it is further muddied by the inverted relation of the terms. Defense typically involves giving reasons in support of something, while theodicy is defined by the Oxford English Dictionary as 'vindication of divine providence in view of the existence of evil.' I would suggest, therefore, that Plantinga provides a theodicy and Augustine a defense. To avoid confusion, however, I will follow current convention in applying the terms throughout this chapter.

the book of Job, the Psalms of lament, and Ecclesiastes all ably illustrate, some discourse is truthful precisely because it allows the suffering community to voice something more than a brute roar, without getting God "off the hook." Silence can be as evil as false speech; a point also well made by Williams.

> Where silence comes is all-important; so that we cannot in fact discuss it without closest attention to the speech it interrupts or refuses. […]: The way in which silence 'comes in' should be something to do with admitting the most formidable level of difficulty (which is why silence as an evasion or denial is such a monstrosity). If were we *just* to say that language was insupportably compromised and inadequate to truth-telling, […] we should risk losing sight of the fact that it is speech that points into silence and is itself altered by it.[10]

So, then, the presence of evil in a divinely created universe demands some theological attempt to truthfully combine silence and discourse. To reiterate, then, how far along the continuum from defense to theodicy we can proceed may not be the central issue, our primary ambition should be to find *meaning* for suffering.

The Theological "Problem of Evil"

The "charge against God" appears in arguably its oldest form, in Epicurus (342-270 BC),

> God either wishes to take away evils and is unable; or he is able and unwilling; or he is neither willing nor able; or he is both willing and able. If he is willing and unable, he is feeble, which is not in accordance with the character of God; if he is able and unwilling, he is envious, which is equally at variance with God; if he is neither willing nor able, he is both envious and feeble, and therefore not God; if he is both willing and able, which is alone

[10] Williams, *The Edge of Words*, pp. 162-63.

> suitable to God, from what source then are evils? Or why does he not remove them?[11]

Is a minimalist logical defense the only way to avoid the horns of this dilemma? Alvin Plantinga[12] has secured rational defense effectively enough for Tilley to declare that 'the "logical problem of evil" can legitimately be claimed to be solved.'[13] Yet this really does not take us very far, precisely because it does not yield any meaning for suffering. Such rational, minimalist, logical-philosophical rigour is in many respects an entirely post-Enlightenment mode of discourse; it contributes nothing to help us meaningfully link divine action with the Concorde accident.

Perhaps, however, this austere minimalism *should* be enough. 'Shall we accept good from God, and not trouble?', Job asks his morally insensible wife.[14] Enigmatic mystery is, of course, especially attractive to Wildman who situates himself in a theological tradition that understands God as 'the fecund source of all events, regardless of whether human standards in play at a particular time and place would classify them as good, bad, or indifferent.'[15] We have previously outlined Wildman's view that depictions of God as personal are rightly interpreted by Feuerbach and Freud (and the MSIH) as psychological projections; 'the best possible answer to human longings'.[16]

---

[11] Letter to Lactantius, cited in Hvidt, "Historical Development of the Problem of Evil," in (*PNE*), p. 15.
[12] Alvin Plantinga, *God, Freedom, and Evil*, Essays in Philosophy (London: Allen & Unwin, 1975); Michael D. Beaty and Alvin Plantinga, *Christian Theism and the Problems of Philosophy* (Notre Dame, Indiana: University of Notre Dame Press, 1990).
[13] 'Solved, that is,' Tilley says in a footnote, 'for theists who accept a libertarian notion of free will and who find that one can talk of God's creative power and agency as in some way comparable to or in competition with, rather than being analogous to, human creativity and power. Whether there is a version of the free will defense that can be compatible with a "compatibilist" notion of freedom is not clear, at least to me', see Tilley, "Problems of Theodicy," p. 48 footnote 34.
[14] Job 2:10. Job's wife is described in the feminine plural as נְבָלוֹת — *senseless*, especially of religious and moral insensibility.
[15] Wildman, "Incongruous Goodness, Perilous Beauty," p. 282.
[16] Ibid., p. 270.

Yet, while there is certainly much to commend in Wildman's suspicion of unchecked anthropomorphism, I have also argued that his rejection of revelation is a metaphysical claim and that he offers no alternative mechanism for ontologically grounding personal intuitions of evil and moral justice. By contrast, the (*e-t/o-t*) perspective subsumes the non-personal. Andrew Dell'Olio, for example, points to Pseudo-Dionysius who, in the last line of his *Mystical Theology*, says God is even 'beyond every denial.' That is why, Dell'Olio argues, Pseudo-Dionysius, defender of the *via negativa*, nonetheless uses *via eminentiae* as well; because God can also be called super-Personal.[17] This perspective on transcendence strikes me as philosophically richer than Wildman's apophaticism because it protects the divine from excessive anthropomorphism and preserves God's transcendent perfection while affirming the truthfulness of analogy. But there is also a practical problem with Wildman's staunch apophaticism: it renders evil illusory. Not in the Buddhist or Hindu spiritual senses where suffering is a function of attachment, but rather because Wildman's ultimate reality is, for all *practical* purposes, strictly amoral.

> Can we choose purposeless, violence, and cruelty? Yes, and God awaits us along that path as self-destruction and nihility. Should we choose to create meaning, nurture children and spread justice? If we do, the possibility itself is a divinely grounded one. Does God care which way we choose? God is not in the caring business, on this view.[18]

One might query just how Wildman knows, absent the kind of revelation he denies, that self-destruction and nihility await down one path, or one path only?

---

[17] Jerome Andrew Dell'Ollio, "Response to Wesley J. Wildman's 'Behind, between, and Beyond Anthropomorphic Models of Ultimate Reality,'" *Philosophia* 35 (2007): p. 431.
[18] Wildman, "Incongruous Goodness, Perilous Beauty," p. 282.

Nonetheless, Wildman appeals, rather, to the spiritual value of *choice* itself, contending that,

> the fulcrum for human moral action lies where it always has, despite all theological obfuscations: with human decision. […] Nietzsche] praised the spiritual vivaciousness of the one who can take full responsibility for choosing, without any hint of evasion and without any pretence that God favours one choice or another. This is the spiritual maturity in the ground-of-being framework.[19]

Yet, if God does not care *what* we choose, why should he care *that* we choose? Surely if God doesn't care, then God doesn't care "all the way down" so to speak? It seems to me Wildman engages in a turn to the subject that embodies not only the "excessive" anthropomorphism against which he rightly protests elsewhere, but anthropomorphism of a potentially monstrous kind. Monstrous because of the way Wildman's apophatic approach informs the Concorde accident. His perspective seems to insist that the mechanic's *act* of choosing to improperly fit a metal wear strip to the Continental DC10's engine is what matters, not its consequences. God, Wildman's argument would seem to go, could not care less whether said mechanic chose diligently to follow the instructions in the Aircraft Maintenance Manual (AMM), or chose instead to save time by improvising an unapproved fix.[20] The consequences, from the divine perspective, are of no concern, all that matters is that the mechanic choose a course of action without considering either the fear or favour of God. This is

[19] Ibid., pp. 282-83.

[20] 'Facts established concerning the metallic strip and the aircraft reveal inadequate adherence to maintenance procedures by the various workshops that carried out work on the reverser cowl. Thus the engine cowl support was drilled with thirty-seven holes whereas the installation of the strip requires only twelve; equally, a titanium piece was used in Houston along with a mastic which is not normally used for this operation; finally, the lower right wear strip was too long compared to the specification, which helps to explain the successive tearing off of the strip located opposite.' Bureau Enquêtes-Accidents, p. 171.

a profoundly anthropocentric turn to the self. But, as this accident all too graphically illustrates, the consequences of individual choice are not always limited to "self-destruction and nihilism." Wildman's theological perspective, it seems to me, eviscerates not only Revelation's persistent emphasis on our responsibility for choosing well, but any doctrine of a Fall, with its debilitating effect on our very capacity to choose.

If, then, theodicy is desirable beyond the narrow limits prescribed by an apophatic, morally ambiguous, ground-of-being metaphysic, how should we frame its discourse? Dualism offers another transcendent alternative. John Hick explains that this perspective, in its Manichaean and Zoroastrian forms, 'pictured the God whom men worship as less than absolute, and as but one of two co-ordinate powers warring against each other. Or, if one chooses to think of the higher, divine realm as a single totality, […] as divided against itself and as including within it the principle and energy of evil.'[21] Dualism's modern guise appears in some forms of process philosophy wherein the world was not created *ex nihilo* and divine power is metaphysically constrained as divine "lure".[22] In the process-theological perspective, God did not want the AF 4590 accident to happen but was, ultimately, powerless to resist it.[23] Yet, as Whitehead puts it;

> … the revolts of destructive evil, purely self-regarding, are dismissed into the triviality of merely individual facts; and yet the good they did achieve in individual joy, in individual sorrow, and in the introduction of needed contrast, is yet saved by its relation to the completed whole.[24]

---

[21] John Hick, *Evil and the God of Love* (Basingstoke: Palgrave Macmillan, 2007), p. 39.
[22] Whitehead.
[23] Process views differ over whether divine limitation is metaphysically necessary or self-imposed.
[24] Whitehead, (1929), cited in Bracken, p. 146.

But in that case, the Concorde accident only has meaning extrinsically, not to mention instrumentally. The deaths of 113 souls are "trivial", "merely" individual facts. What is *really* of value is the whole. But "whole" in what sense? Whitehead seems to place ultimate value in *process* itself. Consequently, process theology modifies some of Whitehead's scheme.[25] Its influence on the science-theology dialogue is, as already observed, most clearly reflected in the contributions of Ian Barbour.[26] Whether divine lure is ever guaranteed to overcome self-regarding evil remains, however, moot. Moreover, it must be remembered that, on the process view, God and creation are mutually affected. For several reasons, then, the process and (*e-t/o-t*) theological perspectives diverge.

Orthodoxy is, however a broad stream, and two principal theological approaches mark, in John Hick's estimation, historical-theological perspectives on evil. His highly influential *Evil and the God of Love,* divides its theological survey into a dominant 'consequentialist theodicy' rooted in Augustine and a less prominent, but, Hick insists, equally persistent 'developmental theodicy' he links to Irenaeus of Lyon.[27] There are, as Hick's survey shows, three kinds of evil to be considered. Moral evil, which originates with agents; natural evil that may, or may not, originate independently of human (or angelic) actions; and, metaphysical evil which 'refers to the basic fact of finitude and limitation within the created universe'.[28]

---

[25] There are strands within Process philosophy/theology that accept this dualist ontology. Process theologians tend, however, to appeal to an ontology based upon divine *kenosis.*

[26] Barbour, "God's Power: A Process View." For a more contemporary process view see also Bracken.

[27] Hick's reconstruction is contested enough for "Irenaean" to be deployed in scare quotes by some writers. The division is frequently adopted, however, even if only as a programmatic division.

[28] Hick, pp. 12-13. The AF4590 accident was chosen in part because it embodies all three kinds of evil. It also offers a compact case study for assessing how seamlessly the free will and free process defenses align. Do rivets, or engines, or the combustion process require a moral pole?

Yet, as Genesis 1 affirms, creation is inherently *good*. So, by rejecting Manichean dualism we must find some way to account for these different evils; and Augustine, drawing heavily from Plotinus and Neo-Platonism, as Hick sees it, insists that all evil is a form of privation (non-being); a parasitic deficiency, lacking causal powers of its own.[29] Hick summarises Augustinian type theodicies thus;

> The theological themes are: the goodness of the created world, pain and suffering as consequences of the fall, the '*O felix culpa*', and the final dichotomy of heaven and hell. The philosophical themes are: evil as non-being, metaphysical evil as fundamental, the principle of plenitude, and the aesthetic conception of the perfection of the universe.[30]

To understand why God tolerates evil Augustine appeals to the value of free will.[31] Yet this leads to a conundrum Hick finds unacceptable: God created all things good but 'free creatures, by an inexplicably perverse misuse of their God-given freedom, fell from grace, and […] from this fall have proceeded all the other evils that we know.' Hick regards this as incoherent, insisting the idea that 'an unqualifiedly good creature should choose to sin is self-contradictory and unintelligible.' [32] Since Hick's book there has been a lively debate on the logical possibility of God creating creatures with incompatibilist freedom who could, but in fact never would, sin. The lack of philosophical consensus on the nature of agency, clearly identified in the previous chapter, suggests we need not accept Hick's charge of self-contradiction or unintelligibility blithely. Moreover, as Adam Willows argues persuasively in a recent article, the nature and limitations of incompatibilist free will, of the kind Hick himself

---

[29] Augustine, *City of God*, (Cambridge, MA: Harvard University Press, 2014). *Cf.*, 14.27. and 12.7.
[30] Hick, chapter 8, quote taken from p. 169.
[31] 'What cause of willing can there be which is prior to willing?' Augustine, *On Free Choice of the Will*, Book 3, 47.49.
[32] Hick. This and the preceding quotes from pp. 62 ff.

demands, suggests that a causal account of original sin would remain forever beyond explanation, even in principle.[33]

In any case, Hick's own categorisation of original sin as a substance, arising *ex nihilo* seems to be a philosophical category error. Only God can create *ex nihilo.* Surely, therefore, either God created sin intentionally, or evil is, as Augustine argued, merely a privation. But if evil *is* privation, then to speak of its 'creation' commits the fallacy of reification – turning an abstract noun into a concrete entity. Sin is not an object but a consequential relation; something Augustine explains elegantly thus: 'For when the will abandons what is above itself, and turns to what is lower, it becomes evil – not because that is evil to which it turns, but because the turning itself is wicked.'[34] In light of the (*e-t/o-t*) ontology, reflected in the Scholastic philosophy of act and potency, Hick's interpretation trades, I would suggest, on ambiguity in the meaning of "unqualifiedly good" as it applies to a finite creature. Cast in the (Thomist) language of the previous chapter, we could, instead, say that Lucifer and Adam were created essentially good, but each with the potency (potential) to sin.

In any case, Hick's own logic compels him to reject the Augustinian interpretation of the Fall and its linkage of *all* suffering to agential sin.

> [T]he time has long been with us when Christians can not only see, but must frankly say, that the Genesis story is not history but myth. […] that it is no longer possible to combine biblical literalism with a responsible attitude to scientifically acquired knowledge. […] The story of the fall does not describe genetically how our human situation came to be as it is, but analyses that situation as it has always been. Man has never lived in a pre- or un-fallen state, in however remote an epoch.[35]

---

[33] Adam M. Willows, "Augustine, the Origin of Evil, and the Mystery of Free Will," *Religious Studies* 50, no. 02 (2014): pp. 255-69.
[34] Augustine, *City of God*, 12, 6.
[35] Hick, p. 175.

Arguing that first century reception-history shows competing strands of interpretation, Hick insists that despite Paul's use of the figure of Adam in Romans 5, the early church shares no common approach to the link between evil and sin.[36] And so, seizing on Irenaeus's depiction of Adam and Eve as children, Hick argues that Irenaeus analogically 'suggests that man was created as an imperfect and immature creature who was to undergo moral development and growth and finally be brought to the perfection intended for him by his maker.'[37]

For Hick 'Christian theodicy must therefore be centred upon a moral personality rather than upon nature-as-a-whole, and its governing principle must be ethical rather than aesthetic.'[38] Therefore, contra Augustine, *natural* evil is due neither to the free choices of non-human spirits nor to human sin. Rather, it is a metaphysical corollary of the kind of creaturely freedom God values. Hick then picks up this developmental theme again, albeit developed independently of its provenance in Irenaeus, in the Enlightenment philosophy of Friedrich Schleiermacher, some fourteen hundred years later.

The Enlightenment Watershed: Pre- and Post-Enlightenment Theodicy

I have had cause to identify significant philosophical and sociological changes that occurred during the Enlightenment in each chapter thus far. Another important strand

[36] Hick has been criticised for a partial and highly selective engagement with Irenaeus. For a detailed appraisal that strongly challenges the marginalisation of Paul's use of Adam in Romans see Robert Yarbrough's "Adam in the New Testament," in Adam, the Fall, and Original Sin, ed. Hans Madueme and Michael Reeves (Grand Rapids: Baker Academic, 2014), pp. 33-52, and Thomas Schreiner's "Original Sin and Original Death: Romans 5:12-19," in ibid., pp. 271-288
[37] Hick, p. 214.
[38] Ibid., p. 198.

of influence is the Enlightenment pursuit of liberation from religious confessions, for this also invited an epistemological exchange: the rejection of divinely revealed premises for rationally accessible ones.

Until Medieval times, Westerners viewed the world through a theocentric lens by which evil and suffering are consequences of turning away from God. But Enlightenment rationalism sought to recast theodicy within the limits of human reason alone. Thus, while Aquinas and Malebranche taught that God could add good to the world, Leibniz insisted this was impossible because evil and punishment are perfectly balanced, permitting no *ad hoc* interventions.[39] The best of all (rationally) possible worlds would be one in which, contra Aquinas, no additional good could be "compossible", and yet evils would exist because the perfection of the divine cannot be realised in finite creation.[40] Nonetheless, to morally justify his scheme Leibniz followed Augustine in arguing that human moral freedom, even exercised wrongly, was a greater overall good than a world lacking such freedom.

It would be anachronistic to plot the Concorde accident against this Enlightenment perspective, but history is replete with potential tests and this clinical appeal to ration was severely tried by the Lisbon earthquake of 1755 which struck a Roman Catholic city, on a religious holiday, during services. Consequently, most of its victims were the faithful, crushed under collapsing church structures. Survivors seeking refuge from fire and further collapse at the waterfront were then overtaken by the tsunami that struck about thirty minutes after the quake. Yet 'sinners' attending brothels located on the eastern outskirts of the city were spared, prompting Voltaire's satirical response to Leibniz 'best of all possible worlds' in *Candide.* Writing half-a-

[39] Hvidt, p. 23.
[40] Ibid., pp. 24-25.

century later, Kant too adopted a revisionist perspective, reinterpreting the doctrine of Original Sin in Book One of *Religion Within the Boundaries of Mere Reason* (a title to illustrate a cultural mood indeed).[41]

The consequence of this redrawing of the boundaries is nicely summarised by Niels Hvidt; 'Instead of God being offended by the sins of his creatures, it is humans who are offended by God's "sin" – evil in the world.' The role of accuser and accused has been reversed. Leibniz dismissed the charge, insisting God's arrangement necessarily includes evils like floods, pestilence, and earthquakes as punishment for original sin. But, as Hvidt points out, Voltaire challenged Leibniz's idea of compossibility and Kant, writing less than fifty years later, challenged Original Sin.[42]

The final building blocks of modern theodicy were established by Hegel and Marx who secularised the optimism of Leibniz 'best of' ration by recasting historical processes as a progressive development towards ever greater good; for individuals; societies; and for biology.[43] Theodicy thus shifts from a consequentialist 'backward looking stance' in which evil is metaphysically privative and linked primarily to the consequences of angelic and human sin, to a forward oriented stance whereby it is primarily a metaphysical necessity; the catalyst for fruitful growth and increasing maturity.[44] The 'best of' motif has been preserved, but now transposed into the divine wisdom that underpins laws of nature; first justifying, but ultimately necessitating, a "hands off" theodicy.

---

[41] Tilley points out that 'Some scholars in recent Kantian research suggest (in contrast with his early, mainly Lutheran, biographers) that Kant disliked Christianity and was really more oriented towards pantheism.' See Tilley, "Problems of Theodicy: Background," p. 28.
[42] Hvidt, p. 29.
[43] Ibid., p. 30.
[44] Hick, p. 82.

Hick's claim that the Irenaean/Schleiermachian developmental interpretation is historically co-equal with the Augustinian doctrine necessitates a brief excurses on the traditional interpretation of original sin and the status of Adam's personhood. Space prevents me offering more than the thinnest sketch of that historical paradigm, or the variety of exegetical details needing to be considered, but in their measured introduction to an academically serious collection of essays defending a consequentialist interpretation of original sin and Adam and Eve as real persons, Hans Madueme and Michael Reeves rightfully recognise how the debate over Scriptural interpretation of Genesis and the relevant Pauline passages actually revolves around three interlocking choices; the epistemological relation between natural science and theology, the strengths and weaknesses of historical criticism, and the epistemological weight to give to theological tradition.[45]

Their book defends the view that a coherent doctrine of original sin depends upon Adam and Eve being real persons and that in contrast to Hick's thin and tendentious reconstruction of Irenaeus's beliefs, consequentialism both follows from and predates Augustine, for whom counteracting the Pelagian denial of original sin included citing earlier Church fathers abundantly to establish that his argument was historical and not novel.[46] Robert Kolb begins his chapter on the Lutheran perspective with Luther's own words that "this inherited sin has caused such a deep, evil corruption of nature that reason does not comprehend it; rather, it must be believed on the basis of the revelation in the Scriptures."[47] Kolb then charts the Lutheran perspective through Melanchthon, and Lutheran Orthodoxy noting both original sin's

[45] Madueme and Reeves, pp. x-xi.
[46] Peter Sanlon, "Original Sin in Patristic Theology," in *Adam, the Fall and Original Sin*, ed. Hans Madueme and Michael Reeves (Grand Rapids: Baker Academic, 2014), p. 88.
[47] Cited in Robert Kolb, "The Lutheran Doctrine of Original Sin," ibid., p. 109.

scope and its inherited nature in that doctrine. Donald Macleod's survey of Reformed theology shows how, despite internal debates over traducianism and creationism for the provenance of the human soul, Reformed theologians were unanimous that God was not responsible for original sin and that 'human depravity […] was rooted not in creation [timelessly] but in a fall.'[48]

In outlining the Wesleyan approach, Thomas McCall notes a widespread confusion over the status of the doctrine in historical Wesleyanism.[49] Concurring with Robert E. Chiles thesis that Wesleyanism gradually shifts its emphasis from divine grace to freedom of the will,[50] McCall cites Wesley's letter to John Newton that there was not a 'hair's breadth' between Wesley's and Calvin's hamartiology.[51] McCall further argues that Wesley and other early Methodists held a federalist theology, believing that Adam and Eve were real persons.[52] Wesley's primary reason for doing so is, McCall argues, Christological.

> Scripture draws a clear parallel between Adam and Christ, and the biblical account clearly depicts Christ as representative. "But Adam was a type or figure of Christ; therefore, he was also, in some sense, our representative; in consequence of which, 'all died' in him, as 'in Christ all shall be made alive.'" So although "neither representative, nor federal head, are scriptural terms" (and thus not strictly necessary), yet the main lines of the federal position are biblically correct. At the same time, it is important to remember that Wesley himself held to a doctrine of prevenient grace'.[53]

---

[48] Donald Macleod, "Original Sin in Reformed Theology," ibid., p. 146.
[49] Thomas H. McCall, ""But a Heathen Still" the Doctrine of Original Sin in Wesleyan Theology," in *Adam, the Fall and Original Sin*, ed. Hans Madueme and Michael Reeves (Grand Rapids: Baker Academic, 2014), p. 148.
[50] Robert E. Chiles, *Theological Transition in American Methodism: 1790-1935* (New York: Abingdon, 1965).
[51] McCall, p. 151.
[52] Ibid., p. 165.
[53] Ibid., p. 149 and internal references to Wesley's works therein.

This Christological parallelism frequently centres on Paul's juxtaposition of Adam and Christ in Romans 5:12-21 and 1 Corinthians 15:20-23. There is no space to detail here the many exegetical and hermeneutical possibilities that have been canvassed in relation to Paul's use of Adam,[54] but Robert Yarbrough draws widely, if briskly, from a variety of scholars to show how divergences in Second Temple, rabbinic and medieval interpretations preclude denoting a single orthodoxy within Judaism over the status of the first Adam, although some of these changes foreshadow Enlightenment moves to de-historicise him, while Greek patristic and Eastern Orthodox views tend to emphasise corruptibility of the human body *per se*.[55]

From the Western side, Millard Erickson's systematic work *Christian Theology* perfunctorily reports that 'the traditional view has been that [Adam and Eve] were actual persons and that the events in the biblical account took place within space and time.'[56] L. J. Kreitzer points out that the genealogies of Jude 14 and Luke 3 suggest Adam was understood as an actual historical figure in the first century, noting also that Paul's multifarious use of Adam includes, even though it is not limited to, a historical person.[57] Surveying those works tending towards the (*e-t/o-t*) perspective it seems that what energises the Pauline debate is a concern that the parallelism of Paul's language contrasting Adam and Jesus is so overt that material changes to the meaning of Adam – and by extension original sin - necessarily impact Christology in ways that may threaten their view of both Scripture and Tradition. Thus, commenting on the issues surrounding Romans 5:12-21, Kreitzer observes,

---

[54] *Cf., inter alia,* the excursus by N. T. Wright in John H. Walton, *The Lost World of Adam and Eve* (Downers Grove: IVP, 2015), pp. 170-180; Robert W. Yarbrough, "Adam in the New Testament," pp. 33-52; Venema and McKnight.
[55] Yarbrough, pp. 36-39.
[56] Millard J. Erickson, *Christian Theology* (Grand Rapids: Baker Books, 1985), p. 474.
[57] L. J. Kreitzer, "Adam and Christ," in *Dictionary of Paul and his Letters*, ed. Gerald F. Hawthorne, Ralph P. Martin, and Daniel G. Reid (Leicester: InterVarsity Press, 1993), pp. 9-15.

> Closely related to [Paul's consideration of Adam's fall in Romans 3:23] is the consideration of how being made "in the image of God" stands as a description of human nature and existence. This is a matter which has long occupied the attention of Christian commentators, many of whom, like Calvin (as R. Prins notes), have concentrated on Paul's letters in addressing the issue. It is interesting to note that the whole of Romans 5, particularly the Adam/Christ analogy in verses 12-21, becomes critical in this regard.[58]

This issue will be taken up again in due course. But against the backdrop of the Enlightenment, Madueme and Reeves are again perceptive to suggest 'perhaps the real difficulty with any idea of originated sin is how scandalous it is to modern sensibilities about autonomy.'[59]

Theodicy in the VO/CTNS Series

It is important to note that in the science-theology dialogue of the VO/CTNS series, Hick's nomenclature has been reversed. 'Consequentialist' theodicy now refers to evil as the unavoidable consequence, or inescapable by-product, of God's chosen mode of creation: not the wholly contingent consequence of free agential choices.[60] This form of consequentialism fits the Irenaean approach, as Hick portrays it, rather than the Augustinian perspective.

In *QCLN* Nancey Murphy explores similarities between scientific and theological research programmes, particularly as they might apply to the design

---

[58] Ibid., p. 13.
[59] Madueme and Reeves, "Threads in a Seamless Garment," in *Adam , the Fall, and Original Sin,* ed. Hans Madueme and Michael Reeves (Grand Rapids: Baker Books, 2014), p. 219.
[60] Robert Russell, William Stoeger, Nancey Murphy, Tom Tracy and Terrence Tilley all offer 'consequentialist' theodicies in this revised sense in (*PNE*).

argument for explaining the fine-tuning of the universe.[61] Murphy discusses what counts as data for theology, building the case for a communally and historically established canon that combines with present experience to yield an authority for Scripture 'that needs no special pleading (no doctrine of revelation)' but that nonetheless demands 'an account and rationale for taking [particular] aspects of the text to be relevant ones'.[62] Murphy's goal is to show that comparable methodological procedures govern both science and theology by highlighting similarities in the analyses of scientific practice offered by Thomas Kuhn and others. To this effect, Murphy writes,

> So while it appears that theologians treat passages or aspects of Scripture the way scientists treat data, a closer analogy may be the role of classic texts (such as Newton's *Principia*) in defining a Kuhnian paradigm. Notice that this does not mean that theologians are forever tied to the Bible (any more than physicists are to Newton). The point is that if and when they reject it, they cease to be Christian theologians; they have *ipso facto* changed traditions.[63]

The challenge lurking behind Murphy's otherwise straightforward observation is deciding which paradigm is the more faithful to the scriptural data. This issue was the burden of chapter 2, and clearly there are more potential paradigms for biblical data than for the mathematised abstraction of the *Principia.* This difference matters because, as we shall see, the consensus within the two VO/CTNS research programmes rejects, almost without discussion, Augustinian-consequentialist theodicies, preferring the Irenaean developmental-consequentialist paradigm.

---

[61] Nancey Murphy, "Evidence of Design in the Fine-Tuning of the Universe," in *Quantum Cosmology and the Laws of Nature*, ed. Robert J Russell, Nancey Murphy, and C. J. Isham (Vatican City State: Vatican Observatory/CTNS, 1999).
[62] Ibid., p. 410.
[63] Ibid., p. 411.

Whether the VO/CTNS dialogue has adequately retained the doctrinal significance of the Fall, or instead *ipso facto* established its own (demythologised) tradition, is a question to which I shall return. It is worth noting immediately, however, that in discussion of the programme's core and auxiliary hypotheses in the early volumes of the VO/CTNS series, while the Incarnation receives central attention in ways the (*e/t-o/t*) perspective would, I think, strongly affirm, less attention is paid to atonement or redemption.[64] Equally pivotal to theodicy in the VO/CTNS series is the appeal to freedom; both agential and natural. An increasing turn towards eschatological hope and possibilities occurs as the series progresses with which the (*e-t/o-t*) perspective shares many affinities. But no contributor defends the Church's historical scriptural paradigm, noted above, that humanity and creation have been somehow transformed in consequence of a particularised Fall and Original Sin or how that idea might be sufficiently *re*mythologised in a contemporary guise.[65]

Moltmann, in his contribution to *Chaos and Complexity,* advocates a kenotic theological perspective from which,

> God as eternal and omnipresent restrains Godself to allow creation to be, thereby giving it time and providing it with a habitat of its own. God's omniscience is limited by God to such an extent that the future is open and experimental even to God. At the same time, the external and omnipresent God is self-limited such that God can inhabit the temporal, finite creation and impel it from within without destroying it (*schechina*), guiding it to its completion, that is, to its eternalisation and divinisation.[66]

---

[64] See, for example, Murphy's discussion of the Temple-Ellis Programme in ibid., pp. 412-20.
[65] William Stoeger, for example, speaks in terms of "marginalising traditional notions of God." William R. Stoeger, "Reflections on the Interaction of My Knowledge of Cosmology and My Christian Belief," *CTNS Bulletin* 21, no. 2 (2001): p. 13.
[66] Jürgen Moltmann, "Reflections on Chaos," in *Chaos and Complexity: Scientific Perspectives on Divine Action*, ed. John Russell Robert, Nancey Murphy, and Arthur R. Peacocke (Vatican City State: Vatican Observatory/CTNS, 1997), p. 206.

Two points can be made in response to this suggestion. First, Moltmann's economic Trinity fits a developmental theodicy very comfortably, but it omits divine judgment and dilutes unmerited, gracious, redemption of creation gone awry. Experiments can fail without entailing moral culpability? But in the Genesis depiction of the Fall, who or what counts as experiment? Moltmann's interest in eschatology: what the world is being saved towards, is, I would suggest, regrettably divorced from what it is being saved from.[67] Secondly, Moltmann's metaphysic severely constrains transcendence. Polkinghorne univocally insists cause is a zero-sum game, and Moltmann also seems to treat immanence and transcendence univocally, insisting God must divest himself of some powers to be immanently present with creation. In place of Scholastic primary and secondary cause there is the rather curious (not to say alarming, from an (*e-t/o-t*) perspective) idea that God "experiments" with creation in consequence of self-induced ignorance.

How does this kenotic theological perspective map out in relation to the Concorde accident? Not very happily in my view. It seems to insist the evils associated with that day were, at least partially, the consequence of voluntary Divine ignorance creating an "experimental" space. But is it theologically adequate to portray God in such anthropocentric terms? I also question the implication that AF4590 was the instantiation of a metaphysical necessity; viz God cohabiting with finite creation without destroying it. Moltmann treats immanence and transcendence univocally. But how does this accident guide *every*one and *every*thing involved to the future eternalisation and divination of creation? No doubt Moltmann would insist that moral evil dominates the Concorde accident's causal chain, but I struggle with his

[67] But this loses sight of major themes like covenant. The problem, as Vanhoozer points out is that 'God cannot be both love and lord simultaneously, or so the thinking seems to go.' Vanhoozer, p. 118.

conception of an experimenting God, self-voluntarily ignorant of outcomes in order to experience sorrow and solidarity from within creation. Again, this theological perspective posits extrinsic (only way) benefits.

In the final essay of *EMB* Thomas Tracy takes up the problem of Original Sin in the context of evolution.[68] Surveying the implications of both evolutionary and chaos theory, Tracy identifies 'at least' five possible TDAs.[69] And yet, when it comes to the problem of evil, for Tracy the options are far less expansive.

> What, then, is the relation of this good to "evolutionary evils," namely, the natural evils associated with the evolutionary processes? I will suppose that these evils are an inherent part of the natural world God creates, and not a result of the creation having gone wrong in sin (though human sin will affect their distribution, intensity, persistence, and the way we experience them).[70]

Tracy thus adopts Hick's theological perspective: a developmental theodicy in which chance (as an expression of "epistemic distance") is conceptually necessary to provide (incompatibilist) freedom. This clearly fits one philosophical interpretation of the neo-Darwinian hypothesis, but does it come at too high a theological price?

Underpinning much of the VO/CTNS discussion of evil is an appeal to freedom imputed to the whole of creation. John Polkinghorne has been especially influential in coining a scientifically motivated interpretive paradigm. In 1991's

---

[68] T. F. Tracy, "Evolution, Divine Action, and the Problem of Evil," in *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action*, ed. John Russell Robert, S.J. William R. Stoeger, and Ayala franisco J. (Vatican City State: Vatican Observatory/CTNS, 1998), pp. 511-30.
[69] Ibid., p. 519. These are, broadly speaking, the fourfold scheme Stoeger outlines, plus interventionist miracles; but Tracy explicitly acknowledges these options do not exhaust the possibilities clarifying that his intention is only to show that schemes exist whereby divine action is possible within evolutionary history.
[70] Ibid., p. 521.

Reason and Reality, Polkinghorne gives his most sustained commentary on the status of the 'Fall'. His short chapter begins with the following declaration;

> If I were asked what is the major Christian doctrine that I find most difficult to reconcile with scientific thought, I would answer: the Fall. […] The difficulty arises from picturing this situation as having arisen subsequent to an unfallen state, with the associated notion that a radical change occurred as a consequence of some disastrous ancestral act.[71]

Rejecting the Augustinian interpretation of Genesis 1 and Romans 5 noted above as untenable in the light of both evolutionary theory and human anthropology, Polkinghorne links the declaration of creation as 'good' in Genesis 1 to the Anthropic Principle (AP). Impermanence becomes necessary for new life, rendering natural evil an epistemic misperception. 'In that sense', Polkinghorne writes, 'the universe is everywhere 'fallen' and it has always been so.' The better way to understand that 'Fall' is therefore to admit that

> Evolutionary cosmology is consonant with an Irenaean picture of growth into fulfilment, rather than an Augustinian picture of decline from paradise. Once such a world evolves to the point of containing self-conscious freely-choosing beings, it faces the possibility of a further 'fall' into moral evil, exemplified by lives of selfishness and rebellion.[72]

It is not clear to me precisely how Polkinghorne is using the word "further" in this argument. Nonetheless, the seeds for this approach were sown in 1989's *Science and Providence*, where Polkinghorne insists there is only one broad strategy available

---

[71] J. C. Polkinghorne, *Reason and Reality: The Relationship between Science and Theology* (London: SPCK, 1991), p. 99.
[72] Ibid., pp. 99-100.

to any theodicy: to show that evil somehow contributes to a greater good only realisable in this way.[73] He writes,

> I think the only possible solution [to the problem of evil] lies in a variation of the free-will defense, applied to the whole created world. One might call it 'the free process defense.' In his great act of creation I believe that God allows the physical world to be itself, not in Manichean opposition to him, but in that independence which is love's gift of freedom to the one beloved.[74]

1996's *Scientists as Theologians* compares Polkinghorne's own perspective with Ian Barbour and Arthur Peacocke. Polkinghorne writes 'The scientist-theologians recognise this contribution that they can seek to make to theodicy, and it has been a persistent theme in my own writing.'[75] Polkinghorne argues God accords the same respect to natural processes that he accords to human moral choice. My concern, as observed in chapter two, is that this represents an overdrawn anthropomorphism. How legitimate is Polkinghorne's analogical attribution of a moral capability to the very broadest realms of creation? He writes,

> …the FPD says 'God allows tectonic plates to slip and cause earthquakes, and bacteria to multiply and cause disease, because they are 'free' to act in accordance with their natures, just as we are free to act in accordance with our nature. […] To those who would object that it is an abuse of language to use the adjective 'free' in relation to non-moral entities, I would reply that I suspect that there is a relationship, within the interconnectedness of the created order, between the opennesses to the future allowed to non-human and to human creatures:'[76]

---

[73] Polkinghorne, *Science and Providence*, p. 63.
[74] Ibid., p. 66. Subsequent quotes are from pp. 66-68.
[75] Polkinghorne, *Scientists as Theologians,* p. 48.
[76] Ibid., p. 49. Polkinghorne, elsewhere, writes; 'The two 'defenses' are intimately related to each other. I suspect that only a universe to whose physical fabric the free-process defence applied could give rise to beings to whom the free-will defence applies.' See *Theology in the Context of Science*, p. 77.

Unfortunately, I cannot see how this clarifies the analogy. For one thing, at what scale does this analogical freedom apply? Does the Eurasian plate act "freely" in any sense, given the apparently fixed capacities of chemistry and physics in relation to geological process? Does the plate (howsoever conceived) *itself* benefit from this putative freedom? How does "freedom" apply to germs? Surely the force of the free-will defense depends upon human moral freedom being an *intrinsic* good, not extrinsic, or instrumental? Given the transcendent capabilities of language recognised in the first chapter, I hesitate to insist it is necessarily an 'abuse' of language to posit an analogical FPD, but it seems to me much more needs be said to connect the heuristic '*is like*' pole of the analogy. Without that clarification, theological questions also press. Will Pterodactyls and tectonic plates, or metal abrasion strips, be analogically obliged to one day give an account of their "free" choices?

From the developmental perspective some kinds of evil are metaphysically necessary so that, as Arthur Peacocke puts it, 'the very order and impersonality of the physical cosmos which makes pain and suffering inevitable for conscious and self-conscious creatures is, at the same time, also the prerequisite of their freedom as persons.'[77] Nancy Murphy similarly defends the argument that suffering is a by-product of providing 'a necessary condition for a *loving* response to God'.[78] Christopher Southgate regards it as a legitimate 'presumption' that God has created the best of all possible universes 'in terms of the balance between its potential for realising creaturely values and […] concomitant pain.'[79] I can understand why, in the

---

[77] A. R. Peacocke, *Creation and the World of Science: The Re-Shaping of Belief*, Revised Edition (Oxford: Oxford University Press, 2004), p. 166.
[78] Nancey Murphy, "Science and the Problem of Evil: Suffering as a by-Product of a Finely Tuned Cosmos," in *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, ed. Nancey Murphy, Robert J Russell, and S.J. William R. Stoeger (Vatican City State: Vatican Observatory/CTNS, 2007), p. 139.
[79] Christopher Southgate, *The Groaning of Creation: God, Evolution, and the Problem of Evil* (Louisville, Kentucky: Westminster John Knox Press, 2008), p. 48.

broader sociological context of the VO/CTNS series, Southgate should see this as a legitimate presumption, but I will defend the metaphysical possibility of an (*e-t/o-t*) consequentialist perspective and argue there remain problems with the "only way" explanation of evil which are poorly reflected in the breadth of the series' discussion.[80]

For one thing, an eschatological alternative one day replacing the present arrangement of the universe undercuts the "only way" argument; for it begs the question why God should not create that arrangement in the first place? Polkinghorne asserts that any such creation would be somehow less 'free', but he does not explain, nor is it intuitively obvious, how so.[81] Moreover, this would seem to place the *origination* of evil back firmly with God, for short of adopting a full process metaphysic, evil is neither metaphysically contingent nor *only* the consequence of free creaturely choice.

Another interesting and informative example of this broadly shared kenotic hermeneutic in the 'Scientific Perspectives' series is provided by the philosopher Nancey Murphy. Laying out her broad methodological approach to divine action in *CC*, Murphy takes it that one

> desideratum for theological construction is always to see what sense can be given in each age to traditional formulations. Only if the formulations of the past turn out to be hopelessly unintelligible should they be rejected or radically changed. […] One particular set of terms [for considering divine action] will

[80] For example, see the challenges posed to the "only way" approach based on counterfactual thought experiments by Wahlberg.
[81] J. C. Polkinghorne, *Science and Religion in Quest of Truth* (London: SPCK, 2011), pp. 82-83.

> turn out to be particularly useful; God's continuing work understood as *sustenance, governance,* and *cooperation.*[82]

The (*e-t/o-t*) communion would, I am sure, unhesitatingly endorse these aspects of providence. But is there also a potential theological opportunity cost to emphasising cooperation at the expense of God's *judging* and *saving* actions? Twenty years later, in laying out her defense of the only way theodicy, Murphy points back to this first article to argue that 'God has apparently decided not to violate the "natural rights" of created entities to be what they are.' Murphy then glosses her phrase by appealing to a *kenosis* that respects the 'freedom and integrity' of the creature to achieve a higher goal: viz 'the free and intelligent cooperation of the creature in divine activity.'[83]

In response, I must reiterate that I am perplexed by both Polkinghorne's and Murphy's appeal to an analogy between human moral freedom and freedom in, say, bacteria. At the beginning of her 2007 article, Murphy expressly repudiates Hick's scheme as unduly anthropocentric,[84] but it seems to me the very concept of "natural rights" reimports anthropocentrism through a different door. Rights in relation to God? How so? What could it mean, even analogically, to talk of an Eagle's "natural rights" in relation to the Divine, let alone the natural rights of a rock (Job 38-41), or, lest we lose sight of this chapter's central example, a metal abrasion strip on the engine of a Continental Airlines DC10? The free will defense entails that freedom and moral culpability are *in*trinsically linked but, despite the obvious Process overtones, I am not convinced enough metaphysical substance has been given to the claim that the

---

[82] Murphy, "Divine Action and the Natural Order," in (*CC*) p. 330.
[83] Murphy, "Science and the Problem of Evil," in (*PNE*) p. 135.
[84] Ibid., p. 131.

same principle can justifiably be mapped onto creatures like rocks and rivets, with no (explicated) analogue for their moral capacity or culpability.[85]

This raises a contentious question. How legitimate is it that a historically stable and potentially significant plank of both eastern and western orthodoxy should be reinterpreted to this degree? To argue, as Polkinghorne does, that 'the universe is everywhere "fallen" and it has always been so' represents a substantial departure from the historical perspective of a historically particularised fall from grace into a state of sin and separation mapped above. There are large theological categories in play here; for, as already intimated, just as *kenosis* of the full Godhead significantly affects the doctrine of the Trinity, so the VO/CTNS endorsed developmental theodicy results in a significant rebalancing of soteriology.[86]

The change of emphasis from the Augustinian-consequentialist interpretation of Adam's significance to an Irenaean/Schleiermachian developmental interpretation is neither trivial nor, in my view, does it reflect the broader theological emphasis of Christian history. I query, therefore, whether a deep enough engagement with its *theological* consequences has yet been undertaken for the VO/CTNS series to embrace the developmental 'only way' view alone.[87] I am concerned that the pursuit of 'traction' and the demands of 'constraint' may have trumped theology's transcendent right to constrain, instead, secularised philosophical interpretations of what is only methodological-*natural* data.

---

[85] At least not by those like Murphy and Polkinghorne who nonetheless reject the process metaphysic.
[86] Books defending 'theistic evolution' frequently acknowledge a soteriological dimension and yet fail to explicate more fully how the consequentialist reinterpretation cashes out systematically. See for example Venema and McKnight, especially chapter 8.
[87] A contrasting example is Joseph Lee's exploration of how evolutionary psychology can partner with original sin to illuminate the human condition. See Joseph Lee, "The Human Dark Side: Evolutionary Psychology and Original Sin," *Journal of Religion and Health* 53, no. 2 (2013): pp. 614-29.

Challenging questions now arise for all perspectives. Do Russell's rubrics for CMI only amount, in practice, to theology having to go away and "have another think"? Does the historically particularised interpretation of the Fall, still defended by a numerically significant section of the (*e-t/o-t*) communion have the same status as, say, ancient Hebraic Geocentrism? Or does the dominant Enlightenment metaphysical frame, through which the regnant interpretation of the neo-Darwinian synthesis has emerged, improperly discount key doctrinal claims; particularly those rooted in the transcendent demands of Revelation, as Luther's comment would imply? This need to balance metaphysical and sociological ingredients mirrors aspects of the Open theism debate within evangelicalism and, as in that context, there are no knockdown answers to settle the issues. But in that case, it also follows that whatever detailed interpretation one chooses for Paul's comparison of the first and second Adam in Romans 5, one cannot re-interpret the doctrine of the Fall without potentially re-interpreting the nature of the grace and free condescension attached to Christ's salvific action upon the Cross: the very thing that all communions wish to cherish and comprehend.

To foreshadow some of the discussion of the next chapter, we may note that Alister McGrath has recently reflected on some concerns pertaining to special divine action (SDA).[88] Drawing attention to Charles Taylor's broad thesis that a 'cluster of modern prejudices' possess a social dominance that amounts to an 'immanent frame.' McGrath highlights how

[88] Alister E. McGrath, "Hesitations About Special Divine Action: Reflections on Some Scientific, Cultural and Theological Concerns," *European Journal for Philosophy of Religion* 7, no. 4 (2015): pp. 3-22.

> Taylor's innovative and engaging account […] questions the validity of what he terms 'subtraction stories' understood as 'stories of modernity in general, and secularity in particular, which explain them by human beings having lost, or sloughed off, or liberated themselves from certain earlier, confining horizons, or illusions, or limitations of knowledge.' For those committed to 'subtraction stories', divine action and transcendence belong to the past, and have no place in the present or future.[89]

Neither the science-theology dialogue, nor contemporary theology more broadly, are immune to the lure of such subtraction stories. There is, then, a possibility that the VO/CTNS perspective reflects a hermeneutical stance (paradigm) that has resulted *ipso facto* in a change of tradition: becoming a contemporary natural theology instead of a theology of nature. This is a risk the next two chapters will investigate specifically.

The risk is that by insisting that methodological-naturalist theories constrain the transcendent data of divine Revelation, natural theology coerces the abandonment of a doctrine recognised in the (*e-t/o-t*), Catholic, and Eastern Orthodox Traditions.[90] Data is always value laden, and the data on evolutionary anthropology, in particular, is sparse enough to admit a wider variety of philosophically explanatory theories than contributions to the VO/CTNS series intimate.[91] But, as I shall insist shortly, the theological alternatives are not limited to a binary pairing of either literalistic young earth creationism or a culturally attractive *demythologised* science-of-the-gaps.

---

[89] Ibid., p. 11.

[90] Of course, orthodoxy is a broad stream and there will always be debate about what beliefs count as central and what count as marginal traditions. Moreover, orthodoxy also varies historically. Nonetheless, 'Tradition' is not a contentless or wholly arbitrary category, and part of my concern for the Augustinian approach is its indisputable historical lineage. For further reflections on the historical dimensions of orthodoxy see McGrath, *Heresy*, especially chapter 2.

[91] For a recent survey of the relevant Palaeoanthropology see; Adam Stone, "Adam and Modern Science," in *Adam, the Fall and Original Sin*, ed. Hans Madueme and Michael Reeves (Grand Rapids: Baker Academic, 2014), pp. 53-81. See also the comments in Stephen H Webb, *The Dome of Eden: A New Solution to the Problem of Creation and Evolution* (Eugene, Oregon: Cascade Books, 2010), pp. 162-65.

First though, a final demonstration of the legitimacy, as I see it, of raising concerns over the regnant nature of the "only way" perspective in the VO/CTNS series is by returning to Merleau-Ponty's insights on embodiment and the powers of language disclosed in chapter 1. It seems to me that language *itself* signals the magnitude of change involved because nothing in this world "falls" upwards.[92] So how does this reinterpretation faithfully retain the traditional *sense* of transcendent revelatory truth represented by orthodoxy and its protection in Tradition?

To reiterate, however, a flatly literalistic reading of Genesis 1-3 is not, in my view, the correct or only alternative.[93] The pitfalls of anachronistically imputing historical reportage to ancient texts are now well charted.[94] Young earth creationism and a creation completed in seven literal days are neither the correct or historically orthodox interpretation of the Genesis narratives. But anachronism has more than one suit of clothes and a manifestly Modernist reinterpretation of a historically dominant doctrinal motif as a metaphysically necessary "falling upwards" in the best of all humanly-epistemically-rationally (com)possible worlds does potentially as much violence to the text's transcendent truthfulness as insisting it is historical reportage.[95] I contend therefore, that how *best* to (re)interpret the text of Genesis 1-3 and Romans 5, and the broader theological themes of the Fall and Original Sin are by no means a settled matter.

Neither is the possibility that they represent, truthfully, important features of creation's temporal-causal past. The anthropic principle debates whether fine-tuned

---

[92] Paul Tillich's phrase, derived from Hegel.
[93] Neither, however, is it impossible. There are no knock-down arguments in metaphysics and one woman's fideism is another's 'plain' sense.
[94] See, for example, the essays in *Reading Genesis after Darwin*, (Oxford: Oxford University Press, 2009).
[95] A brief but helpful sketch of some issues involved in identifying a proper hermeneutic for the early chapters of Genesis can be found in Walter Moberly's contribution to the collection cited above.

laws are the explanans or the explanandum of humankind's existence.[96] But entertaining the *possibility* of a consequentialist and historically particularised Scriptural interpretation, we could ask, similarly, whether creation is fallen because this is the way the laws of nature must be (Irenaean), or whether those laws must be this way because the creation is 'fallen' (Augustinian)? Clearly, both options demand metaphysical and hermeneutical choices inherently beyond rational, let alone methodological-natural, resolution alone. But in that case the current perspective of "theistic evolution" concerning the Fall is weighted towards a methodologically-naturalistic theory of evolution that is inherently less ontologically (metaphysically) secure than that consensus might easily be taken to imply.

Every perspective on evil entails weighty theological consequences. Much of the VO/CTNS discussion revolves around suffering as metaphysically necessary by-product, the "only way" to freedom and progress. But suppose, simply for argument's sake, that some of those law-like relations partially identified by science have been modified by a historically particularised primeval Fall. First, it would follow that this is not the only way creation could ever have been. *Some* law-like causal relations are not fine-tuned optimally but are, instead, (presently) fine-tuned to reflect the consequences of sin. But in that case defending *this* arrangement of laws as *necessarily* constraining divine capacities, which seems to be the burden of many anthropic discussions in the science-theology dialogue, would be both metaphysically spurious and theologically inappropriate. Moreover, it carries a heavy theological opportunity-cost; for, as already observed, necessity eliminates grace.

---

[96] John D. Barrow and Frank J. Tipler, *The Anthropic Cosmological Principle* (Oxford: Oxford University Press, 1986).

If, alternatively, *all* sin is contingent, then it is entirely possible that this world could have been better, and that what we call 'progress' is better understood as repair; divine action graciously helping creation to become what it always should have been. In such a world, some evils and the suffering they induce exceed a rationally utilitarian metaphysical opportunity cost. They are authentically gratuitous and *wholly* in need of redemption of a kind God can and will provide. Thus no one need claim that the Continental DC10's shedding of a part of its engine *then* and *there*, with the consequent loss of 113 lives, reflects the "only way" or a kenotic "natural right" for all of creation – including rivets - let alone God "experimenting". It wasn't, and defending all natural evils as metaphysically necessary turns out to be theologically specious.

Christianity is, unquestionably, a broad stream containing a range of theological interpretations of the historical and doctrinal repository of its faith. Whether, however, the contemporary discussion embodied in the VO/CTNS series is theologically broad enough in its scope is, I want to insist, a legitimate and important question. Sin is, after all, a theological category and not a (social) scientific or efficient-causal one.[97] Here, then, the process theology of Barbour, the panentheism of Peacocke and the broad adoption of a non-interventionist Irenaean-developmental theodicy by the majority of participants in the 'Scientific Perspectives' projects have, I would argue, potentially culminated in what Murphy rightly labels an *ipso facto* change of tradition. One that does not reflect the broad *theological* understanding of

[97] Hence sin, as a theological aspect of the person, is only addressed tangentially in (*NP*).

evil held by the historical believing community and one that therefore omits the (*e-t/o-t*) perspective.[98]

Why might this change of perspective have occurred with so little internal debate? We have already charted the background influence of a dominant cultural narrative. Fergus Kerr in *The Modern Philosophy of Self in Recent Theology*, in (*NP*), decries the influence of Enlightenment philosophy on contemporary theologians. The attraction of Irenaean-developmental theodicy becomes easier to understand, then, when Kerr argues that '...the picture of the self-conscious and self-reliant, self-transparent and all-responsible individual, which Descartes and Kant between them imposed upon modern philosophy may easily be identified, in various guises, in the work of many modern theologians.'[99] Kerr's observation will be developed in the next chapter.

But if all Augustinian-consequential linkage between natural and moral evil is severed, such that famines and floods never have *anything* to do with divine action, either as judgement or self-disclosure, what has happened to vast sections of the revelatory data?[100] It is, of course, metaphysically consistent to posit a form of divine action that kenotically divorces God from every flood or famine or pestilence or earthquake. But surely at *some* point this putatively "Scientific Perspective" must founder on the same rocks of Biblical travail that Gilkey charted for the Biblical Theology movement half a century ago?

---

[98] N. P. Williams, *The Ideas of the Fall and of Original Sin: A Historical and Critical Study* (London: Longmans, Green, 1927).

[99] Kerr identifies Cartesian overtones in Karl Rahner, Hans Kung, Don Cupitt, Schubert Ogden and Gordon Kaufman. See Fergus Kerr, "The Modern Philosophy of Self in Recent Theology," in *Neuroscience and the Person: Scientific Perspectives on Divine Action*, ed. Robert J Russell, et al. (Vatican City State: Vatican Observatory/CTNS, 1999), pp. 23-40.

[100] William Paul Griffin, *The God of the Prophets: An Analysis of Divine Action*, Journal for the Study of the Old Testament Supplement Series (Sheffield: Sheffield Academic Press, 1997).

It strikes me as a questionable re-interpretation of the 'Fall' to label evil as necessary, let alone "upwards". Augustine's cry of '*oh felix culpa*' reflected his response to God's unmerited grace, not his own creaturely self-elevation.[101] And yet in rejecting the current hegemony of only way developmental theodicy in the VO/CTNS series and, instead, defending the *possibility* of a broadly Augustinian-consequentialist hermeneutic, I am acutely aware that I defend a minority position at this period in the science-theology dialogue.[102] So be it. I re-iterate that I do not intend by this to defend a flatly literalistic reading of the early chapters of Genesis. That would be anachronistic projection of a different kind. What I wish to do, instead, is defend the importance of an adequate *theological* (re)appropriation of the Fall: one that preserves, by *remythologisatio*n, those key ingredients of the story and its interpretation, crystallised in historical repository of the (*e-t/o-t*) Tradition. One that *might* necessitate a historically particularised pole grounded in an appeal to Revelation that represents truths (currently) inaccessible by any other epistemic route. Truths received, reflected upon, and preserved in the history and Tradition of the (*e-t/o-t*) communion. I fully grant this is no easy task.

How might this transcendent Augustinian-consequentialist model be re-applied to the immanent cosmological and anthropological data? In *The Dome of Eden* Stephen Webb offers a version of the 'gap theory' and a primeval fall of unembodied (Angelic) consciousness that Amos Young believes worth paying

---

[101] Christof Gestrich, *The Return of Splendor in the World: The Christian Doctrine of Sin and Forgiveness* (Grand Rapids, Michigan: W.B. Eerdmans, 1997), pp. 92-98, and pp. 138-41.
[102] For a variety of engagement in addition to the works by Madueme and Reeves, and by Webb, see *inter alia*, Nathan W. O'Halloran, "Cosmic Alienation and the Origin of Evil: Rejecting the "Only Way" Option," *Theology and Science* 13, no. 1 (2015): pp. 46-63; Jonathan Chappell, "Raymund Schwager: Integrating the Fall and Original Sin with Evolutionary Theory," *Theology and Science* 10, no. 2 (2012): pp. 179-98; Rodney D. Holder, "Modern Science and the Interpretation of Genesis: Can We Learn from Dietrich Bonhoeffer?," *Theology and Science* 6, no. 2 (2008): pp. 213-31; Ian A. McFarland, *In Adam's Fall: A Meditation on the Christian Doctrine of Original Sin*, Challenges in Contemporary Theology (Chichester: Wiley-Blackwell, 2010), pp. 154-87.

attention to.[103] More recently still, Hudson Hud has offered his own historically particularised interpretation of the Genesis narratives.[104]

What if humanity cannot be fully specified by its physical characteristics alone? If it can, then the implications of the mitochondrial Adam and Eve are substantial indeed. But is the *imago Dei* codified into the human genome? If not, there is no need to deny the evolutionary development of either hominids or the emergence of homosapiens. That is only methodological-natural evidence that God formed Adam from the dust (Gen. 2:7a). But what of the second step: God's breathing life into him (:7b)? Since we need not read this verse literalistically the two events need not be chronologically immediate. Might it be, therefore, that "humanity" was created by God in a radically different sense (gracious gift) to the evolutionary (efficient-causal) hominid genus identifiable by the physical markers of anthropo-archaeology. Humanity (in the theological rather than biological sense) could, in that case, have been created *specially*: by a free gift of divine grace, particularised in two individuals and thereafter communicated in perpetuity to, as well as through, their offspring. An act of grace, incidentally, that methodological-natural scientific investigation, had it been present to that event, could never detect, *only* being able to describe the consequences in terms of 'emergent' phenomenology.

This is, I readily grant, speculating far beyond the bounds of traction never mind constraint. Yet too much traction risks producing an emaciated natural theology instead of a theology of nature. Moreover, such speculation takes seriously one kind of data Murphy methodologically appeals to; a communally and historically

---

[103] Webb. Amos Young writes, 'Webb is one of very few theologians to take the doctrine of the satan seriously […], and those involved in the theology and science dialogue should read the book.' See Amos Yong, *The Spirit of Creation: Modern Science and Divine Action in the Pentecostal-Charismatic Imagination* (Grand Rapids, Michigan: W.B. Eerdmans 2011), p. 210 footnote 100.
[104] Hud Hudson, *The Fall and Hypertime* (Oxford: Oxford University Press, 2014).

established canon that is combined with present experience to yield an authority for Scripture. Whether a further appeal to divine Revelation for grounding that truth constitutes "special pleading" is a metaphysical question, the answer to which, methodologically-natural science is, by its own definition, utterly blind. Nicholas Lash, in his contribution to *PPT*, observes that

> There have, I think, been few more fateful moments in the history of Christian thought than the early modern subsumption of the whole grammar of revelation and religious belief into that "spectatorial" model of processes of knowledge which so came to dominate Western imagination. Before, [Newton] there had been many ways of reading many texts, but few controls on interpretive ingenuity. Now, there are but two books [the book of the Bible and the 'book' of nature], and both of them are picture-books.[105]

This is a helpful, if troubling, characterisation of the historical roots of a contemporarily dominant world-view, and it chimes clearly with the contraction of cause in relation to freedom charted in the previous chapter. The consequences for this separation and privileging of the immanent over and above the transcendent are illustrated quite clearly if we return, once more, to reconsider Nicholas Saunders's conclusion that the VO/CTNS series generated a crisis for contemporary theology.[106] Saunders's epistemology reflects the risk attending the "theology constrained by science" *crie de cour* of much of the dialogue. An epistemology that rationally sanitises metaphysical transcendence and expunges R/revelation, seeing only 'bold assertions and a belief that SDA takes place.' What then is Saunders's prescription?

---

[105] Nicholas Lash, "Observation, Revelation, and the Posterity of Noah," in *Physics, Philosophy and Theology: A Common Quest for Understanding*, ed. Robert J Russell, William R. Stoeger S.J., and George V. Coyne S.J. (Vatican City Sate: Vatican Observatory, 1988), p. 205.
[106] Saunders, p. 215.

> What theologians need to do is to […] become more scientifically aware. For it is only through a detailed understanding of the claims made by science, assumptions behind the laws of nature, and the philosophy of determinism, that theology will continue to progress into the twenty-first century.[107]

Theology needs a more detailed understanding of science? But in that case, there is a deep irony here; for the very people whose contributions Saunders has surveyed to reach this conclusion are *exceptionally* literate scientists in their respective fields. If the theology of divine action is "in crisis" in even the hands of specialist scientist-theologians of unquestionable expertise in their respective scientific fields, how could the solution be *more* science for theologians? Might the solution be the opposite? Nicholas Lash's call for a deeper engagement with theology and philosophy by scientists is surely, a more appropriate response. The additional irony is that Saunders's critique is subsequently rejected by contributors to the VO/CTNS series not because of his flawed understanding of the science, but because his conclusion was derived from a *philosophical interpretation* of the laws of nature that no contributor to the series held anyway.[108] Saunders needed, in short, a better understanding of transcendence and the limits of methodological-naturalism.

If contemporary science has no place for theologically pivotal stories like the fall of the satan and Original Sin, that might only be because it has replaced them with its own creedal stories; of progress; of naturalism; of neo-Darwinian chance and necessity (a binary pairing in which, you should notice, 'chance' is posited as a kind

---

[107] Ibid., p. 216.

[108] Wildman writes; 'I would conjecture that Saunders has an intuition that the strong-ontological interpretation of stochastic laws must be correct. Yet instead of simply arguing for this and then drawing the obvious conclusion that noninterventionist QSDA is impossible, he presents an unnecessarily complicated argument with the same conclusion, without materially new conceptual elements.' See Wildman, "The Divine Action Project," (*TY*), p. 164. *Cf.,* Russell's evaluation in the same volume, and subsequent discussions by a number of contributors in *Theology and Science* 2, no. 2, (2004): pp. 71-83.

of efficient-cause and not simply a linguistic place-holder for epistemic ignorance); of 'bootstrapping'; and of mathematisable scientifically accessible causation as the sole philosophical category for non-mental cause?

In outlining his theological concerns about SDA, McGrath makes an observation that holds out a provocative possibility for the argument of this chapter. He notes how Trinitarianism was out of fashion in Newton's day, commenting that 'defense of this doctrine seems to have been seen as being little more than a formal expectation on the part of orthodox theologians'.[109] Might it be, then, that the doctrine of the satan, and the doctrine of the Fall find themselves similarly *sociologically* marginalised today?

Remythologising 'Evil'

What would a remythologised theological perspective look like? I suggest that the place to start is a hermeneutical stance in which, as Lash pithily puts things, 'the primary function of Christian doctrine is regulative rather than descriptive.'[110] Indeed from the vantage point of almost thirty years later, Lash's observation that the dialogue between science and theology at its most convivial when both parties 'operate as more or less sophisticated spectatorial empiricists' proves tellingly perceptive.

Yet just as the line between defense and theodicy is porous and ambiguous, so perhaps the impetus to choose between an 'Irenaean' and 'Augustinian' interpretation of evil is too binary and simplistic. Moreover, this chapter's emphasis on a key

[109] McGrath, "Hesitations About Special Divine Action," p. 19.
[110] Lash, p. 211.

dispute masks the common valuation of other important doctrinal principles – not least trinitarianism, the Incarnation, and eschatology. This is a regrettable.

While a full solution to the problem of evil, whether possible in principle or not, is certainly beyond the scope of this chapter I happily endorse Murphy's suggestion that theological traditions represent particular research paradigms and that 'part of the task of a theological research programme is to give an account of and rationale for taking [whichever aspects] to be the relevant ones.'[111] Let me therefore lay out three core ingredients, as I see them, for a *theological* perspective that is adequate to the task of integrating both Scriptural and natural data.

First, Revelation. To take revelation seriously is to argue that the Bible is more than just a picture book; that God 'speaks' as well as acts.[112] I reject any claim that revelation is *necessarily* 'special pleading' as a false metaphysical bid from immanent epistemology to transcendent ontology. I would endorse Karl Barth's call for theology to "stand on its own feet" and challenge any presumption of a Kantian-like version of theodicy "within the limits of (scientific) reason alone".[113] More pithily: Revelation should provide some of the fuel for powering the engine in Russell's CMI.

Secondly, Tradition: the communal historical preservation of the meaning of central concepts and narratives. Where opposing interpretations compete, the historically stable doctrinal interpretation should only be laid aside with caution, to the minimum extent necessary, and only after broad and stable consensus - perhaps even ratification by ecumenical Council - has emerged. As chapter two was careful to observe, this is not to deny that preservation may lead to accretion, or reflection to

---

[111] Murphy, "Evidence of Design in the Fine-Tuning of the Universe," p. 410.
[112] Wolterstorff, especially chapters 6 and 7.
[113] See Barth's *Protestant Theology*; *Cf.*, Daniel J. Price, *Karl Barth's Anthropology in Light of Modern Thought* (Grand Rapids, Michigan: W. B. Eerdmans, 2002), pp. 49-54.

anachronism. Yet because historical-critical, literary, reception study, and the other paraphernalia of modern theological study have a vital role to play in determining the content of the Church's theology, it follows that truth-content is stable enough that a doctrine should mean, broadly, what it has always meant and not be lightly presumed as fair game for radical overhaul.[114]

Thirdly, truth is unified. This means that conflicting perspectives need to be evaluated rather than relativised. Philosophy, at its best, provides a grammar for language that is seeking truth, and critical-realism constrains unbridled fideism, but it also implies that Revelation and philosophically freighted scientific hypotheses have a mutual potential to signal faulty epistemic claims in one-another.

Certain theological elements are, in my view, crucially absent from the 'Irenaean' developmental theodicy endorsed and expounded in the VO/CTNS series. First, the presence/significance of the angelic realm. This is, understandably, challenging for methodologically-naturalist and dominantly physicalist epistemic disciplines. But the angelic realm is a persistent element of the biblical data: from the theophany of Genesis 22:11, to Jesus cryptic reference in Mathew 18:10, the voice some of the crowd heard in John 12:27-30; to Revelation 12:3-14. Bracketing out immaterial agents (whatever "edge" the noun 'angel' intimates) is perfectly legitimate methodologically-naturally. But, as the previous chapter demonstrated, and the following chapter will reinforce, it also *limits* the truths science can name.

[114] This principle, too, can be cashed out in terms of core and auxiliary hypotheses. Thus, the Incarnation and Resurrection are core hypothesi, while, say, the trans-temporal insistence of some that women must be silent in church is an auxiliary hypothesis. The status of the first Adam falls somewhere between these extremes; it is not present in the Nicene Creed but, as already noted, carries soteriological consequences that demand careful reflection.

Moreover, I am concerned that the VO/CTNS series interpretation of *kenosis* and divine suffering as metaphysically concomitant with freedom reflects, however inadvertently, a twenty first century deism whereby God is temporally and emotionally present but powerless to *act*. Perhaps it is no accident if this, too, chimes with McGrath's observation that 'It is important to note that there are good reasons for thinking that a generalised and generic deism – similar to that of the 'Age of Reason' – has gained considerable influence in the west since the Second World War.'[115]

Once again, however, I accept that I am championing a place for what is a minority position within the present dialogue. So be it. This is not entirely altruistic because I count myself among that broad (*e-t/o-t*) perspective that finds discomfort, to say the least, with any suggestion that God is "experimenting" with creation, or dutybound to respect "natural rights". Frankly, I see a problem that raises questions demanding wider, and deeper, consideration than the VO/CTNS series was able to provide.

Having wandered down such broadly abstract avenues, it is time to apply the fruit of these explorations to the tragic events of July 2000.

Why did God permit such evil? The only honest answer is that we cannot yet say in any satisfying detail.[116] Explanation may elude, but meaning remains a possibility, and to that end, purely extrinsic interpretation will not do. The world is broken; but it wasn't made to be this way. The mishandling of the maintenance

---

[115] McGrath, "Hesitations About Special Divine Action," p. 21.

[116] 'It has often been remarked, and remains significant, that no single model of atonement became definitive in the Christian creeds. We associate this with a drawing back from too definite a scheme for theodicy.' Christopher Southgate and Andrew Robinson, "Varieties of Theodicy: An Exploration of Responses to the Problem of Evil Based on a Typology of Good-Harm Analysis," in *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, ed. Nancey Murphy, Robert J Russell, and William R. Stoeger S.J. (Vatican City State: Vatican Observatory/CTNS, 2007), p.82.

procedure on a small metal strip in a Continental Airlines hangar reflects something endemic to the human condition, not just the moral failure of one individual on one working day. To that degree, to evilly err is now human, though how seamlessly the FWD and FPD interface in this case-study is moot. Could God have acted at any point he wished in the causal chain to prevent this tragedy? Yes! But freedom and responsibility *are* related in ways that link choice and consequence, even if those links are not simplistically consequential; as though the tower of Siloam fell on only the most sinful eighteen men in Jerusalem (Luke 13:1-5). God, then, is not responsible for evil and does not need us to get him "off the hook".

Whatever the divine reason for choosing this mode of creation, anthropomorphised rational appeals to metaphysical necessity; to all cause as a zero-sum relation; or to creation exerting some kind of "natural right" over its creator, are all strongly to be resisted as presumptively anthropocentric. 'The Earth is the Lord's and everything in it' (Psalm 24:1), and 'Woe to him who strives with his Maker, an earthen vessel with the potter! Does the clay say to him who fashions it, 'What are you making'? or 'Your work has no handles'?' (Isaiah 45:9; *Cf.*, Romans 9:21). The relation between divine action and evil is beyond the capacities of human ration alone. God *could* have interposed in certain chaotic processes that day; perhaps to change the wind and therefore the choice of runway. God *may* have interposed in the interaction of thrust and drag affecting the fire and aerofoil; to ensure the Concorde crashed only in a location that minimised loss of life on the ground.[117] God *could* have interposed at the quantum level to change the efficient-causal chain underpinning where and when the Continental DC10 engine lost its part.

[117] Had the aircraft remained airborne a little longer it would have crashed in the town of Gonesse.

But the truth is that such details elude us. The aircraft was lost and the investigation selectively explored only *some* of the causal chain. But had God acted on this occasion to ensure the wear strip was lost to the side of the runway, there would have been no accident, no investigation, and no-one would ever have known divine action happened, let alone how. Such gives us good reason to keep on praying, and might make us cautious about dogmatically ruling out all SDA, even in principle.

Here, though, is where Tilley's insistence upon action becomes relevant; for the Concorde investigation, having identified the probable cause(s), recommended several practical changes to ensure the same evil would not be perpetuated. Here, too, at last, is the proper place for an apophatic silence to appear; silence that informs and frames the overarching conversation. A silence grounded in humility that, having sought to name, recognises its own provisionality, finitude and inadequacy; that does not press on to commit the sin of trying to name the unnameable. Silence in its proper place. Silence that speaks truth.

Summary

A map of theological perspectives on divine action that neglected to chart the philosophical contours of evil would be as deficient as a map of Asia without Everest and the Himalaya. Evil is the topic around which philosophical and sociological tectonic forces erupt, forming profoundly difficult terrain for whosoever would pursue a high vantage point – if not to gain understanding – then at least to gain some glimpse of meaning.

Consequently, evil is a recurring theme throughout the science-theology dialogue, as well as within the VO/CTNS series; and John Polkinghorne insists that scientist-theologians are especially well placed to contribute to this venture. But from the (*e-t/o-t*) theological perspective, the VO/CTNS series and the contributions of the scientist-theologians occasionally make for uncomfortable reading. A discomfort that arises around demythologisation, rejection of Revelation, and the consequent marginalisation of Tradition. From this perspective, it becomes necessary to ask whether a shared, albeit implied, hermeneutical stance amongst these scientifically trained theologians has culminated *ipso facto* in a change of tradition, performatively practicing a form of natural theology, despite its stated ambition to offer a theology of nature? Yet again, we may observe the sociological dimension to epistemology.

An overarching question now links every chapter thus far. One that addresses the capacities of language; the limits of methodological-naturalism; the status of evil; the role of sociology; and the proper relationship between theology and science. The question is this: “What does the term transcendence represent?” But answering it adequately requires the broadest context possible.

Chapter 5

Transcendence, Immanence, and the Role of Contemporary Cultural Frames

Two concerns control the substance and shape of the thesis to this point. The first is to establish whether Clayton is correct to argue that the (*e-t/o-t*) theological perspective is absent from the VO/CTNS series. The second is the broader question of how to speak "well" about divine action, but addressing such concerns demands a deep enough account of the broad context in which they reside.

Consequently, pivotal tensions implicit in disagreements over the scope, and not just the possible modes, of divine action have been charted. Tensions arising from the capacities of language itself; distinguishing between GDA and SDA; the epistemic status of revelatory knowledge; the relation of freedom to causation; the meaning and purpose of *kenosis*; and, of course, the relation of divine action and evil. These tensions hinge on the extent to which divine powers or processes lay beyond methodological-natural observation and we have charted them using the labels 'immanence' and 'transcendence'. But is this distinction philosophically legitimate? It is time to clarify the geography of the words themselves, the better to identify their profile and provenance. *Is* there a transcendent realm? If so, what epistemic access are we afforded to it, and by what route?

Two recent and important historical investigations examine the contemporary Western worldview, illuminating the way it shapes the dialogue between science and

religion. The first is Charles Taylor's majestic overview of the broad cultural and intellectual forces that have given birth to what he labels *A Secular Age.* The second is Peter Harrison's more precisely focussed examination of *The Territories of Science and Religion.* I begin with Taylor's insights as a broad backdrop before turning to the more specific issues that Harrison identifies.

This Secular Age

Drawing on the work of philosophers like Wittgenstein, Heidegger, and Polanyi, who argue that belief is always embedded in a 'framework', some elements of which are often simply taken for granted, Taylor sets himself the task of tracing the change in Western Society from a 'naïve framework' in which belief in God overwhelmingly dominated, say 500 years ago, to our present 'reflective framework' where belief in God is co-equal with other possibilities. For Taylor;

> The shift in background, or better the disruption of the earlier background, comes best to light when we focus on certain distinctions we make today; for instance, that between the immanent and the transcendent, the natural and the super-natural. Everyone understands these, both those who affirm and those who deny the second term of each pair. This hiving off of an independent, free standing level, that of "nature", which may or may not be in interaction with something further or beyond, is a crucial bit of modern theorising, which in turn corresponds to a constitutive dimension of modern experience,[1]

Contemporary notions of history and spirituality are connected via a 'social imaginary' that Taylor identifies as a story where knowledge is the incremental sum

[1] Charles Taylor, *A Secular Age* (Cambridge, Massachusetts: Belknap Press of Harvard University Press, 2007), pp. 13-14.

of a historical journey in which the idea of "God" serves as an obstacle to rational, neutral, knowledge that, finally, overcomes its own spiritual naivety.[2]

This imaginary replaces openness to what we now call 'transcendence' with what Taylor calls an interiorised or "buffered" self.

> the depths which were previously located in the cosmos, the enchanted world [of spirits and a porous relationship to signs in nature] are now more readily placed within. [… The] rich symbolism of the enchanted world is located by Freud in the depths of the psyche; and we all find this move very natural and convincing, whatever we might think of his detailed theories.[3]

Taylor also points to an emerging distinction in the late Middle Ages and early Modern period between natural and supernatural; rooted, however, in the theological desire to stipulate the independence of the supernatural, defend divine autonomy and prevent it being, as he puts things, 'chained by the bent of "nature." Likewise', he notes, 'the Reformers did everything they could to disentangle the order of grace from that of nature.'[4] As already observed, such theological aspirations 'dovetail perfectly' with philosophical changes, themselves reinforced and accelerated by the methodology and success of the new sciences. The result: a "natural" physical universe underwritten by exceptionless laws possibly, but not necessarily, attributable to God – at least, as Taylor rightly clarifies, at the first order level of enquiry. This

---

[2] Ibid., pp. 28-29.
[3] Ibid., p. 539. Similarly, Barbara Maria Stafford writes; 'I have been arguing that the lowering of the sublime – already perceptible in embryo in the late-eighteenth-century archaeologically inspired model of unearthing – has become intensified in the downward plunge of much twenty-first century scientific research. The neurosciences are not alone in favouring a steeply descending infinity. 'Barbara Maria Stafford, "Still Deeper: The Nonconscious Sublime; or, the Art and Science of Submergence," in *Beyond the Finite: The Sublime in Art and Science*, ed. Ronald Hoffmann and Ian Boid Whyte (Oxford: OUP, 2011), p. 53.
[4] Taylor, p. 542.

predominantly immanent framework easily gives rise to what Taylor calls a ‘closed world structure’ (CWS).

> The mechanical outlook which splits nature from supernature voids all this mystery. This split generates the modern concept of the “miracle”; a kind of punctual hole blown in the regular order of things from outside, that is, from the transcendent. Whatever is higher must thus come about through holes pierced in the regular, natural order, within those normal operations there is no mystery. [For Christian fundamentalists], it provides proof of “miracles,” because certain things are unexplained by the normal course of natural causation. For the materialist, it is proof that anything transcendent is excluded by “science.”[5]

A closed world structure, however, must appear completely self-supporting. How does this come about? Taylor attributes it to a “subtraction story” by which humankind, beginning with those in the Western intellectual elite who were both brave and willing enough, could slough off every religious and metaphysical illusion.[6] This, at any rate, is what the foundational figures of Enlightenment philosophy; Descartes, Locke, and Hume believed followed inevitably from careful introspective reflection upon experience. Viewed historically, therefore, God has not been displaced abruptly. Rather, a shift begins at the end of the seventeenth century, towards ‘the primacy of impersonal order’ and a concomitant belief in the development of natural religion with its tendency to corrupt or accrete with the passage of time.[7]

Consequently, subsequent attacks on faith revolve around Divine agency and extra-systemic (transcendent) power; miracles, special providences, acts of favour and punishment, and the like. And yet, as Taylor importantly notes, ‘the “refutation” of

---

[5] Ibid., p. 547.
[6] Ibid., pp. 294-95.
[7] Ibid., p. 221.

orthodox religion barely notices the Loyolas, Ste. Teresas, or St. Francois de Sales; or when it does it can only see them as "enthusiastic" claimants to special revelations or divine commands. The grid that Deism, and its successors, operate with blanks out communion almost totally.'[8] This selective engagement is indicative of a seductive flaw Taylor detects in closed world structures (CWSs) that have reputedly sloughed off their religious and metaphysical "illusions". Seen from the post-Modern world structures of Heidegger and Merleau-Ponty's deconstruction, this epistemically self-evident CWS exhibits, Taylor insists, a 'most massive blindness'. How so? Because;

> experience was carved into shape by a powerful theory which posited the primacy of the individual, the neutral, the intra-mental as the locus of certainty. What was driving this theory? Certain "values", virtues, excellences: those of the independent, disengaged subject, reflexively controlling his own thought processes "self-responsibly" in Husserl's famous phrase. There is an ethic here […] of a disengagement which brings control, […] requires courage, the refusal of […] conformity to authority, of the consolations of an enchanted world […]. The entire picture, shot through with "values", which is meant to emerge out of the careful, objective, presuppositionless scrutiny, is now presented as having been there from the beginning, driving the whole process of "discovery".[9]

A closed world structure that appears self-supporting becomes, all too easily, naturalising. Alternative interpretations, especially those with ancient roots, become, from this new ethical and epistemological viewpoint, regression back into myth and illusion, not a source or repository of deeper truths. The result, in Taylor's view, is a contemporary Western society comprising people who see themselves as agents of instrumental reason, but who have become blind to cosmic signs and symbols of divine disclosure. But recognising 'sign' and recognising 'purpose' are, Taylor insists,

---

[8] Ibid., p. 280.
[9] Ibid., pp. 559-60.

incompatible, because, 'We have to abandon the attempt to read the cosmos as the locus of signs, reject this as illusion, in order to adopt the instrumental stance effectively'.[10]

A reminder about the scale at which I am mapping is, once more, in order. Secularism, understood as the broad thesis that educational and technological advances lead inevitably to the demise of religious belief, is a genus with many species and it has both defenders and critics.[11] Taylor's analysis works at a yet larger scale by asking what motivates the "unthought" possibilities for secularism itself.[12] The problem, of course, is that we all operate with an "unthought". Wildman's "inchoate forces" if you will, that generate framing assumptions and hermeneutic assumptions often invisible to those who share them. Taylor has been criticised, for example, for a selective and partial interpretation of history,[13] and for the lack of attention he has paid to the role of the colonial encounter in forming Western European views of other religions.[14] Nonetheless, his overall thesis seems credible and insightful.

A further reason for accepting his analysis is its congruence with the various theological perspectives present – and indeed absent - from the VO/CTNS series.

---

[10] Ibid., p. 98.
[11] For an illuminating and engaging orientation regarding varieties and issues surrounding secularism for the non-specialist see James K. A. Smith, *How (Not) to Be Secular: Reading Charles Taylor* (Grand Rapids, Michigan: William B. Eerdmans Publishing Company, 2014). For more detailed engagement on a variety of aspects of Taylor's theories see the essays in Michael Warner, Jonathan VanAntwerpen, and Craig J. Calhoun, *Varieties of Secularism in a Secular Age* (Harvard, Massachusetts: Harvard University Press, 2010).
[12] "Unthought" is borrowed from Foucault. See Taylor, p. 427; Smith, p. 80.
[13] Jonathan Sheehan, "When Was Disenchantment? History and the Secular Age," in *Varieties of Secularism in a Secular Age*, ed. Michael Warner, Jonathan Vanantwerpen, and Craig Calhoun (Harvard, Massachusetts: Harvard University Press, 2010), pp. 217-42.
[14] See Peter van der Veer, *Imperial Encounters: Religion and Modernity in India and Britain* (Oxford: Princeton University Press, 2001). Taylor responds to various criticisms in Warner, VanAntwerpen, and Calhoun, pp. 300-21.

With Taylor's proposed historical and sociological context in mind, we can revisit Wesley Wildman's perspective to show how Taylor's thesis finds strong resonances when plotting out a contemporary apophatic theology of divine action.

We have noted Taylor's proviso that the immanent frame can be open or closed to transcendence. Wildman is particularly interesting, therefore, because he maintains an openness to God as the transcendent 'ground of being' while severely constraining any attempt to describe God in detail.[15] How, then, does Wildman escape this almost fully "buffered" self? His epistemic route to transcendence is, as previously described, the MSIH.[16] Wildman's world structure remains open in so far as he accepts the MSIH is 'somewhat philosophical in character', and yet consistency with its viewpoint should, he insists, be a requirement for any *additional* claims. This 'minimalist interpretation' doesn't venture a position on the reality of gods and so, Wildman insists, a 'posture of neutrality' underpins the MSIH properly understood.[17]

Yet this anthropological perspective aligns almost seamlessly with Taylor's portrayal of an immanent frame, ontologically 'hived off' and bordered in terms of subtraction stories. Surely *that* is why atheistic philosophies appropriate the content of the MSIH much more straightforwardly than religious philosophies? Indeed, Taylor's analysis explains why, in my view, this minimalism proves insufficiently distinguishable from philosophical reductionism. The putative neutrality of the MSIH comes under further pressure considering Taylor's analysis of the blindness that masks implicit ethical values in "self-responsibility" and supposedly courageous rational engagement. Moreover, as Harrison points out, the word 'science' that

[15] Wildman, "Comparative Natural Theology," p. 190.
[16] Wildman "A Theological Challenge," p. 572.
[17] Ibid.

supposedly binds this "shared currency of thought" tends to produce an artificial sense of unity in which 'the mathematical rigour of the physical sciences [is] combined with the matter-of-fact "historical" claims of the biological sciences to give modern science an unassailable epistemic status'.[18] However successful a concept like the MSIH may appear at the rhetorical, academic or political level, Harrison also points out that 'as a number of contemporary philosophers of science have observed, this does not necessarily confer any metaphysical unity on modern science.'[19]

But just how open is Wildman's world structure in practice? As we observed in chapter 2, Wildman's 'working hypothesis' is that revelation is not 'supernatural' but, instead, found in 'every moment of human insight, in the depths of nature, and in the emergence of intense value that nature supports.'[20] He continues; 'religiousness is not the primary drive for the evolution of human cognitive traits, […] their application to religion is an evolutionary side effect [and] the popularity of highly anthropomorphic forms of personal theism is [consequently] troubling.'[21] First, we might ask once more: why only anthropomorphised personal theisms? Why are not *all* claims to detect a 'deep structure', or 'intense value' equally likely to be evolutionary spandrels or exaptations: useful but ontologically vacuous by-products, and therefore suspect? This relocation of divine revelation from external to internal seems so buffered as to be perilously close to a fully CWS, for one wonders how Wildman's "working hypothesis" rejecting divine revelation could ever be falsified?

Wildman, as previously observed, insists that 'The story of cosmic evolution severely strains the supernatural cosmology and naturally suggests a very different

---

[18] Harrison, p. 176.
[19] Ibid., p. 193.
[20] Wildman, "Behind, between, and Beyond," p. 410.
[21] Ibid., p. 421.

kind of ultimate reality, [... A ground-of-being God is] morally ambiguous; the fecund source of both order and chaos, weal and woe, because such a God would be the deep structure of the world as we encounter it.'[22] Yet "*naturally* suggests" becomes a telling phrase following Taylor's historical analysis. Why must we accept Wildman's proffer that the *deep structure* of the world is morally ambiguous? It is not at all clear how Wildman can ground what he calls an 'evolutionary birthright' (and note well the profound anthropocentrism at work in that metaphor). Wildman's argument rests, it was noted, on an enthymeme in which the moral worth of the whole cosmos, a *profoundly* transcendent claim, is accessible to his personal – presumably utilitarian - axiological calculus; a calculation finely poised between weal and woe. This chimes nicely with Taylor's identification of an ethically courageous post-Enlightenment philosophy that sloughs off the comforts of 'primitive' religion, and by which any vestige of transcendence becomes an "evolutionary birthright" carrying responsibilities that disappointingly few have the moral courage to inherit. Or so the argument goes.

It is also illuminating, following Taylor's analysis, to return to Wildman's complaint about the "excessive" contemporary focus on a personalistic God. Wildman insists this is a 'post-Reformation distortion, deeply linked to the "turn to the subject" in modern philosophy and theology. […] I am unwilling', he combatively writes, 'to allow the general category of theism to be held hostage to what I hope amounts to a passing trend in the history of Western Protestant theology.'[23] Here we find, it seems to me, more than a hint of the kind of subtraction story Taylor identifies; in which primitive religion succumbs, over time, to accretion and distortion. Yet it was Jesus,

[22] Wildman, "The Import of Physical Cosmology for Philosophical Cosmology," p. 207.
[23] Wildman, "Incongruous Goodness, Perilous Beauty," p. 269.

after all, who told us to refer to God as “Father”. Certainly, God is not a man (Numbers 23:19), but while reaffirming my (*e-t/o-t*) commitment to the need for apophatic limits to our theologising, the hermeneutical challenge is an ancient and familiar one: discerning the function of analogy and the boundary between necessary and excessive anthropomorphism.

Taylor’s thesis is, then, that we live in a secular age dominated by an immanent frame, facilitating closed world structures, themselves supported by subtraction stories. Let me now turn to the more specific analysis of what Peter Harrison calls *The Territories of Science and Religion* to explore how some conventions in the dialogue between science and theology support both authors’ overall theses. This will, I believe, shed further light on the methodological choices of the VO/CTNS series and Russell’s appeal to non-interventionist objective divine action (NIODA), in particular.

Harrison accounts for the emergence of ‘science’ and ‘religion’ as putatively separate disciplines in the change that took place, in the early Middle Ages, from an ethic based upon transformation of self (*habitus*) to an ethic based upon the transformation of nature. Thus, a major shift occurs between 1200AD and 1700AD in which the goal of knowledge shifts from transformation of the inner self to transformation of the outer world. Harrison traces several consequences, including the gradual eclipse of allegorical reading of scripture beginning in the 13th Century. As previously observed, these propagate, constraining the understanding of causality so that ‘In much the same way that symbolic meanings of nature and scripture were collapsed into a single literal sense, the various causal layers of Aristotelian scholasticism came to be flattened into a single layer of univocal efficient causes.’ Harrison then continues,

> There was one order of meaning – the literal sense- and one level of causation – efficient causation. Both of these developments were promoted by religious thinkers, and for religious reasons. They were both a precondition for the emergence of modern science. Yet, the ultimate effect of this flattening out of the scope of meaning and causation was that modern science and theology would come to occupy the same explanatory territory.[24]

It is worth reiterating, then, that this impetus to differentiate immanence and transcendence rested on theological, as well as philosophical, concerns. The Reformers, challenged the Medieval valuation of *habitus* because it threatened the role of grace, and Luther's doctrine of salvation by faith alone. They were also concerned that it underplayed the significance of the Fall.[25] Unfortunately, such concerns sow philosophical tares among their theological wheat and I have already charted how, following the demise of non-literal modes of interpretation, an overtly mythical story like Eden easily becomes dismissed as pre-literate fantasy, safely to be consigned to the dustbin of intellectual history by the long arm of "progress". In fact, in view of the arguments of the previous chapter, it is fair to describe the contemporary theological situation as a veritable collapse of the doctrines of both the Fall and the satan into deeply unfashionable obscurity, at least in the Academy and by comparison with the situation in, say, 1500AD. The intellectual harvest has, in any case, been substantial. Natural evil is now a metaphysical necessity: the unavoidable "opportunity cost" of developmental freedom in a univocally causal zero-sum game. Double agency is rejected as double-talk and, because power and agency are now univocal, God must be morally distanced from evil by applying *kenosis* to every member of the Godhead. But how voluntary or comprehensive divine *kenosis* is, itself, inevitably becomes philosophically contentious.

---

[24] Harrison, both quotes are from p. 80.
[25] Ibid., pp. 86-88, 138.

Theological dispute over the relation between transcendence and *kenosis* has spilled out into continental philosophy, which has shown something of a theological turn in recent decades; exemplified in Richard Kearney's notion of 'anatheism' where the prefix *ana* signifies a movement away from, followed by a return towards God after the "death of God".[26] The result is a God who cannot be objectified but 'whose presence shows up in the sacramentality of the flesh, whether in real life or in its imaginative refiguring by poets, artists and writers.' Jens Zimmerman interprets Kearney as leaning apophatically toward transcendent themes. [27] Kearney himself writes,

> For me, to have lost the illusion of God (as sovereign superintendent of the universe) is to enjoy the possibility of opening oneself, once again, to the original and enduring promise of a sacred stranger, an absolute other who comes as a gift […]. In short, anatheism is a radical opening to someone or something that was lost and forgotten by Western metaphysics – to cite Heidegger and Derrida – and needs to be recalled again. And here we can translate from the historical formulation of the anatheist question – What comes after the disappearance of God? – to the more existential one: How might any contemporary self experience this in one's concrete, lived existence […]?[28]

Again, we should note how elegantly this fits Taylor's broad typology: a severely attenuated (buffered) transcendence; an ontologically free-standing world needing no sovereign superintendence but demanding, rather, ethically courageous

---

[26] Richard Kearney, *Anatheism: Returning to God after God* (New York: Columbia University Press, 2010). Kearney points in particular to the work of Agamben, Badiou, Kristeva, Žižek and Derrida. Yet this theo-philosophical appropriation selectively endorses only those theological ideas that contain congenial metaphysical import; e.g., *kenosis* but not *perichoresis* and, perhaps predictably, the near total absence of any engagement with the doctrine of the Fall.

[27] Richard Kearney and Jens Zimmermann, *Reimagining the Sacred: Richard Kearney Debates God with James Wood, Catherine Keller, Charles Taylor, Julia Kristeva, Gianni Vattimo, Simon Critchley, Jean-Luc Marion, John Caputo, David Tracey, Jens Zimmermann, and Merold Westphal,* eds. Richard Kearney and Jens Zimmermann (New York: Columbia University Press, 2016), p. 2.

[28] Ibid., p. 9.

existential engagement. But, Kearney's hermeneutical stance strikes me as theologically flawed from an (*e-t/o*-t) theological perspective because it, again, interprets power univocally, anachronistically reading modern ethical concerns over the exercise of power backwards into the pre-Enlightenment world. Kearney claims Western metaphysics signifies a false bid for power that perverts ethical responsibility. But as Taylor and Harrison both credibly argue, the Modern and post-Modern distinction between knowledge and ethics would be simply incomprehensible to pre-Modern minds, for whom power and responsibility were integrated in *habitus*. A univocal interpretation of power appears again in the exchange between Kearney and Italian philosopher Gianni Vattimo in *Reimagining the Sacred,* wherein Vattimo suggests that Kearney appeals to kenosis as temporary and anticipatory when such a view would be, Vattimo insists, misleading. Kearney's *kenosis* is only a provisional stage, before God recalls us to 'partake in his triumphant plenitude', but, Vattimo insists,

> God's lowering would thus be a pedagogic device, a kind of communicative strategy, which leaves entirely unchanged the traditional metaphysical picture of God as the self-subsistent being. Even the proximity of religious experience to poetry, and even (especially) the rebellion against the absolutism of dogmas and churches, risks falling back into a shadow (or light) of God's provisional self-humbling, who nonetheless remains the indefectible supreme reality of our tradition faiths.[29]

Vattimo instead rejects divine transcendence altogether, insisting 'Truth differs from reality in that it is not absolute but always in relation to this or that belief' and that 'Truth is to be recognised as a series of interpretive paradigms (in Kuhn's

[29] Gianno Vattimo "Anatheism, Nihilism and Weak Thought," in ibid., p. 132.

sense), not as correspondence to some objective "reality" out there.'[30] This seems deeply problematic, not least because it is, itself, performatively self-contradictory: a universalising truth claim that all truth claims are relative. Moreover, if truth *is* constructed by consensus, then the world depends on, among other things, the mood of quantum theorists because the ontology of the quantum formalism is then 'truly' indeterminist only according to the majority interpretation. It would become equally truthfully deterministic should the majority interpretation change tomorrow.[31] Polkinghorne is, it would seem to Vattimo, wrong: epistemology *determines* ontology. Vattimo's rejection of transcendence is linked to his univocal understanding of power. Yet, even if power *should* be interpreted univocally, and Vattimo's (totalising) rejection of divine monarchical power stand, what follows? Whether, granted his ontology, creaturely anarchy really is ethically preferable to divine tyranny is a question brought into sharp relief by present-day events across the world. Slavoj Žižek also seems to deny transcendence, locating the meaning of Christianity in immanent human relations. Žižek's 'atheist wager' is that in *kenosis*

> God dies and resurrects itself as a Holy Ghost, as the *form* of collective belief. It is a fetishistic mistake to search for the material support of this form (the resurrected Christ) - the Holy Ghost is the very collective of believers, what they are searching for outside of the collective is already there in the guise of the love that binds them.[32]

[30] Ibid., p. 147.
[31] For a cogent refutation of this argument see Roger Trigg, *Beyond Matter: Why Science Needs Metaphysics* (West Conshohocken: Templeton Press, 2015), especially chapters 2 and 3.
[32] Slavoj Žižek, *Less Than Nothing: Hegel and the Shadow of Dialectical Materialism* (London: Verso, 2012), p. 115.

It is hard, however, not to recognise in Žižek's hands the corpse of nineteenth century liberal theology being revivified with scant regard for the patient's original cause of death.

In contrast to Vattimo and Žižek, John Caputo interprets *kenosis* transcendently, although in a radically different way to the (*e-t/o-t*) perspective. For Caputo, the classical doctrine of *kenosis* denotes not the divestment of power but the exercise of '*ultra* power' and of '*ultra* sovereignty' thereby disqualifying itself. Caputo defends, instead, a metaphysic of transcendence in which God needs humanity as much as humans need God.

> God is not a supremely powerful agent or hyperbeing but a potency that has to come into the world in order to acquire actuality. God as such, in his pure "*an sich sein*" is abstract being, a concept that has to acquire reality in the world and become divine in and through humanity, so that God really and truly is not God until we come along. The divine life is incarnated in us, and we are the ones who do all the heavy lifting, because God as God is a kind of abstract, one-sided concept that lacks independent reality. It's in *us* that God becomes God.[33]

Beyond its substantial heterodoxy from the (*e-t/o-t*) perspective, a more anthropocentric form of theism is hard to imagine.

If, however, *any* of these varied interpretations of transcendence and *kenosis* are valid, divine action of a biblical hue becomes a chimera. God is powerless and the world is just a chaotic matrix devoid of telos. It retains, in these thinkers' eyes, axiological import - although why weakness is a greater virtue than power is never explained. Ultimately, God becomes risk *itself*; at risk of God's own extinction

[33] John Caputo, "Anatheism and Radical Hermeneutics," in *Reimagining the Sacred,* p. 199.

whenever ecological or cosmological catastrophe strikes the species. It is perhaps noteworthy how, for many contemporary philosophical perspectives, 'being' has become subservient to 'process' of one kind or another. The problem from a theological perspective, of course, is that this philosophical plundering of a single theological idea (*kenosis*) is indefensibly selective and *ad hoc,* ignoring basic methodological tenets of hermeneutics; not least the canonical context*;* a Christological principle, expressed in a biblically rare philological term, in an overtly poetic literary setting.

Harrison adds a further gloss to Taylor's depiction of the "buffered" self by noting how, in the past, natural philosophy was integral to philosophy *per se* for developing *habitus* – that is the integrated spiritual, intellectual, and practical habits of life. The modern division between science and theology, and science and philosophy, is facilitated, therefore, by what Harrison regards as a form of historical amnesia.[34] Present day 'natural theology' argues from (allegedly) epistemically neutral premises to the existence and characteristics of God, yet the phrase 'natural theology' does not exist in either patristic or medieval literature.[35] Harrison's 'basic claim', therefore, is that the Western sense of "religion" 'did not exist in the first centuries of the Christian era, although the emergence of Christianity is nonetheless accompanied by a new understanding of religious identity that is the precondition for the emergence of the modern idea.'[36] Harrison points out that in the ancient world,

[34] Harrison, p. 18. In view of Taylor's and Harrison's expositions, Stephen Hawking's blithe and trenchant dismissal of philosophy on the very first page of *The Grand Design* gains sobering contextualisation.
[35] Ibid., p. 71.
[36] Ibid., p. 34.

> Myths were not thought to offer alternative explanatory accounts to "science." Not only were they regarded as compatible with rational, philosophical accounts of the natural world, but they were also considered to be important vehicles for the transmission of profound philosophical truths. It is a mistake, then, to regard myths as incompatible with rational explanations, or to imagine that a mythical phase of Western history gave way to a proto-scientific age.[37]

Early Christianity was a moral and spiritual way of life, albeit one that could challenge immanent (e.g., political) allegiances; not a discrete package of logical propositions and doctrine that could be "disembedded", in Taylor's parlance, from individual *habitus*. True, the Church Fathers introduced the idea of the "two books"; Scripture and nature, but 'For medieval thinkers these [two books] offered ways of ascending from the visible, mutable, and material things of nature to an intelligible spiritual realm that lay beyond [and therefore] served to shape the person and prepare the mind for the encounter with more elevated theological truths.'[38] This explains the perdure of the fourfold reading of Scripture: literal (historical), tropological, analogical, and allegorical. Higher readings, it was maintained, required a specific *habitus* not available to all people, all of the time. As Pusey's example shows, "higher" readings can become tendentious or polemical, yet the counter claim that there is only a "plain" univocal meaning to Scripture (and, by extension – nature) is by no means as epistemically pure and philosophically uncontentious as often contemporarily assumed. Our readings of Scripture, or of nature, and their integration in an open or closed world structure is part of a broader *habitus* that influences whether, and to what extent, we have "eyes to see and ears to hear".[39]

---

[37] Ibid., p. 25.
[38] Ibid., p. 57.
[39] The distinction between those who can and those who can't see or hear is a recurring theme in Scripture. *Cf*., e.g., Dt. 29:4, Ez. 12:2, Mk. 8:18, Rom. 11:8.

How then do we choose between alternative metaphysical, theological, and doctrinal options for describing divine action? In classifying the various options presented in the VO/CTNS series in chapter 2, I rather crudely highlighted a tension between credibility and "creedability" broadly sympathising with Wildman's opinion that final positions are partly 'an issue of taste or rational style.'[40] In the further light of both Taylor's and Harrison's analyses we might suggest this tension – between immanence and transcendence - is primarily a problem of this Secular age's making; but that does not show how to resolve such tensions. Wildman's perceptive claim that theological instincts play on both sides of the divide is reinforced by Harrison's observation that some disputes in public discourse 'should be thought less in terms of conflict between science and religion, and more as theological controversies waged by means of science. Such conflicts are' Harrison continues '[…] irresolvable, not because there is any inherent incompatibility in science and religion, but because the underlying value systems – which are "natural theologies" of a kind – are ultimately irreconcilable.'[41]

These tensions invite, I would argue, a renewed sensitivity to the role that *habitus* (understood as the interconnection of belief and praxis) plays between various communities of interpretation. It is a central argument of this thesis that an influential interpretation of divine action derives from the writings of a small and tightknit community of scientist-theologians broadly sharing a hermeneutical stance that, at particular points, exhibits important tensions with the (as Philip Clayton observes) numerically significant (*e-t/o-t*) community's perspective. Whether, and why, that should be so is, I believe, worth evaluating and unpacking. Of course, important but

[40] Wildman, "The Divine Action Project," in (*TY*) p. 147.
[41] Harrison, p. 197.

subtle distinctions are lost in course grained communal divisions between, say, 'scientists', 'theologians', 'philosophers', 'adherents to the MSIH', '(*e-t/o-t*)' and so on. It is important, therefore, to stress that I am not insisting that Wildman, or Russell, or Polkinghorne, or indeed any other individual considered in these pages fits such archetypal conceptual boxes without remainder. My comparison of abstract theory and individual embodiment, (not to mention personal reflection on my own *habitus*), seeks something a little more nuanced than that: illuminating patterns and parallels and how they fit into the broader background from which they emerge.

The theological options here are not binary either. I value, for example, Polkinghorne's thoughtful rejection of process theology, while rejecting his, to my ear, brutal demythologisation of the Fall. Similar comments could be adduced about Wildman's apophatic stance helpfully alerting us to naïve or unbridled anthropomorphisms lurking near the surface in biblical literalism and open-theism. This without accepting his dismissal of revelation and his repudiation of personal analogues for describing God. Examples could be multiplied – which is why *habitus* cannot be bracketed out completely in my view.[42] Some may interpret *habitus* as an impediment to "truth", but it is also true that we are socially relational and that some *truths* - though not merely constructed - may, in fact, only be recognised, preserved and communicated through the vehicle of 'Tradition'. But there is no knockdown argument to settle such debates either way.

[42] This is not a claim to epistemic relativism. It is my consistent argument that truth is, itself, a transcendent property. My point is, instead, to deny the positivist claim that "data" is epistemically neutral. Recognising truth involves an element of faith, but also, in some cases, self-revelation by another. (E.g., Mt. 16:13-20).

Transcendence and Methodological-naturalism Revisited

Taylor, it was noted earlier, believes a shift, or disruption, of world structure is being manifested in the contemporary distinction between immanence and transcendence and between natural and the super-natural. These entail the "hiving off" of an independent, free standing "nature" which doesn't have to be in interaction with anything beyond. This crucial aspect of modern theorising is well illustrated in the way the VO/CTNS series distinguished SDA from GDA and framed its investigation around non-interventionist objective (special) divine action (NIODA).[43]

Here we must return to the semantic suppleness of language itself, to ask whether *objectively* identifying the difference between 'general' and 'special' is even possible. Reviewing the VO/CTNS series in *TY*, Wildman offers the following summary distinction as it emerged during discussion.

- General divine action (GDA) is the creation and sustaining of all reality insofar as this does not necessarily presume any specific providential divine intentions or purposes.

- Special Divine Action (SDA) is specific providential acts envisaged, intended, and somehow brought about in this world by God, possibly at particular times and places but possibly also at all times and places.[44]

[43] Robert J. Russell, "Introduction," in *Chaos and Complexity: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, Nancey Murphy, and Arthur R. Peacocke (Vatican City State: Vatican Observatory/CTNS, 1995), pp. 3-7.
[44] Wildman, "The Divine Action Project," p. 140.

A series of challenges emerge, however, in applying this putative distinction. First, how does a *specific* act that is "at all times and places" differ from the *general* act of creating or sustaining? Counterfactual knowledge, several contributors argued, provides a way to distinguish between them. We might reason, for example, that "if God had not performed '*x*' the universe would have continued in state 'y^1' instead of its actual state of 'y^2'. Yet *creatio ex nihilo* and ontological indeterminism *both* challenge the possibility of counterfactual reasoning. *Creatio ex nihilo* challenges the coherence of asserting any universe could continue apart from God's *actual* will, while ontological *in*determinism eliminates any epistemic baseline from which to compare alternative universes to isolate SDA. I shall explore these problems more fully shortly.

For now, though, let us note how counter-factual approaches to creation depend upon exactly the kind of "hived off" supposedly free-standing nature that Taylor has alerted us to. Counter-factual reasoning also chimes well with Harrison's observation that science and religion seem sometimes compelled to posit a third, neutral, epistemic space in which to assess truth claims.

Finally, the counter-factual approach seeks to distinguish between God's general providence and his special providence by criteria *other* than divine revelation. Wildman and Dawes rightly sense, however, that SDA *depends* upon ascribing agential intention and purpose to God. Taylor's analysis of immanence and transcendence helps explain why the temptation to analytically parse between GDA and SDA is superficially attractive to modern minds, and yet dissolves into sorites like ambiguity in practice; a problem acknowledged at the end of the VO/CTNS series.[45]

[45] Particularly Gregersen's article in (*TY*).

A second set of difficulties emerges when we consider the distinction between interventionist and noninterventionist divine action as the series conceived it. Wildman's summary is, again, helpful.

- A noninterventionist special divine act is in accord with created structures of order and regularity within nature.

- An interventionist special divine act involves abrogating, suspending, or ignoring created structures of order and regularity within nature.[46]

Confusion may, and indeed to some extent did, arise because whether a particular divine act counts as interventionist depends upon how the laws of nature are believed to function.[47] For the woman who sees the laws of nature as ontologically prescriptive (that is *determining* what happens, rather than *reflecting* what usually happens), the miracle at the wedding feast in Cana (John 2:1-11) would appear interventionist. Yet to the woman for whom laws are merely descriptive approximations of what Polkinghorne calls a "suppler and subtler" underlying ontology, the miracle *might* be non-interventionist since, potentially, no underlying regularities were suspended or violated. If laws of nature merely approximate an underlying ontology water might transmogrify in accordance with the same law-like behaviours we are familiar with, but, on this occasion, in a way with which current scientific knowledge is simply unfamiliar. We are now back, of course, to the

[46] Wildman, "The Divine Action Project," p. 141.
[47] Ibid., p. 158. Wildman notes that 'the question of [incompatibilist theories of SDA] status as noninterventionist […] is their most controversial aspect'. *Cf.*, pp. 169-172.

question first raised in chapter 3 about the limits of methodological-naturalism and the transcendent status of the "laws" of nature.

Transcendence and NIODA

Robert Russell's influence on the science-theology dialogue, and his desire to structure the VO/CTNS discussion using the framework of non-interventionist objective special divine action (NIODA), makes him another important and illuminating test case for the theses of Taylor and Harrison. Russell's metaphysic is helpfully explored in an exchange that follows John Haught's review of Russell's *Cosmology from Alpha to Omega*.[48] In reply to Haught's critique, Russell insists that, as a critical-realist, his world structure remains open to transcendence, agreeing with Haught that metaphysics is more fundamental than any science, including physics. Russell therefore reiterates his own hierarchical approach to epistemology, placing physics at the bottom. Rejecting Haught's interpretation of the implications of his scheme, however, Russell insists that,

> It is an entirely different matter to move from this epistemic hierarchy to the domain of metaphysics and insist […] I am actually referring to quantum physics as foundational or fundamental in the metaphysical sense. [this would involve both a category error and] the elementary error of assuming that one can move effortlessly and directly from epistemology to ontology without ambiguity or a need for a justification of the choice of ontologies yielded by a specific epistemology.[49]

[48] John F. Haught, "Is Physics Fundamental? Robert Russell on Divine Action," *Zygon* 45, no. 1 (2010): pp. 213-20.
[49] Robert J. Russell, "Cosmology from Alpha to Omega: Response to Reviews," ibid, p. 243.

Russell insists his theological accounts of scientific theories are never intended to provide comprehensive explanations of divine action. Quantum NIODA is not meant to explain *how* God acts, offer a solution to the problem of double agency, or supply Farrer's causal joint.[50] He accepts the futility in seeking a 'causal joint' even in principle, and the risks in positing God as a co-secondary cause.[51] Acknowledging, therefore, his broader treatment of the metaphysical and theological issues at stake I accept Russell's claim that his primary motivation is only to press the "what if?" case as far as possible. Yet I am left with a nagging feeling that Haught is not as wide of the mark as Russell wishes to insist. Perhaps this is because of Russell's continued appeal to the significance of the quantum domain, even while modifying his position toward alternative TDAs over time.[52] It is very tempting to conclude, particularly considering the relative brevity of Russell's engagement with alternative schemes, that he, himself, sees rather more to the quantum realm than simply one of several possible *ex hypothesi* domains for divine action. It is not always easy, despite Russell's protestations to the contrary, to tell that he is arguing an illocutionary "What if?" because the locutionary tone of his arguments more closely resembles a "So that".

I wonder, therefore, whether a deceptively strong realist epistemology underwrites Russell's interpretation of quantum mechanics? In any case I believe it is

---

[50] *Cf*., Russell, "Special Providenc and Genetic Mutation," p. 216 footnote 88; "Divine Action and Quantum Mechanics," p. 295.

[51] Wesley J. Wildman, "Robert John Russell's Theology of God's Action," in *God's Action in Nature's World: Essays in Honour of Robert John Russell*, ed. Ted Peters and Nathan Hallanger (Aldershot: Ashgate, 2006), pp. 147-69.

[52] In (*EMB*), p. 196, Russell writes 'Admittedly it is possible, as others argue and although I doubt it, that the effects of God's creative and providential action may occur directly in a non-interventionist manner at many, perhaps even every, level of biological complexity […]. Nevertheless, the current hypothesis is that if divine action within evolution is to be both direct and non-interventionist, the most likely locus of these effects, and perhaps (contrary to the arguments of others noted above) the only such locus, is the level of genetic mutation.' By the time of (*QM*), however, Russell has changed his mind and there writes 'though this essay will focus on bottom-up causality, like most scholars I believe that a combination of all three [bottom-up, top-down and whole-part] will eventually be needed for an adequate account of objective, noninterventionist divine action,' p. 294.

worth repeating here an observation made in chapter 1, that even where critical-realism serves as a common metaphysical stance, science and theology bare the inherent tension in that conjunction differently. Methodological-natural science seeks, so far as possible, to eliminate the 'critical' and establish the 'realism'. This striving for an ever-fuller account of immanent creation reaches its limiting metaphysical case in a putatively physicalist grand unified theory (GUT) or a theory of everything (TOE). Theology, meanwhile, ever mindful of the ontological difference between Creator and creation, always seeks to preserve the *critical,* so to speak; a hermeneutical stance that reaches its limiting metaphysical case in apophatic theology.

In the VO/CTNS dialogue, it is my belief, for all the reasons so far adduced, that the claims of scientist-theologians shaping that dialogue, while acknowledging the need for ontological caution in intellectual principle, implicitly tend towards ontological realism in dialogical practice.[53] This is, I think, the thrust of Haught's critique of Russell. It is certainly my own reflection on Russell's, Polkinghorne's and others' actual arguments.

In his introduction to *QM,* Russell summarises a series of typologies of divine action; interventionist; occasionalist; top-down; whole-part; and bottom-up. 'Finally,' he writes, 'it is possible to hold that there are events that in some objective sense are special acts of God. When we call these events "special" we do so as an acknowledgement of what God is doing in a special way to bring them about.'[54] But who is the independent observer objectively marking this event as "special" and how

[53] Polkinghorne's oft cited claim that "epistemology models ontology" being a conspicuous example.
[54] Robert J. Russell, "Introduction," in *Quantum Mechanics: Scientific Perspectives on Divine Action*, ed. John Russell Robert, et al. (Vatican City State: Vatican Observatory/CTNS, 2001), p. iii.

does she access the neutral epistemic space to assess it objectively? The categories themselves, notwithstanding their challenging juxtaposition, reflect important themes in Taylor's and Harrison's theses. First, a "hived off", free standing, ontology in which God may act, or refrain from acting, "specially". Secondly, a supposedly neutral epistemic space in which to distinguish rationally and independently between subjective and objective.

While consistently championing the quantum realm for a TDA, Russell's views on when and why God acts therein have varied. In *QM,* he argues; 'My central thesis is that God acts in quantum events to bring about, or actualise, one of several potential outcomes; the collapse of the wavefunction occurs because of divine and natural causality.'[55] That is to say, the inherently (ontologically) indeterministic consequence of quantum processes allow God to act without "violating" or intervening. Two questions arise in response. What could "actualise" possibly mean? And, assuming we could know, how often does God so act?

To begin with, could we ever distinguish between non-intervention and actualisation? Imagine two copies (say, *Y* and *Y'*) of a single ontologically *indeterministic* world created at a time *t=x*. These two worlds *cannot* remain identical, even if God were to refrain from actualising any divine choice in both because, for any time after *t=x,* world *Y* and world Y *'* will immediately begin to diverge as different *in*determined events carrying efficient-causal consequences occur in each. But in that case, any hope of distinguishing between intervention and non-intervention (actualisation/non-actualisation) disappears ontologically as well as epistemically. In an ontologically quantum indeterministic creation there simply *cannot* be a hived off,

[55] Russell, "Divine Action and Quantum Mechanics," in (*QM*) p. 314.

free standing, 'objective' baseline against which to determine whether a putative divine act is actualising, let alone interventionist, or not. In which case the difference between divine 'actualisation' and divine 'intervention' becomes suspiciously problematic in the same way the distinction between GDA and SDA proves problematic.[56] This difficulty reappears when Russell insists that 'Essentially what science describes without reference to God is precisely what God, working invisibly in, with, and through the processes of nature, is accomplishing.'[57] "In, with and through" is tellingly ambiguous, and it would be interesting to know how Russell differentiates this phrase from the neo-Thomistic double-agency he rejects; especially since; in answer to the second question posed above, while Russell changes his mind about *when* God acts, ultimately, he declines to follow Nancey Murphy who argues that God acts in all quantum events while still respecting the integrity of creatures at all levels of complexity.[58] Russell also rejects Thomas Tracy's approach in which God, for the sake of *kenosis*, acts in some quantum events only.[59] Russell provides, instead, a summary of his own theory of SDA in *QM*, the series' penultimate volume.

> Instead, our approach is *noninterventionist*: [because] God has created the universe *ex nihilo* such that some natural processes at the quantum level are insufficiently determined by prior natural events. One could say that nature is "naturally" indeterministic. Thus, God does not suspend natural causality but creates and maintains it as ontologically indeterministic. […] In essence, God creates the universe such that quantum events occur without sufficient natural causes and acts within these natural processes and together with natural causes to bring them about.[60]

---

[56] Disparities among contributors to the VO/CTNS series about what 'intervention' constitutes were acknowledged as a problem in the Capstone volume assessing the series as a whole. See *inter alia* the articles by Russell, Stoeger and Wildman in (*TY*).
[57] Russell, "Special Providence," in (*EMB*) p. 193.
[58] Murphy, "Divine Action and the Natural Order," in (*CC*) pp. 325-57.
[59] Thomas F Tracy, "Particular Providence and the God of the Gaps," in *Chaos and Complexity: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, Nancey Murphy, and arthur R. Peacocke (Vatican City: Vatican Observatory/CTNS, 1995), pp. 289-324.
[60] Russell, "Divine Action and Quantum Mechanics," in (*QM*) p. 295.

This is nature with natural holes, so to speak: ontological gaps for God freely to choose whether to act or not, but always without violating any other causal processes. But if God is to act without *intervening* in any way, surely any act of quantum SDA must *add* to, rather than modify, the sum of all quantum events in creation? Surely God's assigning a specific outcome to a quantum potentiality intervenes with *something* (however mysterious) that would, otherwise, have "collapsed" to a (presumably different) specific value. If not, what does the word "act" represent? Either God, on Russell's thesis, causally 'intervenes' to change what would have actualised differently (otherwise he is not really acting, is he), or he acts 'additionally' to actualise what would never have happened otherwise; in which case we have the sum of the anterior creation *plus* an additional divine act of quantum actualisation. Russell might retort that God only actualises to *ensure* a particular outcome, but this would entail that God is ignorant of all but the bulk statistical properties of the quantum realm he has created *ex nihilo*.[61] I concur with Stoeger who judges that Russell's approach to stochastic ontological indeterminism violates the principle of sufficient reason (PSR), foundational to scientific enterprise.[62] To argue, as I understand Russell's view, that constraint operates on outcomes (since, presumably, *some* cause must account for stochasticity) but *not* on any causal process that leads to those constrained outcomes, is incomprehensible to me.

From an (*e-t/o-t*) theological perspective, Russell's approach to divine action is neither attractive or particularly convincing for another reason besides, because

---

[61] These are interesting, if muddy, waters to explore. Russell does not insist God is ignorant of the 'mechanism' underwriting quantum indeterminism, but then why would God act except to change an outcome? Retorting that God acts to ensure outcomes he would not otherwise be certain of, granted *creatio ex nihilo*, devolves to the claim God creates some events in ways even God doesn't fully know.
[62] William R. Stoeger, "Conceiving Divine Action in a Dynamic Universe," in *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress*, ed. Robert J. Russell, Murphy Nancey, and S.J. William R. Stoeger (Vatican City State: Vatican Observatory/CTNS, 2008), pp. 225-48.

although Russell is keen to exclude miracles from his discussion of TDAs, the form of his argument carries epistemic consequences for the miraculous in any case. In an ontologically indeterministic stochastic realm where, as Russell himself insists, God does not intervene to modify the deterministic evolution of the Schrödinger equation *or* the probability distribution of an outcome from the measurement event; SDA, as defined in the VO/CTNS series, becomes *by definition* invisible. All we could say *post facto* would be that an event had a statistical likelihood of '*x*'. Even if '*x*' turns out to be vanishingly miniscule, statistical unlikelihood provides no epistemic warrant for labelling the consequent event SDA. Indeed, on Russell's approach it would seem that any biblical miracle is potentially explicable as a statistically exceptional (1 in, whatever the current age of the universe is believed to be) event occurring only via, in Russell's nomenclature, 'insufficiently determined prior natural events'. But in that case deciding whether any particular event warrants the label SDA becomes unequivocally fideistic. The ontologically indeterministic perspective demolishes the very neutral, objective, epistemic space it desires for parsing between GDA and SDA.

Indeed, all interventionist/non-interventionist and analytical GDA/SDA schemes are, in my view, conceptually flawed, because they inadequately reflect the necessity for divine participation in *every* activity – even free creaturely acts - in a *creatio ex nihilo*. In so arguing, I acknowledge, but grasp, the theological nettle of theodicy that Russell points out attending this view.[63] I do so for two reasons: first, because creation cannot be independently hived off from God. Secondly, because transcendent divine cause is precisely what gives scope for eschatological, hope.

[63] Russell, "Special Providence," in (*EMB*), p. 216.

Russell seeks, understandably enough, an ontology to fit his own incompatibilist libertarian understanding of free will. How is this achieved? He says of *general* providence:

> We could say from a quantum perspective that God indirectly creates order and novelty in the classical realm by directly creating a quantum mechanical universe [*ex nihilo*] with its combination of quantum events and FD/BE statistics and by acting as continuous creator in time within the indeterminism of quantum events. God is thus truly the God of both order and novelty.[64]

In response, I would point out, first, the ambiguity of the conjunction 'and' in Russell's combination of quantum event and statistical consequence. Either the statistics obey quantum events, or quantum events obey statistical laws, but there is a single principle in play – not a conjunction of causal principles. Secondly, "order and novelty" are epistemic: they pertain whatever the underlying ontology. Nonetheless, Russell rejects double-agency and appeals, instead, to ontological indeterminism for agential freedom.[65]

> [w]e may think of God as acting in all quantum events in the course of biological evolution until the appearance of organisms capable of even primitive levels of consciousness. From then on, God may continue to work in the quantum-genetic domain, but God may then abstain from acting in those quantum events underlying bodily dispositions, thereby allowing the developing levels of consciousness to act out their intentions somatically.[66]

---

[64] Russell, "Divine Action and Quantum Mechanics," in (*TY*), p. 309.
[65] In "Divine Action and Quantum Mechanics," his article for (*QM*), Russell footnotes a reference to Murphy's contribution to (*NP*) pointing out that if Murphy adopted a compatibilist position it would be clearer to see why she says she doesn't need ontological indeterminism.
[66] Russell, "Special Providence," in (*EMB*), p. 215.

Ontological indeterminism serves as Russell's source of agential freedom, but I do not see how ontological *in*determinism can offer the kind of existential/moral freedom Russell seeks. To see why, let me offer an illustration. What precisely I will be doing at 11:13am next Tuesday week is presently unknown. Why? Let us consider two options;

In world '*A'* chance is an *epistemic* signifier. In this world, there is a logical and unbroken chain of causes and effects that stretches backwards to explain what I was doing Monday a week ago, and in the same way, there is a logical (PSR) unbroken chain connecting now and next Tuesday. Alas, my knowledge of the universe's initial state and my computing capacity are both insufficient to calculate or usefully predict that future condition. On an incompatibilist view, I have no freedom.

Conversely, in world '*B'* chance is an *ontological* signifier in which PSR is constrained such that some things happen for reasons that are unknowable *even in principle*. In this case, the backward chain to last Monday week is undifferentiable from that in world '*A'* (the past is specified) but there can be *no* future unbroken chain; it simply does not exist. '*B*' deviates from '*A*' at some point before next Tuesday week because of ontologically indetermined future events. But how am I freer in world *B*? Suppose, for example, I make plans to go to the cinema that day with friends, and this remains my intention until that morning when, for as yet ontologically indeterminate reasons, my car breaks down; or some other quantum event in the next few days ramifies preventing me from going. A world that is too ontologically open provides no freedom at all because it renders volition powerless: I may plan all manner of things, but uncaused quantum events will spill over in ways that prevent me from completing my goals.

More problematically still, how in world '*B*' are my *volitions* safe, given that the same quantum *in*determinism also impinges on my underlying physical brain states? If God abstains from acting in quantum events that *in*deterministically underlie bodily dispositions then, it would seem, *nothing* is in charge of at least some of those things that *cause* me to be *me*.[67] In world '*B'*, I might change my mind about wanting to go to the cinema next Sunday for a reason as yet ontologically *in*determined. How can I override the consequences of *in*determined quantum events that God is, on Russell's view, also obliged to refrain from overriding, out of respect for my creaturely freedom? Will *I* change my mind about the cinema or will some indetermined quantum event magnify and ramify, causing that change of mind? How often might such things happen? Always? Almost-always? Sometimes? Seldom? How would I ever know? (If only there was some objective and neutral epistemic space available to decide in…). I fail to see how I am any more "free" in a world where nothing – not even my own wills and volitions – are immune to quantum indeterministic events in the brain, than in a world of closed causal structures.[68]

To pursue this line of argument just a little further; some form of 'top-down' control would preserve or reassert *my* freedom, but the only *in*compatibilist route out of this Kantian antinomy would be to posit some mysterious kind of emergence, or dualism, retaining agential powers but detaching them from *all* material efficient-causal processes. Such a position is metaphysically coherent, albeit deeply

[67] This, at any rate, seems to be the outcome of adopting a quantum-indeterministic physicalist metaphysic. Dualism offers a potential solution to this dilemma, but methodological-naturalism forbids the scientist this option *qua* scientist. Agential freedom, for various reasons discussed previously and below, is unverifiable by appeal to the immanent frame alone.

[68] The same point emerges in Wildman's discussion of Kantian antinomy. See Wildman, "The Divine Action Project," in (*TY*) especially pp. 165-67. See also the exchanges that follow in *Theology and Science* including "Further Reflections on 'the Divine Action Project'."

unfashionable.[69] Yet, again, we find ourselves facing questions and difficulties identified previously in chapter 3: the metaphysical provenance of formal cause; the univocity of methodological-natural cause and the philosophical challenges in distinguishing between emergence and dualism as the source of agential freedom.

Let us return to Russell. in explaining his own position, Russell makes what is, by his own estimation, an important claim; and one that both to understand and evaluate we must hear in the fullness with which it is laid out.

> I think this point is so crucial that I will repeat my previous argument here: Schrodinger's cat makes it clear that God's action at the quantum level results in two quite different kinds of macroscopic effects. It produces the *ordinary* world of the cat and Geiger counter (the ordinary physics of solid matter and Ohm's law, the routine biology of metabolism, etc.), which we describe as general providence. But it also results in *specific differences* in the ordinary world- the cat living instead of dying- when God acts in one way instead of another, in a specific quantum event. For example, God acts with nature so that the particle is emitted now and not later, or it is emitted in the $+x$ direction rather than $-x$, etc. Which way God acts determines (indirectly) a specific result in the ordinary world. Thus we may attribute special providence to the cat being spared from death and granted life in the crucial moment. In fact, it is precisely the nature of the measurement problem, namely the collapse of the wavefunction from a superposition of states to a single state, that might allow us to combine Murphy's pervasiveness of divine causality with Tracy's concern for the event to be objectively special: God acts in this event as in all events (God's action is never "more" or "less" but the same, equally causative). Still in this occasion, with two states superposed before the event, God will choose one state in particular, and not the other, the one destined to promote life, thus conveying God's intentionality in this particular event. We can thus interpret this particular event, in which the cat lives instead of dying, in terms of objective special providence without restricting God's action to that event, and yet still maintain the objectively revelatory character of that particular event.[70]

[69] For a credible and interesting contemporary defense of dualism see, Keith Ward, *More Than Matter?: What Humans Really Are* (Oxford: Lion, 2010).
[70] Russell, "Divine Action and Quantum Mechanics," in (*QM*) p. 316.

I find this a confusing argument to unpick for, surely, if God's action is never "more" or "less" but equally causative, the distinction between GDA and SDA disappears? Where is the "ordinary" world? Surely there is only *this* world with *this* Geiger counter and *this* cat, whether alive or dead, that speaks objectively of special divine providence; since *this* dead cat – we must suppose – conveys God's life promoting intentionality in a way we simply do not comprehend. Yet how, if this is not Russell's meaning, can we tell the difference between divine choices that establish the 'ordinary' background and those that include Tracy's (and Russell's) objectively special foreground? In the light of Taylor's and Harrison's proposals, we can see why "objectively revelatory" is a contemporarily attractive notion; but we can also see more clearly how the term itself signifies an epistemic disjunction. Working with words can be a hazardous business.

The key question from an (*e-t/o-t*) perspective is, then, "What does ontological indeterminism provide that is preferable to primary and secondary cause?" I suggest that the theological locus of primary causation is relationship. Conceived in these terms *in*determinism is theologically wrong-headed precisely because it diminishes or eliminates relationship. In an indeterministic environment some things happen that can *never*, so the argument goes, bear any causal *relationship* with the past. Moreover, causal closure of a sufficient kind is theologically desirable, for without it there can be no teleology. Ironically, then, the quantum indeterministic approach risks eliminating human freedom from the opposite direction to "rigid" causal determinism. To that end, linking agential freedom to ontological indeterminism seems a pyrrhic metaphysical ambition.

Transcendence and Epistemology: Evaluating Clayton's Call for "Traction"

What does all this background mapping produce? I suggest it allows us to come full circle, back to Philip Clayton's contribution to *TY,* the 'Capstone' volume in the first VO/CTNS series. It was, after all, his observation that 'I am not sure that one can find in these volumes any defense of what […earlier in the article] I called evangelical theism or an orthodox-theistic theory of divine action' that motivated this assessment of the VO/CTNS series.[71] We are now better equipped to evaluate, from that (*e-t/o-t*) perspective, his insistence in the same article that (what I call) speaking "well" about divine action entails that a TDA exhibit "traction" with science.

In categorising alternative TDAs, Clayton treats primary cause/secondary cause in the tradition of Aquinas, as an alternative to the (*e-t/o-t*) theological perspective but it was noted in the introduction how compatibilist double-agency is integral to the historical and orthodox theological tradition as it is traced through Thomism. Clayton's description of the (*e-t/o-t*) perspective rests on conceptual language that includes natural laws needing no divine causes, frequent divine "intervention" and the direct agency of God and yet omits the key elements of the Bebbington quadrilateral. In many respects his categorisation is more redolent of contemporary literalistic fundamentalism than historical or evangelical orthodoxy in my view, especially the notion of natural laws divorced from God. It may very well be that his description captures the theological essence of an influential strand in contemporary Western Protestantism, but I would argue that Clayton's division also reflects the degree of theological disconnect between Western therapeutic deism;

[71] Clayton, "Towards a Theory of Divine Action," in (*TY*) p.103.

univocal, literalistic fundamentalism; and historical orthodox/evangelical creedal Christianity with its richer fourfold hermeneutical stance. Nonetheless, there are plenty of reasons for taking his claim that an important theological perspective is, in fact, missing in the series.

Much of Clayton's article is concerned with the relationship between science, theology, and philosophy, and the need for traction. He begins with the premise that 'Theological language has "traction" if and only if it makes claims that can be impacted, either positively or adversely, by the results of philosophical critique, historical-critical research, or scientific knowledge.'[72] Then, appealing to the principle of Popperian falsification, Clayton insists that 'To whatever extent a theology fails to value and pursue traction, to that extent it becomes fideistic.'[73]

To avoid fideism, Clayton considers three alternative types of traction. Traction (1) entails a TDA *derived* from science. Traction (2) is a TDA that can be tested (and falsified) by science. Traction (3) is a TDA that is consistent with science. Clayton rejects traction (1) because natural theology fails for traditional Christianity. What about traction (3)?

> That some TDAs have traction [3] seems obvious. In fact, it is all too easy to come up with examples of traction [3]: all theories of primary and secondary causality; Wilesian theories of history as a single act of God; all theories according to which the acts of God in history are "hidden" from human knowers but revealed only to "the eyes of faith"; all acts of God as understood by Karl Barth; [certain examples following Tom Tracey's typology]; all theories […] that appeal to mystery or the absolute disanalogy between God and humanity; and any of a wide variety of "compatibilist" theories of divine action.[74]

[72] Ibid., p. 92.
[73] Ibid., p. 93.
[74] Ibid., p. 95.

Now, this is a significant body of theological thought, with a rich historical and intellectual pedigree and certainly one that encompasses a substantial proportion of orthodox and evangelical Christian believers; myself included. Moreover, we should note that these TDAs entail certain *ontologies* of transcendence. It is somewhat startling, therefore, when Clayton almost immediately goes on to insist that;

> I thus conclude that traction (3) does not constitute a serious test for a TDA. Traction (3), I fear, amounts to "tennis without a net"; no matter what shot one hits, one can find some way to call it "in." Although not completely without value, traction (3) is not significant enough as a goal to merit the primary attention of theologians.[75]

Oh dear! I would point out, however, that as an advocate of traction (3), not only do I seem to be in good and reputable company, but I have now spent several chapters differentiating shots I regard as "in" and those I regard as "out." The tennis analogy strikes me as sloppy to the point of pejorative.

Clayton accepts that traction (3) may be adequate for personal faith, but insists that in public theology the burden of proof can only be lifted by traction (1) or (2) grounding this claim in several ways: the success of science as an epistemic presumption for naturalism; the disparate variety of religious world views that meet traction (3); cultural bias as a sufficient explanation of personal preference for Christian theism; the superior strength of metaphysical arguments in favour of "God" as ultimate reality or ground of being rather than personal agent; the superiority of other metaphysical systems in relation to quantum physics and possibly neuroscience

[75] Ibid.

and, finally; the superior systematism of process metaphysics.[76] Now, I will readily grant that Clayton *might* be right here, but I don't find his reasons especially persuasive. Moreover, I can see no way to determine which metaphysical system is "superior", or how to establish a neutral, *objective,* weighting process to ground the kind of inductive argument required. Once again, then, the role of *habitus* in our preferring a given theological perspective is, it seems to me, inescapable.

More significantly, though, what epistemic rights may science claim? How legitimate is Clayton's demand that public theology must entail tractions (1) or (2)? How incorrigible is methodological-natural knowledge?

As chapter three observed, scientific realism is epistemically problematic. Sophie Allen, in an article provocatively entitled *What's the point in Scientific Realism if we don't know what's really there?,* argues that 'in the case of a range of robustly realist formulations of scientific realism, the 'scientific' and the 'realism' are in significant philosophical and methodological conflict with each other.'[77] Allen suggests the fallibility of empirical investigation, and the pragmatic inclusion of simplifying theoretical formulations, ensures that 'scientific realists are content to introduce a certain amount of vagueness into their definitions'.[78] This reflects the epistemic nature of "critical-realism" common to the science-theology corpus. That vagueness prompts her, however, to

> suggest that the theoretical flexibility of scientific theorising outruns the metaphysical flexibility of the realist's ontology – his account of which categories of things there are in the world - and thus that scientific theorising

[76] Ibid., pp. 95-96.
[77] Sophie R. Allen, "What's the Point in Scientific Realism If We Don't Know What's Really There?," in *Philosophy of Science: Royal Institute of Philosophy Supplement: 61,* ed. Anthony O'Hear (Cambridge: CUP, 2007), p. 97.
[78] Ibid., p. 100.

> can lead us to be sceptical about the categories of entities which the robust realist takes to exist mind independently.[79]

Against what is often called, following Hillary Putnam, the 'No Miracles Argument' (NMA) that the empirical success of science demands some form of realism, we must also lay Larry Laudan's list of scientific theories that have proven predictively successful and yet radically false.[80] Whether this warrants the "Pessimistic Induction" that current scientific theories are as vulnerable to radical replacement as earlier theories, is a matter for ongoing debate and would take us below the scale of the present mapping exercise. But the implication for Clayton's insistence on TDA (1) or (2) is nicely captured by John Worrall's assessment of what follows from the demise of Augustine Fresnel's predictively successful nineteenth century theory that light consists of periodic disturbances transmitted through an all-pervading elastic medium; 'luminiferous ether'.

> If Fresnel's theory can only count as radically false in the light of current theories of light and there is no sense in which that theory is retained (or 'quasi-retained') within those current theories, then to hold *either* that our current theories are true and will never be replaced in the future *or even* that they are approximately true and will be substantially retained within any successor theories that may come along would be a matter of pure a-rational faith.[81]

---

[79] Ibid., p. 103.

[80] Laudan suggests the crystalline spheres of ancient and medieval astronomy; the humoral theory of medicine; the effluvial theory of static electricity; 'catastrophist' geology, with its commitment to a universal (Noachian) deluge; the phlogiston theory of chemistry; the caloric theory of heat; the vibratory theory of heat; the vital force theories of physiology; the electromagnetic aether; the optical aether; the theory of circular inertia; and theories of spontaneous generation. Larry Laudan, "A Confutation of Convergent Realism," *Philosophy of Science* 48, no. 1 (1981): p. 33.

[81] John Worrall, "Miracles and Models: Why Reports of the Death of Structural Realism May Be Exaggerated," in *Philosophy of Science: Royal Institute of Philosophy Supplement: 61*, ed. Anthony O'Hear (Cambridge: CUP, 2007), p. 130.

Clayton, it would appear, risks substituting fideism for scientism, but faith in *some*thing is unavoidable and the epistemological implications are not limited to the physical sciences alone. Endorsing Thomas Kuhn's thesis of temporarily dominant scientific paradigms that are periodically overturned and replaced,[82] Donald Gillies argues that '[…] Kuhn's model, with some modifications, can be extended to mathematics and medicine.' He draws the inference that current paradigms cannot be immune to radical replacement in the future.[83] Consequently, quite whether TDAs (1) or (2) are really as attractive – let alone essential – as Clayton suggests, is far from certain. There is an important debate to be had about the epistemic rights of *both* the scientist and the theologian, but Clayton's scheme for assessing TDAs skews the available options, limiting transcendence to a methodologically-natural form that must, for example, be rational and empirically verifiable. It is an illusion to argue that science is less dependent upon any specific metaphysic than is theology, or music, or art for that matter. How could it be? Neither science or theology are conducted in a metaphysical vacuum and were "science" more commonly referred to by its older designation of "natural philosophy", Clayton's metaphysical *a priori* privileging of methodological-natural knowledge might become less implicit.[84]

---

[82] Kuhn.

[83] Donald Gillies, "Lessons from the History and Philosophy of Science Regarding the Research Assessment Excercise," in *Philosophy of Science: Royal Institute of Philosophy Supplement: 61*, ed. Anthony O'Hear (Cambridge: CUP, 2007), quote taken from p. 66.

[84] I find myself at odds with Clayton's philosophical approach to the relation of science and metaphysics; the topic he devotes section 4.2 of his paper to. There he urges a closer "partnership" which may render metaphysical theories 'responsive to science' through a process of mutual constraint. I judge this problematic in two ways. First, science (e.g., specific biological or cosmological theories and their data) and metaphysics *per se*, occupy different levels of an epistemic hierarchy in my view. Hence the vast philosophical corpus on structural realism, foundationalism, coherentism, idealism, phenomenalism, verificationism, positivism, etc., upon which specific scientific theories like quantum entanglement or the neo-Darwinian synthesis are deemed to rest. Therefore, while the relation between science and metaphysics is not detached, neither can it be a straightforward "partnership." Secondly, Clayton's invocation of Riffert and Cobb's "scientific metaphysics" as a *tertium quid* simply muddies the water because metaphysics is operative on *both* sides of the compound term; the 'science' side as well as the 'metaphysics' side. Again, neither initial philosophical theory nor judgements about what qualifies as data emerge from a pristine, objective, metaphysic-free, epistemic vacuum.

There is, however, an important tension between the avowed goal of the VO/CTNS series and its place in the wider science-theology dialogue that Clayton rightly identifies, and that demands careful consideration. I believe that Clayton is, in one sense, perfectly correct to assert that

> […] the VO/CTNS volumes mean to engage the natural sciences, not to dictate to them. The only way to be successful at this task is to eschew appeals to authority, whether scriptural or ecclesial, or to what can be known by faith alone. Some theologians may chafe under the restrictions. Still, for the purposes of this series and its goals, I suggest, the theologian should accept the methodological requirements of metaphysics.[85]

Surely that should be "… the theologian should accept the metaphysical requirements of methodological-naturalism"? But, in any case, the critical phrase here is "for the purposes of this series and its goals". The task in hand was to explore "Scientific Perspectives on Divine Action" and science, whether of the historical-critical or the physical variety must be free to pursue its own goals according to its own methods. But in that case what follows, strictly speaking, for theology from the methodological-natural perspective on divine action? Potentially very little.[86]

Here we can develop the observation, first drawn tentatively in chapter one, by evaluating the possible parallel between theology (of divine action) and the VO/CTNS series; and theology (Christology) and the historical-critical quest for Jesus.[87] Thus – and I sketch only the briefest contours to illustrate a broader principle

---

[85] Clayton, "Towards a Theory of Divine Action," in (*TY*) p. 97.
[86] For an outstanding illustration of the philosophical issues surrounding critical-realism and the strict limits on what science may claim ontologically, see William R. Stoeger, "Describing God's Action in the World in Light of Scientific Knowledge of Reality," in *Chaos and Complexity: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, Nancey Murphy, and Arthure R. Peacocke (Vatican City State: Vatican Observatory/CTNS, 1995), pp. 139-61.
[87] See *inter alia*; Raymond Martin, *The Elusive Messiah: A Philosophical Overview of the Quest for the Historical Jesus* (Boulder, Colorado: Westview Press, 1999); Gregory W. Dawes, *The Historical Jesus*

- the first quest, reflecting both Enlightenment and deist views dominating German and British culture respectively, jettisoned the possibility of supernatural redeemer, in search of an otherwise mundane man with an unusual gift for moral pedagogy. The second quest sought to reconnect history and the *kerygma* (proclamation) of the post-resurrection community, while what N.T. Wright has dubbed a 'third quest' is a more diffuse investigation of Jesus's cultural similarities and dissimilarities with his fellow Jews. But James Dunn quotes Leander Keck's observation that "The historical Jesus is the historian's Jesus, not a Kantian *ding an sich* (thing in itself)."[88] Equally then, *mutatis mutandis,* the scientific perspective on divine action is the scientist's and not a Kantian *ding an sich*. So much the contributors to the VO/CTNS series would agree. But there is a world of difference between claiming that the underlying *ding an sich* cannot be less than a methodological-natural "scientific" perspective discloses and insisting that it cannot be *more* than that perspective affords. How is "dialogue", let alone Russell's CMI, to function if, in practice, *every* time disagreement arises the theologian is the only one who must go away and think again?

This is why I keep returning to Saunders's invocation of a "crisis" for theology following his evaluation of the VO/CTNS series. His argument was scrutinised by a number of leading contributors, including Wildman, Polkinghorne and Russell, and his position laid aside on the grounds that Saunders rejected an ontological view of divine action that none of the contributors to the series held in any case. Thus, it might be argued, Saunders is simply a straw man for my own critique.

Quest: Landmarks in the Search for the Jesus of History (Louisville, Kentucky: Westminster John Knox Press, 2000); Gerd Theissen and Dagmar Winter, *The Quest for the Plausible Jesus: The Question of Criteria*, 1st American ed. (Louisville, Kentucky: Westminster John Knox Press, 2002); James D. G. Dunn, *A New Perspective on Jesus: What the Quest for the Historical Jesus Missed* (London: SPCK, 2005); James D. G. Dunn and Scot McKnight, *The Historical Jesus in Recent Research*, Sources for Biblical and Theological Study (Winona Lake, Indiana: Eisenbrauns, 2005).

[88] L. E. Keck, *A Future for the Historical Jesus,* cited in Dunn, p. 29.

But while laying his specific argument aside, the broader inference, that science *could* constrain theology to a point of crisis, remains implicit. Yet Saunders's critique rested wholly upon metaphysical issues (a "strong" ontology of the meaning of "law of nature," incompatibilist freedom, and the demand for traction based on predominantly realist interpretations of QM, chaos theory *et al*) that are philosophical and therefore beyond *scientific* methodological-natural evaluation. And so, again, we must acknowledge the blurred boundary between nature and philosophy, method and metaphysic; implicit in the modern word for natural philosophy: "science".[89]

Let me, however, be as clear as possible about what I am arguing here. It is not that there cannot, or should not, be a scientific perspective on divine action; just as there can, and should, be a historical perspective on Jesus.[90] But neither approach *exhausts* the possibilities for locating or "explaining" those attributes of divine action that are *ad extra* to methodological-naturalism.[91] Transcendence is not so easily constrained.

Summary

This chapter set its task as charting two central and recurring terms in contemporary thought, immanence and transcendence, using the work of Charles Taylor and Peter Harrison to examine their historical provenance and contemporary relevance for

[89] Trigg, pp. 122-25.
[90] This is not an argument to jettison methodological-naturalism but, rather, to point out the potential mislabel (because method and metaphysic cannot be so neatly parsed) and to highlight the role that an implied hermeneutic of transcendence always plays in epistemology. *Cf.*, chapter 3 above.
[91] A nice collection of essays touching on theology while exploring these tensions in the broader context of human experience is; Ronald Hoffmann and Iain Boyd Whyte, *Beyond the Finite: The Sublime in Art and Science* (Oxford: Oxford University Press, 2011).

philosophy, anthropology, and sociology, as well the VO/CTNS series dialogue of divine action. It has plotted onto that broader background, philosophical and theological perspectives embodied in the individual hermeneutical stances of some contributors to the VO/CTNS series, revealing inescapable philosophical and sociological dimensions to individual and communal perspectives that pass largely unacknowledged in the dialogue that comprises the VO/CTNS series.

Yet it does not follow that our goal should be to eliminate *habitus* from future dialogue, for there can be no hived off, epistemically pure, view from nowhere.[92] There are no knock-down arguments to settle questions of ultimacy or to eliminate the cross-pressures that exist between the transcendent demands of Revelation and the immanent demands of methodological-naturalism. In fact, a more widespread reflexive awareness of *habitus* might diffuse epistemic tribalism, helping to forge more respectful links across disciplinary aisles.

My mapping exercise is almost complete. The next chapter will refine the centre of the map, permitting some close-quarter navigation by plotting two dominant theological perspectives in the VO/CTNS series precisely to demonstrate conclusively that Clayton is correct and the (*e-t/o-t*) perspective is indeed absent.

[92] Thomas Nagel, *The View from Nowhere* (Oxford: Oxford University Press, 1986).

Chapter 6

A "*new* neo-Orthodoxy?" Comparing and Contrasting William Stoeger John Polkinghorne and Robert Russell on Natural Theology

If you pull an A-Z of London off the shelves, you'll find the very centre of the city, though only the centre, is mapped at an expanded scale. I propose to do something similar in this chapter. This expansion of, rather than consistency at, scale will prove very helpful but can only be completed because enough surveying has now been done to correctly identify the geographical centre. I now propose, therefore, to re-chart the key tension I take to be at the heart of the VO/CTNS series: the meaning of 'cause'. This expanded scale allows me to plot an overtly Catholic theological perspective, and an Anglican scientist-theologian's approach, the more clearly to differentiate between them, but also – crucially - so that I can evaluate more clearly how that (*e-t/o-t*) perspective might differ from both again.[1]

This chapter will therefore, briefly, outline Stoeger's and Polkinghorne's theological perspectives respectively. As will become clear, the key difference between the two revolves around their differing metaphysic of cause, and, more

[1] Clayton obviously excludes Stoeger and neo-Thomism from whatever cohort he has in mind as "orthodox theists" but 'orthodox', I have argued, must include central tenets of the pre-Reformation faith. To that end, comparing and contrasting Stoeger and Polkinghorne will clarify the differences between their Catholic and Anglican perspectives in the series, and between them and (if the argument of this chapter is granted) Russell's ambitions for the VO/CTNS series.

specifically still, whether God may act only as a transcendent primary cause (Stoeger) or may act, also, as secondary cause (the later) Polkinghorne. In clarifying the scope of methodological-naturalism, Chapter 3 noted the enduring philosophical challenges involved in defining action and how action and cause should be related. A simple definition of cause would be "whatever contributes to bringing about the being of a thing (as in 'be-cause')." This definition has the distinct advantage of being broad enough to include not only *efficient* causes like friction, motion, and heat, but the other Aristotelian categories of cause; *material*, *formal*, and *final*, previously discussed in chapter 3. The present chapter will briefly outline Stoeger's and Polkinghorne's theological perspectives respectively. As will become clear, the key difference between the two revolves around their differing metaphysic of cause, and, more specifically, whether God may act only as a transcendent primary cause (Stoeger) or may act, also, among secondary causes, as Polkinghorne argues.[2] In essence the difference in question is whether SDA can only be mediated *through* some other created means, or it can be attributed directly – without any intermediary means - to God? This comparison will allow me to draw on Philip Jacobs's very helpful analysis of the VO/CTNS series to suggest a difference between Russell and Polkinghorne while demonstrating that Clayton was correct nonetheless to identify the fact that an (*e-t/o-t*) theological perspective is not well represented in the series.

[2] Note that this is not a debate about whether miracles are ontologically possible, or constitute ontological "violations". The issue under investigation is strictly whether God can act immanently *as* a kind of secondary cause or only act transcendently *through* secondary causes.

William Stoeger's Theological Perspective on Divine Action

Owen Thomas summarises a variety of perspectives on transcendence in the VO/CTNS series, noting an 'odd aspect' in which 'metaphysics is often called ontology [but then] ontology is sometimes interpreted to refer to something *within* science.'[3] In (*PPT)* Stoeger strongly advocates a methodologically-naturalist stance, insisting that scientific method is 'complete and self-sufficient at its own level'. Then, contending that theology and philosophy must nonetheless be receptive to the findings of science, he asks

> Is such a disciplinary openness and critical acceptance reciprocal? Should scientists *as scientists* maintain an explicit receptivity to the conclusions and findings of philosophy and theology? Obviously not. The status each discipline employs within the framework of the other is by *no* means reciprocal. One can do impeccable scientific research without adverting to philosophical or theological findings or principles […]. Science (properly conceived) is discrete and self-contained and the only "partial" reciprocity with theology and philosophy lies in science knowing its proper boundaries.[4]

If, however, we replace the term 'science' in Stoeger's rationale with the term 'natural philosophy' it becomes clear that his methodological distinction is easily misapplied; for the "proper boundary" between empirical research, philosophy, and theology is less granular than many scientists endorsing Stoeger's methodological-

[3] Thomas, p. 34.
[4] William R. Stoeger, "Contemporary Cosmology and Its Implications for the Science-Religion Dialogue," in *Physics, Philosophy and Theology: A Common Quest for Understanding*, ed. George V. Coyne, Robert J. Russell, and William R. Stoeger (Vatican City State: Vatican Observatory/CTNS, 1988), p. 242.

naturalism seem to recognise.[5] And yet Stoeger is aware of this potential epistemological misstep, for Russell notes that, as a fellow member of the steering committee for the VO/CTNS series, Stoeger was insistent that only scientists 'open to the wider philosophical and theological agenda, even if they weren't "believers" should be invited to attend.[6] Thus, in contrast to those who wish to subsume metaphysics as a category *within* science, Stoeger argues, fittingly for this map of divine action, that an adequate metaphysic must draw not only upon the insights of the various sciences, but also upon philosophy and theology.[7]

Stoeger's own metaphysic of transcendence came in for reconsideration during the VO/CTNS series, although precise changes are hard to identify.[8] Outlining his position in both *EMB* and *NP,* Stoeger endorses the principle of sufficient reason, but rejects the Aristotelian philosophy of nature. He also rejects a Kantian synthetic *a priori* of knowledge on the pragmatic grounds that reality has a certain 'recalcitrant' quality and 'refuses to be moulded to our imagination and desires'.[9] Furthermore, he rejects Platonism,[10] describing himself, instead, as 'weakly critical-realist' or an 'empirical realist'.[11]

---

[5] In the case of scientists like Victor Stenger, Richard Dawkins and Stephen Hawking, conspicuously so.
[6] Robert J. Russell, "William R. Stoeger, SJ (1943-2014): Physicist, Cosmologist, Friend, and Leader in Theology and Science," *Theology and Science* 12, no. 4 (2014): pp. 293-95.
[7] Stoeger, "Contemporary Cosmology and Its Implications for the Science-Religion Dialogue," pp. 241, 29.
[8] In (*EMB*) Stoeger writes 'With regard to my metaphysical presuppositions, I cannot adequately articulate them all. Furthermore, I am in the process of re-examining them', p. 165. Yet reflecting on his faith some years later, he insists it has remained substantially unchanged. See; "Reflections on the Interaction of My Knowledge of Cosmology and My Christian Belief," p. 12.
[9] "The Mind-Brain Poblem, the Laws of Nature, and Constitutive Relationships," in *Neuroscience and the Person: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, et al. (Vatican City State: Vatican Observatory/CTNS, 1999), p. 131.
[10] Stoeger, "Contemporary Physics," in (*QCLN*), p. 208.
[11] Stoeger, "Describing God's Action," in (*CC*), p. 240.

This ‘partial reciprocity’ or weak critical-realism raises now familiar questions about the powers of language and epistemological limits of ration, and Stoeger is extremely mindful of the challenges and obstacles in describing the divine being and ‘his’ putative action.[12] In a personal reflection published in 2001, he insisted that over the years his faith deepened without substantially changing. In that regard he writes, ‘I began to realise that God could not be adequately conceived or described or objectified, no matter how hard we tried, and that creation involved not just another causal chain.’[13] In a footnote to that quote, the inherent limits of theology and science are briefly discussed before Stoeger concludes

> The symbolic character of much religious expression both hides and reveals transcendent aspects of reality that are inaccessible to science. Thus, although “marginalising traditional notions of God” plays a role in my reconciliation of science and theology, there is much more to it than that.[14]

It is regrettable that Stoeger does not elucidate this evocative phrase, especially because he explicitly defends revelation when, in the same footnote, he insists that ‘From biology alone, our destiny is death. But from our experience of God’s revelation, we know of a life and destiny beyond death’.[15] Whatever “marginalising traditional notions” means, Stoeger retains a place for revelation throughout his writing. Thus, in distinguishing between science, philosophy, and theology in *PPT,* for example, Stoeger emphasises that where the focus of philosophy

---

[12] *Cf*., Stoeger, “The Immanent Directionality,” in (*EMB*) p. 166; “Conceiving Divine Action,” in (*TY*) p. 235.
[13] Stoeger, "Reflections on the Interaction of My Knowledge," p. 12.
[14] Ibid., footnote 5, pp. 12-13.
[15] Ibid.

is on the knower, 'poignant consciousness' of the limits of that knowing can open philosophy to religious experience and revelation.[16]

Stoeger also recognises the role of *habitus* when he observes that '… there is both a definite "givenness" to the divine revelation – we encounter it in our experience – and also some social and cultural conditioning in the articulation of any apprehension of God's revelation.'[17]

For Stoeger a correct appreciation of the limitations of science (and the laws of nature) as disclosing underlying reality is no less crucial.[18] As he points out, physics lacks the tools to bridge the ontological gap between nothing and something, or between God and anything that is not God.[19] Consequently,

> It is an illusion to believe that these incredibly rich representations of the phenomena [i.e., models] are unconstructed isomorphisms we merely *discover* in the real world. Instead they are *constructed* […] One hopes that the best of these models at least mimic the key structures and relationships we are interested in […] but they are the result of imaginative and conceptualised abstraction and idealization guided by continual experiment and careful observation and measurement.[20]

If, however, models are merely imaginative and conceptualised abstractions or idealisations, two now familiar metaphysical questions arise. First, to what extent does a model *explain* rather than merely re-*describe*? Secondly, even *if* models are explanatory, how, or where, does the need for explanatory regress terminate, for as

---

[16] Stoeger, "Contemporary Cosmology and its Implications," in (*PPT*) pp. 237-38; "Describing God's Action," in (*CC)* p. 241, 244-46.
[17] Stoeger, "Reflections on the Interaction of My Knowledge of Cosmology and My Christian Belief," p. 13, footnote 6.
[18] Stoeger, "Contemporary Physics and," in (*QCLN)* p. 207.
[19] Stoeger, "Describing God's Action," in (*CC)* p. 246.
[20] Stoeger, "Contemporary Physics and," in (*QCLN)* p. 214.

Stoeger himself points out in *QCLN*, lawful necessity perches inelegantly atop an infinite regress for which our scientific models cannot themselves account.[21]

Moreover, his "weak" critical-realism suggests that, as previously observed, those miracles Hume and his intellectual descendants would insist comprise ontological contraventions are, in fact, only epistemological: *apparent* violations of what are only imaginative, conceptual, 'law-like' models. Concerning miracles, Stoeger rightly comments, 'such violations are very problematic in view of the infrequency and lack of substantiation of such patterns of intervention'.[22] They are, however, only "very problematic" for scientific methodology and the philosophical perspective of a specific *habitus.*

The challenge is, therefore, to speak of divine action in ways that allow God due sovereignty and freedom of action, without nullifying scientific or philosophical principles. For Stoeger this means a perspective that is 'faithful to Christian sources of revelation and consistent with what we know from the sciences about reality, its structure, evolution and processes.'[23]

What then is the role of causal determinism, which Stoeger sees as a central issue for discussing divine action? He judges it, ultimately, 'a red herring'[24] because determinism is, he insists, 'basically a mathematical concept' that is, in any case, level specific and that 'causal relationships, such as the mental and the personal, […] transcend those described by physics and chemistry'.[25]

---

[21] For Stoeger, laws are thus descriptive not prescriptive, with God the *sui generis* terminus of explanatory regress: Stoeger, "Contemporary Physics," in (*QCLN)* p. 222.
[22] Stoeger, "Conceiving Divine Action," in (*TY*) p. 237.
[23] Stoeger, "Describing God's Action," in (*CC*) p. 241.
[24] William R. Stoeger, "The Divine Action Project: Reflections on the Compatibilism/Incompatibilism Divide," *Theology and Science* 2, no. 2 (2004).
[25] Stoeger, "Conceiving Divine Action," in (*TY)* p. 243.

In Stoeger's view this disallows *necessary* interventions, or even 'gaps' such as quantum indetermination, if they posit God as a co-secondary cause.[26] Stoeger's hermeneutical stance prioritises the philosophical implications of *creatio ex nihilo* but he also accepts that 'the strongly relational and dynamic insights of both process and Trinitarian frameworks are essential.'[27] Thus, describing himself as a compatibilist, Stoeger insists that,

> The really important distinction, it seems to me, is between those who conceive of special divine action as basically similar to acts that a secondary or created cause would effect, and those who conceive of special divine action as a manifestation of a relationship which cannot be conceived as similar to, or in place of, acts or results created agents would produce – that is, radically connected with God's universal creative action. Should we call the former incompatibilists and the latter compatibilists?[28]

In evaluating the VO/CTNS series' main theories of divine action, Stoeger adverts to a historically orthodox Catholic interpretation of God as 'primary' cause, contrasting this with science's capacity to reflect *only* secondary causes.[29]

This equivocal distinction brings language front and centre, and Stoeger is extremely sensitive to the way that language about divine action, whenever shorn of its analogical and mythical character, tends to translate primary cause into some 'absoluteness of being' univocally collapsing the *meaning* of the word transcendence from *analogia* to *eminentiae*.[30] Consequently, Stoeger argues that 'scientifically motivated top-down and whole-part models can only focus on 'important "external"

---

[26] Stoeger, "Describing God's Action," in (*CC*) p. 242.
[27] Stoeger, "Conceiving Divine Action," in (*TY*) p. 236.
[28] Stoeger, "The Divine Action Project: Reflections on the Compatibilism/Incompatibilism Divide," p. 195.
[29] Stoeger, "Conceiving God's Action," in (*TY*) p. 225.
[30] Ibid., pp. 231-33.

or transcendent-immanent relationships in ways that serve simply [as] an alternative model of what is being expressed when we invoke "laws of nature" beyond those which are within the competency of the sciences to describe.'[31] Again, Stoeger identifies the key problem for a *via eminentiae* metaphysic of transcendence when he observes that,

> The most serious issue in all these approaches really is how a completely immaterial "cause" or "entity" can act to influence a material configuration or entity in a way which is not that of a "primary cause." [32]

Murphy observes that Peacocke's TDA via downward causation 'was one of only a few major theories of divine action worked out from within the sphere of science.'[33] Peacocke's approach did not, however, win widespread approval. Russell, for example, rejects it because 'technical problems in scientific cosmology preclude us from viewing the universe as having a boundary' and, to Russell, action at a boundary would in any case count as intervention.[34] The more fundamental problem however, and one that Russell only alludes to in his critique of Peacocke's approach, is the fact that, as Murphy points out, 'downward causation is always mediated by ordinary physical forces.'[35]

Wildman suggests that Stoeger is concerned that quantum level special divine action appears to cast God as a secondary cause alongside other created causes.[36]

---

[31] Stoeger, "Conceiving Divine Action," p. 239.
[32] Ibid., p. 236.
[33] Clayton, "Towards a Theory of Divine Action," in (*TY)* p. 114.
[34] Russell, "Challenge and Progress," in (*TY*) p. 22.
[35] Nancey Murphy, "Emergence, Downward Causation and Divine Action," in *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress*, ed. Robert J. Russell, Murphy Nancey, and S.J. William R. Stoeger (Vatican City State: Vatican Observatory/CTNS, 2007), p. 129.
[36] Wildman, "The Divine Action Project," in (*TY*) p. 145.

Russell, however, locates Stoeger's objection to the quantum approach in the fact that it removes divine action from the level of the personal.[37] Stoeger would, I suspect, endorse both concerns.

Yet we must somehow uphold the theological tension between what Stoeger calls 'our complete inability to conceptualise God or God's activity' and the fact that 'some portrayals of God and God's relationship to the world are much less inadequate and incorrect than others'.[38] We shall return to the role of univocalised language, and the difference between eminence and analogy, when we take up Jacobs' analysis of the VO/CTNS series.

What then of the distinction between GDA and SDA? In Stoeger's view, when primary cause is rightly understood

> [t]he essential truths of Catholic faith are not about the detailed structure and functioning of the physical and biological world, which is the concern of the natural sciences. They concern, instead, the presence and action of God in the world and in our lives, and consequently the ultimate origin, meaning and destiny all things have in God, through Jesus Christ – which are issues outside the competency of the sciences.[39]

Stoeger seems increasingly to allow, therefore, for the possibility that the GDA/SDA distinction adopted by the VO/CTNS series may have been methodologically unhelpful.[40] Thus, as already observed, for Stoeger, 'Wherever they [explanatory gaps] occur within a causal chain in a scientific context they should be

---

[37] Russell, "Challenge and Progress," in (*TY*) p. 49; *Cf.,* Stoeger, "Conceiving Divine Action," in (*TY*) p. 231.
[38] Ibid pp. 234-5.
[39] Stoeger, "Reflections on the Interaction of My Knowledge of Cosmology and My Christian Belief," p. 3 footnote 1.
[40] Stoeger, "Epistemological and Ontological Issues Arising from Quantum Theory," in (*QM*) p.97; "Conceiving Divine Action," in (*TY*) pp. 244-47.

left for the scientific disciplines themselves to fill' because, as he then goes on to insist, '*at its own level*, science is capable of providing adequate and complete explanations.'[41] Yet it still does not follow from this that 'miracles' are impossible, for using the example of "miraculous" healing he then goes on to say

> Furthermore, there is no assurance that the proximate cause of the healing, miraculous as it is, was not effected by God operating through a "regularity or law of nature" which is beyond our present knowledge or understanding, or through an intermediary agent, that is, a prophet or an angel. [42]

As chapter 3 has already shown, this is a critical point. Plagues of frogs or the stilling of a storm – from the point of view of the sciences – occur in a manner indistinguishable from the ever-present interaction of hydrology and amphibian life cycles in the Nile delta, or the seasonal interplay of geostrophic winds and physical geography. Yet whether agential types of cause can be methodologically-naturally modelled will always be moot. There is an important "both/and" element to this theological perspective on divine action. SDA is a *manifestation* of God's grace and purpose, not in contradistinction to, but enfolded within the *general* divine grace that intends that chaotic interplay to produce rain for both the righteous and the unrighteous, frogs to reproduce, and Israel to call upon their God for deliverance. This understands the word 'act' in a manner that does not parse 'general' and 'special' according to some independent, 'objective', epistemological perspective.[43]

---

[41] Stoeger, "Contemporary Cosmology and its Implications for the Science-Religion Dialogue," in (*PPT*) p. 239.
[42] Stoeger, "Describing God's Action," in (*CC*) p. 251.
[43] This non-contrastive approach was adopted by other contributors to the series as well; most notably Willem Drees and Gregersen.

If I have a reservation about Stoeger's approach in view of the (*e-t/o-t*) perspective's theological concerns, it is that there seems to be an imbalance in the outworking of his theological commitment to revelation when set against his scientifically motivated marginalisation of "traditional notions" of God.[44] If, to take up the concerns of chapter 4 once more, contemporary science can rule out the traditional interpretation of a particularised agential 'Fall' then why can it not, on the same grounds, also rule out the traditional, particularised interpretation of Christ's resurrection? To put the question more pointedly: how does the historically particularised death and resurrection of Jesus Christ avoid similarly becoming a "doctrine of the stop-gaps?"[45] Yet, if, as Stoeger would surely agree, the Cross is immune to wholesale demythologisation in the light of divine revelation, why is more caution not also warranted in assessing the role of philosophical – and sociological - assumptions for evaluating *some* philosophical interpretations of the data concerning neo-Darwinian evolutionary theory. The extra-biblical evidence is limited in both cases. In view of the conclusions of the previous two chapters, I shall return to this methodological issue when I take up Jacobs' analysis in due course.

Secondly, my suspicion – though I can put it no more strongly than that – in evaluating Stoeger's broad corpus of writing is that there has been a degree of ebb and flow in his interpretation of divine transcendence over the course of time, and that the influence of temporal and relational prioritisation in late twentieth century theology impacted his metaphysic to some degree; although without substantially threatening his orthodox Catholic perspective. His depiction of God's temporal relations, for

---

[44] This is most evident in Stoeger's seeming embrace of an 'Irenaean' theodicy. See William R. Stoeger, "Entropy, Emergence, and the Physical Roots of Natural Evil," in *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, ed. Nancey Murphy, Robert J Russell, and S.J. William R. Stoeger (Vatican Observatory: Vatican Observatory/CTNS, 2007), pp. 93-108.

[45] Granted, for the believer the Cross is integral to the Nicene Creed in a way that the Fall is not, but the atheist may well wonder whether the differences are more than merely fideistic.

example, seems to shift initially towards a more open interpretation, before tracking back somewhat and mounting a stronger defence of God's atemporal qualities.[46]

John Polkinghorne's Theological Perspective on Divine Action

Polkinghorne differentiates systematic theology, which deals with 'those aspects of our encounter with reality that serve as specific vehicles of religious experience' from philosophical theology, which is 'the great integrating discipline' assimilating 'knowledge of the one world of our experience'.[47] I wonder, however, whether such distinctions underestimate the sociological dimension of faith and the complex nexus of ingredients contributing to individual *habitus*? In any case, insisting that the possibility of philosophical integration needs itself explaining, Polkinghorne observes that 'because I regard the existence of God as the ground for the possibility of this latter integrating discipline, I prefer to call it philosophical theology rather than metaphysics.'[48]

Polkinghorne shares several elements of Stoeger's critical-realist philosophical perspective. Thus, he insists,

> There is no logically inevitable way to proceed from epistemology to ontology, from what we know about entities to what they are actually like. However, unless we believe ourselves to be lost in a Kantian fog – that is, unless we are condemned to groping encounter with phenomena (appearance)

[46] *Cf.*, Stoeger, "The Immanent Directionality of the Evolutionary Process and its Relation to Teleology," in (*EMB*) pp. 163-90, and "Ernan McMullin on Contingency, Cosmic Purpose, and the Atemporality of the Creator," Zygon 48, no. 2 (2013): 329-37.
[47] Polkinghorne, *Scientists as Theologians,* p. 12.
[48] Polkinghorne *Science and Christian Belief,* pp. 46-47.

> and we totally lack any grasp of noumena (reality) – we must suppose there to be some connection between the two. […] It can be resolved only by an act of metaphysical decision. Such an act cannot be logically determined a priori, but it can be rationally defended a posteriori, by an appeal to the fruitful success of the strategy adopted.[49]

In lieu of this Kantian *a priori*, Polkinghorne labels his own metaphysical approach 'bottom-up' thinking, using 'truth through motivated belief' as a hermeneutical stance.[50] Drawing heavily upon the philosopher Michael Polanyi for principles such as significance tests, and inference to best explanation, Polkinghorne appeals to verisimilitude as a rational defense.[51] Consequently, while noting Bartholomew's criticism in *God of Chance* that significance tests lack objectivity, Polkinghorne replies that 'contextualism' provides a rich enough framework to permit justified belief.[52] Consequently, Polkinghorne also says that,

> I have added to my critical-realism the suggestion that it is intelligibility that is the key to reality. […] Entities with explanatory power are candidates for acceptance as components of reality. What makes sense of extensive experience is to be treated with ontological seriousness. Here is a particular way of expressing the realist conviction so natural to a scientist and so necessary for a theologian.[53]

But if intelligibility is being *added* to critical-realism, then human rationality begins to play a more decisive part in epistemology. Here, therefore, we may glimpse

---

[49] Polkinghorne, *Belief in God in an Age of Science*, p. 52.
[50] Polkinghorne, *Theology in the Context of Science*, p. xii.
[51] Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (London: Routledge & Kegan Paul, 1958).
[52] J. C. Polkinghorne, *Science and Creation: The Search for Understanding* (London: SPCK, 1988), p. 39; *Cf.* Bartholomew, *God of Chance*, chapter 3, especially p. 37.
[53] Polkinghorne, *Scientists as Theologians*, p. 15.

evidence of Polkinghorne's movement towards a more overtly *realist* epistemology, at least performatively.

Polkinghorne resists the 'two languages' interpretation of science and theology that underpins Stoeger's orthodox Catholicism and Protestant Neo-Orthodoxy.[54] Consequently, Polkinghorne emphasises the explanatory function that models play.[55]

> I want to make a clear distinction between model and metaphor. Models are used in science as explanatory devices, useful in the attempt to gain some understanding of a limited aspect of physical phenomena. (See Reason and Reality, pp. 20-23) […] There is no reason to treat models with ontological seriousness, as if they were approximate maps of reality. They are simply crude pictures of a particular process […] Models are prosaic devices aiding investigation, useful in the attempt to get some purchase on particular processes. Metaphors are allusive literary devices that illuminate a situation, not by a kind of painstaking partial correspondence with aspects of another situation, but by a disclosure rooted in the unexpected juxtaposition of what is fundamentally dissimilar. Metaphors are poetic revelatory devices, useful in the attempt to probe beneath the surface of appearance.[56]

Indeed, Polkinghorne sees model and metaphor as distinct categories in which only the former is intrinsically scientific. Thus,

> When scientists use apparently metaphorical language - as in talk of 'black holes' or the 'genetic code' – they are using these terms as picturesque shorthand […] not using them for the generation of ideas in a truly metaphorical way […] Metaphor, in my view, is not intrinsic to scientific discourse, but it certainly is to theological discourse. The latter's need to use finite language about the uncapturable infinity of the divine nature requires the indefinite open-endedness that metaphor affords, its poetic power to grant

[54] This explanatory interpretation contrasts with both Peacocke's and Soskice's emphasis on models' exploratory role. *Cf.,* Barbour, *Myths, Models and Paradigms,* p. 78.
[55] Soskice, chapter 6.
[56] Polkinghorne, *Scientists as Theologians,* p. 20.

> intuitive illumination. In fact, theology must go beyond the literary device of metaphor and make use of the broader concept of symbol.[57]

I warmly endorse Polkinghorne's appeal to symbol, but, as chapter 1 has emphasised, his distinction between model and metaphor deeply underestimates, it seems to me, the semiotic complexities surrounding the symbolic role of *all* language.[58] Moreover, if we grant Polkinghorne's argument that science is epistemically oriented away from metaphor, but theology epistemically oriented towards it, the 'two-languages' scheme Polkinghorne has rejected promptly becomes more compelling than he seems to recognise.

But, I think a deeper problem attends Polkinghorne's metaphysical approach here. For, if models serve primarily in an explanatory, rather than investigatory, role, Polkinghorne's insistence that "epistemology *models* ontology" becomes a metaphysically realist claim, shifting the epistemological centre of gravity despite his previous insistence to the contrary; viz that "There is no reason to treat models with ontological seriousness, as if they were approximate maps of reality."[59]

Polkinghorne's interpretation of 'model' reinforces my own argument that there is a performative tension in the role model plays for each discipline; for I have suggested that scientific TDAs explored in the VO/CTNS series performatively *tend* towards a '-realist' interpretation in *communal* practice, whereas their theological cognates tend towards an anti-realist (*critical*-) interpretation.

---

[57] Ibid.
[58] George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 1980).
[59] Similarly, Stoeger, as far back as (*PPT*) rejects this approach saying 'So, as Ernan McMullin has argued, metaphysics is not – and cannot be – an Aristotelian philosophy of nature, where ordinary experience of the middle range is sufficient for philosophical generalisation', "Contemporary Cosmology," p. 228.

Polkinghorne rejects materialism, dualism, or idealism, as inadequate explanations for the relationship between mind and matter. Instead, he adopts dual-aspect monism: 'a metaphysic in which mind and matter are complementary aspects of one 'world-stuff' perceived (as a physicist would say) in the different phases of the material and the mental.'[60] He accepts, together with Thomas Nagel, however, that dual-aspect descriptions are 'nothing more than pre-Socratic flailing about.' Nonetheless, Polkinghorne points to quantum complementarity (wave/particle duality) as a fruitful example of relating otherwise incommensurable qualities.

What then is God's role as creator, and His relation to creation? Polkinghorne rejects both process and whole-part panentheism.[61] Yet Polkinghorne also consistently rejects the compatibilism of Aquinas (defended by Stoeger), albeit, as already observed, only insofar as Farrer has expounded the concept via double agency.[62] There seem to be two main motivations for this metaphysical choice. First, Polkinghorne goes further than Stoeger in constraining God's (a)temporality. Thus, Polkinghorne adopts an Open theist Trinitarianism, rejecting the 'B' theory of time because, in his view, it entails an insufficiently 'personal' depiction of God and an inadequate account of history, and because it pays insufficient attention to 'becoming' as an important ontological category.[63]

Polkinghorne has changed his mind about how God acts. 1979's *Science and Providence* illustrates his initial position well,

---

[60] This and following quote from Polkinghorne, *Scientists as Theologians,* p. 29.
[61] Polkinghorne writes, 'One might define [Panentheism] as stating that the world in some sense exists in God, but that he in his divine nature exceeds the world.' *Science and Providence,* pp. 15-16, 32; *Cf,. Science and Christian Belief,* pp. 64-67; *Scientists as Theologians,* p. 32.
[62] Silva, "Thomas Aquinas Holds Fast," pp. 658-67.
[63] Polkinghorne, *Scientists as Theologians,* pp. 31-33.

> If God is the origin of all that is, he is consistent with all that is, and this means that a great deal of his purposive activity will be hidden in the structure of scientific law. […] The God who is the ground of physical process is inescapably a *deus absconditus*, a hidden God. This is the area where Christian theism is "necessarily tinged with deism.[64]

Yet this '*deus absconditus'* is not to be explained in the Thomist categories of primary and secondary cause as Stoeger does because compatibilism, for Polkinghorne, is a form of fideism that involves 'no more than the imposition of a mysterious theological gloss on natural process.'[65] Moreover, as already observed, Polkinghorne insists that 'the ascription of all that happens to God's primary causality faces [the problem of theodicy] in a peculiarly acute form.[66] Consequently, in his contribution to 2000's *The Work of Love,* Polkinghorne writes 'I have come to believe that the Creator's kenotic love includes allowing divine special providence to act as a cause among causes.'[67]

This latter approach strikes me as potentially problematic. For one thing, as Ignacio Silva quite correctly points out, SDA *among* (i.e., equal and alongside, rather than transcendently through or *ad extra* to) secondary causes would make SDA accessible to scientific enquiry, thereby reintroducing the problematic "God of the gaps" with a vengeance.[68] Moreover, all this notion really does is to shift the "causal joint" back one metaphysical step in any case; because transcendence re-presents, as Stoeger has adroitly observed, as soon as we ask how an immaterial God can directly act as a co-secondary cause?

---

[64] Polkinghorne, *Science and Providence,* p. 45.
[65] Polkinghorne, *Scientists as Theologians,* p. 31; *Science and Christian Belief,* pp. 81-82.
[66] Polkinghorne, *Scientists as Theologians,* p. 32.
[67] Polkinghorne, "Kenotic Creation and Divine Action," p.104.
[68] Silva, "Great Minds Think (Almost) Alike," p. 16.

For Polkinghorne, however, 'causality is surely a zero-sum game.'[69] He therefore embraces an incompatibilist metaphysic whereby free acts require intrinsically 'open' mechanisms in the created order.[70] How is such freedom to be identified?

Polkinghorne does not find Peacocke's approach to top-down divine action, particularly convincing.[71] He concludes that proffered examples of dissipative systems like Bénard cells and chemical clocks generate order in sideways rather than top-down fashion and thinks, like Russell does, that 'it is highly problematic how anyone could consider God as the boundary condition of the universe.'[72]

Polkinghorne also rejects quantum TDAs, perceiving several practical and conceptual difficulties, including deciding what the term 'measurement' refers to, the lack of any clear mechanism for magnifying quantum scale events to affect classical macroscopic events, and because quantum effects are fundamentally episodic in Polkinghorne's view, inadequately reflecting reality as we experience it.[73] Consequently, he locates the indeterministic freedom he desires in chaotic behaviour at the macro level, saying

> To address the issue bluntly: if apparently open behaviour is associated with underlying apparently deterministic equations, which is to be taken to have the greater ontological seriousness – the behaviour or the equations? Which is the approximation and which is the reality? It is conceivable that apparent

[69] Polkinghorne, *Theology in the Context of Science*, p. 57.
[70] Polkinghorne, *Science and Providence*, p. 13.
[71] Peacocke, "God's Interaction with the World: The Implications of Deterministic 'Chaos' and of Interconnectedness and Interdependent Complexity," *Chaos and Complexity: Scientific Perspectives on Divine Action*, eds. Robert J. Russell, Nancey Murphy and Arthure R. Peacocke (Vatican City: Vatican Observatory/CTNS, 1997), pp. 263-87.
[72] Polkinghorne, *Scientists as Theologians,* p. 39.
[73] Polkinghorne, *Science and Theology: An Introduction* (London: SPCK, 1998), p. 89.

> determinism […] might arise from the approximation of treating subsystems as if they were isolatable from the whole, which in fact they are not.[74]

Thus, whereas Stoeger uses 'weak' critical-realism to provide the metaphysical space for transcendent compatibilist primary cause, Polkinghorne uses critical-realism to free transcendence from the mere "approximation" of mathematically deterministic chaos theory in view of actual experience: viz. the apparently open behaviour by *in*compatibly free creatures.

> Thus, a realist reinterpretation of the epistemological unpredictabilities of chaotic systems leads to the hypothesis of an ontological openness within which new causal principles may be held to be operating which determine the pattern of future behaviour and which are of an holistic character. […] As pure spirit, God might be expected to act solely through information input. One could summarise the novel aspect of this proposal by saying that it advocates the idea of top-down causality at work through 'active information.' This is a phrase that Peacocke uses also. I locate the relevant causal joint in chaotic dynamics; he appears to regard God as constituting the 'boundary condition' of the universe.[75]

Peacocke bridges the causal joint analogically, by appeal to mental/physical interaction.[76] Polkinghorne, as already observed, sees problems with Peacocke's analogy,[77] and so his own approach resolves the metaphysical ambiguity in a different direction. Like Wildman,[78] I confess that I do not find Saunders's claim that Polkinghorne's metaphysical gambit has been misunderstood, persuasive.[79] While it is

---

[74] Polkinghorne, *Reason and Reality: The Relationship between Science and Theology*, (London: SPCK, 1991), p. 42.
[75] Polkinghorne, *Belief in God in an Age of Science*, pp. 62-63; *Cf.,* Peacocke, *Theology for a Scientific Age: Being Human and Becoming – Natural, Divine and Human*, (Minneapolis: Fortress Press, 1993).
[76] For a summary and further references see, Peacocke, "God's Interaction with the World," pp. 263-87.
[77] E.g., Polkinghorne, *Science and Providence: God's Interaction with the World*, pp. 15-16 and p. 32, and Polkinghorne, *Science and Christian Belief*, pp. 64-67.
[78] Wildman, "The Divine Action Project," in (*TY*) see especially p. 151 footnote 24.
[79] Saunders, pp. 190-96.

certainly true that Polkinghorne corrects Peacocke's misunderstanding of the *application* of that argument,[80] those like Murphy[81] and Tracy[82] who reject Polkinghorne's approach do so because they regard it as an illicit *metaphysic*, not because they see, as Saunders charges them with, a category error in Polkinghorne's argument. The critical issue is not, therefore, the logical structure of Polkinghorne's inference from epistemology to ontology, but rather whether it mirrors the actual ontology of the world.[83] Do humans, or indeed God, need such 'gaps' to be authentically free?

This question was first considered in chapter 3, and then again in chapter 5. But in deciding which position to adopt on this crucial question, there is another interesting aspect of *habitus* at play; for as Polkinghorne points out

> The extreme popularity of the indeterminacy interpretation [in QM] has been due, I believe, not just to its chronological priority but also to a certain naturalness about an approach that allows overt epistemology to be the guide to ontological conjecture. In the case of chaotic systems the same tendency is not apparent. No doubt a historical effect is at work here – after all the subject derived from the study of Newtonian equations, so that a ready-made interpretation was immediately to hand, indeed it is often called 'deterministic chaos.'[84]

---

[80] Polkinghorne writes; '[Peacocke] believes that I suggested 'God could be conceived of as actually manipulating micro-events within these initiating fluctuations in the natural world in order to produce the results he will.' […] this is a most unfortunate misunderstanding of my position. Vulnerability to small disturbances is simply diagnostic of that sensitivity to circumstance that means that the system must, in fact, be treated holistically.' Polkinghorne, *Scientists as Theologian*, p. 39.
[81] Murphy writes 'Is this move in Polkinghorne's thought simply an instance of using a bad argument for a position that may well be defensible on other grounds? I think not.' Murphy, "Divine Action and the Natural Order," in (*CC*) p. 327.
[82] Tracy, "Particular Providence and the God of the Gaps," in (*CC*) p. 314.
[83] Wildman, "Chaos a Mathematical Introduction," in (*CC*) especially p. 77.
[84] Polkinghorne, *Belief in God in an Age of Science*, pp. 53-54.

Two implications of Polkinghorne's observation are worth comment, one metaphysical and the other sociological. First, the metaphysical fact of the matter is that we are no closer to specifying the ontological relationship between chaotic and quantum domains even now, long after (*CC*) was written. If ontological indeterminism *could* operate beyond the epistemic horizon of quantum events - explained equally successfully by both deterministic and indeterministic interpretations, then I see no compulsion, on pain of consistency, to reject Polkinghorne's argument that ontological indeterminism *could* operate beyond the epistemic horizon of chaotic models, even if they appear to progress deterministically all the way to that horizon.

Secondly, then, it must be remembered there is, as yet, no metaphysical obligation to accept the Copenhagen interpretation of ontological indeterminism. Fully deterministic alternatives such as Bohm's 'pilot wave' theory produce *identical* experimental results. A sociological element affecting the dominant interpretation cannot therefore be ruled out. Thus, it seems to me Polkinghorne's move is more *consistent* philosophically speaking than some of its detractors may have allowed. As Polkinghorne himself argues,

> Unpredictability is an epistemological property. […] In consequence, there is no logically necessary way of moving from unpredictability to an ontological statement about how things actually are, such as the assertion of a kind of 'openness' to the future for such systems. Equally, though, there is no logical bar to making such a move as an act of metaphysical conjecture. Epistemology and ontology are distinct from each other, but the strategy of realism is to use the former as the source of reasonable motivation for ideas concerning the latter.[85]

[85] Polkinghorne, *Science and Theology: An Introduction*, p. 34.

We are back, however, to the central philosophical challenge critical-realism must face; what is the 'real' to which the data 'critically' alludes? Others may reject Polkinghorne's tactic, but they do so on equally transcendent (metaphysical) grounds and, for this reason, dismissing his approach as excessively realist amounts to no more than philosophical name-calling.[86]

From a *theological* point of view, however, this debate concerns the fundamental metaphysical implications of *creatio ex nihilo*. Even if we could formulate a coherent theory of ontological indeterminism we still fail to attain 'freedom' for all the reasons adduced in the previous chapter. Of course, Polkinghorne is not appealing to indeterminism as the *absence* of causal relations, for in applying his analysis to chaotic systems Polkinghorne writes,

> To treat epistemological unpredictability as the signal of ontological openness is not to deny that causal principles bring about the future, but to enlarge the scope and character of what those principles might be.[87]

Interestingly, I wonder whether Polkinghorne's own scheme for divine action isn't much like the primary cause of Stoeger's historically orthodox Catholicism. That is because in either approach it is, ultimately, God's ability to change creation by transforming the ways in which it is organised that (uniquely) differentiates God from the creation. Polkinghorne adopts the term 'active information' for this divine ontological ability.

---

[86] It seems difficult to reject Polkinghorne's metaphysical proffer simply because determinism operates in *models* of chaotic systems, without thereby incurring a counter charge of unwarranted *realism* on the objector's part from Polkinghorne in reply. But we can also recall Sophie Allen's observation about the methodological and philosophical conflicts inherent in the metaphysical fluidity of the compound term "critical-realism." *Cf*., Allen "What's the Point in Scientific Realism," pp. 97-123.
[87] Polkinghorne, *Scientists as Theologians,* p. 35.

> For a chaotic system, its strange attractor represents the envelope of possibility within which its future motion will be contained. The infinitely variable paths of exploration of this strange attractor are not discriminated from each other by differences of energy. They represent different patterns of behaviour, different unfoldings of temporal development […]. Our metaphysical proposal replaces these physical nudges by a causal agency […] expressed in terms of the complete holistic situation, not in terms of clever manipulation of bits and pieces.[88]

Polkinghorne argues two properties of chaotic systems offer possibilities for that openness. First, all paths traversing the strange attractor entail the same amount of energy, though actual paths admit of wide divergence. Secondly, chaotic systems cannot be isolated from their surroundings. The attractor, too, is therefore subject to a more holistic cause of itself: in the form of active information.

> 'Active' because the holistic principle brings about actual future behaviour; 'information,' because its action relates to structure rather than energetic properties. The deterministic equations from which classical chaos theory first developed are then to be understood as 'downward emergent' approximations to the true physical reality. […] In this concept of top-down causality by active-information, supplementing the bottom-up causality of energetic interchange between constituent parts, we can see a pre-Socratic glimmer of how mind and matter might interact in a complementary dual-aspect monism.[89]

Polkinghorne seems to suggest that active information is the mechanism by which contextualism provides a doctrine of real relations. Said otherwise, active information offers a form of top-down causality that might be seen as mirroring primary cause, since it would forever be beyond the epistemic veil of the natural

---

[88] John Polkinghorne, "The Metaphysics of Divine Action," in *Chaos and Complexity: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, Nancey Murphy, and Arthur R. Peacocke (Vatican City Sate: Vatican Observatory/CTNS, 1995), pp. 153-54.
[89] Polkinghorne, *Scientists as Theologians,* p. 36.

sciences. Moreover, in his earlier works at least, Polkinghorne argues that in the divine context, energetic interchange may not be necessary.

> It is not clear that active information is subject to exactly the same constraints as communications theory imposes on the storage of elements of passive information […] God, in any case, is not embodied in the universe and there does not seem to be any reason why God's interaction with creation should not be purely in the form of active information.[90]

In recent years, however, as previously observed, Polkinghorne has been far more willing to entertain the possibility that God also acts energetically, as a co-secondary 'cause among causes.'[91] This metaphysic necessarily follows Polkinghorne's twin beliefs that God acts, but also that cause is a zero-sum game. It is tempting to suggest, however, that herein lies the risk of "bottom-up" thinking that emphasises causal power in empirical (embodied) 'realist' categories "so natural to the scientist" and how this might clash with preserving metaphor and recognising the limits of analogy demanded by theology.[92]

A "*new* neo-Orthodoxy?" Philip Jacobs's Analysis of the VO/CTNS Series

Having juxtaposed Stoeger's transcendent and partially apophatic 'primary cause' perspective with Polkinghorne's Kenotic perspective of God acting as immanent co-

[90] Polkinghorne, "The Metaphysics of Divine Action," in (*CC*) p. 155. This approach marries nicely with speech-act theory and the "let there be…" of Genesis 1.
[91] Polkinghorne, "Kenotic Creation and Divine Action," pp. 104-06.
[92] Christopher C. Knight, "John Polkinghorne," in *The Blackwell Companion to Science and Christianity*, ed. J. B Stump and Alan G. Padget (Oxford: UK: Wiley-Blackwell, 2012), pp. 622-31.

secondary cause in the ontological 'openness' of (only apparently) deterministic chaotic regimes and possibly also, though with reservations, the presumably ontological 'gaps' of quantum indeterminism, I want now to turn to Philip Jacobs's helpful and illuminating analysis of the metaphysical disparity over "cause" evident in the VO/CTNS series. This analysis will, I believe, strengthen my own claim that an *ipso facto* change of tradition, amounting to a revised natural theology, and differing in important respects from the (*e-t/o-t*) perspective, has influenced the central approach to divine action in the VO/CTNS series.

Jacobs frames his analysis in relation to a 12th century debate whether a standalone 'profane' account of nature, of the kind entailed in contemporary methodological-naturalism, threatens the unity of nature and Scripture. Jacobs identifies contemporary representatives of that original debate in the VO/CTNS steering committee, positing Stoeger as influential in the group strongly advocating methodological-naturalism and favouring a 'two languages' relation between science and theology. Russell, on the other hand, influenced the group that favoured a single language approach that, in Jacobs's view, strongly blurs the boundaries between science and theology.[93]

Jacobs argues that, while initially acceding the principle of methodological-naturalism defended by Stoeger *et al* (*Scm*), as the series progressed Russell *et al* (*Rmt*) adopt the view that since there is, in principle, a single unified epistemology, there must also be a meta-science of some kind to which theology can offer "objective" claims; including claims relating to the course of natural history.[94] Jacobs

[93] Philip J. Jacobs, "An Argument over 'Methodological Naturalism' at the Vatican Observatory," *The Heythrop Journal* 49, no. 4 (2008): pp. 542-81. In the first group, Jacobs nominates Stoeger, George Coyne S.J., and Ernan McMullin, (Scm) aligning their views with William of Conches. The second group comprised Russell, Murphy and Tracy, (Rmt) whom Jacobs aligns with Richard of St. Victor.
[94] Ibid., p. 544.

argues that (*Rmt*)'s relaxation of strict methodological-naturalism was not intended to rebut (*Scm*)'s views, but was, instead,

> … a proffer in an intramural debate within Reform theology. Indeed, (*Rmt)* uses the conferences to pursue what might be called a confessional sub-agenda arising in the 'wake' of this debate.[95]

That sub-agenda is, Jacobs argues, to rebut the 'two languages' approach adopted in neo-Orthodoxy, by insisting that neo-Orthodoxy's analogical language can be replaced with univocal terms. As Jacobs nicely summarises things, '… the implied claim of this "biblical view" is that to avoid the slide into "analogy and equivocation" it must be possible to return in some fashion to a univocity between religious and secular language, yet not be "anti-scientific."'[96]

This "return" to univocity is achieved by linking divine action to epistemically 'objective' criteria and the route Jacobs identifies to *that*, is first proposed by Peacocke but subsequently endorsed by both Russell and Polkinghorne. It posits a hierarchical epistemology where sciences occupy variously lower levels and theology sits atop: hence "bottom up" approaches are constraining. If this gambit, as Jacobs labels it, is successful, then the languages of science and theology are neither simply analogical, nor entirely separate, and a door is opened for the 'constructive theology' of Russell's "what if's?" and Polkinghorne's "thought experiments." Furthermore, CMI becomes conceivable.[97] This strategy is, however, unacceptable in (*Scm*)'s view,

---

[95] In both "Divine Action and Quantum Mechanics," in (*QCLN*) pp. 6-7; and the introduction to (*CC),* pp. 5-6, Russell frames this as the debate between historical orthodoxy and neo-Orthodoxy concerning the nature and scope of biblical language. *Cf.*, Jacobs, p. 555, and footnotes 15, 16, 17 therein.
[96] Jacobs, p. 546.
[97] Jacobs is right, also, to note that this hierarchical claim is asserted rather than argued by (*Rmt*). He does not, however, reflect the fact that Stoeger, in (*PPT*), seemingly endorses the hierarchical

because it univocalises cause, philosophically misunderstanding the need always to mediate divine action at the level of secondary causes; which are always complete *in se*.[98]

As Jacobs' correctly insists, this tension is most acute in the context of evolutionary theory where (*Scm*) insists that primary cause 'guides' the whole, but that at the level of secondary causes there are no gaps or holes needing God to fill.[99] Conversely, (*Rmt*) consistently posits God as a *necessary* condition, superintending secondary-causal conditions, thereby guiding the process. Polkinghorne, it should be noted, adopts the same metaphysic as (*Rmt*) by insisting that God acts as a kenotically *necessary secondary*-causal condition of creation's actual history.

But this move to place God univocally *among* creation, as observed earlier, has important repercussions. What is cast as a constructive 'theology of nature' metamorphises into a form of natural theology. The suspicion, voiced in the previous chapter: that theology of nature has transformed into natural theology, is supported by Jacobs' analysis. He compares Russell to the natural philosopher Henry More and the Cambridge Platonists of the 17th century,[100] noting how (*Rmt*)'s,

---

approach, at least by implication, when insisting that 'science is complete and self-sufficient at its own level' (p. 239), while simultaneously insisting that theology and philosophy be receptive to its findings. Similarly, in his 'personal reflection' in 2001, Stoeger, writes 'As a cosmologist I deeply appreciate the hierarchically nested, evolving contexts in which we are situated, and upon which we are utterly dependent' (p. 12). The challenge is agreeing metaphysically how to arrange and relate members of the hierarchy.

[98] Stoeger, "Describing God's Action in the World in Light of Scientific Knowledge of Reality," p. 257. Jacobs points out that Pope Pius XII had to be dissuaded from using the Big Bang theory as corroboration for creatio ex nihilo; Jacobs, p. 551.

[99] Ibid., pp. 552-55.

[100] Jacobs writes; 'Since More was himself a member of the Royal Society, this was not simply a dismissal of science, but rather the proposing of a competitor to the emerging mechanistic natural philosophy. The concept of the World Soul allowed More to revise the definition of *res extensa* […] and offer a redefinition of 'space' as the organ of the divine presence, a bridge between the being of matter and the being of God. He would thereby lead God back into the account of material reality through the same doorway through which Descartes had dismissed him.' Ibid., p. 558.

> shared interests with More seem clear: a concern over an apologetic response to the consequences of the (Cartesian) incompatibilism[101] and a willingness to develop a counter-proposal within that framework. More overcame the incompatibilism by redefining 'space'; (*Rmt*) does it by redefining 'quantum indeterminacy' (as including a sacral element).[102] […] (*Rmt*) mentions that Newton was following 'what might be called Calvinist theological maximalism – to give as much credit to God as possible for whatever happens' and (*Rmt*) would seem to be in this tradition as well: a natural philosophy that follows the *Timaios* in integrating its explanations of natural causation, which then serve an apologetic interest in clarifying how God's dominion and superintendence over creation is effected.[103]

Thus, what Russell labels a 'theology of nature' is, in fact, *ipso facto* a change of tradition: the unavoidable consequence of a methodological-natural, univocalised, interpretation of 'cause'. This univocity constrains transcendence so much that it inexorably re-frames its subject as a form of 'natural theology'. But this approach differs from the two languages epistemology of neo-Orthodoxy: resulting in what Jacobs dubs as '*new* neo-Orthodoxy.'[104]

Why doesn't Jacobs include Polkinghorne in his analysis of the VO/CTNS series? Given the many similarities between Russell's and Polkinghorne's theological approaches to the scientific perspective on divine action, it might simply be explained away as a consequence of Polkinghorne's absence from the steering committee, but I think there is more to it than that.

One observation that *might* shed further light on this issue is by clarifying a subtle difference between Polkinghorne and Russell in relation to the distinction between 'theology of nature' and 'natural theology.' The suggestion that

---

[101] I.e., incompatibilism because natural cause and divine will are metaphysically distinct levels.
[102] The same goal Polkinghorne seeks in metaphysically redefining chaotic openness.
[103] Jacobs, p. 558. Internal references are omitted but the quotation of Calvinist theological maximalism comes from Murphy, in (*CC*) p. 335.
[104] Ibid., pp. 556-59. Note how this analysis mirrors the comment by Gregersen in (TY) p. 185 cited in the introduction to this essay.

Polkinghorne also engages in a form of natural theology of the kind Jacobs charges Russell with in the VO/CTNS series receives some potential support from Knight's assessment of Polkinghorne's thinking. Having previously noted the similarity between Polkinghorne's and Russell's basic theological views Knight suggests that,

> One approach might be to see him [Polkinghorne] as someone who fits much more clearly than he himself might recognise as a proponent of *natural theology*. He himself tends to use this term in the rather narrow sense in which it is defined in terms of attempts to "prove" the existence of God, [through scholastic philosophy or the early modern design argument]. He himself [… defends] a more modest "revived and revised" natural theology [that encourages faith rather than compelling it]. However, in the wider historical sense of the term *natural theology* which Polkinghorne actually points towards in speaking of such a revision – he may arguably be seen as a remarkable example of a natural theologian.[105]

It should be noted however, that while Russell prefers a theology of nature that has traction – and therefore is, by definition, more akin to a natural theology - Polkinghorne characterises his own approach to natural theology in terms of "resonance" rather than "proof".[106] As Clayton demonstrates in rejecting certain kinds of TDA, traction involves stronger epistemic claims than consonance does. Thus, Russell's and Polkinghorne's theological perspectives are similar, but not the same. Whatever his actual reasoning, Jacobs was correct, it would seem, to exclude Polkinghorne from his analysis.

That said, the difference between consonance and traction is a matter of degree. Like so many so many other distinctions considered thus far, the relation between natural theology and theology of nature is more sorites-like. In any given

---

[105] Ibid. p. 629.
[106] J. C. Polkinghorne, "The New Natural Theology," *Studies in World Christianity* 1, no. 1 (1995): pp. 41-50; "Where Is Natural Theology Today?," *Science and Christian Belief* 18 (2006): pp. 169-79.

context the point of distinction may be somewhat in the eye of the beholder. Moreover, natural theology in these more constrained terms, despite its currently unfashionable nomenclature, may still be a valuable endeavour because Knight goes on to argue that Polkinghorne's consonance based approach to natural theology mirrors that of the Cappadocian Fathers in the pre-scholastic period, not least in view of the apologetic dimension that ancient approach also embodied.

But, why didn't Clayton include either Russell or Polkinghorne in his (*e-t/o-t*) cohort? Both men hold Protestant theological perspectives that potentially share much common ground with the (*e-t/o-t*) perspective, not least, as already observed, their strongly Trinitarian and crucicentric theological concerns, and indeed both men's emphasis on the eschatological aspects of their doctrine of creation. Clearly, and for reasons the previous chapter has shown, Russell's metaphysic of NIODA and his valuation of traction are too far removed from the perspective Clayton has in mind. Yet, as Christopher C. Knight also observes, Polkinghorne, in particular, interprets some Scripture in a conservative manner.[107] Cumulatively, however, I suspect that Polkinghorne's biblical interpretation of the world as always and everywhere fallen and his consequent marginalisation of a particularised Fall; the process overtones of his FPD; his zero-sum kenotic view of Creatorly and creaturely divine power; and his rejection of the classical or historically orthodox attributes of God in favour of an open theist type of Trinitarian personalism, cumulatively provide enough warrant for Clayton's decision to exclude him from the (*e-t/o-t*) perspective that he, Clayton, has in mind also. To that extent, and in view of the ways in which the absence of an (e-t/o-t) perspective in the VO/CTNS series has been detailed to this point, Clayton

[107] Knight, p. 629.

offers a judgement I would agree with. An important perspective *is* missing from the series, that neither Russell nor Polkinghorne can be said to represent.

On the other hand, and returning to Jacobs's assessment of the VO/CTNS series, the two languages approach that Jacobs contrasts this putative *new* neo-Orthodoxy with holds problems of its own. First, too strong an appeal to a 'two languages' solution undermines all but the most instrumental uses for science or psychological interpretations of Revelatory truth. Secondly, if theology and science are radically separate languages, then whither hierarchy? Why *must* theology take epistemic account of science? And what, then, motivates Stoeger to "marginalise certain traditional notions of God"? Yet if they overlap hierarchically, as Stoeger also seems to accept; what can it mean to insist the overlap only *ever* holds in one epistemic direction: from science *for* theology (alone)? This is the conflicting tension I intuit in Stoeger's desire to marginalise "certain traditional notions" but retain an epistemic role for R/revelation.

The importance, as well as the challenge, of paying careful attention to language that was mapped in chapter 1 plays a critical function at this juncture. Jacobs' casting of (*Rmt*)'s epistemological ambitions as a false bid for a "meta-science" strikes me as slightly off target in this regard, for Stoeger, Russell, and of course Polkinghorne, are all critical-realists of some hue. The issue isn't therefore whether a meta-science can be created, but rather what a meta-*language* of divine action requires: exactly the question at the heart of this thesis. But *both* a '*new* [VO/CTNS] neo-Orthodoxy' derived from the restricted auspices of only whatever has traction with methodological-natural science, and an overdrawn two languages perspective (whether apophatic, Catholic or Barthian neo-Orthodox) fail because they

proceed from a binary yet false premise: that language must be either univocal (hence the need for constraining 'traction'), or totally equivocal.

But to pick up the argument of Williams in *The Edge of Words*, there is no meta-language; either of divine action, or of science, or of anything else. There is only "language" with all its suppleness; its flexibility, fluidity and felicity. How then shall we speak "well" about divine action? The solution is not to try and pin down the edges of our words; univocally constraining them, as though that act would solve every ambiguity and relieve every pressure. But neither is it gamesmanship in which *any*thing becomes "true" just because someone has said so. If nothing else, this offers an important reminder that, paradoxically, we speak well about divine action when, after as much careful reflection as possible, we try to say something without claiming to say everything.

Summary

This chapter has located the centre of the map I have been charting and redrawn it at an increased scale in order to plot, more precisely, theological differences that cut to the heart of the VO/CTNS debate over divine action. To pursue the now enduring analogy; this, in turn, allows me to perform a more precise theological "position check" by triangulating the position of the (*e-t/o-t*) perspective, using the Catholic and Protestant steering wings Jacobs identifies in the VO/CTNS series as navigational beacons against which to plot its presence or – as we can now affirm – its absence.

This more precise position check reveals two things. First, that the Protestant beacon in the VO/CTNS series has "drifted," so to speak, in relation to other forms of

Protestantism. In the pursuit of traction it has perhaps drifted enough to suggest a new perspective, a "new neo-Orthodoxy" as Jacobs calls it. Secondly, this position check confirms that both beacons' locations differ enough from the (*e-t/o-t*) theological perspective to validate Clayton's belief that such a perspective is, in fact, absent in the VO/CTNS series itself.

But even granted there is now no doubt the perspective Clayton identifies is, indeed, missing, the question remains "How to remedy that fact?" Is a credible description of divine action, from this 'traditional' (*e-t/o-t*) theological perspective, still possible? I believe that it is, and to that end I now wish to introduce a fresh voice to the discussion: Vernon White, and his proposal for universal special divine action (USDA).

Chapter 7

Vernon White's Concept of Universal Special Divine Action (USDA)

The navigational map of divine action I have been drafting now displays the contours of some broad, but crucial, background landscapes. The phrase divine action demands some account of the role of language itself. That, in turn, enables us to chart how language is deployed in both theology and science. The results depict unavoidable tensions and "cross-pressures" about what aspects of divine action count as data for each discipline; tensions that erupt most evidently around the problem of evil. Evaluating prominent contemporary theological strategies for resolving, or absorbing, these cross-pressures and tensions requires a broader charting of the meaning of the words transcendence and immanence. This more expansive geographical background then allows us, carefully, to plot this variety of alternative theological perspectives. It also permits the locus of these scientific and theological cross-pressures - the centre of the map - to be clarified, and more precisely charted as a metaphysical dispute over the meaning of the word 'cause'.

What motivates individual metaphysical choices? *Habitus*, understood as the holistic outworking of "inchoate forces" as Wildman calls them: discrete beliefs and preferences defying comprehensive analysis but coalescing in the *habitus* of an individual's (or community's) belief and praxis. Everybody has a *habitus* and so this map, too, reflexively charts from a *habitus* – one that broadly sympathises with the (*e*-

t/o-t) theological perspective Clayton argues the series lacks, albeit his label has needed clearer definition, and even when exact definitions prove an elusive goal. Nonetheless, the result has revealed a concern over the lack of attention the VO/CTNS series paid to language and the work that words are being asked to perform in its service. A concern that key terms are cashed out differently in the same context; most crucially the meaning of "cause", a word that both trades on, and profits off, an unresolved and - in the course of the VO/CTNS series - largely unremarked ambiguity in 'critical-realism' that permits equivocation over the scope of the word 'model'. This leads to a further concern that, for all the avowed similarities between science and theology, "cross-pressures", to employ Taylor's parlance, generate subtly different interpretations of "critical-realism" for resolving the tensions between transcendent Revelatory 'data' and the 'data' of immanent methodological-naturalism. Cross-pressures diverse enough to highlight the significance of *habitus,* and not just ration, in generating different theological perspectives (Catholic, Open, Kenotic, Process and so on) that have been plotted onto this larger underlying geography.

A second, more precise, concern also emerges. A theological concern with "constraint": a relationship posited by the VO/CTNS series for relieving any cross-pressures by presumptively limiting critical-realist theological perspectives on divine action. Granted a unified ontology, CMI is epistemically attractive, but it is hard to resist the conclusion that, in the hands of those seeking the "scientific perspective" in the VO/CTNS series, when critical-realist pushing turns into critical-realist shoving, it is the theologians who must shove off; must "go away and have another think." Theology is, in conceptual theory, vouchsafed as the queen of the sciences, perched securely atop her epistemic throne. But only until, in bottom up dialogical practice, the hierarchy is performatively reversed and she is left to re-arrange whatever

epistemic scraps fall under the scientific table. Still, at least she is free to rearrange and consume those in (almost) whatever order she then likes; orthodox; open; evangelical; apophatic; process; kenotic. Even, perhaps, (*e-t/o-t*)?

And this, in turn, leads to a deeper concern. A theological concern with an implied hermeneutic by which the repository of that very faith the VO/CTNS series seeks the scientific perspective upon can undergo fundamental "bottom up" re-interpretation in response to the perceived demands of a putatively methodological *only* perspective. Yet one great virtue of mapping at this expanded scale is the way it charts all four corners of the world from which the winds of change can blow; philosophical, and sociological, as well as scientific, and theological. And this, in turn, reveals powerful contours shaping those winds. Contours that remind us science was once called natural philosophy and winds that generate turbulent cross-pressures on the critical-realist language of immanent methodological-natural experience itself, if only we will open the window wide enough.

This is not to dispute the argument that 'Tradition' needs inculturation: constant reinterpretation into the idioms and images of each passing generation: the language of divine action does not reside in aspic. But, in that respect, the now dominant analogy of "causal joint" conveys an implied hermeneutic that is not philosophically benign. Equally, however, my sense is that the so-called culture wars signal the extent to which the Genesis narratives, the meaning of the satan, and the doctrine of Fall urgently need clarifying for the contemporary milieu: *re*mythologising and re-inculturation. This must, however, be done in ways that truthfully preserve transcendent truths communicated in the genre of *myth,* and that reject immanent *only* interpretations generated by the tip-toe move from methodological-natural to philosophically natural *hypothesising*. Had that (*e-t/o-t*)

perspective been present in the dialogue, I believe it would have called the programmatic demythologisation shaping the VO/CTNS approach to the "Fall" and the metaphysical nature of "evil" too theologically brutal, too immanently totalising. It would, I think, have expressed concerns about the shift that Jacobs identifies, though perhaps in terms of *en*culturation. Inculturation is a difficult and demanding task, but, without it, important though ambiguous truths risk being sacrificed on the philosophical altar of a culturally fashionable rationalised and philosophically naturalised anthropocentric "constraint." There is unquestionably a role for the scientist-theologians here, but the pressure doesn't come from one direction alone. Scripture and Tradition exert their own pressures and theology has, after all, long been compelled to create strategies for dealing safely with history's cross-winds. Yet, while the demands of inculturation are well recognised by those steering the VO/CTNS series, the risks of enculturation go largely unremarked. Risks that, from the consequently marginalised (*e-t/o-t*) theological perspective are only putatively side-stepped. Thus, a theological concern arises.

I suggest that what is also needed, if we are to recognise these crosswinds properly and maintain a true course, is a primarily theological perspective on divine action. Let me turn, then, to just such a contribution, one that recognises the demands of immanent methodological-natural data but also respects the (*e-t/o-t*) perspective on transcendent Revelation. In that regard the approach I have in mind has already been proposed, and so although I want to introduce a fresh voice to this debate I should perhaps say re-introduce, for Vernon White offers a theological perspective that has, in my view, been regrettably overlooked and undervalued in the science-theology dialogue of both the VO/CTNS series and beyond. I propose, therefore, to engage positively with White's proposal for USDA, to show how it provides a credible

theological perspective on divine action, deftly balancing the cross-pressures of transcendent Revelation and immanent experience.

White's USDA

How might White's theory of USDA be summarised? It amounts, in essence, to the claim that divine action occurs in every event and is therefore 'universal'. But divine action is also intrinsically 'special' because every event is the expression of decisive order and purpose for every individual as 'a matter of unique importance.'[1] From this theological perspective GDA is a more awkward category than SDA and this emphasis on intrinsic divine purpose in *every* event must not shirk its implications for theodicy. While I will endorse White's approach to divine action and believe his strategies for avoiding occasionalism or his theory devolving to a single divine act are successful, I still find the term 'USDA' problematic. Consequently, while defending the broad thrust of his theological approach I will nonetheless demure from his potential elimination of GDA as a helpful linguistic signifier.

White's major treatment of divine action is his 1985 work *The Fall of a Sparrow,* which presents White's answer to the question 'how can and should we conceive God acting in specific events for us - and with what scope – in all or only some?'[2] White is troubled by then-contemporary philosophical theology's attempts to handle the demands of biblical revelation in relation to the demands of experience. Foreshadowing Taylor's discussion of 'cross-pressures', White insists that in handling

[1] Vernon White, *The Fall of a Sparrow: A Concept of Special Divine Action* (Exeter: Paternoster, 1985), p. 18.
[2] Ibid., p. 20.

these tensions 'especially the experience of so-called "modern", "scientific" man [these theologians] fail to interpret adequately the full range of these riddles of experience, so that an alternative account is required.' White approaches the issue primarily from the perspective of philosophical theology rather than scientifically motivated TDAs, but reflects the same *theological* discontent I have been addressing, noting that,

> … there is a significant strand of contemporary English-speaking theology struggling to articulate a coherent account of divine action in the face of the various demands of revelation, tradition and modern thought, but which consistently compromises its [divine action's] specificity, its initiative and its sovereignty.[3]

Let us therefore plot White's proposal for USDA against the broad contextual features I have charted thus far, to see how he meets those challenges, and how or where his approach might be supplemented.

Language of divine action in White's scheme is primarily analogical. Where Rowan Williams appeals metaphorically to the "edge" of words, White opts for a different spatial image to convey the same principle. Thus, in evaluating Kenotic theology he queries whether the analogy (of parental human love) is drawn too univocally. He asks '[…] is it not staying too close? Has it been sufficiently stretched (as all religious language must be) by the demands of revelation?'[4] This image of 'stretching' appears again later when White writes;

---

[3] Ibid., p. 93.
[4] Ibid., p. 90.

> Remember that this language [of agency] is used analogically *throughout*, in an effort to express the truly transcendent. […] within this basic analogy all that is being referred to as divine action is itself depicted by analogical language […] we should not therefore be beguiled into forgetting how stretched this language must be. […] divine intention defines divine action in a higher sense than human intention defines human action, just as human intention defines human action in a higher sense than animal purposiveness defines animal activity, or than a web of causal laws defines the movement of events in the inanimate physical world.[5]

How this linguistic stretching is accomplished is not something White explicates in detail: although he rejects a purely semiotic role for language.[6] He does not clarify how theological language functions at any great length and, like other contributors, treats analogy and 'model' univocally, masking, in my view, potential problems.[7]

There are, nonetheless, clear affinities between White's "stretching" and Rowan Williams' "edge" of words, and White is clearly alive to the variety of tools language possesses for speaking about divine action. Thus, besides analogy, White also turns to narrative fiction and the trope of 'irony' for the metaphysical space needed to signal transcendence. Rejecting the postmodern hermeneutical stance in which irony signals immanent gaps *within* language, White instead emphasises

---

[5] Ibid., pp. 118-19.
[6] White, *Purpose and Providence: Taking Soundings in Western Thought, Literature and Theology* (London: Bloomsbury, 2015); *Fall of a Sparrow*, pp. 110-11.
[7] White writes; 'To insist on the full measure of complexity and unlikeness on the divine aside of the analogy is perfectly legitimate as long as we are providing corresponding analogies from within human experience […] none of this means we have taken leave of that basic model of human action as defined by intention, accepted from Miss Anscombe, which we are using to explicate divine action. Our model is still a statement about divine action in terms of meaning and purpose, even though it is also, quite properly, a statement about the transcendence of the divine intentional meaning which does not just allow of a 'larger number of purposes', but utilises a 'higher', more complex understanding of what purpose means', *The Fall of a Sparrow*, pp 119-20. My concern about equivalating the word 'model' is that scientific methodological-natural 'models' are disposed towards analogy in a metaphysically univocal sense that will always connect *tenor* and *vehicle* via *eminentiae* as well as via *analogia*. For that reason, I have become increasingly uncomfortable with the theological appeal to 'models' of … (atonement, Trinity, etc.). As already observed, Jesus told stories, and his disciples would, it seems to me, have been dumbfounded had he (a carpenter, obviously familiar with wooden toys) explained the parables' meaning as "models of…"

irony's capacity to reveal the gap *between* language and transcendent reality. 'Irony in this sense,' he insists, 'is therefore, at root, simply an aspect of fundamental honesty. It is a genuine openness to reality, a determination to keep all possibilities alive.' Thus, he writes, 'I am using irony here in the more traditional sense which critical realism allows: that is, as a way of referring to the gaps and ambiguities between language and reality, between words and 'truth'. I see [Thomas] Hardy, like science, engaging with the ambiguities of reality, not just texts or ideas.'[8] White rejects, then, the fully "buffered" view of self.

This suggests that irony offers access to transcendence through a *via negativa* as well as *via analogia*.[9] The benefit of negative language in signalling the depth of divine transcendence is explored further in 'Re-Enchanting the World' where White insists that negative language is signalling much more than a flight from reason. Rather, he insists, the only way language can do justice to God is when we say *both* that God is not bound by finite conditions like temporality, agency and personality but *also* that God is not without such things. The radically negative language of mystical theology is 'a double negative expressing a positive mystery of a transcendence which both encompasses and goes beyond all our language and experience.'[10] This kataphatic approach, as was argued in chapter two, credibly avoids capitulating to Wesley Wildman's radically apophatic demand that we evacuate Revelation of even analogical content.[11]

---

[8] White, *Purpose and Providence*, p. 53.
[9] 'In Hardy the irony is in the gaps between language and reality, not just within language, as such it is precisely the kind of irony which keeps possibilities alive. Not least, it allows at least the possibility of objective purpose in the experience of purposelessness, 'real' presence in absence.' "Providence, Irony and Belief: Thomas Hardy — and an Improbable Comparison with Karl Barth," *Theology* 113, no. 875 (2010): p. 361.
[10] White, "Re-Enchanting the World: A Fresh Look at the God of Mystical Theology," *Theology* 103, no. 815 (2000): p. 352.
[11] White observes that 'Contrary to some received wisdom, neither Augustine nor even Plato construe […] ascent through a negation of the observable, sensible, world. […] God is found beyond them. But

Granted human language of divine action is meaningful, we still need some distinguishing feature to recognise it as DA. White grants that some of its theological features cannot be empirically objective and yet,

> This is not simply a *via negativa:* we could have some conception of what perfect efficacy and universal scope might mean, though it certainly does transcend our conception, strictly speaking, lying only in a 'determinate direction' beyond it. But as such it is not merely a supreme exemplification of some feature of our experience, and has much less tendency to collapse into univocalism.'[12]

White's turn to fictional literature for exploring this linguistic 'stretching' is also helpful. As was argued in chapter one, truly great literature, perhaps like a great experiment, is effective precisely because it isolates, abstracts, and illuminates common experience. So, just as an 'elegant' hypothesis is accorded the scientific status of 'theory' so too an 'elegant' portrayal of the human condition is recognised and elevated in literature to the status of 'classic' or 'work of art.' Great literature appeals, in part, therefore, precisely because it can abstract, stabilise, and reveal human phenomenology. But, more importantly, it also serves as a valuable vehicle for exploring aspects of experience that science places beyond its own methodological-natural epistemic veil; love, ethics, aesthetics, truth, longing etc. Great literature can illuminate truths about the human condition that science, methodologically speaking,

---

the beyond is still found *through* them, as the soul is attracted to their maker. The early mystical tradition is, therefore, much more congruent with Hebrew thought than its Greek ingredients might lead us to expect.' Ibid., p. 351.

[12] White, *The Fall of a Sparrow: A Concept of Special Divine Action*, p. 91. *Cf.*, p. 102, where White says '… the view that bodily reference is needed to make sense of the concept of action may depend more on our actual bodily experience than on the concept of action itself.' True, but the phrase 'determinate direction' also reflects the broader system of spatial metaphors in language that are invoked in relation to transcendence: 'edges', 'stretching', epistemic 'location' and so on. While agreeing with White, this recurring linguistic motif nonetheless reinforces the significance of human embodiment and the insights of Merleau-Ponty examined in chapter 1 of this thesis.

simply cannot. White turns to literature for a similar reason, arguing its breadth tests his thesis about the resilience of providence 'much more effectively than rational analysis alone.' In White's judgement, 'It displays a scenario, rather than just arguing it, and this offers advantages. It can offer the overall sensibility and texture of a world view, not just an abstract account of its metaphysics. This, in my view, will do a scenario more justice.'[13]

This valuation of literature – in both form and content - resonates particularly well not only with post-critical biblical hermeneutics, but also with Jesus's use of parables to convey Revelatory truths. There are, of course, many kinds of literature, but picking up on the centrality of 'narrative' to the biblical canon, White assigns it a more nuanced role than the Biblical Theology movement of the 1950s did.[14] Beginning with the observation that we are naturally disposed to order events in patterns, White acknowledges that 'narrative appears to be not just a location of meaning and purpose but also its generator.'[15] Moreover, those patterns need not be chronologically linear. We shall pick this idea up again in relation to White's USDA and evil.

How might we characterise White's hermeneutical stance? He is clearly strongly influenced by Barth, and so embraces the latter's reformed epistemology of Revelation centred on the Christ event.[16] White avoids a banal form of fideism, however, in two ways. First by acknowledging with due seriousness the challenges

---

[13] White, *Purpose and Providence*, p. 40.
[14] Noting the role of story-telling in The *Fall of a Sparrow*, White traces the following major themes of divine action in the Bible: God as personal agent; purposive; sovereign and efficacious; apparently frustrated or limited. Divine action as universal in scope; special in capacity; sovereign and efficacious; apparently frustrated or limited; not in tension with freedom; but trans-temporal/eschatological in dimension. See *The Fall of a Sparrow*, pp. 26-54.
[15] White, *Purpose and Providence*, p. 26.
[16] 'Theologically there is this priority about the given demands of revelation. The action and meaning of God in Christ is the first and greatest presupposition.' *The Fall of a Sparrow*, p. 23.

posed by the 'riddles of experience' and the demands upon a credible theory of divine action imposed by evil and suffering.[17] His is, consequently, a reflexive hermeneutical stance in which there is the 'relationship of two movements whereby revelation has both to be received or recognised in our experience, and has to interpret that experience to us.'[18] Thus, White's hermeneutical stance is not "tennis without a net", as Clayton might want to label it, let alone the "blind" faith so commonly ridiculed in the "new" atheism of Dawkins, Hitchens, *et al.* In White's more recent *Purpose and Providence* that relationship is explored in figural terms, drawing on Karl Barth and Hans Frei to suggest redemptive purpose can be served without 'requiring an unrealistic doctrine of progress. It affirms redemptive purpose in both particulars and overall outcomes, but without needing to defend dubious claims to interpret it confidently.'[19]

White's second way of avoiding banal fideism is to embrace Barth's Christocentric transcendentalism. Aquinas discusses providence in both the doctrine of creation and the doctrine of God. Barth, by contrast, limits providence to the doctrine of creation. This might appear to constrain our capacity to name divine action, 'Yet in fact it is precisely *as* radically transcendent that Barth's God can then be conceived to be effective as an agent within creation.'[20] Barth's more apophatic approach in effect safeguards God's transcendence, in White's view, by proscribing our capacity to name the *how* of divine action without similarly proscribing God's capacity to act *in se*. This is fideistic in so far as it draws on revelation rather than empiricism or a process metaphysic, but White detects a post-critical aspect in Barth's

[17] Ibid., chapter 1 and chapter 7.
[18] Ibid., p. 20.
[19] White, *Purpose and Providence*, p. 7.
[20] Ibid. 'This is then extensively worked out in Church Dogmatics III/3': p. 95. White's analogical approach to divine action derives from human action (pp. 97-102), specified in terms of 'intention' (pp. 102-105), and holistically (i.e., not limited in scope to 'nature' or 'history', pp. 105-06).

approach, especially in the way he collapses the traditional Reformed distinction between ordinary (general) and special providence. White argues that

> This makes it clear he [Barth] is not relying on any naïve pre-modern account of God's 'direct' intervention, nor is he needing any other kind of empirical distinction […]. Instead, God's activity by Barth's definition transcends all these distinctions anyway – which is precisely what pre-empts the critiques of the empiricists and the Humean challenge about miracles.[21]

It thus sidesteps rather than contradicts empirical science.[22] Yet it remains resolutely personalist in virtue of its Christocentrism. Barth therefore re-frames narrative history as the primary place theologians must look for divine activity; for if divine power must be understood christocentrically, it includes the cosmic Christ and the meaning of theodicy.[23] But this, in turn, demands a conception of divine action that is simultaneously universal and particular.

While I am cautious about the possibility, let alone fruitfulness, of "two languages" epistemologies, it will be clear, by now, that the metaphysical thrust of White's (and Barth's) argument matches my own theological instincts in respect to divine action and the ontological status of evil.

White is wary, and rightly so, in my view, about the usefulness of entering long and speculative debates about the logical possibilities pertaining to free creation.[24]

---

[21] Ibid., p. 97.
[22] 'The notion of a wholly different kind of divine being and action means there is no need and no sense in asking 'where' God is or acts in comparison with or contrast to other beings or causes in the world. As such, this kind of action can then 'join' or 'incorporate' all these others with integrity: that is, without competing with them or displacing them.' Ibid., p. 130.
[23] 'In short: while God's purpose can in principle be identified anywhere, in practice we only tend to see it in fragments, scattered only sparely through history.' But, Barth and Frei echo Auerbach in insisting that divine action is in history not merely supervening as allegory but also as event. Ibid., p.119.
[24] White, *The Fall of a Sparrow*, p. 167.

Again there are two motivations for his circumspection. First, as already observed, granted *creatio ex nihilo* no aspect of creation can be treated apart from also treating the Creator. Secondly, White points out that the Kuhnian lesson of contemporary philosophy of science '… *follows* mystical theology, at least in principle' by recognising there is no free-standing epistemology. In short, 'there is no true thinking about God or the world from detachment, only from commitment.'[25] Thus, as White clearly recognises, the role of *habitus* cannot be separated from epistemological commitments.[26]

White is similarly sceptical about embracing causal indeterminism of the kind that E.L. Mascall, W. G. Pollard, and several contributors to the VO/CTNS series including Russell champion, commenting that; 'In fact I suspect this is dangerous: to talk of indeterminacy at the point of divine causation risks re-introducing a more subtle and sophisticated version of 'mythological' action, a new God of the gaps.'[27] White also repudiates an overreaching 'scientific' constraint on the scope of divine action, noting how a TDA 'conceived in this [methodologically-natural] way may still seem too constrained in principle by the structures of God's own created reality. This is a peril intrinsic to any natural theology where the meaning of God is related to what is recognisable in other empirical terms.'[28] This echoes the conclusion of the two previous chapters: first, that Clayton's demand for scientific constraint of TDAs is of limited utility for a *theology* of divine action, not least because, secondly, "bottom-

[25] White, "Re-Enchanting the World: A Fresh Look at the God of Mystical Theology," p. 350.
[26] White, *The Fall of a Sparrow*, p. 19.
[27] Ibid., p. 104. This is an ontological objection rather than an epistemological objection and, again, I agree with William Stoeger that ontological quantum indeterminism violates the principle of sufficient reason.
[28] White, *Purpose and Providence*, p. 114ff. Granting mystery surrounds the precise causality of the resurrection, White previously notes that; 'In general, therefore, I am more concerned with the business of conceiving that God is acting universally and specially, than with identifying the exceptional occasions when he employs different and extraordinary causal mechanics', *The Fall of a Sparrow*, p. 97.

up" constraint inexorably turns theology of nature into natural theology. A comprehensive perspective on divine action needs other lenses in addition to the single fixed focal length of methodological-naturalism.

For that *ad extra* component White turns to an image invoked by Ian Crombie, arguing that;

> we may not be able, strictly speaking, to conceive a bodiless spirit, but the duality of our own nature, the applicability to ourselves and our experience of concepts which are not needed for the description of the material world, does at least give us a 'reference range' of such difficult statements as 'God is a bodiless spirit'. [It lies] outside the range of our possible conception 'in a determinate direction.[29]

There are, however, two possible directions in which to pursue Crombie's metaphor.[30] It *could* point towards analogically 'embodying' God, as occurs in the panentheism of Arthur Peacocke,[31] and as Grace Jantzen[32] does. As White prudently notes, the process metaphysic of Charles Hartshorne also contains panentheistic overtones. But we have already surveyed the theological problems associated with panentheism and found it, from an (*e-t/o-t*) theological perspective, deficient in important ways.[33] The better alternative, therefore, is to follow the other end of the needle, so to speak, and look for an analogy that better protects divine transcendence in powers of agency. Thus, White rightly draws attention to the common-sense

---

[29] White, *The Fall of a Sparrow*, p. 101.
[30] To explore the geographical metaphor just a little further; we should note that a compass in the northern hemisphere points to magnetic *north* by convention alone. We could just as equally agree the needle points to magnetic south without affecting the underlying physics in any way and, in any case, we are free to follow either end of the needle.
[31] Peacocke, *Creation and the World of Science*; See also, Peacocke, "God's Interaction with the World," in (*CC*) especially pp. 282-283.
[32] Grace Jantzen, *God's World, God's Body* (London: Darton, Longman and Todd, 1984).
[33] White is surely correct that panentheism carries grave ontological implications for an orthodox doctrine of God because it renders God finite, creation necessary, and 'freedom' ambiguous. See White, *The Fall of a Sparrow*, p. 100.

observation that explanation at the methodological-natural level of efficient causation does not exhaust explanation at every level. Kettles don't just boil because an electrical circuit is closed a metal element then warms and heat is conducted to water, but also, at least sometimes, because Rachel desires a second cup of tea. And so, White is surely correct to observe that '… the hiddenness of the 'causal joint' does not of itself discredit the notion of divine activity, nor does it preclude the realisation of specific ends by means of that causality.'[34] By extension then, the facts of nature result from multiple actions at multiple levels. Moreover;

> it follows that the 'hiddenness' of such [divine] action to tools of empirical analysis is perfectly intelligible. Just because action with intent is a different order of explanation from that of the empirical sciences and not causal in the same way, the scientific account of the world may be untouched and unbreached by this different order of explanation.[35]

White's historically orthodox appeal to a form of double agency is further bolstered by the strong analytical support of double agency provided by Nicholas Wolterstorff in *Divine Discourse.*[36] Consequently White is on credible ground when he insists that, from a methodological-natural epistemic perspective;

> There are no gaps being filled. Of course, the hiddenness is only complete in respect of strictly defined tools of empirical analysis. Intentions are not observable in the same way as scientific laws, nevertheless, as we have insisted, they are implicit in the events and can be identified. But the identification, according to this logic of explanation, will require a larger context of meaning in which its meaning can be interpreted, and may require

[34] Ibid., p. 108.
[35] Ibid., p. 107.
[36] Wolterstorff. Chapter 7 defends the claim that God causes events that generate Divine speech acts.

> observation over a considerable period of time. (Theology is concerned precisely with discerning and explicating this larger context).[37]

In fact, we can supplement White's approach in a theologically positive way, by drawing on the implications of mathematical statistics as they appear in the natural world.[38] David Bartholomew has explored the interrelation of chance and purpose at some length.[39] He insists that 'The concept of scale or level is central to understanding the place that chance occupies in the grand scheme of things. For example, what appears chaotic at one level may reveal a pattern when viewed on a larger scale.'[40] Exploring carefully the mathematical link between order and chaos Bartholomew suggests,

> The ubiquity of the normal distribution [Poisson's law] arises not so much because it is built into the structure of the world but rather that it is imposed onto the world by the way we choose to observe it. It may, therefore, tell us very little about the intentions of the Creator. But it does tell us that order and randomness are so closely tied up together that we can hardly speak of one without the other. Total disorder seems impossible. Order is discernible at the aggregate level in even the most chaotic micro-level happenings.[41]

Again, however, this argument offers two potentially conflicting interpretations. It might invite a form of deism in which, as Bartholomew himself puts things, 'If there are to be random processes in the world to serve useful purposes, the creation of them needs to be in God's repertoire. There is then no need for him to be

---

[37] White, *The Fall of a Sparrow*, p. 107.
[38] A fascinating and entertaining exploration of the interrelation of nature and mathematical chance is Manfred Eigen and Ruthild Winkler, *Laws of the Game: How the Principles of Nature Govern Chance* (London: Allen Lane, 1982).
[39] Bartholomew, *God of Chance*, (London: SCM, 1984).
[40] Bartholomew, *God, Chance and Purpose: Can God Have it Both Ways?* (Cambridge: CUP, 2008), p. 9.
[41] Ibid., pp. 39-40.

concerned with happenings at the individual level. All that matters is their behaviour in the aggregate.'[42] Clearly, however, such deism is inadequate to the (*e-t/o-t*) theological perspective by which God is truthfully concerned with every hair on a person's head and the fate of every Sparrow. Yet we can also follow Bartholomew's conclusion in the opposite direction and insist, as White does in *Fall of the Sparrow*, that *every* event is taken up purposefully to become an aspect of a universally special divine action. In that case, Bartholomew's logic can be used to defend USDA despite the present reality of evil by insisting that divine action *necessarily* involves order, purpose, and meaning for even the most apparently chaotic and surd event; albeit potentially that these are realised *only* at a trans-temporal or eschatological level. In light of this possibility, let us turn to examine White's approach to evil more closely.

First, White addresses an interpretation of evil he insists just won't do: the developmental-consequentialism of '*PNE'* wherein the Creator suffers unwanted, undesirable, or unintended consequences. It is, he insists, simply illegitimate to apply such ideas to divine agency. This perspective, though at odds with the VO/CTNS approach, nonetheless finds further support in the thinking of C.S. Lewis, whom White quotes approvingly as saying 'I suggest the distinction between plan and by-

[42] Ibid., p. 133. Whether this is Bartholomew's own position, is unclear. His philosophical interpretation of the situation seems questionable in places. For example, he later insists 'I have repeatedly stated that lawfulness in the aggregate may be the product of randomness at the individual level. What is unpredictable at the latter level, therefore necessarily becomes predictable at the higher level. The converse may also be true but we are not at liberty to have unpredictability at both levels simultaneously. This fact places restrictions on a God who operates at the individual level, and thus places a question mark against the total freedom which might require to be possessed by someone who was truly God', ibid., p. 221. But this imposes on the Creator (who must surely know *everything* that exists) what Bartholomew has earlier acknowledged is an epistemic problem. *We* don't know how God creates *ex nihilo* but it does not therefore follow that God faces the same epistemic barriers that finite humans face. This kind of category error – conflating human epistemology with divine ontology - seems to be a recurring temptation in contemporary TDAs.

product must vanish entirely on the level of omniscience, omnipotence, and perfect goodness.'[43] In short; there can be no gap between divine will and by-product.

Consequently, 2015's *Purpose and Providence* maintains the approach White first proposed in *Fall of the Sparrow;* by which providence is a universally creative and redemptive love, enacted via the relation of metanarrative to sub-narratives.[44] This permits it to be both universal and particular at *every* point, something achieved pre-eminently in Christ (particular) who died to reconcile all (universal). Yet, as White acknowledges, the demands of Revelation as well as the 'data' of experience ensure this cannot be interpreted simplistically. The book of Job shows that scripture can also be apophatic, and Lamentations, and the various prophets all acknowledge the potency of evil. White looks, therefore, to Paul's exposition of Rom. 9-11 as the '*locus classicus'* for showing how God can superintend all things, bringing them to ultimate consummation. Moreover, as he properly insists, the theme of divine redemption and fulfilment, via the particular and not just the general, recurs throughout the canon of Scripture and demands a theological accounting.

> This basic notion of an overruling purpose of divine agency, concerned for particulars, interacting rather than imposing, often bewildering yet actually effective on the widest possible scale and scope, is a vital part of scriptural faith. [internal ref] Its *prima facie* force was evident for the pre-critical mind. Even with critical tools to hand it remains just as striking, for it does not belong to any one editorial hand or one strand of biblical history – it is woven in to a whole variety of narrative traditions. For the same reason a post-critical reading cannot ignore it either. As such, 'providence' in some sense is inescapably scriptural. It is certainly not just an invention of later theology.[45]

---

[43] C.S. Lewis, *Prayer: Letters to Malcolm* cited in White, *The Fall of a Sparrow,* p. 132. The quote ends 'The great work of art was made for the sake of all it does and is, down to the curve of every wave and the flight of every insect.'
[44] White, *Purpose and Providence*, p. 73; *Cf., The Fall of a Sparrow*, pp. 109, 16, 28.
[45] White, *Purpose and Providence*, p. 75.

I have already observed that White is sceptical about the value of pursuing 'speculative' debate about possible worlds, or counterfactuals of freedom, adopting instead the altogether more practical 'mediating position' that evil is inevitable in *this* world.[46] Rejecting also the kenotic approach to theodicy, White is surely right when, in *Fall of the Sparrow*, he writes;

> though a vulnerable and significantly passive God in relation to particulars may seem easy to live with and easy to absolve, it will be a major contention of this book that we are deceived in this: to absolve God too much in relation to too many particulars would raise just as fierce a question about his love and goodness as to burden him with a total and undifferentiated responsibility.[47]

What is attractive about White's approach to evil, therefore, is his refusal to sacrifice what is personal - of meaning and significance for the individual - to a brute or naïve instrumental or extrinsic explanation of evil in terms of other people's, or the 'greater' good. He is, in my view, right to acknowledge that an authentic TDA demands 'that the rationale [for any given event] is found specifically for each individual within all circumstances.'[48] As already observed, White carves out his metaphysical ground in a Barthian Christology that 'helps re-frame providence as a bridge between the particular and universal. For as a particular narrative itself, christocentricity affirms the meaning of all particulars; yet the meaning it secures for them is also, through the cosmic Christ, a relation to history as a whole.'[49] This avoids the twin extremes of deism and occasionalism, without ceding a featureless uniformity to divine action.

---

[46] White, *The Fall of a Sparrow*, p. 167.
[47] Ibid., p. 80.
[48] Ibid., p. 169. Including, therefore, the 113 souls involved in AF 4590.
[49] Internal ref to *CD III/3* p. 183. Cited in White, *Purpose and Providence*, p. 98.

But a credible TDA needs grounding beyond metaphysical theology. It needs enough "flesh on the bones" to meet at least some of the demands the 'data' of immanent experience generate. Explicating this is, of course, far from straightforward, but some analogies may offer a partial glimpse. And so, White suggests a cognate between divine action and some types of human creativity: 'Are any of the supreme painter's 'bad' effects (and good effects) purely accidental? In the divine symphony, are any of the discords merely unfortunate – or any of the harmonies purely fortuitous?[50] White, too, perceives merit in Vanhoozer's programme for remythologising.[51] Vanhoozer's exploration of the authorial analogy is warmly endorsed by White who, after briefly surveying some dogmatic, analytic and scientific TDAs, including the VO/CTNS series, concludes; 'This re-framing of divine causality within the overall model of divine authorship combines insights from all the theological approaches previously outlined.'[52]

Yet even in the authorial analogy the perennial problem of relating authentic creaturely freedom to authentic Creatorly control remains. To that end, White further suggests that true creaturely freedom can be preserved by appropriating Gordon Kaufmann's language of 'master act' and 'sub-acts' such that, while circumventing occasionalism, *everything* is nonetheless caught up to serve divine purpose. This could involve either,

> so arranging and ordering reality that a creature has to act (and, also intend) in a certain way; so constituting his nature and the nature of circumstances surrounding him that he intends what you want him to intend; his act is your

[50] White, *The Fall of a Sparrow*, p. 85.
[51] My engagement with Vanhoozer in chapter two was formed independently of White's interaction with him in *Purpose and Providence*, but there is clearly much in Vanhoozer's theology to support the kind of remythologising an (*e-t/o-t*) TDA will depend upon. His book is warmly commended.
[52] White, *Purpose and Providence*, p. 117.

> act, in a one-to-one correspondence. *Or*, it could mean so arranging and ordering reality that whatever intention the creature has, and indeed enacts in his particular context, carries your intention in a wider context of meaning. In short, so acting that his real act is a sub-act within your master act (to go back to Kaufman's terminology), but you are playing a different drama. Thus we can return to Judas and insist again that if it is in him to betray Jesus, so be it, but it will carry a meaning within God's intention other than Judas' intentions: Judas' act will be a sub-act in God's overall purpose.'[53]

This approach strikes me as the only theologically adequate account of a transcendent Creator who has freely chosen to act *ex nihilo*, and, as already observed, we can supplement White's positive and ambitious theological approach to the problem of evil,[54] in tandem with a scientifically literate epistemology, by recasting Kaufmann's notion of master act and sub-acts in line with Bartholomew's exposition of stochasticity in nature. For, if Bartholomew is right that there can be no such thing as disorder at one level without order at a different level, there exists an immanently credible principle for asserting that creaturely sub-acts, no matter how apparently dystopic or surd from *our* epistemic 'level' *will* be 'taken up' and integrated purposefully within the divine master act. Yet this is accomplished without impugning creaturely freedom; or the true moral repugnance of some of those sub-acts; or the divine capacity truthfully to redeem *everything.*[55] For, surely, White is right to insist that,

> The whole notion of an evil event 'in itself' crumbles under analysis […] every 'event' occurs within a wider context of meaning in which, by its relationship with other events, it can and must be properly described as an

[53] White, *The Fall of a Sparrow*, p. 116.
[54] Ibid. Chapter 5 is called 'Taking it to Extremes.'
[55] 'Thus 'event' and 'evil' gain their meaning compositely from a wider context, and may then find it changed in a still wider context', ibid., p. 134.

> action of God. As such, an event cannot be subtracted and considered simply 'in itself' as evil – or good.[56]

This theodicy is profoundly relational. It resonates well with a metaphysic that treats the "Fall" with due seriousness, and evil consequentially rather than as metaphysical necessity. It avoids the developmental-theodicy of Hick and the latter VO/CTNS Series volume, '*PNE',* without closing off evil's apparent ambiguity or discrediting perplexity at the level of immanent individual experience. For, certainly, perplexity remains and White is commendable for his honesty in that regard. Rhetorically enquiring whether any theory of USDA can address the presence in *this* world of apparently surd evils, he replies; 'The short answer may simply have to be no. There is no interpretation, no theological justification, that will satisfy – not in this life and our current frame of reference. Theology may just have to accept its limit here.'[57] Nonetheless, White invites a better path than the one trod by Job's would-be comforters, for his approach allows us to say a *little*, allows theology to clarify itself, before lapsing into apophatic silence. The crucial clarification being that God can never intend the evil act itself, only ever the wider meaning to which even that act can be graciously be related. But, even more specifically,

> We should be clear what this wider (transcendent) context of redemption which God intends actually is: it is a state in which good is created out of evil events for the benefit of those who suffered evil (i.e., an internal relation), not just for the good of others (an external relation). In other words, what God intends is a context for redemption whereby evil is transformed not just outweighed or compensated. So it is always transformed evil which God intends, not the evil involved in the process.[58]

---

[56] White, *The Fall of a Sparrow*, p. 133; *Cf*., Gen. 50:20 'Even though you intended to do harm to me, God intended it for good, in order to preserve a numerous people, as he is doing today.'
[57] White, *Purpose and Providence*, p. 149.
[58] Ibid., p. 150.

Understandably then, even in White's nuanced hands the 'problem' of evil receives a sense of meaning rather than a comprehensive explanation. Creation's ultimate perfection must remain largely invisible at any single moment from our temporal perspective. It can only be fully appreciated from the perspective of the eternally whole.[59] Again, however, his frank acceptance of the consequences of our actual epistemic limit is to be applauded.

> On this assumption [that there are no surd evils in *this* universe but might be other universes free of evil] the criticism that evil is 'legitimated', it has to be admitted, still smarts a little, for it allows that there may be kinds of perfection wholly unrelated to evil, and that God could have stopped short of this world's 'redeemed' kind of perfection, but did not. So be it. I would then appeal to [the account of evil] already offered, in which it has but a very temporary hold on reality, and that deriving from the creature's tenuous grasp. If it is that which is 'legitimated' then maybe we can, just, bear the smart.[60]

Co-ordinating Immanence and Transcendence

White explicitly co-ordinates his own approach to divine action using the "demands" of revelation and the "riddles" of experience.[61] This, in common with my own views, corresponds to an open world structure (in Taylor's parlance), derived from a Reformed epistemology in which evidence of divine purposive activity is 'not of a purely logical or empirical kind. It is a compulsion of faith, not sight. It includes unknowing as well as knowing.'[62] This compulsion may be highly attenuated in the

---

[59] White, *The Fall of a Sparrow*, p. 139.
[60] Ibid., p. 167.
[61] 'A truly transcendent God cannot act within the world as one agent amongst others *tout simple.* […] The religious grounds for asserting this are indeed as powerful (and properly so) as the general pressure of scientific method and discovery', ibid., p. 67.
[62] White, "Providence, Irony and Belief," p. 357.

contemporary sociological milieu, but it remains for White irrepressibly evident in the disparate consequences of what Max Weber called 'Disenchantment.'[63] Thus, broadly pursuing the secularisation theses of Weber and Taylor, White notes the parallel processes of what T.S. Eliot called a 'dissociation of sensibility'; the Enlightenment fracturing and privatisation of thoughts and feelings, and the purgation of medieval Catholicism's apparently magical rudiments. He concurs, too, with Leslie Stephen's assessment that 'protestantism inevitably became a screen for rationalism'.[64]

But, again echoing the issues Rowan Williams raises in *The Edge of Words*, the existential question recurs; why are we driven to generate historical narratives, or indeed any kind of narrative structure at all? White writes, 'Presumably much of it is due to the exercise of human will or desire. But is that really sufficient to account for all this persistent variety and extraordinary depth of meaning that different narratives generate? Or are we also driven to posit another transcendent source shaping it for us?'[65]

White recognises 'an ebb and flow' in the way that 'particular metaphysical and scientific concerns jostle with the demands of revelation.' An observation that rightly signifies the potentially anachronistic contemporary distinction between 'science' and 'religion' Harrison enumerated in an earlier chapter; not to mention the current fashion for *kenosis* in some areas of philosophy and the twentieth century attraction of process and open theisms. Moreover, in view of the metaphysical ambiguities attending transcendence, a degree of theological compromise and paradox is inevitable – even if it has sometimes been conceded, he says, too cheaply.[66] White's

[63] White "Re-Enchanting the World."
[64] Ibid. The reference to Eliot is on p. 349, the quote from Stephen is on p. 348.
[65] White, *Purpose and Providence*, p. 29.
[66] White, *The Fall of a Sparrow*, p. 59.

main interlocutors in *Fall of The Sparrow* are Maurice Wiles and Schubert Ogden. Both, in White's analysis, follow the 'general drift' of Rudolf Bultmann and demythologise divine action.[67] In Wiles' case this results in the elimination of SDA at the expense of a uniform but much reduced divine sovereignty or initiative, with theologically Pelagian consequences. Ogden, influenced heavily by Charles Hartshorne's Process metaphysic also portrays divine action in passive and Pelagian terms.

White then analyses broadly kenotic approaches, in view of which he perceptively insists 'We need to distinguish between that kind of vulnerability which is open to rejection only by the will of the beloved, and the kind of vulnerability which may also be defeated by other circumstances beyond its control.'[68] He is surely right, then, to insist the demands of love be synthesised with the other demands of revelation. Thus, he too vocalises the now familiar concern with kenotic appeals to anthropocentric experience: that they provide 'a *via eminentiae* which is clearly determined by what we find possible (in principle) in our human activity of love. The analogy tends to be univocal' he observes, 'as analogy, it has largely collapsed.'[69]

Another important benefit of engaging with White's theory of USDA is the attention he pays to the role of time. Clearly, this is of paramount significance for any TDA, and the lack of detailed engagement thus far represents an important lacuna that White allows me to correct.[70]

---

[67] Ibid., p. 72.
[68] Ibid., p. 88.
[69] White, *Purpose and Providence*, p. 91.
[70] The relation of time and TDAs, is a recurring theme across the VO/CTNS series although it did not generate a dedicated conference of its own. Interestingly, Saunders's evaluation of the series in *Divine Action and Modern Science* limits itself to only two direct references to time; W. G. Pollard's distinction between scientific and historical time (pp. 108-09) which Saunders appears to reject as incoherent, and the invariance of time in physical theories like the Schrödinger equation. (pp. 164-65). Whether Pollard's distinction is merely poorly drawn or conceptually invalid is, however, moot. For

White's goal is a coherent compatibilism that protects creaturely freedom without sacrificing divine transcendence. To that end, while agreeing with Peter Baelz that 'God's relation to time lies close to the heart of any discussion of divine activity' White nonetheless rejects Baelz own argument that the classical theological view, by which God can know a future that is not yet predetermined, is both rhetorically meaningless and logically improper.[71] It is, White correctly observes, fallacious to insist that foreknowledge eliminates freedom because there is no logical reason why it cannot be only '*fore'* from the human perspective and only '*knowledge'* from the transcendently divine perspective.[72] I share White's ambition to defend God's transcendent relation to time, noting, for one thing, that biblical prophecy needs a stronger explanation than the temporal uniformity of 'A' series open theism and process philosophy would seem able to furnish.[73] Expanding on his own perspective White writes,

> The sort of relationship between God and the world which is being envisaged here is one where God not only knows what future events will be (in our future, that is), but also acts to arrange circumstances according to a certain pattern in that 'future'; whatever contingencies are actualised by freely taken decisions (or by 'random' selection in the physical realm) are known and already accommodated within the divine action.[74]

Surveying the options to support this general perspective, White rejects the incompatibilist appeal to a process view of time, accepting the need, thereby, to conceive the meaning of God's eternity and possible senses in which it can be both

---

one thing, a theological perspective will distinguish between *kronos* and *Kairos;* a distinction that eludes methodological-naturalism.

[71] White, *The Fall of a Sparrow*, p. 82.

[72] Ibid., p. 150.

[73] Ibid., p. 119.

[74] Ibid., p. 143.

temporal and a-temporal; 'even though', he acknowledges, 'this can only be a perilously speculative endeavour.'[75] His solution to squaring the circle draws on a range of authors to nuance the classical theological vision of sempiturnal a-temporality.

One option White develops is the idea of 'specious' present in which the "present" includes a portion of the immediate past and imminent future. This suggests a possible analogy *via eminentiae* for an all-encompassing divine specious present. Alternatively, a significant strength of aesthetic analogies like music, or Vanhoozer's appropriation of Dorothy Sayer's authorial analogy is that they fit the idea of a specious present *via analogia* rather well.[76] Recognising the risk, however, that the eternal specious present may devolve to nothing more than a static "act" of contemplation, White presses the idea further to suggest a divine specious present that includes change, suffering, and divine action 'within a complete totality of the divine being where that suffering and response already lie in a relation of before-after within the whole.' It is via this transcendent whole, lacking in Process theology, that divine perfection, self-sufficiency, and sovereignty can be said to remain intact.[77] The value of this approach in relation to the problem of evil is obvious: it gives concrete meaning not only to the present experience of divine responsive action at the level of the individual, but also to eschatological hope at the level of 'groaning' creation, and,

---

[75] Ibid., p. 152. Earlier, he writes; 'The reason for much of this [contemporary English-speaking theology's] compromise surfaces from time to time, and very specifically, as a problem of reconciling polar opposites; any attempt to conceive of a transcendent God acting in special ways with personal initiative and perfect efficacy is liable to require a God outside as well as inside the spatio-temporal process', p. 94.

[76] Ibid., pp. 152-55.

[77] Ibid., p. 156. White rejects Hegel and Schleiermacher for the same reason; because historical development must never become *necessary* to God's own development. *Cf.*, *Purpose and Providence*, pp. 93-94.

beyond that, to the mystery at the heart of that evocative apocalyptic imagery of 'the lamb who was slain from the creation of the world' (Revelation 13:8 NIV).

But there is an even more speculative element to White's exploration of divine time. For, while rejecting the 'A' series temporal approach of Open Theism, he suggests,

> … it is possible to conceive of God faced with such an open future for himself, but for whom the world's future was still already present. That is, our time series of past, present, future, is experienced by God [as an authorial or divinely specious present]; but instead of being related to a tenseless divine experience, it is related to a divine time series much like ours in character, though transcending it. […] The fundamental difference lies only in the fact that it transcends, or exists 'parallel' to, our time, in a different dimension (thus distinguishing it radically from process views).[78]

I am not sure precisely what this extra dimension of divine temporality achieves, or what value it serves in White's scheme. It would certainly be beyond methodological-natural investigation of any kind. It might, however, suggest a vehicle for conveying a multi-dimensionality of time; something hinted at in the Greek linguistic distinction between *kronos* and *kairos* employed in the New Testament. This would certainly be useful, in my view, because just as the distinction between GDA and SDA is useful at some rhetorical level, so too a teleological distinction between "general" time and "special" time warrants some account in any theologically comprehensive TDA. I too, however, grant this is all highly speculative. Nonetheless, White's suggestion *might* offer a way to integrate these theologically

[78] *The Fall of a Sparrow*, p. 157.

differentiated temporal qualities fruitfully in what remains, nonetheless, a universal theory of SDA.[79]

It is important to acknowledge, as White unambiguously does, and as it seems to me we always must, problems and tensions in the classical notion of aseity and atemporality even when we wish, nonetheless, to preserve those perennial concepts in some measure. Not unreasonably, he insists that 'No claim is being made to settle these questions, nor even to discuss them fully, but only to indicate that they are still open questions and by no means closed to the kind of considerations that […] others have advanced.'[80] His development of specific schemes remains 'Highly speculative' and it should serve merely as 'signposts' for conceiving transcendent time.[81]

Responses to White's theory of USDA

I have already highlighted the relative obscurity of White's theory of USDA. It would be pertinent to ask, therefore, why his scheme has not received closer attention or deeper engagement in the science-theology literature; especially given the fact that *Fall of the Sparrow* was published in 1985, preceding the VO/CTNS series by three years. I suspect two reasons account for this lack of engagement.[82] First, White's approach is overtly philosophical. It's value in relation to a series concerned with

[79] Presumably, the most we could claim is that *Kairos* serves to intimate or signify that transcendent or parallel time scale in the familiar flow, and the riddles of experience, of our own *kronos.* In any case, such divine time indexes could, presumably, only be disclosed to us by Revelation.
[80] White, *The Fall of a Sparrow*, p. 47.
[81] Ibid., p. 159.
[82] An engagement that, on investigation, becomes conspicuous for its paucity and brevity in the secondary literature. His proposal for USDA receives no direct attention, so far as I can tell, from Polkinghorne, Peacocke, Stoeger, or Russell, and divided the reviewers. Michael Hill, in the *Reformed Theological Review* calls *The Fall of a Sparrow* "a substantial work, deserving serious attention by professional theologians and philosophers", while Laurence Osborne, in *Themelios* concluded that "it does not represent a major contribution to the current debate."

"scientific perspectives" may well not have been intuitively obvious, especially to anyone concerned – as Clayton certainly was – with traction, and limiting broader theological engagement to the series own methodological terms of reference.

Yet I suspect a deeper issue is also in play. A conceptual matter concerning the framing of GDA, SDA and USDA for which Saunders's critique of USDA in *Divine Action and Modern Science* is, again, illuminating. While accepting that SDA is "parasitic" upon GDA, Saunders insists that in White's USDA 'all GDA is effectively subsumed into omnipresent SDAs.' After quoting Ian Walker's opinion that this renders the idea of divine 'action' meaningless, Saunders continues;

> The problem is that not only are the falling of rain or any other natural events and the resurrection similar accounts of God's action, but they must be given equal status in our theological understanding. It is remarkable how little attention has been paid to this redefinition of our knowledge about God – why on this account should theologians assert that the resurrection or Jesus' healing ministry have any more relevance to the attributes of God than does the Holocaust?[83]

It seems to me, however, that Saunders diagnoses a conceptual problem of his own creation: albeit the same one that dogged the VO/CTNS approach as well. It is a methodological syllogism in which, either the distinction between GDA and SDA must be "objective" and analytic, or it becomes merely psychological equivocation.[84] But this misunderstands the power of language. Just because, in a sorites paradox there can be no objective, punctiliar, moment of distinction, it hardly follows that the paradoxes' central terms are therefore synonymous, or *only* psychological. The words

[83] Saunders, p. 30-31.
[84] Thus, Saunders writes; 'The fact remains, however, that many compatibilist approaches to SDA end up denying that anything has actually happened in the physical world at all, and accordingly the approach taken here leans heavily on the side of [causally] incompatibilist SDA', ibid., p. 45.

"bald" and "hairy" are helpful for truthfully describing the ontology of Michael's head, but they are helpful relationally, not analytically.[85]

My suspicion, then, is that White's marginalisation in the context of the VO/CTNS series has been related to his emphasis on philosophical theology rather than empirical 'traction.' In short, his scheme is too theological for those primarily interested in establishing a scientific perspective. But, both chapter 3 and chapter 5 demonstrate, the confines of the "scientific" perspective, though ambiguously connected to transcendence via natural philosophy, are too narrow to allow a *full* account of the data of divine action. Thus, White's scheme is easily dismissed as unduly speculative or insufficiently empirical, without recognising its potential value as a *theological* perspective on divine action.

Summary

This chapter began with a summary of the map charted thus far. A map showing ways in which the (*e-t/o-t*) theological perspective is, indeed, absent in the VO/CTNS series. Plotting that (*e-t/o-t*) perspective reveals, in turn, three theological sources of discontent with certain perspectives and their putative methodological consequences in some contributions to the VO/CTNS series. Consequently, this chapter has turned to an overtly theological voice with a view to charting afresh an SDA that is both scientifically and empirically credible, and yet that can also be aligned with the (*e-t/o-*

[85] For this reason, I don't particularly like the term USDA. As Syndrome puts it in *The Incredibles* "… when everyone's super… *no-one* will be!" Brad Bird, "The Incredibles," (California, USA: Disney/Pixar, 2004). I see great value, therefore, in retaining the semantic breadth afforded by "general" and "special" so long as we avoid the temptation to posit them analytically, or syllogistically.

t) theological perspective. One that better protects Creatorly transcendence, while respecting creaturely immanence.

Vernon White's theory of USDA traverses the transcendent and immanent poles of divine action without capitulating to the various cross-pressures it must weather. It respects the demands of transcendent R/revelation without surrendering to the often perplexing "riddles" of immanent experience. White's approach has much to commend it. It is philosophically nuanced and theologically penetrating. It preserves the divine character without sacrificing God's classical attributes, but is intellectually honest in facing up to the price that must be paid in refusing, too cheaply, to divorce divine action from evil. To achieve this, White draws on the 'data' in all its forms; theological; empirical; and artistic. He displays a welcome sensitivity to the capacity of language, and not least the additional epistemic capacities of fictional narrative.

Why has White's scheme not received more prominent attention? Arguments from silence are notoriously risky endeavours and any answer is somewhat speculative, but I would suggest that in the twin VO/CTNS ambitions of epistemic "objectivity" and generating "traction," White's contribution was marginalised as insufficiently empirical. Or, to put things more trenchantly: a bit too theological.

Chapter 8

Evaluating the Completed Map

I have used "map" as a root metaphor for framing this thesis. It is a common enough literary device to risk cliché, if only because the metaphor is so attractive. It appears, at first sight, as though co-ordinates can be defined much like the *x* and *y* co-ordinates of any familiar map, substituting "immanence" for latitude and "transcendence" for longitude so that discrete combinations can be plotted over background regions (language; biblical theology, scientific methodological-naturalism; evil; philosophy; and sociology). In practice, however, things are not so easy. Immanence and transcendence are sorites-like, not analytically separable co-ordinates, and so it proves impossible to render the extra-dimensionality of transcendence on the two-dimensional face of a literal map. Yet, ironically perhaps, this is, in itself, a helpful reminder. Chapter 1 has shown how metaphor and model may be similar but they are not the same. Metaphors are powerful things and that potency can sometimes obscure the "is not like" pole in the process of suggesting a compelling "is like". Nonetheless, metaphors are essential to epistemology, and one important principle this thesis clarifies is the way that, when we reach the edge of some words, we are given a determinate direction to proceed rather than simply being left (or free) to wander in *any* direction we like.

But, beyond that, what else? What does this map, however metaphorical, contribute that other maps obscure or omit? There are, I believe, several unique

aspects to this thesis. Facets justifying the effort of investigation, and what that reveals about finding way(s) to speak well about divine action.

Most significantly of all, this is the first work to engage at depth with the VO/CTNS series from an (e-t/o-t) theological perspective. It therefore makes a significant contribution to the field, by filling that numerically and historically significant lacuna identified by Philip Clayton in the series' final volume. It applies and extends Taylor's thesis by showing how elegantly his theory matches both the overarching form of the series and the content of perspectives held by influential contributors like Russell and Wildman. Secondly, therefore, this map is the first to engage deeply with Wesley Wildman's perspective in relation to the VO/CTNS series, plotting his apophatic theological perspective on divine action in depth. Thirdly, it is also the first to engage at such depth with Vernon White's theory of USDA. Together with William Stoeger, these comprise important and influential voices in the science-theology dialogue and close attention has been paid to contextualising their perspectives in relation to background influences at the largest scale.

But there are also other original contributions, at shorter scales too. So, for example, this map discloses an equivocation in the word 'model' that affords it tropological dominance in contemporary use. Now, alongside the Airfix models and miniature Eiffel towers purchased on school trips to Calais half a century ago, we find climate models, economic models, business models, and even, church-growth models - to name just a few.

But the graph below suggests how recent this rise in conceptual prominence really is, raising new questions to ask of an old word, inviting further deliberation

over the epistemic role(s) ‘model’ plays in science, theology, and now in life more broadly.

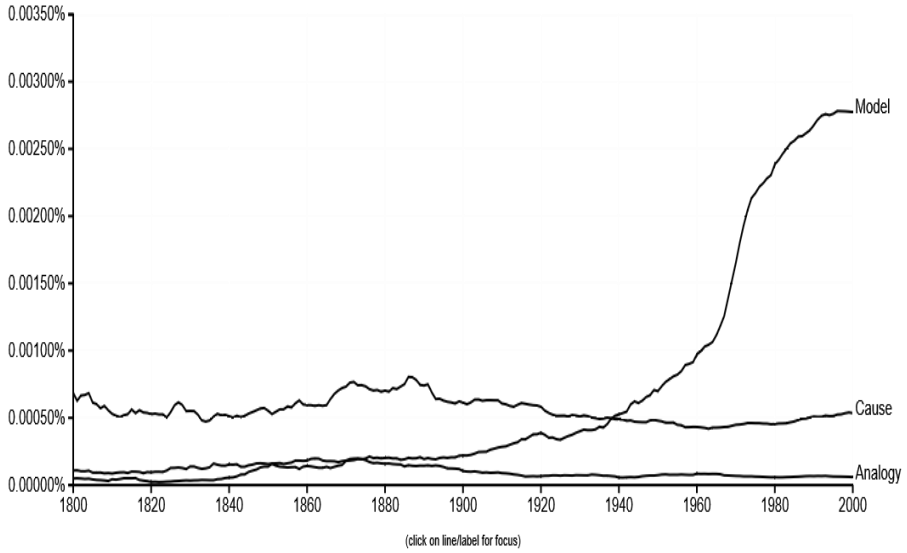


Fig. 3 Google Ngram showing relative frequency of Analogy, Cause, and Model over the past 200 years.[1]

Fifthly, this map discloses a conceptual difficulty that attends much of the language around divine action. That language consists of apparently binary pairs: GDA *or* SDA; primary cause *or* secondary cause; immanent *or* transcendent;[2] freedom *or* determinism; in fact, these relations are more like sorites paradoxes. This is a fresh perspective on the internal relations of the language of divine action and I query whether it has not been more commonly recognised before, at least in part,

[1] Source; Google Ngram Viewer, <http://books.google.com/ngrams>. Ngrams should be treated with caution, and this figure is intended to illustrate rather than demonstrate my argument; which concerns masked equivocation through unreflexive use of the term.

[2] Am I not guilty of the same by treating immanence and transcendence as separable co-ordinates? Yes. But this inconsistency is why I refer to mapping analogically and not as simile (or, for that matter, ‘model’). Analogy protects the “is not like” pole.

because of the power of binary relations in computing. In the present, digital, age virtually anything, it is claimed, can be represented using the binary digits 1 or 0. But there is no single hair the loss of which will turn the hirsute man bald; no single fine-grained link in the efficient-causal chain by which we gain, or lose, freedom; Neither is there a single change in the inchoate and manifold ingredients of *habitus,* by which orthodoxy becomes heterodoxy. But such words can still be truthful. And so, the language of divine action demands careful attention to such words' usage.

Finally, this map invites a new question, or perhaps the opportunity to ask an old question in a new way, by borrowing a framework from sociology and mission to ask whether TDAs that adopt Clayton's traction (3), such as some developmental-consequentialist theodicies, or some versions of "theistic evolution," succumb to a form of enculturation; theologically assimilating Enlightenment philosophy and values? *In*culturation is a missiological concept and denotes a limit to, as well as the benefits of, recasting the Gospel in new cultural settings.[3] Resolving this question, and the proper limits of inculturation for science theology dialogue, demands sociological and theological considerations that are beyond the scope of this map, but might form a fruitful basis for future theological thinking in the science-theology arena.

[3] For a still relevant overview of these issues see David J. Bosch, *Transforming Mission: Paradigm Shifts in Theology of Mission* (Maryknoll, New York: Orbis Books, 1991), pp. 447-57.

Framing Future Dialogue

There are, I have repeatedly acknowledged, no knock down arguments to finally settle issues of metaphysics, but that does not mean we should give up on the attempt to speak as "well" as possible. Making; whether of maps, lithographs, or Airfix models, demands careful attention to method. To that end, I want to appropriate Nicholas Lash's principle of '*Protocols Against Idolatry'* for future science-theology dialogue in view of this thesis's evaluation of the VO/CTNS series.[4] My suggested protocol recognises three core elements for any adequate TDA. Without all three, present and properly aligned, understanding will settle at the wrong focal (hermeneutical) length. Let me summarise each element briefly, before showing how they combine to permit a properly focussed picture.[5]

The linguistic-philosophical abuse of the word "nothing" by some physicists notwithstanding, creation's perdure entails *creatio continua;* divine activity of a constant and all-encompassing kind, not only upholding processes (laws of nature) but giving being to creation holistically. There can be no "hiving off"; no ontological independence of creation from its Creator. This carries a range of implications that shape the (*e-t/o-t*) theological perspective of God and that challenge the metaphysics of process, kenotic, and open theist perspectives. That there are no knock-down arguments to settle such matters is reflected in the comments by several contributors to the concluding volume of the VO/CTNS series that more careful reflection on metaphysical issues is required in future dialogue.[6]

---

[4] Lash.
[5] A photographic analogy helpfully preserves an aesthetic component alongside methodological competence. A good photograph involves the admixture of technical skills and compositional choices that are in the aesthetic eye of the photographer - and viewer.
[6] Russell, "Challenge and Progress," (*TY).* See especially the useful summary of contributions on p. xxiv of that volume.

But, from this it also follows that the (*e-t/o-t*) perspective of God as personal, simple, atemporal, etc., is by no means as outmoded as some insist. On the contrary, the perennial orthodox tradition contains deeply considered and metaphysically nuanced reflections on transcendence that continue to offer theological resources for anyone wishing to address enduring questions.

If a strand of dialogue wishes to constrain the scope of theology for programmatic reasons, as for example Clayton argued in relation to the VO/CTNS series, so be it. But that same constraint then also applies to whatever conclusions follow. The "scientific" perspective of the VO/CTNS series is then *only* a methodological-natural perspective. But there are always hints of transcendence, even in the language of methodological-natural theorising. This brings us to the second element: the epistemological limits of methodological-naturalism.

There is a deeper implication of the relation between Creatorly transcendence and creaturely immanence that emerges if we grant Farrer's famed causal joint but then consider what this *necessarily* involves epistemically. What, granted *creatio ex nihilo,* must the terminus of methodological-natural causal explanation look like? It seems to me that it will always look exactly like quantum indeterminism does. This is emphatically *not* a claim that quantum indeterminism *is* that ontological terminus. It is, after all, perfectly possible that physics might yet identify a deterministic cause of measurement events. But what would then follow? A quick party and no doubt a couple of Nobel prizes, followed immediately by a new search for the cause of *that* mechanism. My point is that, if God creates *ex nihilo,* the ultimate cause of existence will always be methodologically-*naturally* veiled, and therefore epistemologically contestable. Moreover, any coming into being will, it seems to me, *inevitably* appear stochastic, simply because that is what the dual epistemic properties of perdure and

chaotic complexity look like mathematically. We have no metaphysical reason, however, to impute to the Creator either epistemic or ontological limitations that necessarily apply to our finite, created, selves. Conflating the two is a philosophical, and theological, category error.

But in that case, recognising and evaluating potential vehicles of transcendent revelation demands a wider array of epistemological instruments than "science" or, for that matter, biblical revelation alone provide. We need to re-integrate the significance of what the ancients called *habitus;* an aspect of the dialogue that is now, arguably, the purview of sociology.[7] Without minimising the common-sense link between intellect and understanding, I also form, and am formed by, the community I inhabit. The Copenhagen interpretation has a communal dimension. It is perfectly possible to understand it as well as one's peers and yet prefer a different – deterministic – interpretation.[8] So, it is not ration or intellect *alone* that defines those with "eyes to see" and "ears to hear". Some may recognise God's voice where others hear only thunder.[9] If this curtails ambitions for a purely *rational* account of existence, so be it: "subjective" and "objective" are sorites, not analytic. Consequently, the full gamut of human epistemology cannot be limited to the putatively methodologically-naturalist "scientific" disciplines of the MSIH alone.

In addition to considering the phenomenology of religious experience, I believe there is also epistemic value in the turn to fictional literature. Why? Because, as previously observed, great literature provides access to truths that are forever beyond

---

[7] *Habitus* is, however, practical as well as intellectual – a way of living. White notes that abstraction afflicts the religious impulse as well as the academic. But abstraction '… represents a shift from the Augustinian roots of theology in which knowledge and love coinhere; where the mind can only truly know what it loves; and the heart can only truly love what it knows.' White, "Re-Enchanting the World," p. 350.
[8] David Bohm being an obvious example.
[9] John 10:24-27; 12:29. *Cf.*, Wolterstorff.

the epistemic veil of methodological-naturalism *alone*. Biblical Revelation (content) and great literature (narrative form) both name truths about humanity and creation that science, on its own methodologically-metaphysical terms, simply cannot.

If we are to take *habitus* and Revelation seriously, it makes no less sense to take 'Tradition'; the fruit of long communal reflection on that revelation, collated and explicated in the form of doctrinal principles, with equal epistemic seriousness. Orthodoxy, and even the narrower channel of evangelicalism this thesis has investigated, comprises a broad enough stream to accommodate differing interpretations of transcendence, but if Russell's CMI is to have any real bite, surely it is only on the grounds of Revelation that such challenge could ever arise. This has been the burden of my argument in relation to evil, developmental theodicy, and the doctrine of the Fall in chapter four.

Is R/revelation, special pleading? It is not clear to me how so because the possibility and scope of divine self-revelation are metaphysical questions, certainly not scientific ones. The Victorians, it is said, pulled the blinds down as their trains crossed the "ugly" terrain of the Lake District. Similarly, pulling the epistemic blinds down on revelation for philosophically and sociologically fashionable reasons may help us to look respectable in present company, but it leaves the actual world outside our window entirely unaffected.

Access to transcendence will only be preserved by paying careful attention to the creative use(s) of words. From the comments on literature adduced above, it should be clear that this must be a post-critical attention to form as well as content. One way of describing divine action would be to imitate biblical "best practice" so to speak, and Jesus paradigmatically exemplifies the union of epistemology, ontology, and

linguistic suppleness in his use of parables. Jesus told stories, he didn't present 'models.' Instead, he juxtaposed the familiar (immanent) and the radical (transcendent) in short but memorable stories offering paradoxical views of God from a tightly limited perspective. No map can record everything, and so perhaps we too must resist the urge to try and cram too much into any single conversation. Perhaps also, we need more room for imagination and story-telling in our TDAs: new metaphors and analogies that intentionally preserve paradox, enlarge perspective, and establish new points of overlap.

Here, then, we must decide how widely to interpret Clayton's restriction on theologising in the context of the VO/CTNS series' own terms of reference. This principle matters deeply for the contemporary discussion of divine action because, as observed in chapter 5, the appeal to objective and non-interventionist divine action, strikes me as akin to culturally influenced moves to strip away *signifying* content in the historical quest for Jesus until all that remains (in the scientific case) is a canvas of immanent efficient-cause alone, upon which to project the scientist's own transcendent values and interpretations. It should hardly surprise us, therefore, if that starkly minimalist efficient-causal canvas proves equally amenable to placing in a compatibilist, incompatibilist, open, process, deist, or atheistic transcendent frame. Conversely, the truth is that, as William Stoeger so artfully illustrates, within the tight strictures of methodological-naturalism there is nothing to fear, but also relatively little to gain, *theologically*, from a strictly methodological-natural discussion of divine action.[10]

[10] William R. Stoeger, "Contemporary Physics and the Ontological Status of the Laws of Nature," in *Quantum Cosmology and the Laws of Nature: Scientific Perspectives on Divine Action*, ed. Robert J. Russell, Nancey Murphy, and C. J. Isham (Vatican City State: Vatican Observatory/CTNS, 1993), pp. 207-31; "Quantum Theory, Philosophy, and Theology: Is There a Distinct Roman Catholic

Nonetheless, “science” is so culturally and epistemically significant that Polkinghorne, Clayton, and Saunders rightly, in my view, bemoan the broader lack of theological engagement with contemporary scientific theorising. They are right because, in the hands of cultural luminaries like Richard Dawkins, Stephen Hawking, or Martin Rees, science claims a dogmatic and totalising superiority and it is important theologians possess enough scientific (and philosophical) literacy to know where methodological-naturalism ends and metaphysical speculation begins: to contend for truth. This is no small task, I grant, but Saunders, Polkinghorne, Clayton, and Wildman are right for the wrong reasons if they performatively lapse into an empiricist/realist epistemology that perceives theology as the demythologised cart to be dragged wherever the scientific horse may roam, or that lapses too quickly into apophatic silence.

On the contrary, we need theologians who take scientific theorising with utmost seriousness but are not afraid to transgress (dare I say ‘transcend’?) methodologically-naturalist immanent frames of reference. We need more theological engagement with natural philosophising to keep it “honest”; to clarify when and how it spills beyond its own methodological boundaries; to stop the usurpation of theological, philosophical and ethical viewpoints in the guise of a totalising “scientific” mantle; to recognise and rebut scientism. But in that case, we also need more philosophical and theological education of scientists: for exactly the same reasons.

In the context of divine action, that means theologians taking methodological-natural theories like QM, the neo-Darwinian synthesis, and multiverse cosmology

---

Perspective?," in *The Routledge Companion to Religion and Science*, ed. James W. Haag, Gregory R Peterson, and Michael L. Spezio (New York: Routledge, 2012), pp. 169-78.

seriously, while keeping those theories in their proper - limited and provisional - context; able to remind the modern Horatio's of "science" and "philosophy" and "history" and "biology" (and every other *Wissenschaften*) that there may yet be *more* in Heaven and on Earth than is dreamt in even quantum mechanics, or chaos theory, let alone post-Hegelian nihilism.

If these protocols are taken as the demand for a single, fixed, theological perspective that brackets out, or ignores scientific theorising, it is misunderstood, If it is taken as a call for the joint and communal search for truth that includes, but is not limited to, *remythologising* ancient revelation for the edification of current generations, then it has been well understood.

Conclusion

This thesis began with the story of Wilson's cloud chamber and a Dali lithograph of Christ on the Cross. My suggestion was that Dali's conjunction of theological subject and scientific method serves as a useful icon for the discussion that is now, almost, complete.

Why Dali's lithograph? Because cloud chambers and biblical narratives share an important feature in common: both reveal – but only indirectly. Cloud chambers reveal immanent elementary particles forever beyond direct human sense, while the bible reveals transcendent divine action equally beyond direct human sense. In both cases, there is a crucial difference between the sign and the thing signified. Granting, if only for arguments sake, that both reveal truthfully, they do so only in what we can now call, following White and Crombie, a "determinate direction". It may be tedious to say, every time, "this is the kind of path we would expect to see if it were the result of the interaction of the ion cloud trail of a hypothetical positron in a supersaturated vapour of alcohol", but unintended problems emerge whenever we conflate levels of explanation and advert to univocally calling something in the image "a positron"; the simulation in our computer "a universe"; or the background quantum vacuum "nothing". Similarly, however, theological problems attend simplistic conflation of biblical narrative with the divine activity it reveals. One burden of this thesis has been to survey some of the conflicts and consequences that arise from collapsing levels of explanation, noting how this can happen ontologically, epistemically, or linguistically. And yet identifying that determinate direction is crucial. It is the only thing that will

save us from wandering aimlessly, or forever becoming trapped in a thicket of arbitrary language games.

But what, in that case, of Saunders's declaration that the scientific perspective of the VO/CTNS series represents a "crisis" for any contemporary theology of divine action? Well, while agreeing with Saunders that speaking well about divine action entails more than "mere fideistic assertion", I believe this thesis confirms something altogether more positive, in the process demonstrating something important about the journey as well as the destination. Absent knockdown arguments to settle fundamental – metaphysical - questions about divine action, the most that anyone can hope to show, it seems to me, is that they have carefully and methodically followed due process and that they possess reasonable epistemic justification for defending their preferred route to speaking "well" about divine action. They might be wrong. Others might prefer an alternative route to the same destination, or a different destination, or even abandon the journey altogether. And while those who don't believe one or more of an arguments premises are not dutybound to believe its conclusion, it is still important to show that the argument derived from those premises is sound. I believe this thesis goes some way towards achieving that ambition on behalf of an (*e-t/o-t*) theological perspective.

Less controversially, it has evaluated the VO/CTNS series in a way that establishes three primary conclusions that, in my view, deserve serious consideration. First, while noting the difficulties of definition and distinction involved, we may conclude that Clayton is substantially correct and a historically and numerically significant theological perspective that might be labelled (*e-t/o-t*) is indeed absent in

the contributions to the VO/CTNS series.[1] There is much in the VO/CTNS series that I suspect all viewing the dialogue from within the (*e-t/o-t*) communion would both agree with and value. But crucially, some aspects are absent without discussion, such as the scope of Revelation – and on that basis any voice articulating a consequentialist, Augustinian, theodicy.

Secondly, we may conclude that in the context of the VO/CTNS series Taylor's thesis concerning the *form* of secularisation cashes out with remarkable consistency and naturalness; whether that is in the morally courageous buffering of religious and philosophical apophaticism in a manner that remains thoroughly if not deceptively anthropocentric, as Taylor importantly identifies; or in the assumption of an independent, hived off, free standing universe that allows rational, counterfactual, reasoning to provide an independent, objective, route to truth.

But a third conclusion follows from the first two that is, perhaps, the more interesting and significant, because combining these first two conclusions allows us to see more clearly *why* the (*e-t/o-t*) perspective is absent – why the VO/CTNS series was so minded to marginalise certain traditional notions of God. The (*e-t/o-t*) perspective was marginalised for large scale philosophical and sociological reasons that stem largely from the Enlightenment, producing a world structure that frames the VO/CTNS series' dialogue in a very specific way. Yet when *this* broader "unthought" world structure is itself evaluated, it transpires that the reasons adduced for discounting the (*e-t/o-t*) valuation of Revelation and Tradition are far less

[1] This perspective has enough internal diversity for individual aspects or elements to be represented – such as the Open theist and Arminian wings of evangelicalism, to give just one example. Moreover, there are large areas of doctrinal agreement and emphasis that this analysis has necessarily bracketed out, solely for reasons of space.

metaphysically secure than that series' single, common, frame should be taken to imply.

Bibliography

Allen, Sophie R. "What's the Point in Scientific Realism If We Don't Know What's Really There?". In *Philosophy of Science: Royal Institute of Philosophy Supplement: 61*, edited by Anthony O'Hear, 97-123. Cambridge: CUP, 2007.

Augustine. *City of God*. Cambridge, MA: Harvard University Press, 2014.

Ayala, Francisco J. "Darwin's Greatest Discovery: Design without Designer." *Proceedings of the National Academy of Sciences of the United States of America* 104 (2007): 8567-73.

Ayer, A. J. *Language, Truth and Logic*. London: Victor Gollancz, 1936.

Barbour, Ian G. "God's Power: A Process View." In *The Work of Love: Creation as Kenosis*, edited by J. C. Polkinghorne, 1-20. Grand Rapids, Michigan: W. B. Eerdmans, 2001.

———. *Issues in Science and Religion*. London: SCM, 1966.

———. *Myths, Models and Paradigms: The Nature of Scientific and Religious Language*. London: SCM, 1974.

Barrow, John D., and Frank J. Tipler. *The Anthropic Cosmological Principle*. Oxford: Oxford University Press, 1986.

Barth, Karl. *The Church Dogmatics*. Vol. 1, Edinburgh: T&T Clark, 1975.

———. *The Göttingen Dogmatics: Instruction in the Christian Religion, Volume One*. Grand Rapids, Michigan: W.B. Eerdmans, 1924.

Bartholomew, David J. *God of Chance*. London: SCM, 1984.

———. *God, Chance and Purpose: Can God Have It Both Ways?* Cambridge: Cambridge University Press, 2008.

Beaty, Michael D., and Alvin Plantinga. *Christian Theism and the Problems of Philosophy*. Notre Dame: University of Notre Dame Press, 1990.

Bebbington, David. *Evangelicalism in Modern Britain: A History from the 1730s to the 1980s*. London: Unwin Hyman, 1989.

Bird, Brad, dir. *The Incredibles*. Disney/Pixar, 2004.

Bonhoeffer, Dietrich. *Letters and Papers from Prison*. London: SCM, 2001.

Bosch, David J. *Transforming Mission: Paradigm Shifts in Theology of Mission*. Maryknoll, New York: Orbis Books, 1991.

Boyd, Gregory A. *God of the Possible: A Biblical Introduction to the Open View of God*. Ilinois: Baker Books, 2000.

Bracken, Joseph A. *Does God Roll Dice? Divine Providence for a World in the Making*. Collegeville, Minnesota: Liturgical Press, 2012.

Brueggemann, Walter. *First and Second Samuel*. Interpretation: A Bible Commentary for Teaching and Preaching. Louisville, Kentucky: John Knox Press, 1990.

———. *Theology of the Old Testament: Testimony, Dispute, Advocacy*. Minneapolis: Fortress Press, 2005.

Bultmann, Rudolf. *Jesus Christ and Mythology*. New York: Charles Scribner's Sons, 1958.

Bultmann, Rudolf, and Schubert Miles Ogden. *New Testament and Mythology: And Other Basic Writings*. London, Pensylvania: Fortress Press, 1984.

Bureau Enquêtes-Accidents. "Accident on 25 July 2000 at La Patte D'oie in Gonesse (95) to the Concorde Registered F-BTSC Operated by Air France." Edited by Bureau Enquêtes-Accidents, 178 pp. Paris, France, 2002. Accessed May 15, 2015. URL= <https://www.bea.aero/uploads/tx_elydbrapports/f-sc000725a.pdf>

Calder, Todd. "The Concept of Evil." The *Stanford Encyclopedia of Philosophy (*Winter 2016 Edition*)*. Edward N. Zalta (ed.). URL= <https://plato.stanford.edu/archives/win2016/entries/concept-evil/>

Carrier, Richard. *Sense & Goodness without God: A Defense of Metaphysical Naturalism*. Indiana: Bloomington, 2005.

Cazeaux, Clive. *Metaphor and Continental Philosophy: From Kant to Derrida*. Routledge Studies in Twentieth-Century Philosophy. New York: Routledge, 2007.

Chappell, Jonathan. "Raymund Schwager: Integrating the Fall and Original Sin with Evolutionary Theory." *Theology and Science* 10, no. 2 (May 2012): 179-98.

Clayton, Philip. "Toward a Theory of Divine Action That Has Traction." In *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress*, edited by Robert J. Russell, Murphy Nancey and S.J. William R. Stoeger, 85-110. Vatican City State: Vatican Observatory/CTNS, 2007.

Clayton, Philip, and P. C. W. Davies. *The Re-Emergence of Emergence: The Emergentist Hypothesis from Science to Religion*. Oxford: Oxford University Press, 2006.

Conway Morris, Simon. "Darwin's Compass." In *Science and Religion in the Twenty-First Century*, edited by Russell Re Manning and Michael Byrne, 22-39. London: SCM, 2013.

———, ed. *The Deep Structure of Biology: Is Convergence Sufficiently Ubiquitous to Give a Directional Signal?* West Conshohocken: Templeton Foundation, 2008.

Coyne, George V., Robert J. Russell, and William R. Stoeger. *Physics, Philosophy and Theology: A Common Quest for Understanding*. Vatican City State: Vatican Observatory/CTNS, 1988.

d'Espagnat. *Veiled Reality: An Analysis of Present-Day Quantum Mechanical Concepts*. Orsay, Paris: Westview Press, 2003.

Davidson, Donald. *Essays on Actions and Events*. Oxford: Clarendon Press, 1980.

Davies, P. C. W. *God and the New Physics*. London: Penguin Books, 1990.

———. *The Mind of God: Science and the Search for Ultimate Meaning*. London: Simon & Schuster, 1992.

Dawes, Gregory W. *The Historical Jesus Quest: Landmarks in the Search for the Jesus of History*. Louisville, Kentucky: Westminster John Knox Press, 2000.

———. *Theism and Explanation*. Routledge Studies in the Philosophy of Religion. New York: Routledge, 2014. 2009.

Dawkins, Richard. *The God Delusion*. London: Bantam Press, 2006.

Dell'Ollio, Jerome Andrew. "Response to Wesley J. Wildman's "Behind, between, and Beyond Anthropomorphic Models of Ultimate Reality"." *Philosophia* 35 (2007): 427-32.

Dodds, Michael J. *Unlocking Divine Action: Contemporary Science & Thomas Aquinas*. Washington D.C: Catholic University of America Press, 2012.

Dunn, James D. G. *A New Perspective on Jesus: What the Quest for the Historical Jesus Missed*. London: SPCK, 2005.

Dunn, James D. G., and Scot McKnight. *The Historical Jesus in Recent Research*. Sources for Biblical and Theological Study. Winona Lake, Indiana: Eisenbrauns, 2005.

Eigen, Manfred, and Ruthild Winkler. *Laws of the Game: How the Principles of Nature Govern Chance*. London: Allen Lane, 1982.

Erickson, Millard J. *Christian Theology*. Grand Rapids: Baker Books, 1985.

———. *God the Father Almighty: A Contemporary Exploration of the Divine Attributes*. Grand Rapids, Michigan: Baker Books, 1998.

Farrer, Austin. *Faith and Speculation: An Essay in Philosophical Theology, Containing the Deems Lectures for 1964*. London: Black, 1967.

Fergusson, David. *The Cosmos and the Creator: An Introduction to the Theology of Creation*. London: SPCK, 1998.

Feser, Edward. *Aquinas: A Beginner's Guide*. London: Oneworld, 2009.

———. *Scholastic Metaphysics: A Contemporary Introduction*. Heusenstamm, Germany: Editiones Scholasticae, 2014.

Feuerbach, Ludwig. *The Essence of Christianity*. English and Foreign Philosophical Library. 2nd ed. London: Trübner, 1881.

Frame, John M. *No Other God: A Response to Open Theism*. Phillipsburg, N.J: P&R, 2001.

Gaebelein, Frank E., and J. D. Douglas. *The Expositor's Bible Commentary: With the New International Version of the Holy Bible. Vol. 11, Ephesians-Philemon*. London: Pickering & Inglis, 1978.

Gannssle, Gregory E. *God and Time: Four Views*. Downers Grove, Illinois: IVP, 2001.

Garrigou-Lagrange, Réginald, and P. Cummins. *Reality: A Synthesis of Thomistic Thought*. St. Louis: St. Louis and Company, 1953.

Gestrich, Christof. *The Return of Splendor in the World: The Christian Doctrine of Sin and Forgiveness*. Grand Rapids, Michigan: W.B. Eerdmans, 1997.

Gilkey, Langdon. *Maker of Heaven and Earth: The Christian Doctrine of Creation in the Light of Modern Knowledge*. Lanham, Maryland: University Press of America, 1958.

Gilkey, Langdon B. "Cosmology, Ontology, and the Travail of Biblical Language." *The Journal of Religion* 41, no. 3 (1961): 194-205.

Gillies, Donald. "Lessons from the History and Philosophy of Science Regarding the Research Assessment Excercise." In *Philosophy of Science: Royal Institute of Philosophy Supplement: 61*, edited by Anthony O'Hear, 37-73. Cambridge: CUP, 2007.

Goldingay, John. *Models for Interpretation of Scripture*. Grand Rapids, Michigan: W. B. Eerdmans, 1995.

Gregersen, Henrick Neils. "Special Divine Action and the Quilt of Laws: Why the Distinction between Special and General Divine Action Cannot Be Maintained." In *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress*, edited by Robert J. Russell, Murphy Nancey and William R. Stoeger S.J., 179-99. Vatican City State: Vatican Observatory/CTNS, 2007.

Gregersen, Niels Henrik, and Ulf Görman. *Design and Disorder: Perspectives from Science and Theology*. London: T & T Clark, 2002.

Gregersen, Niels Henrik. "Deep Incarnation and Kenosis: In, with, under, and As: A Response to Ted Peters." *Dialog* 52, no. 3 (2013): 251-62.

Griffin, William Paul. *The God of the Prophets: An Analysis of Divine Action*. Journal for the Study of the Old Testament Supplement Series. Sheffield: Sheffield Academic Press, 1997.

Grogan, Geoffrey. *The Faith Once Entrusted to the Saints?: Engaging With Issues and Trends in Evangelical Theology*. Nottingham: Inter-Varsity Press, 2010.

Guest, Matthew. "The Plausibility of Creationism: A Sociological Comment." In *Reading Genesis after Darwin*, edited by David Wilkinson and Stephen C. Barton, 217-36. Oxford: OUP, 2009.

Gunton, Colin E., Stephen R. Holmes, and Murray Rae. *The Practice of Theology: A Reader*. London: SCM, 2001.

Harrison, Peter. *The Territories of Science and Religion*. Chicago, Illinois: University of Chicago Press, 2015.

Hart, Trevor. "Revelation." In *The Cambridge Companion to Karl Barth*, edited by John Webster, 37-56. Cambridge: CUP, 2000.

Haught, John F. "Is Physics Fundamental? Robert Russell on Divine Action." *Zygon* 45, no. 1 (2010): 213-20.

Hawking, Stephen, and Leonard Mlodinow. *The Grand Design*. New York: Bantam Books, 2010.

Hick, John. *Evil and the God of Love*. Basingstoke: Palgrave Macmillan, 2007.

Hoffmann, Ronald, and Iain Boyd Whyte. *Beyond the Finite: The Sublime in Art and Science*. Oxford: Oxford University Press, 2011.

Holder, Rodney D. "Modern Science and the Interpretation of Genesis: Can We Learn from Dietrich Bonhoeffer?". *Theology and Science* 6, no. 2 (May 2008): 213-31.

Hudson, Hud. *The Fall and Hypertime*. Oxford: Oxford University Press, 2014.

Hume, David, and P. F. Millican. *An Enquiry Concerning Human Understanding*. Oxford World's Classics. Oxford: OUP Oxford, 2007.

Hvidt, Niels Christian. "Historical Development of the Problem of Evil." In *Physics and Cosmology: Scientific Perspectives on Natural Evil*, edited by Nancey Murphy, Robert J Russell and William R. Stoeger S.J., 1-34. Vatican City State: Vatican Observatory/CTNS, 2007.

Illari, Phyllis McKay, and Federica Russo. *Causality: Philosophical Theory Meets Scientific Practice*. Oxford: Oxford University Press, 2014.

Jacobs, Philip J. "An Argument over ‘Methodological Naturalism' at the Vatican Observatory." *The Heythrop Journal* 49, no. 4 (2008): 542-81.

Jantzen, Grace. *God's World, God's Body*. London: Darton, Longman and Todd, 1984.

Jones, Kile. "Falsifiability and Traction in Theories of Divine Action." *Zygon* 45, no. 3 (2010): 575-89.

Kearney, Richard. *Anatheism: Returning to God after God*. New York: Columbia University Press, 2010.

Kearney, Richard, and Jens Zimmermann, eds. *Reimagining the Sacred: Richard Kearney Debates God with James Wood, Catherine Keller, Charles Taylor, Julia Kristeva, Gianni Vattimo, Simon Critchley, Jean-Luc Marion, John Caputo, David Tracey, Jens Zimmermann, and Merold Westphal*. New York: Columbia University Press, 2016.

Keating, James F., and Thomas White, O.P. "Divine Impassibility in Contemporary Theology." In *Divine Impassibility and the Mystery of Human Suffering*, edited by James F. Keating, and Thomas White, O.P., 1-26. Grand Rapids, Michigan: W. B. Eerdmans, 2009.

Kerr, Fergus. "The Modern Philosophy of Self in Recent Theology." In *Neuroscience and the Person: Scientific Perspectives on Divine Action*, edited by Robert J Russell, Nancey Murphy, Theo. C. Meyering and Michael A. Arbib, 23-40. Vatican City State: Vatican Observatory/CTNS, 1999.

Kim, Jaegwon. "Mechanism, Purpose, and Explanatory Exclusion." *Philosophical Perspectives* 3 (1989): 77-108.

Knight, Christopher C. "John Polkinghorne." In *The Blackwell Companion to Science and Christianity*, edited by J. B. Stump and Alan G. Padget, 622-31. Oxford: Wiley-Blackwell, 2012.

Kolb, Robert. "The Lutheran Doctrine of Original Sin." In *Adam, the Fall and Original Sin*, edited by Hans Madueme and Michael Reeves, 109-27. Grand Rapids: Baker Academic, 2014.

Kreitzer, L. J. "Adam and Christ." In *Dictionary of Paul and his Letters*, edited by Gerald F. Hawthorne, Ralph P. Martin and Daniel G. Reid, 9-15. Leicester: InterVarsity Press, 1993.

Kuhn, Thomas S. *The Structure of Scientific Revolutions*. 2nd ed. Chicago, Illinois: University of Chicago Press, 1970.

Ladymann, James. "Does Physics Answer Metaphysical Questions?". In *Philosophy of Science: Royal Institute of Philosophy Supplement: 61*, edited by Anthony O'Hear, 179-201. Cambridge: CUP, 2007.

Lakoff, George, and Mark Johnson. *Metaphors We Live By*. Chicago: University of Chicago Press, 1980.

Laplace, Pierre Simon. *A Philosophical Essay on Probabilities* Translated by F.W. Truscott and F.L. Emory. 1st ed. New York: New York and Company, 1902.

Lash, Nicholas. "Observation, Revelation, and the Posterity of Noah." In *Physics, Philosophy and Theology: A Common Quest for Understanding*, edited by Robert J Russell, William R. Stoeger S.J. and George V Coyne S.J., 203-15. Vatican City Sate: Vatican Observatory, 1988.

Laudan, Larry. "A Confutation of Convergent Realism." *Philosophy of Science* 48, no. 1 (1981): 19-49.

Lee, Joseph. "The Human Dark Side: Evolutionary Psychology and Original Sin." *Journal of Religion and Health* 53, no. 2 (2013): 614-29.

Lowe, E. J. "Free Will and Rational Choice." In *The Blackwell Companion to Science and Christianity*, edited by J. B. Stump and Alan G. Padgett, 421-29. Oxford: Wiley-Blackwell, 2012.

Macleod, Donald. "Original Sin in Reformed Theology." In *Adam, the Fall and Original Sin*, edited by Hans Madueme and Michael Reeves, 129-46. Grand Rapids: Baker Academic, 2014.

Madueme, Hans, and Michael Reeves. *Adam, the Fall, and Original Sin: Theological, Biblical, and Scientific Perspectives*, Grand Rapids, Michigan: Baker Academic, 2014.

Martin, Raymond. *The Elusive Messiah: A Philosophical Overview of the Quest for the Historical Jesus*. Boulder, Colorado: Westview Press, 1999.

McCall, Thomas H. "'But a Heathen Still' the Doctrine of Original Sin in Wesleyan Theology." In *Adam, the Fall and Original Sin*, edited by Hans Madueme and Michael Reeves, 147-66. Grand Rapids: Baker Academic, 2014.

McCormack, Bruce L. "Karl Barth's Christology as a Resource for a Reformed Version of Kenoticism." *International Journal of Systematic Theology* 8, no. 3 (2006): 243-51.

McFague, Sallie. *Models of God: Theology for an Ecological Nuclear Age*. London: SCM, 1987.

McFarland, Ian A. *In Adam's Fall: A Meditation on the Christian Doctrine of Original Sin*. Challenges in Contemporary Theology. Chichester: Wiley-Blackwell, 2010.

McGilchrist, Iain. *The Master and His Emissary: The Divided Brain and the Making of the Western World*. New Haven, Connecticut: Yale University Press, 2009.

McGrath, Alister E. *Christian Theology: An Introduction*. 3rd ed. Oxford: Blackwell Publishers, 2001.

———. *Dawkins' God: Genes, Memes, and the Meaning of Life*. Oxford: Blackwell, 2005.

———. *Heresy: A History of Defending the Truth*. London: SPCK, 2009.

———. "Hesitations About Special Divine Action: Reflections on Some Scientific, Cultural and Theological Concerns." *European Journal for Philosophy of Religion* 7, no. 4 (2015): 3-22.

McIntosh, Mark Allen. *Mystical Theology: The Integrity of Spirituality and Theology*. Oxford: Blackwell, 1997.

Minear, Paul. *The Bible and the Historian*. Abingdon: OUP, 2002.

Moltmann, Jürgen. *The Crucified God: The Cross of Christ as the Foundation & Criticism of Christian Theology*. Minneapolis, MN: Fortress Press, 1993.

———. "God's Kenosis in the Creation and Consummation of the World." In *The Work of Love: Creation as Kenosis*, edited by J. C. Polkinghorne, 137-51. Grand Rapids, Michigan: W. B. Eerdmans, 2001.

———. *God in Creation: A New Theology of Creation and the Spirit of God*. Minneapolis, Minnesota: Fortress Press, 1993.

———. "Reflections on Chaos." In *Chaos and Complexity: Scientific Perspectives on Divine Action*, edited by John Russell Robert, Nancey Murphy and Arthur R. Peacocke, 205-10. Vatican City State: Vatican Observatory/CTNS, 1997.

Monod, Jacques, and Austryn Wainhouse. *Chance and Necessity: An Essay on the Natural Philosophy of Modern Biology*. London: Collins, 1972.

Murphy, Nancey. "Creative Mutual Interaction: Robert John Russell's Contribution to Theology and Science Methodology." In *God's Action in Nature's World: Essays in Honour of Robert John Russell*, edited by Ted Peters and Nathan Hallanger, 39-50. Aldershot: Ashgate, 2006.

———. "Divine Action and the Natural Order: Burridan's Ass and Schrödinger's Cat." In *Chaos and Complexity: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Nancey Murphy and Arthur R. Peacocke, 325-57. Vatican City State: Vatican Observatory/CTNS, 1997.

———. "Emergence, Downward Causation and Divine Action." In *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress*, edited by Robert J. Russell, Murphy Nancey and William R. Stoeger S.J., 111-31. Vatican City State: Vatican Observatory/CTNS, 2007.

———. "Evidence of Design in the Fine-Tuning of the Universe." In *Quantum Cosmology and the Laws of Nature*, edited by Robert J Russell, Nancey Murphy and C. J. Isham, 401-28. Vatican City State: Vatican Observatory/CTNS, 1999.

———. "Science and the Problem of Evil: Suffering as a by-Product of a Finely Tuned Cosmos." In *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, edited by Nancey Murphy, Robert J Russell and William R. Stoeger S.J., 131-52. Vatican City State: Vatican Observatory/CTNS, 2007.

Murphy, Nancey C., Robert J. Russell, William R. Stoeger, and Centre for Theology and the Natural Sciences. *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*. Vatican City State: Vatican Observatory/CTNS, 2007.

Murphy, Nancey C., and William R. Stoeger. *Scientific Perspectives on Divine Action Twenty Years of Challenge and Progress*. Vatican City State: Vatican Observatory/CTNS, 2009.

Nagel, Thomas. *The View from Nowhere*. Oxford: Oxford University Press, 1986.

Nash, Ryan R. "Calvinism, Reformed Protestantism, and Bioethics: Are the Controversies Predestined?". *Christian bioethics: Non-Ecumenical Studies in Medical Morality* 20, no. 1 (2014): 123-39.

Nesteruk, Alexei V. "The Quest for Transcendence in Theology and Cosmology." In *The Blackwell Companion to Science and Christianity*, edited by J. B. Stump and Alan G. Padgett, 554-64. Oxford: Wiley-Blackwell, 2012.

Niebert, Kai, Sabine Marsch, and David F. Treagust. "Understanding Needs Embodiment: A Theory-Guided Reanalysis of the Role of Metaphors and Analogies in Understanding Science." *Science Education* 96, no. 5 (2012): 849-77.

Noll, Mark A. "What Is "Evangelical?". In *The Oxford Handbook of Evangelical Theology*, edited by Gerald R. McDermott, 19-33. Oxford: Oxford University Press, 2010.

O'Connor, Timothy "Free Will." In *The Stanford Encyclopedia of Philosophy* (Fall 2014 Edition), Edward N. Zalta (ed.), URL= <http://plato.stanford.edu/archives/fall2014/entries/freewill/>

O'Halloran, Nathan W. "Cosmic Alienation and the Origin of Evil: Rejecting the 'Only Way' Option." *Theology and Science* 13, no. 1 (May 2015): 43-63.

Oord, Thomas Jay. "God Always Creates out of Creation in Love: *Creatio Ex Creatione a Natura Amoris*." In *Theologies of Creation: Creatio Ex Nihilo and Its New Rivals*, edited by Thomas Jay Oord, 109-22. New York: Routledge, 2015.

———. *The Uncontrolling Love of God: An Open and Relational Account of Providence*. Downers Grove: IVP, 2015.

Otto, Rudolf. *The Idea of the Holy: An Inquiry into the Non-Rational Factor in the Idea of the Divine and Its Relation to the Rational*. Translated by John W. Harvey. London: Oxford University Press, 1926.

Paine, Thomas. *The Age of Reason. Part the First Being an Investigation of True and Fabulous Theology*. London: R. Carlile, 1826.

Pardue, Stephen. "Kenosis and Its Discontents: Towards an Augustinian Account of Divine Humility." *Scottish Journal of Theology* 65, no. 03 (2012): 271-88.

Peacocke, A. R. *Creation and the World of Science: The Re-Shaping of Belief*. Oxford: Oxford University Press, 2004.

———. "God's Interaction with the World: The Implications of Deterministic "Chaos" and of Interconnectedness and Interdependent Complexity." In *Chaos and Complexity: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Nancey Murphy and Arthur R. Peacocke, 263-87. Vatican City State: Vatican Observatory/CTNS, 1997.

———. "The Sound of Sheer Silence: How Does God Communicate with Humanity?". In *Neuroscience and the Person: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Murphy Nancey, Theo. C. Meyering and Michael A. Arbib, 215-48. Vatican City State: Vatican Observatory/CTNS, 1999.

Peacocke, A. R., and Ann Pederson. *The Music of Creation*. Minneapolis, Minnesota: Fortress Press, 2006.

Peters, Ted. "Happy Danes and Deep Incarnation." *Dialog* 52, no. 3 (2013): 244-50.

Pinnock, Clark H. "Systematic Theology." In *The Openness of God*, edited by Clark H. Pinnock, Richard Rice, John Sanders, William Hasker and David Basinger, 101-25. Downers Grove, Illinois: IVP, 1994.

Pinnock, Clark H., Richard Rice, John Sanders, William Hasker, and David Basinger. *The Openness of God: A Biblical Challenge to the Traditional Understanding of God*. Downers Grove, Illinois: Intervarsity Press, 1994.

Plantinga, Alvin. *God and Other Minds: A Study of the Rational Justification of Belief in God*. Ithaca, New York: Cornell University Press, 1990.

———. *God, Freedom, and Evil*. Essays in Philosophy. London: Allen & Unwin, 1975.

———. *Warranted Christian Belief*. New York: Oxford University Press, 1999.

Polanyi, Michael. *Personal Knowledge: Towards a Post-Critical Philosophy*. London: Routledge & Kegan Paul, 1958.

Polkinghorne, J. C. *Belief in God in an Age of Science*. Terry Lectures. New Haven, Connecticut: Yale University Press, 2003.

———. "Kenotic Creation and Divine Action." In *The Work of Love: Creation as Kenosis*, edited by J. C. Polkinghorne, 90-106. Grand Rapids, Michigan: SPCK, 2000.

———."The Metaphysics of Divine Action." In *Chaos and Complexity: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Nancey Murphy and Arthur R. Peacocke, 147-56. Vatican City Sate: Vatican Observatory/CTNS, 1995.

———. "The New Natural Theology." *Studies in World Christianity* 1, no. 1 (1995 1995): 41-50.

———. *Reason and Reality: The Relationship between Science and Theology*. London: SPCK, 1991.

———. *Science and Christian Belief: Theological Reflections of a Bottom-up Thinker*. London: SPCK, 1994.

———. *Science and Creation: The Search for Understanding*. London: SPCK, 1988.

———. *Science and Providence: God's Interaction with the World*. 1st Shambhala ed. Boston, Maryland: New Science Library, 1989.

———. *Science and Religion in Quest of Truth*. London: SPCK, 2011.

———. *Science and Theology: An Introduction*. London: SPCK, 1998.

———. *Scientists as Theologians: A Comparison of the Writings of Ian Barbour, Arthur Peacocke & John Polkinghorne*. London: SPCK, 1996.

———. *Theology in the Context of Science*. London: SPCK, 2008.

———. "Where Is Natural Theology Today?". *Science and Christian Belief* 18 (2006): 169-79.

———. *The Work of Love: Creation as Kenosis*. Grand Rapids, Michigan: W.B. Eerdmans, 2001.

Price, Daniel J. *Karl Barth's Anthropology in Light of Modern Thought*. Grand Rapids, Michigan: W. B. Eerdmans, 2002.

Rhoda, Alan R. "Generic Open Theism and Some Varieties Thereof." *Religious Studies* 44, no. 2 (2008): 225-34.

Rice, Richard. "Biblical Support for a New Perspective." In *The Openness of God: A Biblical Challenge to the Traditional Understanding of God*, edited by Clark H. Pinnock, Richard Rice, John Sanders, William Hasker and David Basinger, 11-58. Downers Grove, Illinois: IVP, 1994.

Ricoeur, Paul. *Hermeneutics: Writings and Lectures, Volume 2*. Translated by David Pellauer. Cambridge: Polity, 2013.

———. "Toward a Hermeneutic of the Idea of Revelation." *The Harvard Theological Review* 70, no. 1/2 (1977): 1-37.

Rikhof, Herwi. *The Concept of Church: A Methodological Inquiry into the Use of Metaphors in Ecclesiology*. London: Sheed and Ward, 1981.

Rota, Michael. "Evolution, Providence, and Gouldian Contingency." *Religious Studies* 44, no. 4 (2008): 393-412.

Russell, Colin Archibald. *Science and Religious Belief: A Selection of Recent Historical Studies*. Sevenoaks: Hodder and Stoughton in association with the Open University Press, 1973.

Russell, Robert J. "Cosmology from Alpha to Omega: Response to Reviews." *Zygon* 45, no. 1 (2010): 237-50.

———. *Cosmology: From Alpha to Omega: The Creative Mutual Interaction of Theology and Science*. Minneapolis, Minnesota: Fortress Press, 2008.

———. "Divine Action and Quantum Mechanics: A Fresh Perspective." In *Quantum Mechanics: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Philip Clayton, Kirk Wegter-McNelly and Michael A. Arbib, 293-328. Vatican City State: Vatican Observatory/CTNS, 2001.

———. "Introduction." In *Quantum Mechanics: Scientific Perspectives on Divine Action*, edited by John Russell Robert, Philip Clayton, Kirk Wegter-McNelly and John Polkinghorne, i-xxvi. Vatican City State: Vatican Observatory/CTNS, 2001.

———. "Introduction." In *Chaos and Complexity: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Nancey Murphy and Arthur R. Peacocke, 1-31. Vatican City State: Vatican Observatory/CTNS, 1995.

———. "Recent Theological Interpretations of Evolution." *Theology and Science* 11, no. 3 (2013/08/01 2013): 169-84.

———. "Special Providence and Genetic Mutation." In *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action*, edited by Robert John Russell, William R. Stoeger S.J. and Francisco J. Ayala, 191-223. Vatican City State: Vatican Observatory/CTNS, 1998.

———. "William R. Stoeger, SJ (1943-2014): Physicist, Cosmologist, Friend, and Leader in Theology and Science." *Theology and Science* 12, no. 4 (2014): 293-95.

Russell, Robert J., Nancey C. Murphy, and A. R. Peacocke, eds. *Chaos and Complexity: Scientific Perspectives on Divine Action*. 2nd edition. Vatican City State: Vatican Observatory/CTNS, 2000.

Russell, Robert J., William R. Stoeger, and Francisco J. Ayala, eds. *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action* Vatican City State: Vatican Observatory/CTNS, 1998. Monograph.

Russell, Robert J., Nancey C. Murphy, Theo C. Meyering, and Michael Arbib, eds. *Neuroscience and the Person: Scientific Perspectives on Divine Action*. Vatican City State: Vatican Observatory/CTNS 1999.

Russell, Robert J., William R. Stoeger S.J., and George V. Coyne S.J., eds. *Physics, Philosophy and Theology: A Common Quest for Understanding* Vatican City State: Vatican Observatory, 1988.

Russell, Robert J., Nancey C. Murphy, and C. J. Isham, eds. *Quantum Cosmology and the Laws of Nature : Scientific Perspectives on Divine Action*. Vatican City State: Vatican Observatory/CTNS, 1993.

Russell, Robert J., Philip Clayton, Kirk Wegter-McNelly, and John Polkinghorne, eds. *Quantum Mechanics: Scientific Perspectives on Divine Action*. Vatican City State: Vatican Observatory/CTNS, 2001.

Russell, Robert J., Nancey Murphy and William R. Stoeger S.J., eds. *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress* Vatican City State: Vatican Observatory/CTNS, 2008.

Sanders, John. *The God Who Risks: A Theology of Providence*. Downers Grove, Ill: InterVarsity Press, 1998.

———. "Historical Considerations." In *The Openness of God: A Biblical Challenge to the Traditional Understanding of God*, edited by Clark H. Pinnock, Richard Rice, John Sanders, William Hasker and David Basinger, 59-100. Downers Grove, Illinois: IVP, 1994.

Sanlon, Peter. "Original Sin in Patristic Theology." In *Adam, the Fall and Original Sin*, edited by Hans Madueme and Michael Reeves, 85-107. Grand Rapids: Baker Academic, 2014.

Saunders, Nicholas. *Divine Action and Modern Science*. Cambridge: Cambridge University Press, 2002.

Schaffer, Jonathan. "The Metaphysics of Causation", The *Stanford Encylopedia of Philosophy* Summer 2014 Edition), Edward N. Zalta. (ed.), URL= <http://plato.stanford.edu/archives/sum2014/entries/causation-metaphysics/>

Schmaltz, Tad. "Nicolas Malebranche", In *The Stanford Encyclopedia of Philosophy* (Spring 2014 Edition), Edward N. Zalta (ed.), URL= <http://plato.stanford.edu/archives/spr2014/entries/malebranche/>.

Schneiders, Sandra Marie. *The Revelatory Text: Interpreting the New Testament as Sacred Scripture*. San Francisco: Harper, 1991.

Sella, Andrea. "Wilson's Cloud Chamber." Royal Society of Chemistry, July 24, 2015, accessed September 9, 2016, https://www.chemistryworld.com/opinion/wilsons-cloud-chamber/8765.article.

Sennett, James F. *The Analytic Theist: An Alvin Plantinga Reader*. Grand Rapids, Michigan: W. B. Eerdmans, 1998.

Sheehan, Jonathan. "When Was Disenchantment? History and the Secular Age." In *Varieties of Secularism in a Secular Age*, edited by Michael Warner, Jonathan Vanantwerpen and Craig Calhoun, 217-42. Harvard, Massachusetts: Harvard University Press, 2010.

Shults, F. LeRon, Nancey C. Murphy, and Robert J. Russell. *Philosophy, Science and Divine Action*. Philosophical Studies in Science and Religion. Leiden: Brill, 2009.

Silva, Ignacio. "Great Minds Think (Almost) Alike: Thomas Aquinas and Alvin Plantinga on Divine Action in Nature." *Philosophia Reformata* 79 (2014): 8-20.

———. "Thomas Aquinas Holds Fast: Objections to Aquinas within Today's Debate on Divine Action." *The Heythrop Journal* 54, no. 4 (2013): 658-67.

Sloman, Steven A. *Causal Models: How People Think About the World and Its Alternatives*. Oxford: Oxford University Press, 2005.

Smith, James K. A. *How (Not) to Be Secular: Reading Charles Taylor*. Grand Rapids, Michigan: William B. Eerdmans Publishing Company, 2014.

Soskice, Janet Martin. *Metaphor and Religious Language*. Oxford: Clarendon, 1985.

Soulen, Richard N., and R. Kendall Soulen. *Handbook of Biblical Criticism*. 4th ed. Louisville, Kentucky: Westminster John Knox Press, 2011.

Southgate, Christopher. *The Groaning of Creation: God, Evolution, and the Problem of Evil*. Louisville, Kentucky: Westminster John Knox Press, 2008.

Southgate, Christopher, and Andrew Robinson. "Varieties of Theodicy: An Exploration of Responses to the Problem of Evil Based on a Typology of Good-Harm Analysis." In *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, edited by Nancey Murphy, Robert J Russell and William R. Stoeger S.J., 67-90. Vatican City State: Vatican Observatory/CTNS, 2007.

Stafford, Barbara Maria. "Still Deeper: The Nonconscious Sublime; or, the Art and Science of Submergence." In *Beyond the Finite: The Sublime in Art and Science*, edited by Ronald Hoffmann and Ian Boid Whyte, 43-56. Oxford: OUP, 2011.

Steiner, George. *Real Presences*. Chicago: University of Chicago, 1989.

Stenger, Victor J. *God: The Failed Hypothesis: How Science Shows That God Does Not Exist*. Amherst, New York: Prometheus, 2007.

Stoeger, William R. "Conceiving Divine Action in a Dynamic Universe." In *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress*, edited by Robert J. Russell, Murphy Nancey and William R. Stoeger S.J., 225-48. Vatican City State: Vatican Observatory/CTNS, 2008.

———. "Contemporary Cosmology and Its Implications for the Science-Religion Dialogue." In *Physics, Philosophy and Theology: A Common Quest for Understanding*, edited by George V. Coyne, Robert J. Russell and William R. Stoeger S.J., 219-44. Vatican City State: Vatican Observatory/CTNS, 1988.

———. "Contemporary Physics and the Ontological Status of the Laws of Nature." In *Quantum Cosmology and the Laws of Nature: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Nancey Murphy and C. J. Isham, 207-31. Vatican City State: Vatican Observatory/CTNS, 1993. Reprint, Second Edition.

———. "Describing God's Action in the World in Light of Scientific Knowledge of Reality." In *Chaos and Complexity: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Nancey Murphy and Arthure R. Peacocke, 239-61. Vatican City State: Vatican Observatory/CTNS, 1995.

———. "The Divine Action Project: Reflections on the Compatibilism/Incompatibilism Divide." *Theology and Science* 2, no. 2 (2004): 192-96.

———. "Entropy, Emergence, and the Physical Roots of Natural Evil." In *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, edited by Nancey Murphy, Robert J Russell and William R. Stoeger S.J., 93-108. Vatican City State: Vatican Observatory/CTNS, 2007.

———. "The Mind-Brain Poblem, the Laws of Nature, and Constitutive Relationships." In *Neuroscience and the Person: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Murphy Nancey, Theo C. Meyering and Michael A. Arbib, 129-46. Vatican City State: Vatican Observatory/CTNS, 1999.

———. "Quantum Theory, Philosophy, and Theology: Is There a Distinct Roman Catholic Perspective?". In *The Routledge Companion to Religion and Science*, edited by James W. Haag, Gregory R Peterson and Michael L. Spezio, 169-78. New York: Routledge, 2012.

———. "Reflections on the Interaction of My Knowledge of Cosmology and My Christian Belief." *CTNS Bulletin* 21, no. 2 (2001): 10-18.

Stone, Adam. "Adam and Modern Science." In *Adam, the Fall and Original Sin*, edited by Hans Madueme and Michael Reeves, 53-81. Grand Rapids: Baker Academic, 2014.

Swinburne, Richard. *Revelation: From Metaphor to Analogy*. 2nd edition. Oxford: Clarendon, 2007.

Taylor, Charles. *A Secular Age*. Cambridge, Massachusetts: Belknap Press of Harvard University Press, 2007.

Theissen, Gerd, and Dagmar Winter. *The Quest for the Plausible Jesus: The Question of Criteria*. 1st American ed. Louisville, Kentucky: Westminster John Knox Press, 2002.

Thomas, Owen. "Metaphysics and Natural Science." *Theology and Science* 7, no. 1 (2009): 31-45.

Tilley, Terrence W. *The Evils of Theodicy*. Washington D.C: Georgetown University Press, 1991.

———. "Problems of Theodicy: Background." In *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, edited by Nancey Murphy, Robert J Russell and William R. Stoeger S.J., 35-51. Vatican City State: Vatican Observatory/CTNS, 2007.

Tracy, T. F. "Evolution, Divine Action, and the Problem of Evil." In *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action*, edited by John Russell Robert, William R. Stoeger S.J, and Francisco J. Ayala, 511-30. Vatican City State: Vatican Observatory/CTNS, 1998.

Tracy, Thomas F. "Particular Providence and the God of the Gaps." In *Chaos and Complexity: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Nancey Murphy and arthur R. Peacocke, 289-324. Vatican City State: Vatican Observatory/CTNS, 1995.

Trigg, Roger. *Beyond Matter: Why Science Needs Metaphysics*. West Conshohocken: Templeton Press, 2015.

Vanhoozer, Kevin J. *Remythologizing Theology: Divine Action, Passion, and Authorship*. Cambridge Studies in Christian Doctrine. Cambridge: Cambridge University Press, 2010.

Vanstone, W. H. *Love's Endeavour, Love's Expense: The Response of Being to the Love of God*. London: Darton, Longman and Todd, 1977.

Veer, Peter van der. *Imperial Encounters: Religion and Modernity in India and Britain*. Princeton: Princeton University Press, 2001.

Venema, Dennis R., and Scot McKnight. *Adam and the Genome*. Grand Rapids: Brazos Press, 2017.

Wahlberg, Mats. "Was Evolution the Only Possible Way for God to Make Autonomous Ceatures? Examination of an Argument in Evolutionary Theodicy." *International Journal for Philosophy of Religion* 77, no. 1 (2015): 37-51.

Wall, Alan, and Goronwy Tudor Jones. *Myth, Metaphor and Science*. Chester: Chester Academic Press, 2009.

Wallace, William A. *The Modeling of Nature: Philosophy of Science and Philosophy of Nature in Synthesis*. Washington D.C: The Catholic University of America Press, 1996.

Walton, John H. *The Lost World of Adam and Eve*. Downers Grove: IVP, 2015.

Ward, Graham. "Barth, Modernity and Postmodernity." In *The Cambridge Companion to Karl Barth*, edited by John Webster, 274-95. Cambridge: CUP, 2000.

Ward, Keith. "God as a Principle of Cosmological Explanation." In *Quantum Cosmology and the Laws of Nature: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Murphy Nancey and C. J. Isham, 247-62. Vatican City State: Vatican Observatory/CTNS, 1993.

———. *More Than Matter?: What Humans Really Are*. Oxford: Lion, 2010.

Ware, Bruce A. *God's Lesser Glory: A Critique of Open Theism*. Leicester: Apollos, 2000.

Warner, Michael, Jonathan VanAntwerpen, and Craig J. Calhoun. *Varieties of Secularism in a Secular Age*. Harvard, Massachusetts: Harvard University Press, 2010.

Webb, Stephen H. *The Dome of Eden: A New Solution to the Problem of Creation and Evolution*. Eugene, Oregon: Cascade Books, 2010.

Weinandy, Thomas G., O.F.M. "God and Human Suffering: His Act of Creation and His Acts in History." In *Divine Impassibility and the Mystery of Human Suffering*, edited by James F. Keating, and Thomas White, O.P., 99-116. Grand Rapids, Michigan: W. B. Eerdmans, 2009.

Wellhausen, Julius. *Prolegomena to the History of Israel*. Atlanta, Georgia: Scholars Press, 1994.

White, Graham. "Medieval Theories of Causation." In *Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. Stanford: Stanford University, 2013.

White, Vernon. *The Fall of a Sparrow: A Concept of Special Divine Action*. Exeter: Paternoster, 1985.

———. "Providence, Irony and Belief: Thomas Hardy — and an Improbable Comparison with Karl Barth." *Theology* 113, no. 875 (September 2010): 357-65.

———. *Purpose and Providence: Taking Soundings in Western Thought, Literature and Theology*. London: Bloomsbury, 2015.

———. "Re-Enchanting the World: A Fresh Look at the God of Mystical Theology." *Theology* 103, no. 815 (September 2000): 347-55.

Whitehead, Alfred North. *Process and Reality: An Essay in Cosmology*. Gifford Lectures. Cambridge: Cambridge University Press, 1929.

Wilkinson David and Stephen C. Barton, eds. *Reading Genesis after Darwin*. Oxford: Oxford University Press, 2009.

Wildman, Wesley J. "Behind, between, and Beyond Anthropomorphic Models of Ultimate Reality." *Philosophia* 35 (2007): 407-25.

———. "Comparative Natural Theology." *American Journal of Theology and Philosophy* 27, no. 2 & 3 (2006): 173-90.

———. "The Divine Action Project, 1988-2003." In *Scientific Perspectives on Divine Action: Twenty Years of Challenge and Progress*, edited by Robert J. Russell, William R. Stoeger S.J., and George Coyne, S.J., 133-76. Vatican City State: Vatican Observatory/CTNS, 2008.

———. "Evaluating the Teleological Argument for Divine Action." In *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, William R. Stoeger S.J., and Francisco J. Ayala, 117-50. Vatican City State: Vatican Observatory/CTNS, 1998.

———. "Further Reflections on 'the Divine Action Project'." *Theology and Science* 3, no. 1 (March 2005): 71-83.

———. "The Import of Physical Cosmology for Philosophical Cosmology." *Theology and Science* 6, no. 2 (2008): 197-212.

———. "Incongruous Goodness, Perilous Beauty, Disconcerting Truth: Ultimate Reality and Suffering in Nature." In *Physics and Cosmology: Scientific Perspectives on the Problem of Natural Evil*, edited by Nancey Murphy, Robert J Russell and S.J. William R. Stoeger, 267-94. Vatican City State: Vatican Observatory/CTNS, 2007.

———. "Robert John Russell's Theology of God's Action." In *God's Action in Nature's World: Essays in Honour of Robert John Russell*, edited by Ted Peters and Nathan Hallanger, 147-69. Aldershot: Ashgate, 2006.

———. "A Theological Challenge: Coordinating Biological, Social, and Religious Visions of Humanity." *Zygon* 33, no. 4 (1998): 571-97.

Wildman, Wesley J., and Leslie A. Brothers. "A Neuropsychological-Semiotic Model of Religious Experiences." In *Neuroscience and the Person: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Nancey Murphy, Theo C. Meyering and Michael A. Arbib, 347-418. Vatican City State: Vatican Observatory/CTNS, 1999.

Wildman, Wesley J., and Robert John Russell. "Chaos: A Mathematical Introduction with Philosophical Reflections." In *Chaos and Complexity: Scientific Perspectives on Divine Action*, edited by Robert J. Russell, Nancey Murphy and Arthur R. Peacocke, 49-92. Vatican City State: Vatican Observatory/CTNS, 1995.

Williams, N. P. *The Ideas of the Fall and of Original Sin: A Historical and Critical Study*. London: Longmans, Green, 1927.

Williams, Rowan. *The Edge of Words: God and the Habits of Language*. London: Bloomsbury, 2014.

———. *Grace and Necessity: Reflections on Art and Love*. London: Continuum, 2005.

Willows, Adam M. "Augustine, the Origin of Evil, and the Mystery of Free Will." *Religious Studies* 50, no. 2 (2014): 255-69.

Wilson, George, and Samuel Shpall. "Action." In *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.), URL= <https://plato.stanford.edu/archives/win2016/entries/action/>

Wippel, John F. *The Metaphysical Thought of Thomas Aquinas: From Finite Being to Uncreated Being*. Monographs of the Society for Medieval and Renaissance Philosophy. Washington D.C: Catholic University of America Press, 2000.

Wolterstorff, Nicholas. *Divine Discourse: Philosophical Reflections on the Claim That God Speaks*. Wilde Lectures. Cambridge: Cambridge University Press, 1995.

Wood, W. Jay. *Epistemology: Becoming Intellectually Virtuous*. Leicester: Apollos, 1998.

Woodward, James. *Making Things Happen: A Theory of Causal Explanation*. Oxford: Oxford University Press, 2003.

Worrall, John. "Miracles and Models: Why Reports of the Death of Structural Realism May Be Exaggerated." In *Philosophy of Science: Royal Institute of Philosophy Supplement: 61*, edited by Anthony O'Hear, 125-54. Cambridge: CUP, 2007.

Wrede, William. "The Tasks and Methods of 'New Testamanent Theology'." In *The Nature of New Testament Theology: The Contribution of William Wrede and Adolf Schlatter*, edited by Robert Morgan, 68-116. London: SCM, 1973.

Wright, G. Ernest. *God Who Acts: Biblical Theology as Recital*. Studies in Biblical Theology. London: SCM Press, 1952.

Yarbrough, Robert W. "Adam in the New Testament." In *Adam, the Fall, and Original Sin*, edited by Hans Madueme and Michael Reeves, 33-52. Grand Rapids: Baker Academic, 2014.

Yob, Iris M. "Religious Metaphor and Scientific Model: Grounds for Comparison." *Religious Studies* 28, no. 4 (1992): 475-85.

Yong, Amos. *The Spirit of Creation: Modern Science and Divine Action in the Pentecostal-Charismatic Imagination*. Grand Rapids: W.B. Eerdmans, 2011.

Žižek, Slavoj. *Less Than Nothing: Hegel and the Shadow of Dialectical Materialism*. London: Verso, 2012.