The evolutionary *logoi*: a constructive theological engagement of Maximus the Confessor with evolutionary biology

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Thesis submitted to the University of Nottingham for the degree of Doctor of Philosophy

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April 2023

Contents

ABSTRACT **5**

PREFACE **6**

ABBREVIATIONS **7**

CHAPTER 1: INTRODUCTION **9**

1.1 'MAXIMUS MANIA' 9
1.2 MAXIMUS AND THE NATURAL SCIENCES 11
1.3 THE STRANGE CASE OF THE EVOLUTIONARY *LOGOI* 13
1.3.1 Andrew Louth, 2004 ..... *14*
1.3.2 Elizabeth Theokritoff, 2008 ..... *14*
1.3.3 Christopher Southgate, 2008 ..... *15*
1.3.4 Torstein Tollefsen, 2015 ..... *16*
1.3.5 Paul Blowers, 2016 ..... *16*
1.3.6 Elizabeth Theokritoff, 2017 ..... *17*
1.3.7 Mark Chenoweth, 2020 ..... *18*
1.4 THESIS AIMS 18
1.5 THESIS CLAIMS 19
1.6 THEOLOGICAL METHOD 20
1.7 THESIS PLAN 23
1.8 NOTE ON SOURCES 24

CHAPTER 2: THE EVOLUTIONARY *LOGOI* **26**

2.1 CHAPTER AIMS 26
2.2 INTRODUCTION TO THE *LOGOI* 27
2.3 INTRODUCTION TO EVOLUTIONARY BIOLOGY 29
2.3.1 Preamble *29*
2.3.2 The unity and diversity of life *31*
2.3.3 Replication of inheritable variation *33*
2.3.4 Natural selection *33*
2.3.5 Adaptation *34*
2.3.6 'Replicators' are the genetic code *34*
2.3.7 Evolutionarily adaptive change is blind and gradual *35*
2.3.8 Evolution is, by default, a divergent process *36*
2.3.9 Divergence is balanced by stabilisation and convergence *36*
2.4 EVOLUTIONARY RESEMBLANCES OF THE *LOGOI* 40
2.4.1 The 'defining logoi' *40*
2.4.2 The 'moving logoi' *45*
2.4.3 The 'temporal logoi' *53*
2.4.4 The 'entangled logoi' *56*
2.5 CHAPTER CONCLUSIONS 62

CHAPTER 3: THE CHRISTO-FORMING *LOGOI* **64**

3.1 CHAPTER AIMS 64

3.2 THE *LOGOI* 'IN' GOD 65
3.2.1 As divine ideas 65
3.2.2 As divine wills 68
3.2.3 As divine energies 72
3.2.4 As the second person of the Trinity 77
3.3 THE *LOGOI* 'IN' CREATURES 81
3.3.1 As universals and particulars 81
3.3.2 As substantial form 87
3.4 THE NATURE OF THE GOD-CREATION RELATIONSHIP 93
3.4.1 The same logoi in God and creation 93
3.4.2 Sources of communion and otherness 95
3.4.3 A partial and dynamic panentheism 97
3.4.3.1 Communion via logoi, otherness via materiality 99
3.4.3.2 Communion via energies, otherness via essence 101
3.4.3.3 Communion via person, otherness via natures 101
3.4.3.4 Communion and otherness via all three: logoi/materiality, energies/essence, and person/natures 105
3.4.4 Objections to panentheism based on participation 106
3.4.4.1 The useful fiction objection 111
3.4.4.2 The non-multiple realisability objection 113
3.5 CHAPTER CONCLUSIONS 119

CHAPTER 4: THE PURPOSEFUL *LOGOI* 121

4.1 CHAPTER AIMS 121
4.2 DEFINING THE PROBLEM OF EVOLUTIONARY DYSTEOLOGY 122
4.3 QUESTIONING THE PROBLEM OF EVOLUTIONARY DYSTELEOLOGY 126
4.4 MAXIMUS ON PROVIDENCE, FRAGILITY AND DISORDER 128
4.4.1 Ontological providence 129
4.4.2 Responsive/personal providence 131
4.4.3 Holomeric/delegative providence 132
4.4.4 Convertive/teleological providence 133
4.5 INCONVENIENT TRUTHS ABOUT THE *LOGOI* WITH RESPECT TO EVOLUTIONARY CHANGE 133
4.5.1 The inviolable logoi 134
4.5.2 The teleological logoi 142
4.5.3 The immanent logoi 144
4.5.3.1 Providence and divine action 145
4.5.3.2 Theistic Naturalism 149
4.5.3.3 Thomistic Naturalism 150
4.5.3.4 Pneumatological Naturalism 152
4.5.3.5 Panentheistic Naturalism 153
4.5.3.6 The logoi as Knight's 'Fixed Instructions' 154
4.5.3.7 Immanence enhances purpose 158
4.5.3.8 Immanence does not imply crude 'preformationism' 160
4.5.4 The determinative logoi 165
4.6 CHAPTER CONCLUSIONS 173

CHAPTER 5: THE GOOD *LOGOI* 174

5.1 CHAPTER AIMS 174
5.2 DEFINING THE PROBLEM OF EVOLUTIONARY EVIL 175

5.3 Questioning the problem of evolutionary evil 177
5.4 Creation immature, in motion, and future-defined 179
5.4.1 Falling upwards 179
5.4.2 Simultaneous creation and fall 181
5.4.3 Logoi evolving 184
5.4.4 Logoi evolution continues beyond science 186
5.4.5 Dynamic contemplation of the logoi 188
5.5 'Garments of skin' 192
5.5.1 Addressing unequivocal evolutionary evil 192
5.5.2 The 'Garments of Skin' in Greek tradition 193
5.5.3 Interpreting the Garments of Skin today 194
5.5.4 Revisiting the mechanisms of Darwinian evolution 196
5.5.5 Microcosmic solidarity of humans and non-humans 199
5.6 'Suffering as' 205
5.6.1 Theocentric approaches to suffering 205
5.6.2 'Suffering for' 206
5.6.3 'Suffering with' 207
5.6.4 'Suffering as' 209
5.6.4.1 ...via Deep Incarnation 209
5.6.4.2 ...via Maximian panentheism 211
5.7 Chapter conclusions 215

CHAPTER 6: CONCLUSIONS 216

6.1 Recapitulation 216
6.1.1 Original aims and provisional conclusion 216
6.1.2 Challenging and refining the provisional conclusion 218
6.2 Emerging themes and applications 222
6.2.1 Formal causation 222
6.2.2 Particularity 224
6.2.3 Immanent providence 228
6.2.4 Evolutionary logoi 230

BIBLIOGRAPHY 233

Primary sources 233
Secondary sources 235

Abstract

This thesis brings Maximus the Confessor's *logoi* doctrine into dialogue with modern-day evolutionary biology. Motivated by a number of recent scientific allusions to the *logoi*, it first explores the extent to which the *logoi*, as described by Maximus, exhibit features that are concordant with evolution before going on to consider more discordant aspects that cannot be ignored. Based on an interpretation of the *logoi* as constitutively immanent formal principles that appear in time and expand and contract interactively, the case is made that the *logoi* do indeed bear a strong resemblance to the phylogenetic unity-in-difference that is the hallmark of Darwinian descent with modification. Not only are the *logoi* evolutionary in our physically-observable spacetime but they also could be said to evolve *meta*physically from their timeless intentionality in God to their final consummation in the *Logos*. As to their more disanalogous features: some of these, such as their immutability, purposefulness and determinative character, can be shown to be only superficially at odds with biological evolution, while their goodness (as the very *Logos*) poses greater challenges. However, by drawing upon further resources from Maximus and the Eastern tradition, it is argued, more speculatively, that the underlying goodness of the *logoi* can still be seen in certain elements of the Darwinian process while other elements correspond to the so-called 'garments of skin' imposed by God as part of a simultaneous creation and fall. Overall, this study joins with other Maximian interpreters in attesting to the incarnational and theophanic nature of the *logoi*, but seeks to extend this distinctively Eastern Christo-cosmology into the problematic territory of biological evolution, a territory historically dominated by Western scholarship.

Preface

This study grew out of a previous dissertation and the excellent tutelage that accompanied its gestation.[1] I am grateful to Professor Simeon Zahl and Dr Pui Him Ip for introducing me to the wonderful world of Patristics and Maximus the Confessor in particular. As for the world of 'science-engaged theology' that was always my first love, I am thankful to the Rev Dr Andrew Davison for showing me how the genre can best be served through engagement with history, tradition and philosophy, and for teaching me how to think like a theologian rather than (just) like a scientist (though I am still learning!).

A doctoral student could not wish for a more supportive and encouraging supervisor than I have had in Dr Michael Burdett. Thank you for taking me on, Michael, and for all the guidance and advice. Thanks also to Dr Conor Cunningham, my secondary supervisor, for broadening my theological palate beyond my current focus.

Along the way, I have had the privilege of receiving valuable feedback from a number of experts beyond Nottingham who have feely given of their time to assist a student well outside their usual lines of responsibility. I am indebted to Fr Maximos Constas (Boston), Fr Christopher Knight (Cambridge), Fr Andrew Louth (Durham), Sotiris Mitralexis (Athens), Dionysius Skliris (Athens), Fr Mariusz Tabaczek (Rome), Jordan Daniel Wood (Providence) for helpful discussion and feedback—and especially to Dr Elizabeth Theokritoff (Cambridge), by whose kind introductions I was able to make contact with many of the aforementioned scholars. Naturally, my acknowledgment of their help does not imply that they agree with anything I have written. All errors and misapprehensions remain my own.

Most of all, I am immensely grateful to my wife, Ros, for allowing me to take early retirement to indulge my life-long passion for theology, and for bearing patiently with me on my new adventure.

[1] Andrew P. Jackson, "The nature of individuated creaturehood through the lens of Maximus the Confessor and evolutionary biology" (MPhil University of Cambridge, 2020).

Abbreviations

Works of Maximus the Confessor cited:

Ad Thal	*Quastiones ad Thalassium*
Amb	*Ambiguorum Liber*
Cap Gnost	*Capita Theologica et Oeconomica*
De Char	*Centuriae de Charitate*
Ep	*Epistulae*
Myst	*Mystagogia*
Opusc	*Opuscula Theologica et Polemica*
Qu Dub	*Quastiones et Dubia*
Schol Dionys	*St Dionysii Epistolas Scholia*

Other abbreviations

CCSG	*Corpus Christianorum Series Graeca*
DOML	Maximus the Confessor. *On Difficulties in the Church Fathers: The Ambigua*. Edited and Translated by Nicholas Constas. Dumbarton Oaks Medieval Library. Edited by Jan M. Ziolkowksi. Vol. 1 & 2, Cambridge, MA: Harvard University Press, 2014.
DP	*St. Maximus the Confessor's Questions and Doubts*. Translated by Despina D. Prassas. DeKalb, IL: Northern Illinois University Press, 2010.
FOTC	Maximus the Confessor. *On Difficulties in Sacred Scripture: The Responses to Thalassios*. Translated by Maximos Constas. The Fathers of the Church. Edited by David G. Hunter. Vol. 136,

	Washington DC: The Catholic University of America Press, 2018.
GB	Maximus Confessor. *Selected Writings*. Translated by George C. Berthold. The Classics of Western Spirituality. Edited by John Farina. New York: Paulist Press, 1985.
JA	Maximus the Confessor. *On the Ecclesiastical Mystagogy: A Theological Vision of the Liturgy.* Translated by Jonathan J. Armstrong. Popular Patristics Series. Edited by John Behr. Yonkers, NY: St Vladimir's Seminary Press, 2019.
PG	*Patrologiae Cursus Completus Series Graeca*

Chapter 1: Introduction

1.1 'Maximus mania'

'Not *another* Westerner working on Maximus the Confessor!' teased an Eastern Orthodox scholar on meeting me for the first time. I should not have been surprised. Such is the popularity of the Confessor's writings in academic theology these days that he has become almost *too* fashionable; at least, so my colleague implied. Maximus is, it seems, everyone's favourite Eastern church Father on whom one can rely for some fruitful dialogue, whatever one's theological interests. My colleague's jest was not unfounded: the large number of monographs and articles published in the last few decades testifies to a renaissance of interest in all things 'Maximian,'[2] especially following the cataloguing and translation of many of his works into English.[3] Many reasons could be adduced for this popularity: theo-philosophical, spiritual, and methodological.

Philosophically and theologically, Maximus was eclectic, having read Origen, Evagrius, the Cappadocian Fathers, Nemesius of Emesa, and Dionysius the Areopagite[4] and stood at the confluence of several streams of earlier thought. He represents therefore a convenient nidus, or culmination, from which to gain an integrated summary of the many debates and controversies that were fermenting in

[2] Daniel Haynes, "Preface," in *A saint for East and West: Maximus the Confessor's contribution to Eastern and Western Christian theology*, ed. Daniel Haynes (Eugene, OR: Cascade Books, 2019), ix.
[3] Marek Jankowiak and Phil Booth, "A new date-list of the works of Maximus the Confessor," in *The Oxford handbook of Maximus the Confessor*, ed. Pauline Allen and Neil Bronwen (Oxford: Oxford University Press, 2015).
[4] Andrew Louth, "Introduction," in *A saint for East and West: Maximus the Confessor's contribution to Eastern and Western Christian theology*, ed. Daniel Haynes (Eugene, OR: Cascade Books, 2019), xxi.

previous centuries,[5] the prime example being the Origenist controversy and Maximus' response to it.[6]

Maximus was also a monk of the Evagrian tradition, and his spiritual life shines forth on every page, as when we read of the importance of ascetic practice for gaining true knowledge leading to final theosis. A good example is his contemplation of nature as the way to discern the *Logos*;[7] a subject to which we shall be returning later in this study.

And then there is his methodology. Maximus' mode of discourse is one that approaches any *aporia* with an epistemic humility that is tolerant of ambiguity and tentative in offering solutions. Maximus prefers instead to see connections between things that ultimately lead to the mystery of Christ in whom all things cohere.[8] An example here is Maximus' reappropriation of *tropos* of existence from its original Trinitarian context to describing human virtue formation.[9]

These three factors, along with the sheer volume and subject-breadth of his work, might account for the upsurge of interest in Maximus in recent years, and all

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[5] According to von Balthasar, Maximus is '...the completion and full maturity of Greek mystical, theological, and philosophical thought.' Quoted in *Maximus Confessor: Selected Writings.* Translated by George C. Berthold. The Classics of Western Spirituality. Edited by John Farina. New York: Paulist Press, 1985. xi. According to Maximos Constas, 'Maximus...was active at a time when Greek patristic theology and Platonic philosophy had reached their greatest maturity...' Maximos Constas, "Maximus the Confessor, Dionysius the Areopagite, and the transformation of Christian Neoplatonism," *Analogia* 1, 2 (2017): 1.

[6] Polycarp Sherwood, *The early Ambigua of Saint Maximus the Confessor and his refutation of Origenism*, Studia Anselmiana, (Rome: Orbis Catholicus, 1955), 72-102; Pascal Mueller-Jourdan, "The foundation of Origenist metaphysics," in *The Oxford handbook of Maximus the Confessor*, ed. Pauline Allen and Neil Bronwen (Oxford: Oxford University Press, 2015), 149-63.

[7] Metropolitan (Paffhausen) Jonah, "Natural contemplation in St. Maximus the Confessor and St. Isaac the Syrian," in *Towards an ecology of transfiguration: Orthodox Christian perspectives on environment, nature, and creation*, ed. John Chryssavgis and Bruce V. Foltz (New York: Fordham University Press, 2013), 46-58; Michael Harrington, "Creation and natural contemplation in Maximus the Confessor's Ambiguum 10:19," in *Divine creation in ancient, medieval, and early modern thought*, ed. Michael Treschow, Willemien Otten, and Walter Hannam, Brill's studies in intellectual history (Leiden and Boston: Brill, 2007), 191-212; Joshua Lollar, "Christ and the contemplation of nature in Maximus the Confessor's Ambigua to John," in *A saint for east and west: Maximus the Confessor's contribution to eastern and western Christian theology*, ed. Daniel Haynes (Eugene, OR: Cascade Books, 2019), 245-59.

[8] Louth, "Introduction," xxii.

[9] Rowan Williams, "Nature, passion, and desire: Saint Maximus' ontology of excess," in *A saint for East and West: Maximus the Confessor's contribution to Eastern and Western Christian theology*, ed. Daniel Haynes (Eugene, OR: Cascade Books, 2019), 148; Dionysios Skliris, ""Hypostasis," "person," "individual," "mode": a comparison between the terms that denote concrete being in St Maximus' theology" (paper presented at the Knowing the purpose of creation through the resurrection: Proceedings of the symposium on Maximus the Confessor, Belgrade, 2012), 437-50.

of this despite the fact that he is—it has to be said—a difficult author. Difficult, not just in terms of his complicated long-winded way of writing, but also because of the dispersed and fragmentary nature of much of his thought. Maximus was no Aquinas when it comes to being orderly and systematic.

With regard to the current study, the attraction held by Maximus lies in the richness of what he has to say about creation and protology. One can scour many of the church fathers for philosophical material on the subject of creation but struggle to find anything substantive beyond hexaemeral commentary. Not so with Maximus,[10] as will become clear from his theology of the *logoi*. It is particularly fitting that Maximus should today be consulted by scholars from the Western tradition given the ecumenical dialogue he entered into during his own lifetime, which even led to him being suspected as a traitor by his fellow Greeks. He was, and remains today, a 'Saint for East and West.'[11]

Therefore, despite the current 'Maximus mania,' I feel no embarrassment, and make no apology—as yet another Western 'outsider'—for offering this small contribution to Maximian scholarship.[12]

1.2 Maximus and the natural sciences

Despite Maximus' current popularity, it is surprising that there have been relatively few sustained attempts at bringing to bear his theological and metaphysical thought

[10] For the most part, Maximus did not concern himself with exegetical problems in the early chapters of Genesis. Paul M. Blowers, "From nonbeing to eternal well-being: creation ex nihilo in the cosmology and soteriology of Maximus the Confessor," in *Light on creation: ancient commentators in dialogue and debate on the origin of the world*, ed. Geert Roskam and Joseph Verheyden (Tübingen: Mohr Siebeck, 2017), 172.

[11] This is the title of a recent collection of essays covering Maximus' anthropology, Christology, spirituality, ontology and metaphysics—precisely the breadth that exemplifies modern Maximian scholarship. Daniel Haynes, ed., *A saint for East and West: Maximus the Confessor's contribution to Eastern and Western Christian theology* (Eugene, OR: Cascade Books, 2019).

[12] A summary of the present study can also be found in: Andrew Jackson, "Peacocke Prize Essay: Towards an Eastern Orthodox contemplation of evolution: Maximus the Confessor's vision of the phylogenetic logoi," *Zygon: Journal of Religion and Science* 58 (2023).

with modern-day natural science,[13] let alone evolutionary biology.[14] This is a pity because Maximus, and indeed the Eastern Orthodox tradition more broadly,[15] offers a rich resource from which to draw fresh perspectives on biological evolution; perspectives that are not always acknowledged in standard theological interpretations of evolution.[16] Furthermore, biological evolution is too important a subject to be neglected by theology, and I am not (just) referring here to the polemics of religious and scientific fundamentalists that have raised evolution to that of paradigmatic example of science and religion in conflict. Rather, I mean that evolution is key to understanding so much of what exists in the natural world, and any attempt that theology makes to engage with biology from a synchronic perspective must also expect to tackle it from its orthogonal diachronic perspective.

[13] Two clusters of interest are environmental ethics and astrophysics. See: Radu Bordeianu, "Maximus and ecology: the relevance of Maximus the Confessor's theology of creation for the present ecological crisis," *The Downside Review* 127, no. 447 (2009): 103-26; Gayle E. Woloschak, "Perspectives on Orthodoxy, evolution, and ecology," in *Toward an ecology of transfiguration: Orthodox Christian perspectives on environment, nature, and creation*, ed. John Chryssavgis and Bruce V. Foltz (New York: Fordham University Press, 2013), 263-75; Emma Brown Dewhurst, "The cosmology of St Maximus the Confessor as a basis for ecological and humanitarian ethics," in *Teologikon* (2014), 126-40; Elizabeth Theokritoff, "The vision of St. Maximus the Confessor: that creation may all be one," in *The Wiley Blackwell companion to religion and ecology*, ed. John Hart (Hoboken, NJ: John Wiley & Sons Ltd., 2017), 220-35; Alexei V. Nesteruk, *Light from the east: theology, science, and the Eastern Orthodox tradition* (Minneapolis: Fortress Press, 2003); Alexei V. Nesteruk, "The sense of the universe: St Maximus the Confessor and the theological consummation of modern cosmology," in *The architecture of the cosmos: St. Maximus the Confessor new perspectives*, ed. Antoine Levy et al., Schriften de Luther-Agricola-Gesellschaft (Helsinki: Luther-Agricola-Society, 2015), 298-344.

[14] Vincent Rossi, "Clash of the paradigms: the doctrine of evolution in the light of the cosmological vision of St. Maximos the Confessor," (2015), https://orthochristian.com/81599.html; Paul M. Blowers, "Unfinished creative business: Maximus the Confessor, evolutionary theodicy, and human stewardship in creation," in *On earth as it is in heaven: cultivating a contemporary theology of creation*, ed. David Vincent Meconi (Grand Rapids, MI: Eerdmans, 2016), 174-90; Mark Chenoweth, "A Maximian framework for understanding evolution," *St Vladimir's Theological Quarterly* 64, no. 3-4 (2020): 157-80; Doru Costache, "Logos, evolution, and finality in the anthropological research: towards a transdisciplinary solution," in *Science and religion: antagonism or complementarity?*, ed. Basarab Nicolescu and Magda Stavinschi (Bucharest: XXI Eonul Dogmatic, 2003), 241-60.

[15] My use of the nomenclature 'East' and 'Eastern' is not a geographical designation but rather a way to identify the church vis-à-vis the 'Western church,' that is, Roman Catholics and Protestants. I also realise that 'East' and 'Eastern' encompass a number of separate ecclesiastical bodies (e.g. Greek, Russian, Oriental) that may not all agree on the doctrines and beliefs I attribute to them.

[16] For example, Nicola Hoggard Creegan, Bethany Sollereder and John Schneider, in their recent books on animal suffering in evolution, make no reference to Maximus' *logoi* cosmology or to other Eastern ideas that would be highly germane to their projects, such as an instantaneous creation and fall, or the 'garments of skin,' that I will be discussing in later chapters. Nicola Hoggard Creegan, *Animal suffering and the problem of evil* (Oxford: Oxford University Press, 2013); Bethany Sollereder, *God, evolution, and animal suffering: theodicy without a fall* (Abingdon, UK: Routledge, 2019); John R. Schneider, *Anmal suffering and the Darwinian problem of evil* (Cambridge: Cambridge University Press, 2020).

That is to say, evolution encourages us to see the past as the key to the present. As Arthur Peacocke once said, quoting Dobzhansky's famous epigram:

> [Since]..."Nothing in biology makes sense except in the light of evolution" [a]ny theology—any attempt to relate God to all-that-is—will be moribund and doomed if it does not incorporate this perspective into its very bloodstream. Yet much Christian theology simply tinkers apologetically with its beliefs at what seem vulnerable chinks in its armour, assuming that it will survive into what it hopes will be less challenging times.[17]

As it turns out, Maximus' way of 'relating God to all that is' is particularly well disposed to our modern evolutionary perspective, though recognition of this potential is barely nascent in the secondary literature, as we shall now discover.

1.3 The strange case of the evolutionary *logoi*

One of Maximus' most original and celebrated insights was his vision of the Word, the *Logos* of John Chapter 1, as a refracted articulation of separate *logoi* that form the diversity and order of the cosmos, accounting for its goodness and purposefulness. A considerable amount has been written about Maximus' *logoi*, doctrine, which has been seen as 'the most perspicuous Platonic element of his thinking and...a thorough Christianized version of the doctrine of transcendent Forms...,'[18] of which much more will be said in the following chapters. But in line with previous comments, very little has been written of the *logoi* in connection with the natural sciences, biology, or evolution. There are however a few intriguing and tantalising exceptions that stand out: brief allusions to the *logoi* and evolution or to the *logoi* and genetics, often lacking in any further explanation. It was my discovery of these throwaway comments that became the inspiration and motivation for the

[17] Arthur Peacocke, "Biology and a theology of evolution," *Zygon: Journal of Religion and Science* 34, no. 4 (1999): 698.
[18] Torstein T. Tollefsen, "Christian Platonism in Byzantium," in *Christian Platonism: a history*, ed. Alexander J.B. Hampton and John Peter Kenney (Cambridge: Cambridge University Press, 2021), 217.

current study, and it is worth setting them out now as the foundation markers for the thesis as a whole.

1.3.1 Andrew Louth, 2004

In a landmark collection of essays on panentheism, Fr Andrew Louth, professor of Patristic and Byzantine studies at the university of Durham, contributed a paper entitled 'The cosmic vision of Saint Maximos the Confessor' in which he promotes a form of panentheism in which the *logoi* emanate from the *Logos*. He describes how this leads to '...a dynamism about Maximos's understanding of God's relationship to the cosmos through the *logoi* that is lacking in Plato.'[19] He acknowledges that the *logoi* are inviolable (as God's wills) but that they are not static but can move towards their fulfilment in union with God. He goes on to observe that 'Maximos assumes that natures are fixed—all his contemporaries did—but his thought is open to the idea of evolution, say, as a way of expressing God's providence...'[20]

Here, to my knowledge, is the earliest use of the word 'evolution' in connection with Maximus and the *logoi*. Unfortunately, having piqued our interest, Louth does not go on to explain *how* that evolution, to which Maximus is 'open,' could occur without 'violating' the *logoi*. Instead, he goes on to discuss the rational freedom that humans have by which God's providential intention is expressed in a synergistic way. He makes no mention of how non-human fauna and flora might be capable of evolving, or what it is within them that evolves, if it is not their *logoi*.

1.3.2 Elizabeth Theokritoff, 2008

Independent Orthodox scholar and translator, Elizabeth Theokritoff, likewise discusses Maximus' *logoi* as part of an Orthodox account of creator and creation. She makes the same point about the *logoi* being simultaneously fixed (in God) but dynamic (in the world) and quotes Louth's view that evolution is a fitting descriptor of their role in creation:

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[19] Andrew Louth, "The cosmic vision of Saint Maximos the Confessor," in *In whom we live and move and have our being: panentheistic reflections on God's presence in a scientific world*, ed. Philip Clayton and Arthur Peacocke (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2004), 188.
[20] Louth, "The cosmic vision of Saint Maximos the Confessor," 189.

> Modern theologians are concerned to show how the Fathers' grounding of creation in God's will, not his essence, safeguards the 'splendid newness of creation' as a reality truly distinct from its Creator. It is increasingly emphasised that the notion of *logoi* in creation by no means ties us to a belief in the fixity of forms such as the Fathers themselves held; indeed, the *logoi* provide a promising way of thinking about an evolving universe. They are 'fixed' in the sense that they are expressions of God's will which is not fickle. But they are far from static: they give created being its dynamism, precisely because they include...the 'beckoning goal' of creation.[21]

She goes on to explain that the source of this 'beckoning goal,' according to Georges Florovsky, from whom she quotes, is the 'transcendental entelechy' of creatures allowing them to go beyond their own natures.[22] It is not at all clear, however, what this really means. Positing an inherent *telos* in nature is one thing, but to claim that creatures exceed their natures is hard to understand, except in the case of human beings whose capacity for self-destruction is plain to see.

1.3.3 Christopher Southgate, 2008

As a prelude to his development of an evolutionary theodicy, scientist-theologian Christopher Southgate, made brief reference to the *logoi* in his acclaimed book, *The Groaning of Creation*. Seeking, like the previous authors, to emphasise the dynamic character of creation over against an over-static Platonic ontology, Southgate compares the *logoi* to 'points and peaks within evolutionary fitness landscapes...[in which he sees] every peak as a possibility imagined in the mind of God, hence possessing...divinely given patterns of being.'[23] He is referring here to a famous metaphor first proposed by evolutionary biologist Sewell Wright to illustrate how populations evolve gradually in directions set by their ever changing environments.[24] Later in the same passage, Southgate talks of God 'drawing the biosphere

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[21] Elizabeth Theokritoff, "Creator and creation," in *The Cambridge companion to Orthodox Christian theology*, ed. Mary B. Cunningham and Elizabeth Theokritoff (Cambridge: Cambridge University Press, 2008), 68-9.

[22] Georges Florovsky, *Creation and redemption*, Collected works of Georges Florovsky, (Belmont, MA: Nordland Publishing Company, 1976), 62, 67.

[23] Christopher Southgate, *The groaning of creation. God, evolution and the problem of evil.* (Louisville: Westminster John Knox Press, 2008), 61.

[24] Sewell Wright, "The roles of mutation, inbreeding, crossbreeding and selection in evolution," in *Proceedings of the Sixth International Congress of Genetics. Vol. 1, Transactions and general addresses.*, ed. Donald F. Jones (Austin, TX: Genetics Society of America, 1932), 356-66.

onward...encouraging organisms, through the power of the Spirit, in their exploration of that landscape.' What he seems to be suggesting is that the *logoi* set the divine goals which creatures are free to follow by means of some sort of autonomous power of their own. Without any further explanation, one cannot help but draw the conclusion that, in Southgate's view, the *logoi* are external to organisms, merely setting the goals to which they should follow and with no guarantee that those goals will be reached; something he himself admits when he notes the resemblance of (his reading of) the *logoi* to the divine 'lure' of process theology.[25]

1.3.4 Torstein Tollefsen, 2015

Well-known Maximus scholar, Torstein Tollefsen, ventures a small section on Maximus and evolution in an essay he published as part of an edited volume on 'Deep Incarnation' (a subject we shall consider in §5.6.4.1). There he comments on the movable nature of the *logoi* being consistent with biological evolution:

> I think Maximus' doctrine of the *logoi* of creatures, as well as the dynamic view that creatures by their very being *qua* creatures are essentially movable, may be conceived as a Christian metaphysical horizon for the understanding of beings in evolution throughout the natural history of the world. They are, simply, designed eternally by God to develop as they do.[26]

1.3.5 Paul Blowers, 2016

Inspired by Southgate's book, Patristics scholar Paul Blowers published an article eight years later entitled 'Unfinished creative business: Maximus the Confessor, evolutionary theodicy, and human stewardship in creation' in which he attempts to interpret the *logoi* in a way that supports Southgate's evolutionary theodicy. It is an impressive paper in many ways, being the first to seriously engage with the primary textual material rather than make general claims. It is however limited by its brevity and is self-confessedly biased in its desire to support Southgate's theodicy. Elements

[25] Southgate, *The groaning of creation. God, evolution and the problem of evil.*, 61.
[26] Torstein T. Tollefsen, "Saint Maximus the Confessor on creation and incarnation," in *Incarnation: on the scope and depth of Christology*, ed. Niels Henrik Gregerson (Minneapolis, MN: Fortress Press, 2015), 113.

of his argument will be looked at later, but for now, we may note some of his evocative language:

> At one level, the *logoi* constitute the divinely premeditated and exemplary plan of created beings. They are ontological "codes" that establish the salutary interconnections and interactions between creatures spiritual and material, grand and minute, macrocosmic and microcosmic, and that situate those beings in networks conducive to their peculiar development and thriving, and to their participation in the uncreated *Logos*. Because they define a creature's nature (φύσις), the *logoi* are also teleological codes. We might say they are the theological and metaphysical counterpart of DNA, since they encompass a creature's "historical" beginning, middle, and end...[27]

Here we have an even more explicit reference to the *logoi* and evolution. As 'codes,' the *logoi* are responsible for natures, interactions, development, and direction: a role that at least in the view of some, could be attributable to DNA or genes (though nowadays it is likely to be tempered by a more holistic view of causation within organisms). Blowers has a lot more to say about the *logoi* and evolution in his paper, but to my knowledge, the paper has not attracted much attention and has resulted in no follow up work on his own part or on the part of others.

1.3.6 Elizabeth Theokritoff, 2017

A year later, in a contribution to the *Wiley Blackwell Companion to Religion and Ecology*, Elizabeth Theokritoff makes another brief comment on the DNA-like nature of the *logoi*:

> The *logoi* of being, together with those of judgment (i.e. distinction) and providence, could be said to "constitute the divine plan for the created cosmos" laying the basis for "cosmic conversion to God"...provided that "plan" does not suggest something external or bureaucratic. A closer, though still imperfect, image might be to see the *logoi* as something like spiritual DNA: the code of "letters" (note the coincidence of metaphors) that enables the creature to actualize itself. A *logos* cosmology effectively banishes God-as-watchmaker.[28]

[27] Blowers, "Unfinished creative business: Maximus the Confessor, evolutionary theodicy, and human stewardship in creation," 178.
[28] Theokritoff, "The vision of St. Maximus the Confessor: that creation may all be one," 227.

In contrast to Southgate, who saw the *logoi* as setting external goals that creatures should follow, Theokritoff here emphasises the *internal* presence of the *logoi* allowing God to realise his purposes from within, in the same way that DNA is constantly supplying the 'language' and information by which organisms maintain and continue their existence.

1.3.7 Mark Chenoweth, 2020

Finally, and most recently, Mark Chenoweth from St John's University, New York has authored a paper entitled 'A Maximian framework for understanding evolution.' In it, he argues that the *logoi* act as divine exemplars and that, contrary to popular opinion, evolution *does* contain signs of the directionality that would be expected if creation were directed by the *logoi*. Furthermore, he points to the anthropic end of evolution that laid the ground for the incarnation. Some of the points he makes with regard to evolution's directionality will be addressed later, but for our present purposes we can note the following example of Chenoweth's theme of movement and directionality afforded by the *logoi*:

> Thanks to advances in biology and Maximus' cosmic theology, evolution can be interpreted as the striving of the cosmos towards its redemption. Evolution "moves" forward through various *logoi*, fulfilling God's plan for the world until it reaches Christ the *Logos* who binds the createdness of evolution to the uncreatedness of God.[29]

1.4 Thesis aims

Hopefully the foregoing will have helped explain some of the inspiration and motivation for this study, the aims of which can now be stated. There are in fact three.

The first aim is to explore the extent to which the authors quoted in §1.3 are correct to suggest a link between Maximus' theology of the *logoi* and biological evolution as we know it today. The tone adopted in pursuing this aim will be one of

[29] Chenoweth, "A Maximian framework for understanding evolution," 180.

constructive advocacy, seeking to build the best possible case in favour of such a connection that can then go on to serve as a preliminary conclusion and tentative hypothesis for the second aim.

The second aim is to build a theological understanding of biological evolution that incorporates all relevant aspects of Maximus' *logoi* theology, and not just those that are superficially correlative. Here the tone will be more critical, highlighting problematic areas of evolution and troublesome aspects of the *logoi* which are difficult to harmonise with each other.

Having heard, as it were, the case for the defence and the case for the opposition, the third aim will be to attempt a synthesis and even rapprochement, if needed and if possible. To achieve this, I will be venturing beyond Maximus' *logoi* doctrine *per se* and availing myself of certain other resources from the Eastern tradition; resources that have been somewhat neglected in the usually Western-dominated science-engaged religion domain.

1.5 Thesis claims

As an orientation and anticipation of what is to come, this study will make the following overall claims, corresponding to the three previously-mentioned aims.

First, I will be claiming that the hints and suggestions of a link between the *logoi* and evolution are indeed well-founded, based on a number of similarities between Maximus' vision and the phylogenetic descent with modification of all life. The result is a vision of what might be termed the 'evolutionary *logoi*.' Although 'coincidental' in the sense that Maximus could not have been thinking of biological evolution, I will argue that the vision of the evolutionary *logoi* is much more than just an abstract correlation; it is also ontological: the *logoi* become constitutively immanent as they emanate hierarchically and temporally from the *Logos*, just as populations of individuals, genes, and phenotypes do when they evolve from common ancestors.

Second, I will be claiming that some wider 'inconvenient truths' of the *logoi*—particularly their purposefulness and goodness—appear to be at odds with the

happenstance nature and cruelty of evolution and that these dissonant features tend to weaken the initial vision of the evolutionary *logoi*.

Third, rather than abandon the provisional conclusion of the evolutionary *logoi* in the light of the above problems, I will be claiming that it is possible to resolve the discrepancies and reach an overall harmonisation by incorporating certain distinctively Eastern notions into the model, such as: incarnational naturalism (as a mechanism of divine action); a simultaneous creation and fall (as a way of avoiding conflict with evolutionary chronology); and the 'garments of skin' allegorical interpretation of Genesis 3 (as an explanation of certain 'non-good' aspects of evolution).

1.6 Theological method

Before proceeding, a number of things need to be stated in advance concerning what kind of study this is and what kind of study it is not, without which the potential for confusion and misunderstanding is considerable.

First and foremost, this study is an exercise in constructive, interdisciplinary theology lying at the interfaces between Patristics, systematic theology, philosophical theology and the natural science of evolutionary biology. Of course, everything boils down to theology and God in the end, and there is sense in which such academic and disciplinary distinctions are frivolous or even idolatrous, given that every subject belongs to God and there is no autonomy to be had apart from him. Nevertheless, that is not how everyone sees things, and the academy is compartmentalised by the language-game barriers it tends to erect within itself. Furthermore, few people can be experts at everything, and so the scope of any study needs to take account of the capabilities and interests of author and readership alike. With that in mind, the current study is written primarily for the scientifically-engaged theologian, who is *as* concerned for the truths of science as she is concerned for the truths of theology, even if both truths are ultimately the same, one truth.

An inevitable consequence of the breadth involved in any interdisciplinary enterprise is the limiting effect it has on depth, and this study is no exception. Although the study will involve tackling primary textual material, it is not a study in Patristics, and despite the fact that it makes reference to much canonical literature within the field of evolutionary biology, it is not breaking any new ground in science. This is not an excuse for shoddy exegesis or reckless appropriation of science, but it does mean that leading-edge scholarship at the forefront of, say, translating Greek texts or evaluating recent scientific evidence will not be found here.

Of the many different models that have been put forward to characterise the relationship between theology and science, the current study can best be described as an exercise in 'dialogue' or 'synthesis' rather than 'conflict' or 'independence,' to use Ian Barbour's terminology.[30] Following Robert John Russell, I am attempting a creative, mutual interaction in which the two domains offer new insights to each other.[31] Or, to use Neil Messer's recent typology, the study most likely falls under his 'Type 4,' in which both theology and science contribute to the argument, but theology contributes the most (evidence for this being the number of citations to Maximus versus modern day scientists).[32] Finally, the fact that the study engages with concrete historical texts, rather than arguing abstractly, also separates it from much of the rest of the theology-and-science enterprise which, according to Andrew Davison, is still in its infancy in this regard. Hopefully, this study is rising to his call for 'more history, more theology, more philosophy and more science.'[33]

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[30] Ian G. Barbour, *Religion in an age of science*, vol. 1, The Gifford Lectures, 1989-1991, (SCM Press, 1990), Ch.1. Examples of those from within the Orthodox tradition who might be said to have adopted a position of conflict are Vincent Rossi and Alexei Nesteruk, respectively. Rossi's views will be considered later. As for Nesteruk, his phenomenological stance lies beyond the scope of this study, but his complex view of the hypostasisation of the universe in human consciousness (e.g. ''Nature' appears as a mode of the intentional immanence of human subjectivity...'), introduces a certain idealism over against the realism and independence of the universe that is generally assumed in science. See: Alexei V. Nesteruk, *The universe as communion: towards a Neo-Patristic synthesis of theology and science* (London and New York: T&T Clark, 2008), 203.

[31] Robert John Russell, "Recent theological interpretations of evolution," *Theology and Science* 11, no. 3 (2013): 174.

[32] Neil Messer, *Science in theology: encounters between science and the Christian tradition* (London: T&T Clark, 2020).

[33] Andrew Davison, "More history, more theology, more philosophy, more science: the state of theological engagement with science," in *New directions in theology and science: beyond dialogue*, ed. Peter Harrison and Paul Tyson (London and New York: Routledge, 2022), 19-35.

It is also important to point out that the work is not intended to be polemical in the sense of trying to defend any pre-held agenda, ideology or confessional stance. As a case in point, evolution will be assumed to be the best explanation we have for how life emerged on our planet, and the Darwinian mechanisms of inheritable variation, adaptation, and selection—along with numerous supplementary mechanisms more recently emphasised or brought to light—will be accepted as being the established scientific consensus. Accordingly, I will spend no time arguing about the science with proponents of 'young earth creation,' even if some of them attempt to appropriate Maximus for their cause; though I *will* take seriously their theological objections (cf. my response to Vincent Rossi in §4.5.1).

Given that this piece of science-engaged theology does take its point of departure from an ancient author, something needs to be said about the nature of the 'retrieval' process being undertaken. Maximus knew nothing about evolution and may even have rejected it had he known; so, one might ask: how is it possible to allow anything Maximus says to be relevant to evolution without it being a folly of anachronistic eisegesis? Although there are clearly dangers, the original intent and application of an ancient text need not preclude its use in shedding light on modern questions or problems. The old can illuminate the new, and vice versa. Evolution can therefore legitimately be read through the lens of Maximus and Maximus can be read through the lens of evolution without one necessarily exerting any greater control or authority over the other. It is not a case of 'reading-back' science into ancient texts but of setting texts in conversation with each other.[34] Just because science enjoys modern day prestige does not give it hegemonic priority over theology; but nor are they 'non-overlapping magisteria.'[35] Ancient theology and modern science can mutually enrich in the same way that ancient theology and modern theology can. The early church fathers were, after all, doing just the same thing themselves when trying to integrate what was to them ancient thought with their own contemporary issues. As Andrew Louth has remarked: 'If we are going to learn from Maximos, we shall have

[34] Another example being Tom McLeish's reading of the book of Job in the light of evolution. Tom McLeish, "Evolution as an unwrapping of the gift of freedom," *Scientia et Fides* 8, no. 2 (2020): 43-64.
[35] Stephen Jay Gould, *Rocks of ages: science and religion in the fulness of life* (London: Vintage, 2002), 49.

to think through his ideas again, using concepts that are contemporary to us, just as he used concepts that were contemporary to him.'[36]

1.7 Thesis plan

The pursuit and demonstration of the stated aims will proceed as follows.

In Chapter 2 I will offer a brief synopsis of current evolutionary biology, dwelling on some aspects that will become important later on. I will then enter into a detailed survey of four main elements of Maximus' *logoi* theology that would lend support to the comments made by the authors cited in §1.3—to the effect that the *logoi* really *can* be thought of as being evolutionary in a way that not only mimics, parallels or anticipates evolution, but in a way that really *is* evolution. Chapter 2 therefore ends with a positive construal of the evolutionary *logoi* that serves as a hypothesis or 'straw man' for what is to come.

Chapter 3 is something of an excursus from the main argument in which I explore what (or who) the *logoi* really are, from both the divine and the created perspectives. As a result of that bilateral comparison, an attempt is made to define the nature of the divine-creature relationship that would seem to result. It turns out, I argue, that the relationship is significantly different from other more participatory models, and has the effect of raising the stakes for any evolutionary interpretation of the *logoi* (i.e. making the case presented in Chapter 2 harder to maintain).

In Chapter 4 I consider the first of two major problems that evolution poses for the *logoi*: that of its lack of purpose, derived from its stochastic production of variation and its haphazard tracking of environmental changes. I show how the happenstance nature of evolution, though somewhat exaggerated, can seem especially problematic in the light of four 'inconvenient truths' about the *logoi* that have yet to be considered: their inviolability, their teleology, their immanence, and their determinism. However, with careful attention to Maximus' meaning and intention, I show how each of these truths is fully compatible with the facts of

[36] Louth, "The cosmic vision of Saint Maximos the Confessor," 187.

evolution, and how they can, to some extent, be subsumed under a distinctively Eastern model of divine action: panentheistic naturalism.

In Chapter 5 I tackle the second problem posed by evolution: that of the 'collateral damage' in the form of suffering death and destruction that accompanies the evolution of all successful evolutionary lineages, and which is seemingly incompatible with the goodness and theophanic nature of the *logoi*. Without claiming to solve what is a fiendishly difficult problem, I offer three possible perspectives that might serve to mitigate, or call into question, the severity of the problem. These are: the presence of an underlying and primordial good evolution of all things; an obscuring of that underlying evolution by what have been termed 'garments of skin;' and the radically cruciform nature of creation in which God suffers *as* the creatures he has made, rather than just *for* or *with* those creatures.

Finally, in Chapter 6, I sum up what has been a long and complicated journey and return to the thesis aims to assess to what extent they have been fulfilled and my claims justified. I conclude with some reflections on overall themes that have emerged from the study, and on some possible practical applications.

1.8 Note on sources

The study draws almost entirely on English translation editions of Maximus' most well-known works, though occasionally translations are taken from the secondary literature. Unless otherwise stated, any cited Maximus text will be derived from the main English editions listed in the Bibliography. The footnoted references to Maximus are formatted in either three or two parts. An example of a three-part references is: *Ad Thal* 51.3, CCSG7:395.20-25, FOTC:305. This means: Maximus' *Quastiones ad Thalassium* number 51, paragraph 3, using the Greek text of *Corpus Christianorum Series Graeca* volume 7, page 395, lines 20-25, which has been translated into English by Maximos Constas in his book published in the *Fathers of the Church* series, page 305. An example of a two-part reference is: *Amb* 7.6, DOML1:81. This means: Maximus' *Ambiguum* number 7, paragraph 6, translated into English by Maximos Constas from his own Greek critical edition that can be found in the first volume of

his *Dumbarton Oaks Medieval Library* edition, page 81 (there being no need to cite a Greek text in this case as his DOML volumes contain his Greek critical edition side by side his English translation).

Some of Maximus' output remains untranslated into English and failure to incorporate this is an acknowledged limitation of this study. However, since the study is not primarily a study in Patristics, and since I assume, most of what needs to be said about the *logoi* has already been identified and translated, I think it is unlikely that anything significant has been missed, though I would be pleased to be proven otherwise.

Chapter 2: The evolutionary *logoi*

2.1 Chapter aims

The purpose of this chapter is to develop further those tantalising comments made by previous authors that point to a resemblance between evolution and the Maximian *logoi*. It is a constructive goal by which I hope to make the best possible case for there being a genuine correspondence between the two; to articulate what the authors might well have been 'getting at' even if it might not have been completely clear in their own minds. As such, the chapter will generate a hypothesis or 'straw man' that will serve as a departure point for later chapters whose aim will be to be rather more critical in bringing to bear potentially unwelcome implications and repercussions of the correlation. For now, though, the tone will be positive and charitable, seeking to construe a way in which Maximus' language of the *logoi* can indeed map onto the language of evolution without doing violence to either.

I will start with a brief outline of the historical background to the *logoi* in Greek and early Christian thought, leaving much more to be said in Chapter 3 when I will consider the theo-philosophical implications of the *logoi*. I will then offer a lengthier introduction to evolutionary biology which will serve as repository of scientific information that I will call upon throughout this study. It will be a somewhat bespoke introduction, tailored to what I have to say about the *logoi* later on, though hopefully sufficiently balanced that it is not seen to be a tendentious accommodation of Maximus. Following on from these two introductions will come my main argument for how an evolutionary interpretation of the *logoi* can be made, which will entail four main categories of textual evidence: the *logoi* defining the immanent form of creatures; the *logoi* moving in various ways; the *logoi* appearing in our real time; and the *logoi* being mutually constitutive. Note that this will be a one-way comparison only, starting with the *logoi* and looking for resemblances to evolution; it will not (yet) look in the other direction of how major components of evolution might find a home in the *logoi* system. For that, we will have to wait till later chapters when I will seek

to incorporate some of the details of the Darwinian mechanisms and outcomes of evolution rather than just the 'mere' fact of descent with modification. I will finish the chapter by commenting on the nature of what the chapter has produced, claiming it to be more than just an idle correlation, but a profound ontological interpretation of Maximus' metaphysical vision that happens correspond to the way things have actually come to be.

2.2 Introduction to the *logoi*

The Greek word *Logos* is an extravagantly polysemous word with over fifty different meanings listed by the lexicons,[37] making it notoriously difficult to translate; a feature it shares with the so-called 'heart words' of other languages such as *res* (thing), *Wesen* (essence), and *raison* (sense).[38] When the context is clear, *Logos* has a specific philosophical and theological meaning of long heritage that has been well documented and much discussed.[39] The noun *Logos* derives from the verb *legein*, 'to say,' and conveys the sense of 'meaning,' 'description,' 'reason,' 'principle,' or 'explanation.'[40] In the theological sub-context of cosmology and creation, *Logos*—as a singular noun—came to mean a transcendent creative archetype upon which all things are modelled, whereas its plural, *logoi*, expressed the variegated articulation of that *Logos* resulting in its immanent presence in all things.[41]

[37] Sotiris Mitralexis, "Maximus' 'logical' ontology: an introduction and interpretative approach to Maximus the Confessor's notion of the *Logoi*," *Sobornost* 37, no. 1 (2015): 68.
[38] Louth, "The cosmic vision of Saint Maximos the Confessor," 188.
[39] David Bradshaw, "The logoi of beings in Greek Patristic thought," in *Toward an ecology of transfiguration: Orthodox perspectives on environment, nature, and creation*, ed. John Chryssavgis and Bruce V. Foltz (New York: Fordham University Press, 2013), 9-22; Andrew Louth, "St. Maximos' doctrine of the logoi of creation," in *Studia Patristica*, ed. J. Baun et al. (Leuven, Paris and Walpole MA: Peeters, 2010), 77-84; Torstein T. Tollefsen, *The Christocentric Cosmology of St Maximus the Confessor* (Oxford: Oxford University Press, 2008), Ch.3; Sherwood, *The early Ambigua of Saint Maximus the Confessor and his refutation of Origenism*, Ch.4; I.H. Dalmais, "La théorie des "logoi" des créatures chez S. Maxime le Confesseur," *Revue des Sciences philosophiques et théologiques* 36 (1952): 244-49.
[40] Christopher Stead, *Logos*, Routledge Encyclopedia of Philosophy, (Taylor and Francis, 1998). https://www.rep.routledge.com/articles/thematic/*logos*/v-1.
[41] Bradshaw, "The *logoi* of beings in Greek Patristic thought," 13.

Historically, *Logos* was associated with Plato's demiurge that created according to a paradigm,[42] the Stoic belief in seminal reason principles (*logoi spermatikoi*),[43] St Augustine's and Thomas Aquinas's divine ideas,[44] and of course, the biblical *locus classicus* of John Chapter 1 where the *Logos* is the Word, the second person of the Trinity, in whom, through whom and for whom all things were created.[45] As has been well documented, Maximus appropriates this background etymological usage primarily for the purpose of refuting Origenism, to show that all things are fundamentally good owing to their origin in the *Logos*.[46] In doing so he also provides a 'Christianized' version of the Platonic doctrine of transcendental Forms in which the *Logos* multiplies himself into exemplars that emanate or process into the world.[47]

Beyond this brief outline of the *logoi* I will have much more to say in Chapter 3 when we will consider what the *Logos-logoi* might mean for the relationship between creator and creation and what it might imply for biological evolution. But a cautionary point that is worth making right now, before we consider the primary texts of Maximus, concerns a source of confusion with regard to the *Logos* and the *logoi*. Bearing in mind the way in which the *Logos* has historically been used as both a transcendent paradigm and an immanently defining principle, it can potentially be difficult to know whether Maximus is referring to the divine, transcendent 'side,' or the creaturely, immanent 'side.' Context might often indicate that the *Logos* being referred to is the divine *Logos*, but it might be less obvious to know whether the *logoi* being referred to are *logoi* 'residing' in God as exemplars, or *logoi* 'residing' in creation as principles and definitions. Again, we will be returning to these themes in the next chapter, but the reader should be alerted to these sources of ambiguity

[42] Torstein T. Tollefsen, "Christocentric Cosmology," in *The Oxford Handbook of Maximus the Confessor*, ed. Pauline Allen and Bronwen Neil (Oxford: Oxford University Press, 2017), 23.
[43] Jordan Daniel Wood, "Stoic motifs in the cosmology of Maximus the Confessor," *Dionysius* 37 (2019): 30-43.
[44] St. Augustine, *Eighty-three different questions*, trans. David L. Mosher, The Fathers of the Church, (Washington D.C.: Catholic University of America Press, 1982), 46.2, p.79; Thomas Aquinas, *Summa theologica*, trans. Fathers of the English Dominican province, vol. 1, Complete English Edition in Five Volumes, (Notre Dame, IN: Christian Classics, 1948), 1.15.
[45] Colossians 1:16
[46] Sherwood, *The early Ambigua of Saint Maximus the Confessor and his refutation of Origenism*, 167; Louth, "St. Maximos' doctrine of the *logoi* of creation," 79.
[47] Tollefsen, "Christian Platonism in Byzantium," 216-8.

when examining the texts that I will shortly be offering in support of an evolutionary correlation.[48]

2.3 Introduction to evolutionary biology

2.3.1 Preamble

There are many different ways in which the story of the modern-day scientific theory of biological evolution could be told. Its historical development, its evidential basis, its accepted and disputed mechanisms, its metaphysical underpinnings, its ideological overtones—all are some of the possible narratives, and all carry a vast literature.[49] In contrast to many scientific theories that enjoy a relatively benign acceptance, the theory of evolution seems to court suspicion and controversy such that any particular account can be accused of carrying a hidden agenda or a covert ideology. Hence, 'gene-centric' versions have been accused of being 'reductionistic'[50] and 'ideological,'[51] the standard Neo-Darwinian Synthesis (NDS)[52] has be labelled as 'hard Darwinism',[53] and efforts to extend an evolutionary perspective to human

[48] For a helpful discussion of the textual ambiguities of the *logoi* either in God and in creation, see Christopher Barnard, "*Logoi* in Saint Maximus the Confessor: a Christological epistemology of langauge" (PhD Pontificiam Universitatem S. Thomae in Urbe, Romae, 2018). Barnard refers to the former as a 'Neoplatonic use' and the latter as an 'Aristotelian use.'

[49] e.g. for historical development see: David J. Depew and Bruce H. Weber, *Darwinism evolving: system dynamics and the genealogy of natural selection* (Cambridge, MA: The MIT Press, 1996); Jan Sapp, *Genesis: the evolution of biology* (Oxford: Oxford University Press, 2003). For evidential basis see: Mark Ridley, *Evolution*, 3rd ed. (Oxford: Blackwell, 2004); Richard Dawkins, *The greatest show on earth: the evidence for evolution* (London: Bantam Press, 2009). For disputed mechanisms see: Eva Jablonka and Marion J. Lamb, *Evolution in four dimensions: genetic, epigenetic, behavioural, and symbolic variation in the history of life*, Revised Edition ed. (Cambridge MA: The MIT Press, 2014). For metaphysical underpinnings see: John Dupré, "The metaphysics of evolution," *Interface Focus* 7 (2017), http://dx.doi.org/10.1098/rsfs.2016.0148. For ideological overtones, see: Denis Alexander and Ronald L. Numbers, *Biology and ideology from Descartes to Dawkins* (Chicago, Ill.: University of Chicago Press, 2010).

[50] Samir Okasha, *Evolution and the levels of selection* (Oxford: Clarendon Press, 2006), 142.

[51] R.C. Lewontin, *The doctrine of DNA: biology as ideology* (London: Penguin Books, 1991), 48.

[52] Also referred to as the 'Modern Synthesis' after Julian Huxley's book published in 1942: *Evolution: the modern synthesis.*

[53] Christopher Southgate, *God, humanity and the cosmos: a textbook in science and religion* (London: T&T Clark, 2011), 177.

social or psychological phenomena have been said to be 'fundamentalist'.[54] Of course, like any scientific theory, evolution *can* be wilfully misrepresented: Intelligent Design proponents can point to the remaining challenges in evolutionary biology to suggest that the theory as a whole is in crisis,[55] and militant atheists, with sleight of hand, can move from 'evolution is without purpose' to 'therefore there is no purpose in the universe.'[56] Some would say that evolution has itself become something of a religion.[57]

In the light of the foregoing climate of suspicion towards evolutionary biology, it would be foolhardy for me to claim any neutral position, and so I will say at the outset that my own approach will be to assume that Darwinian evolution offers the best account of how life on earth emerged, and to align myself with some of the more stringently mechanistic ways of expressing this account. My reason for doing so is not because I see no value in taking on board some of the recent qualifications of Darwinian evolution that can be found, for example, in the so-called 'Extended Evolutionary Synthesis' (EES),[58] but simply because I want to present theology with a 'worst case scenario' upon which to build any understanding of God's interaction with the world. 'Worst case' because if theology can come to terms with the starkest

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[54] Hilary Rose and Steven P. R. Rose, *Alas, poor Darwin: arguments against evolutionary psychology* (London: Jonathan Cape, 2000); Stephen Jay Gould, "Darwinian fundamentalism," *The New York Review*, no. June 12 (1997).

[55] Michael J. Denton, *Evolution: a theory in crisis* (Chevy Chase, MD: Adler & Adler, 1985).

[56] Denis Alexander, *Is there purpose in biology? The cost of existence and the God of love* (Oxford: Lion Hudson, 2018).

[57] e.g. Mary Midgley, *Evolution as religion: strange hopes and stranger fears* (London and New York: Routledge Classics, 2003); Alister E. McGrath, "The ideological uses of evolutionary biology in recent atheist apologetics," in *Biology and ideology: from Descartes to Dawkins*, ed. Denis R. Alexander and Ronald L. Numbers (Chicago and London: University of Chicago Press, 2010), 329-51.

[58] The EES refers to an ensemble of mechanisms said to supplement the standard account of Darwinian evolution involving mutation, adaptation and natural selection. Proponents of EES claim that the standard account needs to be formally adjusted to acknowledge the importance of these mechanisms. Opponents think there is no need to do so since in most, if not all cases, the said mechanisms have been known about and openly acknowledged for decades. For the record, I tend to side with the latter camp, and worry when theology seems to think that EES offers a more congenial form of Darwinism with which to engage. For a summary of the EES mechanisms see: Kevin N. Laland et al., "The extended evolutionary synthesis: its structure, assumptions and predictions," *Proc. R. Soc. B* 282 (2015). For an example of how these mechanisms have been known for at least 20 years, see: Arthur Peacocke, "Biological evolution—a positive theological appraisal," in *Evolutionary and molecular biology: scientific perspectives on divine action*, ed. Robert John Russell, William R. Stoeger, and Francisco J. Ayala (Vatican State City and Berkeley, CA: Vatican Observatory and Center for Theology and the Natural Sciences, 1998), 360, fn.8. For an example of how theology is welcoming the findings of EES, see: Andrew Davison and Nathan Lyons, "Theology, philosophy and the Extended Evolutionary Synthesis," *Philosophy, Theology and the Sciences* 7, no. 2 (2020): 149-57.

form of Darwinism then it can certainly embrace more moderate versions if those should finally be proven to be more realistic. And by 'starkest' I mean those depictions of evolution that seem to offer few places in which to discern evidence of divine action. Whilst it is important for theology to have an accurate and balanced view of the scientific consensus on evolution, it should not in my view be allying itself with ameliorated versions of Darwinism that might, in any case, offer only exceptions to the main Darwinian processes responsible for complex structures and functions. It is better, in other words, not to be held hostage to fortune but to be prepared for the worst. Accordingly, in what follows, I have deliberately chosen the 'replicator' concept to describe evolution, partly for its reductionistic starkness and partly as it offers a useful heuristic for understanding how evolution got off the ground before the complexity of large organisms began to obscure the underlying principles at play. Having said that, I have not shied away from more nuanced understandings of evolution that, for example, give equal prominence to cooperation, convergence, and constraint as to selfishness, divergence, and contingency.

2.3.2 The unity and diversity of life

Evolution is a process that accounts for the diversity and unity of life on our planet. If life consisted of either: (1) a profusion of identical organisms; (2) a multitude of unique organisms; or (3) just one monolithic organism, we might still wonder how it all arose, but we would have less need for an evolutionary process, preferring instead perhaps to attribute its existence to brute fact, or divine fiat. The fact that life is profuse, diverse, *and* united by the possession of shared features and properties suggests that God's method of creation was one of deploying common substances across multiple creatures. With the discovery of the fossil record, this was thought to be an historical process involving either transformation from original kinds containing innate drives, or progressive replacement of original kinds with new acts of creation.[59] Biological change through time was thus accepted well before Darwin, but what Darwin and his successors did was to suggest an alternative mechanism that requires no intrinsic potentiality or external intervention and yet which can still

[59] Southgate, *God, humanity and the cosmos: a textbook in science and religion*, 169.

account for the diversity *and* commonality of the natural world: 'descent with modification.'

The importance of unity-with-diversity as evidence for descent with modification was highlighted by one of the original architects of the Neo-Darwinian Synthesis (NDS), Theodosius Dobzhansky. In his well-known 1973 paper 'Nothing in biology makes sense except in the light of evolution' he stated:

> The diversity and unity of life are equally striking and meaningful aspects of the living world...The unity of life is no less remarkable than its diversity. Most forms of life are similar in many respects...What do these biochemical and biologic universals [e.g. the genetic code] mean?...Without that light [of evolution], it [biology] becomes a pile of sundry facts—some of them interesting or curious but making no meaningful picture as a whole.[60]

Dobzhansky was here attempting to demonstrate the compatibility of evolution with belief in a creator God. His key point is that living things form a simultaneous unity and diversity. Diversity alone could undoubtedly arise from a simple divine edict, but diversity *with* union suggests that God has used a process in which most creatures emerge from each other rather than simultaneously *ex nihilo*. Furthermore, the nature of the unifying factors (the "universals" as Dobzhansky calls them) is genetic relatedness arising from a temporal succession of change; an unfolding of creation through time. The patterns we recognise that link organisms together into nested hierarchies are not artificially imposed constructs reflecting aesthetic sensibilities but reflect real ontological change over countless generations. These patterns can be analysed at different levels in organisms: from homologies[61] at the macroscopic phenotypic level to homologies lying buried within genome sequences. The overall result has been termed 'the genetic book of the dead'.[62]

[60] Theodosius Dobzhansky, "Nothing in biology makes sense except in the light of evolution," *The American Biology Teacher* 35, 3 (1973): 126.
[61] Biological homologies are shared features due to a common ancestral origin, in contrast to analogous features that are due to parallel or convergent evolution. See: Donald L.J. Quicke, *Principles and techniques of contemporary taxonomy* (Dordrecht: Springer-Science+Business Media, 1993), 22-3.
[62] Richard Dawkins, *Unweaving the rainbow* (London: Allen Lane The Penguin Press, 1998), Ch.10.

2.3.3 Replication of inheritable variation

The basics of the NDS can be broken down into a few key components.[63] First, there needs to be some substratum upon which evolutionary change can take place, which needs to be copiable, sufficiently stable once copied, and capable of acquiring and retaining changes. A conceptual placeholder for such a substratum is the 'replicator',[64] usually thought to be a primordial molecule or crystal that auto-repeats itself into multiple lineages whilst occasionally sustaining molecular modifications that become retained in the replication process, thus resulting in compositionally distinct lineages. At face value, this first component of evolution might be thought sufficient to account for the simultaneous unity and diversity of life, but it does not go far enough in explaining the type of diversity we observe in the natural world. Living things do not exemplify all possible permutations of replicator diversity and do not fill the world with an exponential heap of copies. They are instead, discontinuously distributed and crafted to their environments in limited numbers.

2.3.4 Natural selection

To make sense of these real-world features of life, we need the second component of the NDS, the differential survival of the replicators afforded by their inherited variations; a process known as 'natural selection'. The physico-chemical world is a hostile place in which entropic forces disintegrate or disrupt ordered assemblies or orderly processes. It is also one of limited resources where no two objects can occupy the same time and space. One might therefore expect replicator lineages to be vulnerable to extinction or to retardation of their replication rates in response to degradative forces and limited raw materials for self-replication. Any small changes that offer an incremental enhancement in survival or replication rate will find those changes being carried forward to future generations (i.e. 'selected'), while any lack of change, or change in the wrong direction, will ultimately lead to extinction. Thus natural selection can put a limit on the diversity of life and explain why life is not a runaway process.

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[63] See, e.g. Ridley, *Evolution*.

[64] Popularised by Richard Dawkins in several of his books.

2.3.5 Adaptation

But natural selection alone does not go far enough in showing how surviving replicators exhibit diverse differences on top of their commonly shared ancestral features. For this we need the third component of the NDS, the concept of adaptation; and to explain adaptation we need the prior concept of a variable environment: a spatio-temporal landscape of potential 'niches' offering different physico-chemical-biological challenges for any would-be occupier. In any given niche, natural selection will favour combinations of replicator traits that satisfy the conditions for existence in that niche. Even the very presence of different replicator lineages changes the environment for other lineages and creates new opportunities for survival through the accumulation of traits that enhance replication by interacting positively with these other replicators, whether the interaction be competitive or cooperative in nature.

These three components[65]—replication with inheritable variation, natural selection, and adaptation—represent the core principles of modern-day evolutionary biology with which it is possible to understand the simultaneous diversity and unity of life without needing to invoke direct acts of divine creation. Of course, there are many controversial and unresolved aspects of evolution that lie beyond these core principles, but we should not forget the extraordinary explanatory power afforded by evolution to make sense of the bizarre unity-in-diversity of the living world; a living world that, for the theist at least, *might* have looked very different from how it actually appears if God had chosen to create in a different way.

2.3.6 'Replicators' are the genetic code

What unites all life is not an abstract conceptual relatedness but a real and immanent commonality. Dobzhansky homed in on genetic relatedness as a good example of immanent relatedness for the simple reason that the genetic code, comprising DNA with four base pairs, is one of the most universal features of all life, and is strong evidence that all life evolved from a single common ancestor, even if there had

[65] Or four, if replication is distinguished from heritable variation.

originally been other lineages not using the same code that subsequently went extinct. My previous use of the word 'replicator' was in order to remain neutral as to the material embodiment of the replicating entity, but the existence of a single DNA genetic code suggests the 'lowest common denominator' replicating entity capable of accumulating heritable changes that has survived the entire evolutionary history of all living things is the gene.

2.3.7 Evolutionarily adaptive change is blind and gradual

According to the NDS, any selective advantage conferred by an altered phenotype in an individual organism must be accompanied by some *causally covarying* change in the individual's genotype, otherwise the benefit will not be passed on to its progeny. It does not matter if the variation is random, as long as it is genetic, since natural selection will filter out useless or harmless variants within the random range of options. Evolution might occur more rapidly if the variants were somehow directed towards making phenotypes more suited to the presenting environment, but there is no evidence that any guided mutation of this kind occurs.[66] It is in fact a core tenet of the NDS that even if the environment could mould a phenotype to become more adept at survival, any such moulding could not find its way into the germ line to allow the phenotype to be inherited.[67] The range of phenotypic solutions to the myriad problems presented by an ever-changing environment have been conceptualised as an 'adaptive landscape'[68] or 'morphological design space'[69] in which favourable

[66] Much has been made of the recent discovery of non-random mutations in which mutation rates in highly conserved regions of the genome are reduced, or in which mutation rates are increased in response to environmental challenges. It is important to note, however, that these must all be evolved mechanisms whereby DNA repair enzymes are up- or down-regulated to permit lower or higher mutation rates in certain regions. It is far from the environment being able to dictate the exact DNA changes needed to produce a more successful phenotype. For a general discussion, see Jablonka and Lamb, *Evolution in four dimensions: genetic, epigenetic, behavioural, and symbolic variation in the history of life*, Ch.3. For a specific recent example, see J. Grey Monroe et al., "Mutation bias reflects natural selection in Arabidopsis thaliana," *Nature* 602 (2022): 101-5.

[67] An exception is epigenetic inheritance: non-DNA molecules or modifications to DNA that are passed through the maternal gametes into future generations. These 'extra-genetic' elements undergo chemical change in response to environmental conditions which can affect how the DNA that they are associated with is transcribed and expressed. It is not yet known how significant this has been in evolution. See Richard C. Francis, *Epigenetics: how environment shapes our genes* (New York: W.W. Norton & Company, 2011).

[68] Wright, "The roles of mutation, inbreeding, crossbreeding and selection in evolution," 356-66.

[69] George R. Jr. McGhee, *The geometry of evolution: adaptive landscapes and theoretical morphospaces* (Cambridge: Cambridge University Press, 2007).

adaptations are represented by multi-dimensional clusters of traits or local peaks in fitness. Arrival at these clusters or peaks is achieved by a slow process of incremental improvement that is blind to any distant optima. The environment passively affords opportunities to evolving organisms. It has no powers to enable replicators to generate the right kind of progeny but acts only as a filter, allowing the most adapted progeny to survive.

2.3.8 Evolution is, by default, a divergent process

The picture painted so far is of a blind expansive process in which lineages diverge into ever more specialised niches, retaining as they go the history of their previous encounters, and upon which they must cumulatively build rather than replace and start afresh. It is a picture known as 'adaptive radiation' in which the only way to innovate is to branch and divide in an arboreal fashion. Even without selection, much of the increase in organismic diversity through time can be attributed to the simple mathematical fact that there are always more ways for separate lineages to diverge than to converge.[70]

2.3.9 Divergence is balanced by stabilisation and convergence

But this is an incomplete picture. Of equal importance to the NDS are factors that tend to stabilise lineages (leading to longer branches) and factors that tend to combine lineages (leading to grafted branches). A danger of the concept of replicator is that it implies a self-sufficiency of replicating units when in fact, from the very earliest moments of evolution, replicators must have been supported by other substances and processes; ancillary molecules that protected replicator units from degradation and maintained fidelity of replication through error correction. Only through cooperative interactions could lineages remain intact for any length of time.[71] This is why the molecular and cellular processes involved in DNA replication, transcription and translation are so highly conserved across evolutionary time and so

[70] Known as the 'Zero-Force Evolutionary Law,' analogous to Newton's First Law of Motion. See: Robert N. Brandon and Daniel W. McShea, *The missing two-thirds of evolutionary theory*, Cambridge Elements, (Cambridge: Cambridge University Press, 2020).

[71] Mark Ridley, *The cooperative gene: how Mendel's Demon explains the evolution of complex beings* (New York: The Free Press, 2001).

causally intertwined with the DNA they support. The causal interactions between DNA and its immediate environment are so incredibly complex and multi-directional that any notion of DNA 'orchestrating' the organism is too simplistic.[72] Genes and their associated molecular machinery have travelled together through evolutionary history, so much so that their combined longevity justifies the application of the word 'replicator' to the package of gene-plus-vehicle rather than gene alone. The combined package leads to the stabilisation of lineages, and this stabilisation must itself have evolved as a product of natural selection since it is too complex to have been established entirely through spontaneous processes of self-assembly.[73] It is a special form of natural selection known as 'stabilising selection.' Genes that code for proteins whose job it is to keep the genes intact for longer are more likely to undergo successful replication and thus produce more copies of themselves, giving them more opportunity to hit upon the right mutations for adaptation to new niches.

Allied to stabilising selection are those processes of evolutionary convergence in which previously independent replicators come together, prime examples being lateral gene transfer in prokaryotes (bacteria) and genetic recombination during sexual reproduction in eukaryotes ('higher' organisms). The resulting convergence of lineages adds reticulations or anastomoses to the tree of life, turning it into something of a tangled nest in places.[74] What were previously independently evolving solutions to life's problems become merged into combined solutions allowing a bypassing or short-circuiting of the usually slow meandering process of mutation and natural selection. Permutations became shaken up to allow potential step changes in evolution.

Another phenomenon capable of offsetting the divergent nature of evolution is mutualistic symbiosis: when two or more different species living in close proximity

[72] For an excellent account of how the metaphor of orchestration can be turned on its head, see: Denis Noble, *The music of life: biology beyond the genome* (Oxford: Oxford University Press, 2006).
[73] It is a moot point as to whether at the very starting point of life the replicator complex emerged as one combined unit, or whether the coding component (e.g. RNA) was able to replicate alone prior to being stabilised. An alternative view is that the starting point was some kind of self-organising autocatalytic network of molecules. Wim Hordijk and Mike Steel, "Autocatalytic networks at the basis of life's origin and organization," *Life* 8, no. 62 (2018), https://doi.org/10.3390/life8040062.
[74] Sapp, *Genesis: the evolution of biology*, 231.

provide for each other mutual aid.[75] The aid is typically either nutrition (e.g. mycorrhizal fungi donating phosphate in return for sugars from the plant roots they surround), transportation (e.g. insects transporting pollen in exchange for nectar), or protection (e.g. fish receiving protection from sharks in return for removing parasites from the shark's body). The proximity can range from: living closely but remaining separate species (e.g. cleaner fish and sharks); living inside each other and remaining separate species (e.g. bacteria living in our guts); or, living inside another species and becoming assimilated by it such that the original identity of one or the other has been degraded or lost (e.g. cellular organelles such as mitochondria derived from invading bacteria). The latter two cases are particularly important for the way they unite distantly related populations, even overcoming the stabilising selection that has given rise to species. We now know that this so-called 'endosymbiosis' has happened on a number of occasions leading to some major transitions in evolution.[76]

Mechanisms of evolutionary stabilisation and convergence have the effect of supplementing what would otherwise be a purely divergent process of solution exploration, and rather than reduce evolutionary diversity they actually increase it by offering new sources of variation upon which natural selection can act. What seemed like a recipe for successful innovation—exploration through branching permutations—has been enhanced and even surpassed by the additional convergent mechanisms of lateral gene transfer in asexual lineages, gene shuffling and recombination in sexual species, and mutualistic symbiosis between distant species.

There is one last form of convergent selection I want to mention that is of a very different kind to the others; that which is commonly known as 'convergent evolution:' the evolution towards similar phenotypes across distantly related species. Examples include: the twenty cases of independent evolution of the camera eye in vertebrates, molluscs, annelids (worms), spiders, cubozoans (jelly fish) and shrimps; the seventy examples of invertebrates converging on an ant-like morphology; the use of echolocation in bats, dolphins and swiftlets; and the remarkable similarity of

[75] Judith L. Bronstein, "The study of mutualism," in *Mutualism*, ed. Judith L. Bronstein (Oxford: Oxford University Press, 2015), 6.
[76] John Archibald, *One plus one equals one.* (Oxford: Oxford University Press, 2014); John Maynard Smith and Eörs Szathmáry, *The major transitions in evolution* (Oxford: W.H. Freeman, 1995).

placental and marsupial mammals adapted to similar environments.[77] This kind of convergence—towards the same solution from different starting points—is different from the previous kinds of convergence for two reasons. First, it does not involve any merging of separate phylogenetic lineages; in fact, its surprising feature is that similar phenotypes can be reached separately and independently from considerably different starting points. Second, it could be said to be *reducing* evolutionary innovation rather than increasing it, for no matter how much raw variation can be mustered by the divergent or convergent permutational processes previously mentioned, the solutions that are 'allowed' in the case of convergent evolution seem to be quite constrained. The sources of this constraint are not fully understood, but are thought to include the limited ways of obeying the laws of physics (e.g. in swimming or flying), or the limited options afforded by developmental processes that have become conserved across very distantly related lineages. It may be tempting to view convergent evolution as the light of divine agency penetrating the fog of blind contingency, but this would lead to the problematic implication that God is not equally at work in the divergent aspects of evolution.[78] More will be said about divine action and evolutionary purposiveness in Chapter 4, but for our present purposes, the reason for mentioning convergent phenotypic evolution is to emphasise that evolution is to some extent 'hemmed in' by constraint rather than 'free to go anywhere.'[79] The success of replicator lineages to populate design space[80] is not merely a function of the efficiency with which they generate endless novel forms but is also crucially dependent on the prior configuration of the environment, which is determined partly by life itself (e.g. the presence of competing organisms), partly by contingent physical processes (e.g. weather patterns or geological erosion), and partly by invariant laws of physics (e.g. gravity or fluid dynamics).

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[77] Simon Conway Morris, *Life's solution. Inevitable humans in a lonely universe* (Cambridge: Cambridge University Press, 2003); Simon Conway Morris, *The runes of evolution. How the universe became self-aware* (West Conshohocken, PA: Templeton Press, 2015).

[78] A mistake I have tried to address in: Andrew P. Jackson, "Theological implications of Simon Conway Morris's portrayal of convergent biological evolution," *Science and Christian Belief* 33 (2021): 2-29.

[79] At a molecular level, this constraint has become increasingly apparent in recent years. Despite the hyper-astronomical number of possible amino acid combinations in proteins, only a small fraction are ever realised owing to redundancy in the mapping of genotype to phenotype. Ard A. Louis, "Contingency, convergence and hyper-astronomical numbers in biological evolution," *Studies in History and Philosophy of Biological and Biomedical Sciences* 58 (2016): 107-16.

[80] See definition in §2.3.7

From this rather wide-ranging overview of evolution and the *logoi* we are now in a position to address the alleged connection between the two.

2.4 Evolutionary resemblances of the *logoi*

2.4.1 The 'defining logoi'

Evolution is clearly about change, but before we can consider evolutionary change as a process, we must consider what it is that is being changed and how that change can be specified. Maximus' *logoi* must be capable of adequately defining what a creature is before they can have any bearing on how the said creature (or population of creatures) can change and evolve. It must—to have any traction with the science of evolution—be relatable to the changing ontology of real, embodied, living things undergoing descent with modification, and not merely an abstract theoretical construct imposed for aesthetic or other reasons. We must start, therefore, with the question of how Maximus understands the relation between the *logoi* and living beings on the creaturely side of the created-uncreated divide.

First, according to Maximus, the *logoi* are responsible for the plurality and diversity that exist within creation:

> If created things are many, then they must certainly be different, precisely because they are many. For it is impossible that many things should not also be different. And if the many are different, it must be understood that their *logoi*, according to which they essentially exist [*kat ousian huparchousi logous*], are also different, since it is in these, or rather because of these *logoi*, that different things differ. For different things would not be different from each other if their *logoi*, according to which they came into being, did not themselves admit of difference.[81]

Created things derive their differences from, or 'according to,' different *logoi*. To use a modern scientific expression, one might say that there is a *causal covariance* between *logoi* and the different things they define: if the *logoi* are different, then the

[81] *Amb* 22.2, DOML1:449

creatures must be different. But bearing in mind the ambiguity of the *logoi* as regards their position across the created-uncreated divide, Maximus does not state here what he means by 'according to:' whether for example he is thinking the *logoi* exert their influence from a distance (from the divine side) or from within (inside creation). To answer this question, we need to look elsewhere. For example:

> ...the *logoi* of His divinity, which transcends all intellection, exist within beings and create—in a manner beyond our cognition—the essences of those beings, and preserve them in existence...[82]
>
> For every generic item, according to its own proper principle [*kata ton oikeion logon*], exists as a whole indivisibly and really in the whole of those things subordinate to it...[83]
>
> ...the "letting down by its four corners" [of St Peter's sheet in Acts] signifies the world composed of four elements, existing as clean in the intelligible world according to the *Logos* that exists inherently in these things.[84]

It seems clear from these passages that the 'mode of action' (to use another scientific expression) by which the *logoi* exert their defining influence is by constitutive indwelling and is responsible for the essence of creatures and not just their taxonomic designations. The immediacy of this indwelling is also reflected in Maximus' descriptions elsewhere of the *logoi* being 'implanted' (*egkatespeiren*),[85] 'intermingled' (*egkatamizai*),[86] 'engrafted' (*perigraphousan*),[87] and 'embedded' (*egkatablēthentes*)[88] within created beings. Some of the philosophical and theological implications of this will be explored in Chapter 3, but we can note in passing how this constitutive inherence of the *logoi* resembles the Aristotelian notion of intrinsic formal cause (as opposed to extrinsic paradigmatic cause)[89] and the Stoic

[82] *Ad Thal* 35.3, CCSG7:239-41.30-33, FOTC:213
[83] *Amb* 41.10, DOML2:117
[84] *Qu Dub* 116, CCSG10:85.10-13, DP:103
[85] *Ad Thal* 51.2, CCSG7:395.9, FOTC:305
[86] *Ad Thal* 51.3, CCSG7:395.24, FOTC:305
[87] *Myst* 7, CCSG69:34.554, JA:71
[88] *Amb* 17.7, DOML1:389
[89] Andrew Davison, *Participation in God: a study in Christian doctrine and metaphysics* (Cambridge: Cambridge University Press, 2019), Ch.4.

division of the *Logos* into the *logos endiathetos* (the *Logos* remaining internal to God) and the *logos prophorikos* (the 'expressed' *Logos* finding its way into creation).[90]

To summarise: the *logoi*, according to Maximus, account for the multiplicity and diversity of creation by defining creaturely form in an immanently real manner and in a way that defines the essence of creatures—what they really are—rather than how we might choose to describe them. This, I would suggest, provides our first verification of some of the comments made by previous authors. The *logoi* really *do* seem to be 'ontological codes' or 'spiritual DNA' insofar as they define and constitute what lies at the heart of all organismal differences. This might mean difference residing principally in the genome, or it might mean more holistically, differences residing in phenotypes and environments as well as genotypes. Either way, whatever constitutes biological essential difference (or in Aristotelian terms, 'substantial form') must owe its origin and continued existence to the *logoi*; *logoi* that provide and sustain the immanent ontological structure of all reality.[91]

The word 'essence' (*ousia* or *phusis*) might suggest the possibility that the *logoi* are restricted in their defining role to only the broad-brush strokes of creaturely form and not the detail—enough to specify species, perhaps, but without defining individuals, particulars and accidents. Maybe the *logoi* define only high-level form, leaving the low-level details to either chance, creaturely free will, or something else. Although this might sound a rather pedantic question it is actually of crucial importance to any theological engagement with evolution. Much evolutionary change starts off as seemingly inconsequential 'accidental' changes to DNA, either by mutation or recombination (reshuffling), which then go on to become fixed in the population to form the basis for new adaptations and speciation events. If these minute changes in DNA escape the constitutive purview of the *logoi* then we face a serious disconnect between Maximus' theory of the *logoi* and the process of Darwinian evolution, in which case the correspondence between *logoi* and creatures will be only partial. When in Chapters 3 and 4 we consider what the *logoi* mean from

[90] J.N.D. Kelly, *Early Christian doctrines*, 3rd ed. (London: Adam & Charles Black, 1965), 13.

[91] Nikolaos Loudovikos, *A eucharistic ontology: Maximus the Confessor's eschatological ontology of being as dialogical reciprocity* (Brookline, MA: Holy Cross Orthodox Press, 2010), 54, quoting I.H. Dalmais.

the divine perspective, we will discover then the significance of any lack of full correspondence between *logoi* and creaturely form.

Leaving aside for now the *implications* of a complete versus a partial determination of creaturely form by the *logoi*, let us look at what Maximus himself states. What we find when we examine Maximus' writing on the *logoi* is that, perhaps surprisingly, the *whole* of creation, from top to bottom, is specified and coded by the *logoi*:

> ...all things that are distinguished from each other by virtue of their individual differences [*idiōs diaphorais*] are generically united by universal and common identities [*katholou kai koinais genikōs*], and they are drawn together to one and the same by means of a certain generic principle of nature [*genikō tini logō phuseōs*], like genera that are united with each other according to substance [*kata tēn ousian allēlois henoumena*], and consequently have something one and the same and indivisible [*adiaireton*].[92]
>
> And simply, to speak concisely, the principles of whatever is separated and particular [*diērēmenōn kai merikōn hoi logoi*] are, as they say, contained by the principles of whatever is universal and generic [*katholou kai genikōn*].[93]

Four points stand out from these extracts. First, there are *logoi* for particulars, which answers our question as to the extent of the influence of the *logoi*. The *logoi* do indeed specify down to the detail of individual organisms. There is no 'tapering off' or declension of the *logoi* as they progress from the most universal to the most detailed, as might have been expected in a Platonic world of sensible objects reflecting imperfectly their transcendental exemplar forms. Second, there are *logoi* for genera as well as particulars. Maximus does not think of the *logoi* in a nominalist or atomistic fashion as the 'quanta' of creaturely form combined in endless permutations. Instead, there are separate *logoi* for all strata of reality.[94] Third, the

[92] *Amb* 41.10, DOML2:117
[93] *Amb* 41.11, DOML2:119
[94] Dragos Bahrim comments that 'One and the same individual corresponds not only to a single *logos* but also to a multitude of *logoi* that are however unified and synthesised in its own *logos*. Certain *logoi* may belong to other beings as well. In this respect, some of the *logoi* are singular or peculiar, while others are general of universal… Some *logoi* (reasons) have a distinctive function…Other *logoi* have, correspondingly, a unifying function…' Dragos Bahrim, "The anthropic cosmology of St Maximus the Confessor," *Journal for Interdisciplinary Research on Religion and Science*, no. 3 (2008): 16-7.

separated particulars are drawn together by the possession of generic commonality, which forms the basis for a hierarchical organisational (which will be made even more clear when we come to consider the motion of the *logoi*). But, fourth—and most significantly—the uniting of particulars via generic principles of nature (generic *logoi*) is said to be 'according to substance,' (*kata tēn ousian*) rather than, for example, according to concept (*epinoia*).

Applying these points to biological life as now scientifically understood, we have a picture which starts to resemble that of a taxonomic classification of organisms in which the taxonomist is attempting to group according to shared substance, rather than merely shared superficialities. Most modern-day taxonomists would seek in their 'splitting' and 'lumping'[95] to bring out what are the 'real' interconnections between creatures: those based on genealogical descent rather than arbitrary designations.[96] Despite differences in methodology, taxonomists are generally united in wanting to 'carve nature at her joints.'[97] So too with Maximus. Although he was not attempting any formal biological classification, he was, it seems to me, framing a created hierarchy that is ontological and real rather than conceptual and imaginary, made possible by the indwelling of the immanent *logoi* that define different levels of shared ontological relatedness. Creation for Maximus is neither a homogeneous amorphous blend of being, nor an assemblage of isolated monads that can only be united by mere sortal predicates. What unity exists in the cosmos is real and immanent on account of generic *logoi* binding all creatures together. Eric Perl puts it elegantly: '...the divine self-multiplication into creation is not a mere swarm of individual *logoi*. It is a structured multiplicity...'[98]

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[95] These words are sometimes used to caricature the tendency of some taxonomists to either split organisms into lots of small taxa, or to group them into relatively few taxa.

[96] 'All true classification is genealogical…community of descent is the hidden bond which naturalists have been unconsciously seeking, and not some unknown plan of creation, or the enunciation of general propositions, and the mere putting together and separating objects more or less alike.' Charles Darwin, *On the origin of species* (Cambridge, MA: Harvard University Press, 1964 (1859); repr., Facsimile ed.), 420.

[97] For an introduction to biological taxonomic methods and principles, see: Quicke, *Principles and techniques of contemporary taxonomy*; Richard A. Richards, *Biological classification: a philosophical introduction* (Cambridge: Cambridge University Press, 2016).

[98] Perl, "Methexis: Creation, Incarnation, Deification in Saint Maximus Confessor," 170.

2.4.2 The 'moving logoi'

There are three aspects of Maximus' cosmological or ontological view of motion that I believe are relevant to evolutionary biology. These are: (1) the motion of all *logoi* from being, to well-being and to eternal well-being; (2) the motion of all things in procession and return; and (3) the motion of all things in expansion and contraction. How these three kinds of motion are related to each other is not always clear in the secondary literature, and in what follows, I offer one possible interpretation designed to take seriously the all-embracing role of the *logoi* and the exhaustive nature of their ontological movement. I will then go on to show how this motion of the *logoi* resembles the kind of motion seen in biological evolution.[99]

Maximus uses many different kinds of motion for different theological purposes,[100] but when it comes to ontology and cosmology, he seems to take an Aristotelean view of motion in which creaturely nature (*phusis*) denotes becoming, rather than a static reality.[101] Creaturely motion takes place within the boundaries of finite reality, in contrast to the stability and rest found in God who is without boundary or limit.[102]

The subject of motion is particularly important in Maximus' opposition to the Origenists. He replaces their sequence of 'abiding-motion-becoming' (*monē-kinēsis-genesis*) with 'becoming-motion-rest' (*genesis-kinēsis-stasis*).[103] Motion is a natural and good aspect of creaturehood rather than a perversion from an original serene stasis, and is the result of an in-built desire or propensity to reach an end purpose. Contrary to Origen, Maximus understands the initial remaining of creatures in God to be in terms only of their divine predeterminations (ideas and wills) which are

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[99] I am not the first to note that Maximus' dynamic view of creation is consistent with evolution, e.g. Gayle E. Woloschak, "The broad science-religion dialogue: Maximus, Augustine, and others," in *Science and the Eastern Orthodox church*, ed. Daniel Buxhoeveden and Gayle E. Woloschak (Farnham: Ashgate, 2011), 136.

[100] Mitralexis has itemised several different types of motion that Maximus borrowed from Aristotle: locomotion, change/alteration; corruption/decay; origination; return; change into something else; growth/increase; decrease; spiral movement, and cyclical movement. Sotiris Mitralexis, "Maximus' theory of motion: motion kata phusin, returning motion, motion para phusin," in *Maximus the Confessor as a European philosopher*, ed. Sotiris Mitralexis et al. (Eugene, OR: Cascade Books, 2017), 74.

[101] Mitralexis, "Maximus' theory of motion: motion kata phusin, returning motion, motion para phusin," 87.

[102] *Ad Thal* 65.23, CCSG22:283.520-40, FOTC:537-8

[103] Sherwood, *The early Ambigua of Saint Maximus the Confessor and his refutation of Origenism*, 93.

eternally enfolded as the transcendent *Logos*. Creatures are 'fully decided' in advance but do not thereby fully exist in advance. For that to happen, they have to be, as it were, 'released' into their finite acts of motion after which they then seek to return to their source. Motion is not therefore the cause of differentiation, but the effect of differentiation. Maximus famously expresses his anti-Origenistic triad of 'becoming-motion-rest' in terms of a similar three-phased movement of the *logoi* from 'being,' to 'well-being,' and to 'eternal well-being':

> If, then, rational creatures are created beings, then surely they are subject to motion [*kineitai*], since they are moved from their natural beginning in being, toward a voluntary end in well-being. For the end of the motion of things that are moved is to rest within eternal well-being itself, just as their beginning was being itself, which is God, who is the giver of being and the bestower of grace of well-being, for He is the beginning and the end [*archē kai telos*].[104]
>
> He is a "portion of God," then, insofar as he exists, for he owes his existence to the logos of being that is in God; and he is a "portion of God" insofar as he is good, for he owes his goodness to the logos of well-being that is in God; and he is a "portion of God" insofar as he is God, owing to the logos of his eternal being that is in God.[105]

Although these passages are specifically referring to rational beings, other texts imply that Maximus intends his *logoi '*triad of being' to apply to all creatures and not just to humans inasmuch as all *logoi* move, and not just those possessing behavioural volition.[106] For example:

> When, moreover, we consider all the things that come into being from God, whether intelligible or sensible, their coming into being (*genesis*) is conceived of before their motion (*kinēsis*), for motion cannot precede coming into being...According to those who have examined these matters carefully, no being in principle is devoid of

[104] *Amb* 7.10, DOML1:87. The triad maps on to many other triads that Maximus uses. See: Loudovikos, *A eucharistic ontology: Maximus the Confessor's eschatological ontology of being as dialogical reciprocity*, 76-84.
[105] *Amb* 7.22, DOML1:105
[106] A point affirmed by Tollefsen. See: Torstein T. Tollefsen, "Causality and movement in St. Maximus' Ambiguum 7," in *Studia Patristica*, ed. J. Baun et al. (Leuven, Paris and Walpole MA: Peeters, 2010), 93.

> motion (including beings that are inanimate and merely objects of sense perception)...[107]

Dionysius Skliris refers to the *logoi* triad of being as a 'dromic ontology' in which the *logoi* follow a course (*dromos*) or itinerary as part of their realisation. They begin as eternal wills situated in the *Logos*, then move to historical realisation as concrete spatiotemporal modes (*tropoi*), before finally reaching their ends in hypostatic union with Christ.[108] The first and last stages of the triad—attaining 'being' and 'eternal well-being'—are gifts of grace that begin and end outside our current spacetime to which creatures are incapable of contributing.[109] In contrast, the intermediate stage of realising well-being is arrived at through the exercise of natural proclivities built in to all creatures, be they minerals, plants, animals, or humans. The middle phase entails a finite and historical mode of existence and much of Maximus' writing concerns how humans have the power in this phase to flex their *tropoi* either in accordance with or in opposition to their *logoi*. He has, however, little, if anything, to say about how the *tropoi* of non-human creatures change in this middle phase, and I will later argue that it is better to assume that the *tropoi* of non-humans is fixed in between origination and deification (see §4.5.4).

The second type of motion is that of procession (*proodon*) and return (*epistrophē*) which features prominently in *Ambiguum* 7. Here, Maximus is adopting well-known Neoplatonic metaphysics, though unlike Plotinus or Proclus, he does not entertain mediating hypostases such as Being, Life, Intellect and Soul to bridge the transition from the One to the many.[110] Indeed, for Maximus, there are no median terms between God and creation, for the *Logos* is the *logoi* and each of the *logoi* is itself the *Logos*, a point that we shall consider in more depth in §3.2.4. Right now, all I want to consider is how procession and reversion map on to the *logoi* triad of being.

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[107] *Amb* 7.6, DOML1:81 See also: *Ad Thal* 60.8, CCSG22:79.115-20, FOTL:431 and *Cap Gnost* 1.10, PG90:1085D-1088A, GB:130

[108] Dionysios Skliris, *On the road to being: St Maximus the Confessor's syn-odical ontology*, ed. Maxim Vasiljević (Vrnjacka Banja, Serbia: Sebastian Press, 2018), 136-8.

[109] *Ad Thal* 22.7, CCSG7:141.70-95, FOTC:153

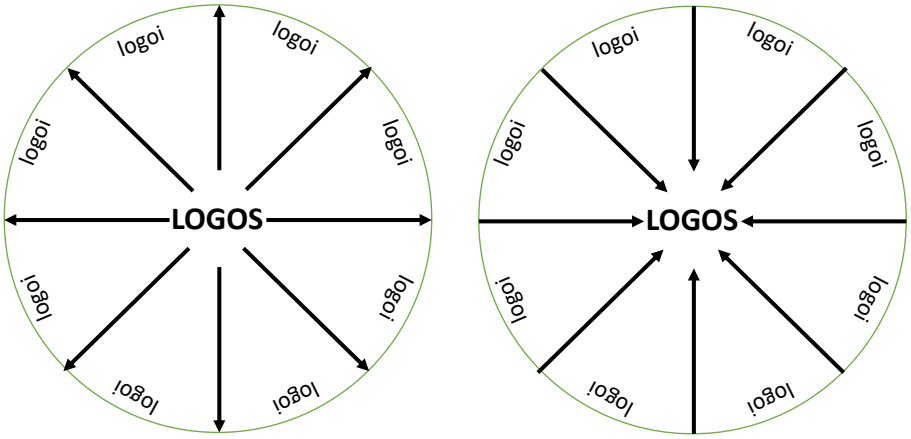
[110] Daniel Heide calls it a 'transformation of mediation.' See: Daniel Heide, "The word as sacrament: the eucharistic ontology of Maximos Confessor" (PhD McGill University, 2022), Ch.2.

It would seem reasonable to interpret procession and return as a cosmological and (partly) historical) motion,[111] with procession corresponding to motion of the *logoi* from being to well-being, and return as the motion of the *logoi* from well-being to eternal well-being. The motion of being starts out in the *Logos* (outside history), progresses through the finitised *logoi* (inside history), before returning eschatologically to the *Logos* (outside history again). Maximus famously pictures the procession and return of creatures as the spokes of a wheel being simultaneously flung outwards and attracted back again to their central origin in God[112] (see Fig.1):

> According to the creative and sustaining procession of the One to individual beings, which is befitting of divine goodness, the One is many. According to the revertive, inductive, and providential return of the many to the One—as if to an all-powerful point of origin, or to the center of a circle pre-containing the beginnings of the radii originating from it—insofar as the One gathers everything together, the many are One.[113]

It is a powerful analogy of, first, how the One *Logos* can 'contain' the many *logoi* and yet remain simple as the limiting point of radial convergence, and, second, of how the many *logoi* can return and be united to the One whilst remaining forever unconfused.

[111] Tollefsen, "Christocentric Cosmology," 78.
[112]The image goes back to Plotinus and Ps. Dionysius. See: Plotinus, *The Enneads*, trans. Stephen MacKenna (London: Penguin Books, 1991), VI.8.18, 530-1. Pseudo-Dionysius, "The divine names," in *The complete works* (Mahwah, NJ: Paulist Press, 1987), 5.6, PG3:821A
[113]*Amb* 7.20, DOML1:101 See also: *Cap Gnost* 2.4, PG90:1128A, GB:148; *Myst* 1, CCSG69:10.133-5, JA:51



Procession (*Proodon*):
'The One [*Logos*] is many [*logoi*]'
'Logoi of being' and '*logoi* of well-being'
Within time and space

Return (*Epistrophē*):
'The many [*logoi*] are One [*Logos*]'
'Logoi of eternal well-being'
Outside time and space

Figure 1: The historical procession and return of the logoi.

The third type of movement relevant to evolution is described in *Ambiguum* 10 as the double movement of expansion (*diastolē*) and contraction (*systolē*):

> ...but the substance of all beings—has been set in motion and continues to move according to the principle and mode [*logō te kai tropō*] of expansion and contraction. For it is moved from the most generic genus through the more generic genera to particular species, through which and in which it is naturally divided, proceeding down to the most specific species, where its expansion comes to a limit, which circumscribes its being on the lower end of the scale; and once again it is gathered back from the most specific kinds of species, moving back through more and more general categories, until it is gathered up into the most generic genus, and there its contraction comes to an end, limiting its being on the uppermost end of the scale. Circumscribed thus from two directions, I mean from above and below, it plainly has a beginning and an end, and cannot possibly receive the definition of infinity.[114]

Here, Maximus describes an expansion from the most generic genus to the most specific species, and a contraction back from the most specific species to the most generic genus. The range of this movement is bounded at one end by the circumscribed indivisible unit, the individual, and at the other end by the largest possible universal, which must be nothing less than the *Logos* himself. It is a process

[114] *Amb* 10.89, DOML1:289

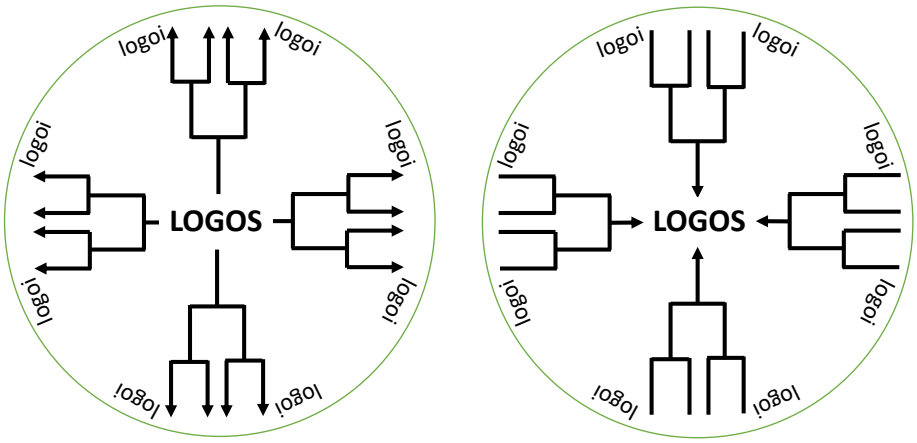
in which creatures are at first dispersed and then brought together, and can be perceived independently from, or one might say, orthogonal to, the historical narrative of procession and return.[115] The nature of this movement is abstract and theoretical, arising from a practice of contemplation (*theoria*) and strongly resembles the classifying of nature according to hierarchical principles.[116] This 'conceptual motion' of Maximus, as he mentally scans up and down the tree of life, anticipates what a modern-day taxonomist might do in seeking to classify organisms according to homologous features; that is to say, features that are remnants of a shared evolutionary ancestry.[117] In the previous section we saw how Maximus hinted at an ontological hierarchy of beings by virtue of shared generic *logoi* that unite 'according to substance.' Here, that hierarchical, or arboreal, vision is even more pronounced.[118] Indeed, it can be made even more visually explicit if we superimpose Maximus' linearly-hierarchical, but abstract, picture of expansion and contraction upon his circularly-divergent, but concrete, picture of procession and return (see Fig. 2).

[115]Tollefsen provides a schematic representation of such orthogonality though he does not superimpose them, as I do. See: Torstein T. Tollefsen, "Christocentric Cosmology," in *The Oxford Handbook of Maximus the Confessor*, ed. Pauline Allen and Bronwen Neil (Oxford: Oxford University Press, 2015), 78.

[116]A fact that has not gone unnoticed by Nicholas Constas: 'Here Maximos describes the movement of created being by a system of classification (at once logical, predicative, and ontological), in which items (or entities) move in the direction either of "differentiation" (diastole) or "simplification" (systole), understood as movements between species and genera, particulars and universals. The system itself is derived from Porphyry's introductory study on logic known as the *Isagoge*, on which see Barnes, Porphyry, 108-28.' Confessor, *On Difficulties in the Church Fathers: The Ambigua*, 489, fn.62.

[117] Tollefsen has made the same observation: '...the *logoi* are the divine principles by which individuals, species, and genera are instituted in a created hierarchic system of essences...The taxonomic system introduced in this text is first and foremost the immanent order of created beings.' Tollefsen, *The Christocentric Cosmology of St Maximus the Confessor*, 86.

[118] Maximus gives another sense to the arboreal nature of the *logoi* when he depicts the *logoi* of all things sitting like birds in a mustard tree. *Cap Gnost* 2.10, PG90:1129AB, GB:149. See also: Kyrill Zinkovskiy and Methody Zinkovskiy, "Hierarchic anthropology of Saint Maximus the Confessor," *International Journal of Orthodox Theology* 2, 4 (2011): 46.



Expansion (*Diastolē*):
From the most generic to the most particular

Contraction (*Systolē*):
From the most particular to the most generic

Figure 2: The contemplative expansion and contraction of the logoi superimposed on the procession and return of the logoi.

In this way, the synchronic contemplation of the hierarchical arrangement of all things is given a diachronic grounding or a chronological explanation. The static nested hierarchy of all living things becomes the end result of a dynamic process of descent with modification. The *logoi* that define all things are eternally *enfolded* in the transcendental *Logos* but temporally *unfold* into finite immanence during the processive phase of the *Logos*' journey. They do so not in an independent fashion, as spokes radiating independently away from a central hub, but in a derivative fashion, as spokes splitting and branching on their way out from the centre.

Figure 3 illustrates how Maximus' circular vision of the procession and expansion of the *logoi* resembles modern-day representations of evolutionary relatedness in which the tree of life is replaced by a circle of life. It is a pleasing coincidence that, in modern evolutionary biology, circular representations are preferred to trees because the former's rotational symmetry avoids what has been seen as a subtle progressivist bias in the upward-pointing verticality of trees.[119]

[119] Stephen Jay Gould, "Redrafting the tree of life," *Proceedings of the American Philosophical Society* 141, no. 1 (1997): 30-54.

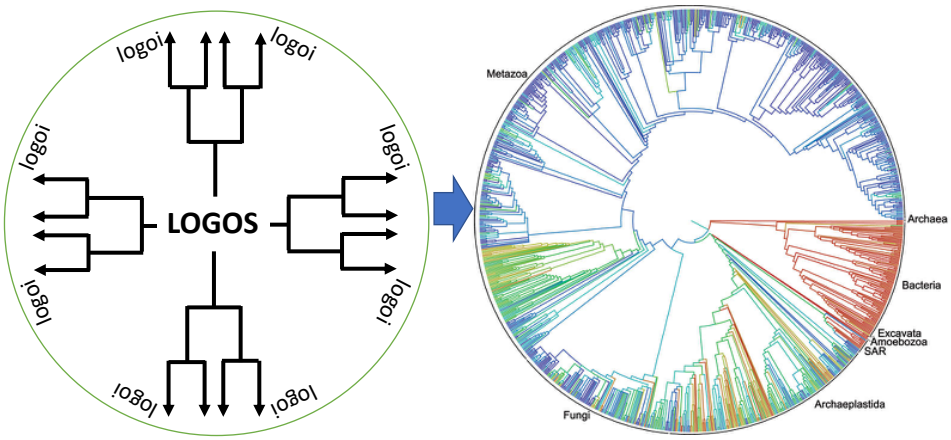


Figure 3: The procession and expansion of the logoi interpreted as phylogenetic classification[120]

In summary, in his contemplation of the natural world expanding and contracting in a hierarchical fashion, Maximus anticipates biological evolution as a concrete process of temporal creation. Evolution supplies the missing rationale that can convert Maximus' argument from being purely metaphysical, arrived at through contemplation, to being ontological and cosmological, arrived at through the practice of phylogenetic classification. The conceptual divergence and convergence that takes place when contemplating the hierarchy of the cosmos not only corresponds to, but owes its existence to, the evolutionary divergence and convergence that has taken place over the world's history.

So much for the processive or expansive phase of the *logoi*, but what about the revertive, contractive phase? Here we must distinguish between a conceptual contraction of the hierarchy and an ontological contraction. The former can take place in our minds as we contemplate the refolding or collapsing back of all things, genus by genus, into their complete unification in the *Logos*. The latter, however, could be problematic, for it might imply a reversal of biological evolution or an overall direction to evolution culminating in some singularity or 'Omega point.'[121] I shall have more to say on this topic in Chapters 4 and 5, but here I will suggest that such an interpretation is not necessary. The final reunification of all things occurs in the third

[120] The circular 'open tree of life' can be found at: https://www.science.org/content/article/first-comprehensive-tree-life-shows-how-related-you-are-millions-species.
[121] cf. Pierre Teilhard De Chardin, *The phenomenon of man* (London: Collins, 1960); Frank J. Tipler, *The physics of immortality* (London: Macmillan, 1995).

of Maximus' ontological triad, the *logoi* of eternal well-being, when God will work '...providentially to bring about the assimilation of particulars to universals...and will unite them reciprocally to each other and to the whole universe in an identity of movement.'[122] Although there will be a point in time when this 'begins' (either at the death of an individual creature or at the death of the universe), the completion of this event will occur outside our time as we know it, and certainly outside the realm of scientific prediction and extrapolation.

2.4.3 The 'temporal logoi'

The three-stage journeying of the *logoi*—from outside time, to inside time, and back again to outside time—introduces the important point that the *logoi* are very much part of a temporal process; what could be regarded as *creatio continua*. The *logoi* are not just eternal metaphysical principles inhabiting a meta-historical realm but have entered and indeed constitute the very spatio-temporal realm that we inhabit. Without this temporal realism it would be difficult to draw any correlation between the *logoi* and evolutionary biology. Indeed, some might prefer to be without such realism and might prefer to regard Maximus' cosmological vision as being entirely mystical, contemplative and metaphysical, standing aloof from any possible engagement with modern day empirical science. To anticipate this objection, we need to consider in more detail the temporal realism of the *logoi* in order to demonstrate the legitimacy of an evolutionary interpretation.

Maximus does not tie his account of the *logoi* to an historical biblical account of creation, which is in keeping with his metaphysical approach to cosmology in which creation is more about a relationship of dependency than of chronological origin. Maximus' cosmology is not therefore hostage to any particular scientific account of creation or any hexaemeral interpretation of Genesis. Nevertheless, it is significant that Maximus does take the trouble to say that all creation, from large to small, is brought into existence 'at the right time.' For example:

[122] *Ad Thal* 2.2, CCSG7:51.11-16, FOTC:97

> By his word (*Logos*) and his wisdom he created and continues to create all things—universals as well as particulars—at the appropriate time [*chronon*].[123]
>
> Instead, in the wisdom of the Creator, individual things were created at the appropriate moment in time [*kairō*], in a manner consistent with their *logoi*, and thus they received in themselves actual existence as beings.[124]
>
> For all things that have come to exist substantially in any way whatever, or that will come into existence, have all been willed in advance by God, and have been conceived of in advance and fore known by Him, and to each particular being He gives substance and subsistence at the fitting and appropriate time [*kairon*].[125]

Maximus uses two different words for time in the above extracts, *chronos* and *kairos*. The former has been interpreted as the measure of motion in the sensible world, and the latter a dimensionless outcome, disclosure, or moment.[126] The whole topic of time has important ramifications for the process of deification or *theosis*, but with our current subject in mind of creation by evolution, it is sufficient to note the chronological beginning of creatures, or their kairological disclosure. No matter how the *logoi* exist within the Godhead—and we shall consider that question in the next chapter—they certainly enter our finite realm in a temporal sequence, at the appropriate time.

Maximus may have stressed this temporal aspect of the *logoi* in order to affirm God's freedom in creation in opposition to various competing views, such as the Neoplatonic idea of involuntary emanation, the Origenist idea of creaturely diversity arising from creatures' falling away from God, or the Stoic idea that creation is permeated by an autonomous organising principle.[127] He may even have had in mind the need to stress the ontological gap between the *logoi* existing eternally in/as the *Logos* and the same *logoi* in creatures that have a temporal beginning. Whatever his original motivation, the fact that the *logoi* are, as it were, 'activated' at the right time

[123]*Amb* 7.16, DOML1:95
[124]*Amb* 7.19, DOML1:101
[125]*Amb* 42.13, DOML2:145-7
[126]A recent study on Maximus' different understandings of time, see: Mitralexis, *Ever-Moving Repose: A Contemporary Reading of Maximus the Confessor's Theory of Time*.
[127]Stead, *Divine Substance*, 119.

for their role in creation is a vital piece in the jigsaw linking Maximus' *logoi* and evolution.

That the *logoi*, or at least some *logoi*, have a temporal aspect is brought out further in the second of the *Questions to Thalassius* in which Maximus seeks to solve the tension between God completing his creation in six days and Jesus' statement that 'my father is still working, and I am also working' (Jn 5:17). There he says:

> God completed the first *logoi* of creatures and the universal substances of all beings at one time (as he himself knows how), and he is still at work effecting not only their preservation in their very existence, but also the actual creation, bringing-forth and constitution of the parts that are potentially in them. Moreover, he is at work bringing about the assimilation of the particular parts to the universal wholes through providence.[128]

Maximus distinguishes here three temporal aspects of God's creative act: his original specification of creation (via the *logoi*) as an eternal activity within the Godhead; his on-going work to actualise these *logoi* as creatures; and his providential care of all creaturely components by assimilating them into wholes. He goes on after this passage to talk about rational creatures aligning their modes of being (*tropoi*) with their *logoi* leading to their deification, but not before making the above comments that are applicable to all creatures and not just human beings. All of this sets up the *logoi* for engagement with natural science, since what Maximus is envisaging is a temporal procession that must surely correspond to both *creation continua* and providence in the sensible world of *chronos* time. It is consistent with the *logoi* of new biological species appearing within the created order at just the right time to define and embody those species. The *logoi* do not remain behind in the eternal intelligible realm to be somehow participated in by finite sensible creatures, but they emanate into the sensible realm being directly responsible for the flux of being and becoming.

In summary: the procession and expansion of the *logoi* is a process starting timelessly in God but continuing temporally in creation by way of the *logoi* appearing

[128] *Ad Thal* 2.2, PG90:272A a translation quoted in Johannes Zachhuber, *The rise of Christian theology and the end of ancient metaphysics: Patristic philosophy from the Cappadocian fathers to John of Damascus* (Oxford: Oxford University Press, 2020), 279.

at their proper time. In this first stage, the *logoi* are 'operating' as their *logoi* of being. Thereafter, creatures follow their natural ends through time according to their *logoi* of well-being, enabling them to flourish as God intended. Here, in this second stage, we see the beginnings of a return and convergence to the *Logos*, whereby the diversifying forces of directional selection are offset by the unifying forces of stabilising selection, and human beings endowed with consciousness and free will are able to overcome forces of anomie by leading a life of virtue. These first two stages of Maximus' triad of being—the *logoi* of being and well-being—belong to the realm of finite space-time, or at least partly so, and as such, they are amenable to observation by human beings and qualify for scientific investigation and interpretation. Only their extremes remain inaccessible.[129] As much as astrophysicists and cosmologists might try, the extreme beginning of the universe in God will always lie beyond scientific investigation because the origin of the *logoi* of being lies in the transcendent *Logos* himself. Likewise, the extreme end of the universe lies outside our current space-time, again in the *Logos*. Ontological return and convergence can only be accomplished to a limited extent in the second phase of the *logoi* of well-being. Final consummation of creation belongs to Maximus' third phase—the *logoi* of eternal well-being—which, by an act of divine grace, results in a transformation of the cosmos beyond the capacities of any current physical processes. I will have more to say about this three-staged journey in Chapter 4.

2.4.4 The 'entangled logoi'

To recap our exposition so far: we have considered the way in which the *logoi*, as multiple refractions of the *Logos*, define all things, and move expansively or divergently in a manner that leaves behind a unity-in-diversity, contemplatable as a hierarchical tree (or circle) of life. We have seen how the *logoi* code for particulars as well as specific and generic entities, and how they are immanently real, rather than just abstract cognitive constructs. And we have observed how the *logoi* emerge

[129] 'The end of creation proves just as supranatural as its beginning, Creation's edges, as it were, cannot by definition be *natural*.' Jordan Daniel Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor* (Notre Dame: University of Notre Dame Press, 2022), 105.

sequentially in real time (even though their pre-existence and origin in the *Logos* is an entirely different matter which we have yet to consider).

If we remind ourselves of some of the provocative statements made by previous authors about the *logoi* and evolution, we can now perhaps appreciate the extent to which what they were saying is true. The *logoi* really *are* 'ontological "codes" that establish the salutary interconnections and interactions between creatures'[130] and 'spiritual DNA...that enables the creature to actualize itself.'[131] Evolution really *is* 'moving forward through various *logoi*'[132] resulting in an 'arboreal network of generic and specific unities and differentiae.'[133]

I am tempted at this point to stop and offer the foregoing as sufficient evidence in support of the previous authors' allusions to what might be termed the 'evolutionary *logoi*' or the 'phylogenetic *logoi*.' There are however two dangers in what I have said so far about the *logoi* and evolution that need to be addressed before our task in this chapter is complete. The first danger is that the *logoi* be identified too much with DNA, and become aligned with that gene-centred view of evolution, which for all its merits, amounts to only a partial account of the information flow and causal interactions within living systems.[134] The second, and related, danger is that of seeing the *logoi* entirely in a divisive light, responsible for endless fissile or divergent events in which species undergo adaptive radiations into new environments, while ignoring the crucial stabilising role of cooperation, convergence, and coalescence that we considered in §2.3.9.

Fortunately, we find in Maximus an antidote to such one-sided accounts of evolution, an aspect of the *logoi*, not so far discussed, that resonates well with certain modern-day understandings of evolution which seek to balance the negative image of 'nature red in tooth and claw' with the more positive images of cooperation,

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[130] Blowers, "Unfinished creative business: Maximus the Confessor, evolutionary theodicy, and human stewardship in creation," 178.
[131] Theokritoff, "The vision of St. Maximus the Confessor: that creation may all be one," 227.
[132] Chenoweth, "A Maximian framework for understanding evolution," 180.
[133] Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 55.
[134] For a popular and eloquent defence of this position, see: Noble, *The music of life: biology beyond the genome*. Amongst Noble's many insightful comments are: 'there is no privileged level of causality in biological systems' (xii), and 'there is no easy way to separate instructions from the process of carrying them out' (53). See also the collection of essays in: Tobias Uller and Kevin N. Laland, eds., *Evolutionary causation: biological and philosophical reflections* (Cambridge, MA and London: The MIT Press, 2019).

symbiosis, niche construction, and ecosystem stability. This new aspect of the *logoi* may be summarised as their *providential role in stabilising life through inter-relational co-constitution*. Before coming to the textual evidence for this more constructive, convergent role of the *logoi* it is instructive to see how Maximus understands life as an overall integrated system.

First, we can note how Maximus appreciates the default condition of the created world to be one of intrinsic fragility. As created things, creatures are contingent and cannot continue to exist without God's constant upholding. That would be true even if the world happened to show enormous stability, but as it happens, the world even reinforces this contingency by its materially unstable nature. For Maximus, instability is therefore a natural condition:

> The saints, having realised that this is the constitution of the sensible world, namely, that the bodies from which and in which the world subsists are caught in a process of mutual destruction and alteration from one into the other, from which it follows that the primary properties of bodies is a natural condition of instability [*phusin astatou*] and alteration, so that today they are carried along and mutated in one way, and tomorrow in another...[135]

From the perspective of evolution, we can see the same tendency in the way in which replicator lineages are prone to mutational change, leading to either annihilation or divergent propagation and mutual separation. Natural selection has acted disruptively to separate populations into non-interbreeding species that go their separate ways occupying ever-more specialised niches requiring ever-more specialised adaptations. Even without any overt interaction and competition between these diverging lineages, for every successful lineage, there must have been countless unsuccessful ones that failed to exhibit the required variation suitable for survival.

Having no inkling of the contingent processes that led to the hierarchical arrangement of living things, Maximus was nevertheless aware of the need for some divine 'supplementation' in creation to compensate for its intrinsic instability and tendency towards divergent self-destruction. What is really interesting is that

[135] *Amb* 10.83, DOML1:277

Maximus does not simply appeal to God's power or omnipresence to provide that compensating stability; nor does he suggest a 'hands-off' approach in which God intervenes through the *ad hoc* implementation of stabilising secondary causes. Instead, Maximus emphasises the *pre-existing in-built* nature of the supplementation: creation comes ready-supplied with its pre-packaged source of stability in the form of the whole-part relationships between creatures:

> For it is quite clear that the permanence of beings, and their order [*taxis*], position [*thesis*], and motion [*kinesis*]; the harmonious conjunction of extremes through intermediaries...; the agreement of the parts [*merōn*] with the wholes [*hola*], and the comprehensive unity of wholes with parts; and the clear distinction [*diakrisis*] of the parts from one another in accordance with their individuating differences [*diaphoran*]; as well as their unconfused union [*asugchutos henōsis*] in accordance with the unchanging identity [*aparallakton*] in the wholes of each of them...all this, I say, clearly shows that all things are efficiently held together by the providence of God who created them.[136]

This strikes me as a magnificent vision of a non-interventional form of divine providence in which God holds all things together by virtue of a 'holomeric' configuration of the world; a union of parts to their whole, in which the parts and whole are real and immanent rather than abstract constructs.[137] It is a somewhat counter-intuitive notion of providence in which God is not supervising from an external distance but orchestrating everything from within—a providence by 'immanent relatedness' one might say. As Maximus scholar, Maximos Constas explains, '[t]he universe is a dynamic field in which the fixed identity of beings depends on their mutual unfolding and relation in a web of universal interdependence.'[138] Or as Colin Gunton, in a different context, has observed: 'God

[136] *Amb* 10.100, DOML1:309-11

[137] Torstein T. Tollefsen, "The concept of the universal in the philosophy of St Maximus," in *The architecture of the cosmos*, ed. Antoine Levy et al., Schriften der Luther-Agricola-Gesellschaft (Helsinki: Luther-Agricola-Society, 2015), 71.

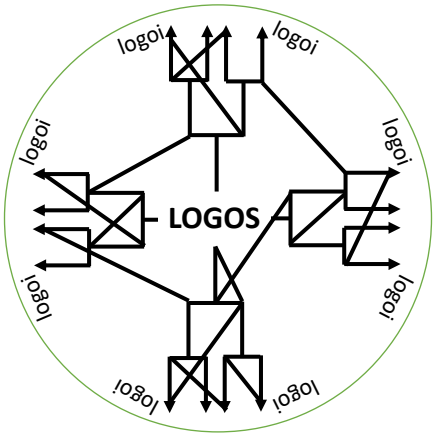
[138] Maximos the Confessor, *On difficulties in sacred scripture: the responses to Thalassios*, ed. David G. Hunter, trans. Maximos Constas, The fathers of the church, (Washington DC: The Catholic University of America Press, 2018), 98, fn.8 commenting on *Ad Thal* 2.2

enables the creation to act ministerially.'[139] Such providence may have been evident to Maximus from his own synchronic view of the relations existing between living things; relations that tend to maintain the world in a stable equilibrium, and which in modern scientific parlance could be described in terms of ecosystem stability.

Even clearer support for this theme of providential constitutive relatedness can be found in Maximus' well-known statement that '...in their substance and formation all created things are positively defined by their own *logoi*, and by the *logoi* that exist around them and which constitute their defining limits.'[140] Here we see that multiple *logoi* are involved in the definition of an individual creature, some of which are internal to that creature and others of which are external and 'environmental.'[141] Transposing this thought to our modern understanding of evolution, we can see it to be true in a number of ways. The *logoi* of the environment—whether they be the *logoi* of climate conditions, the *logoi* of habitats, or the *logoi* of competing organisms—have a critical influence on which of the many *logoi*-defined organism variants survive and reproduce. In one sense, natural selection transfers the informational complexity of the environment to the genome.[142] Sometimes there is an escalation of mutual definition, as when species take part in an arms race to develop ever more sophisticated means of capture or escape. As Holmes Rolston III famously quipped, 'The cougar's fang has carved the limbs of the fleet-footed deer, and vice versa.'[143] Sometimes an organism's habitat forms an essential component of its being, or an extension of its phenotype, such as the dam that is so integral to the life of a beaver.[144] At other times, creatures co-create each other's environmental niches, locking them together into states of mutual interdependence.[145] In all these

[139] Commenting on Basil of Caesaria's understanding of the Genesis 1 words 'let the earth bring forth...' Colin E. Gunton, *The Triune creator: a historical and systematic study*, Edinburgh studies in constructive theology, (Grand Rapids, MI and Cambridge, UK: William B. Eerdmans Publishing Company, 1998), 71.
[140] *Amb* 7.19, DOML1:101
[141] Theokritoff, "The vision of St. Maximus the Confessor: that creation may all be one," 228.
[142] Charles H. Lineweaver, Paul C.W. Davies, and Michael Ruse, "What is complexity? Is it increasing?," in *Complexity and the arrow of time*, ed. Charles H. Lineweaver, Paul C.W. Davies, and Michael Ruse (Cambridge: Cambridge University Press, 2013), 10.
[143] Holmes Rolston III, *Science and religion: a critical survey* (West Conshohocken, PA: Templeton Foundation Press, 2006), 134.
[144] Richard Dawkins, *The extended phenotype* (Oxford: WH Freeman, 1982), 59, 200.
[145] John F. Odling-Smee, Laland, Kevin N., Feldman, Marcus W., "Niche construction," *The American Naturalist* 147, no. 4 (1996): 641-48.

cases, creatures are drawn together by their *logoi* into complex enmeshments or interlacements (*enkapsis*)[146] (see Fig. 4). In many cases these constitutive relationships become what ecologists would call 'obligate' rather than 'facultative,' or what Aristotelians would call essential rather than accidental.



'...all created things are positively defined by their own *logoi*, and by the *logoi* that exist around them and which constitute their defining limits.'

Figure 4: The entangled logoi.

In summary, the perfectly orthodox NeoDarwinian view of the interweaving of divergent and convergent forces leads to a complex vision of life that we perhaps take for granted. Living organisms are so incredibly enmeshed and interwoven with their environment that it is difficult to understand organisms or groups of organisms in complete isolation. Although they may possess what appear to be physical boundaries (such as membranes, skin, or cuticle), the physical, chemical, electromagnetic communications and transactions that take place with the 'outside' world render any notion of a spatially confined 'replicator' too simplistic. From the earliest stages of evolution replicator success must have been dependent on and deeply invested in the surrounding environment. Successful replicators needed to 'carry their environment with them' through successive generations of replication in order to stand any chance of augmentation of their numbers. This more holistic view

[146] Jacob Klapwijk, *Purpose in the living world? Creation and emergent evolution* (Cambridge: Cambridge University Press, 2008), 276.

of evolution in which causality is multi-directional (rather than just 'genes upward') is now widely accepted, especially amongst philosophers of biology. Even Dawkins distanced himself early on from an overly reductionist account of genetic causal influence by admitting the importance of 'vehicles' that accompany and facilitate replicators.[147]

All this considered, Maximus' *logoi* doctrine prohibits any simplistic correlation of the *logoi* with genes or the genome. The rational principles or specifications needed to pre-define creatures far exceeds the syntactic and semantic information content embodied in an individual's genetic code. If we are to think of the *logoi* in terms of information needed to define a living organism, I propose we think in terms of the *complete information bundle* that extends a long way beyond the confines of the organism's 'body.' Such is the deeply enmeshed relationship between living things and their physical environment there may be no limit to the far reaches of this bundle. For us humans, genetic information in the form of gene sequences may seem a convenient repository for the *logoi* owing to its simple one-dimensional code-like nature, but for God there is no reason why the *logoi* cannot be specified in much more complex terms; in terms of formal coordinates comprising multiple dimensions in space and time. None of this would be surprising to Maximus for whom ultimately no particular can be understood without reference to its providential bondedness to everything else and to God.

2.5 Chapter conclusions

The purpose of this chapter was to take the lead from previous authors and to follow their hints and suggestions of a link between Maximus the Confessor's *logoi* doctrine and evolutionary biology to see the direction it might take. I deliberately adopted a posture of advocacy, making the best case for a connection between them, without entertaining potential objections. Rather than disclose everything that Maximus says

[147] Richard Dawkins, "Replicators and vehicles," in *Current problems in sociobiology*, ed. King's College Sociobiology Group (Cambridge: Cambridge University Press, 1982), 45-64.

about the *logoi* I was selective in choosing only those aspects that seem evolutionary in character and which seem indubitably to be about created things, leaving aside, for example, those places where Maximus discusses the *logoi* eternally pre-existing in God. And rather than consider every aspect of the specifically Darwinian theory of evolution, I engaged with only those main elements that pertain to the diverging and converging forces at play that have given rise to descent with modification, omitting the collateral damage caused by a competitive struggle for existence. As will become apparent in later chapters, this will prove to have been a rather procrustean exercise, for without my deliberate elision of several vital aspects of evolution (its randomness and evil) and several vital aspects of the *logoi* (their inviolability and purposefulness), an evolutionary interpretation of the *logoi* might never have got off the ground.

There is however method in my madness. By bracketing out some of these complications, I have hopefully cleared the ground to shown that there is at least *some* basis for an evolutionary interpretation of the *logoi*, if only as an initial approximation, or a null hypothesis. As part of this initial model, we have seen how the *logoi* are determinative of creaturely form at all levels from the most generic to most particular. The determination is also intrinsic and immanent to creatures rather than an external taxonomic labelling. These two features of the *logoi* immediately render them part of our material, created reality and hence relatable, in theory, to the findings of modern science. We also saw how the *logoi* are dynamic, having moved from an infinite supra-temporal realm into our finite temporal realm (of being and well-being), and having appeared at the right time. In doing so, they have undergone procession and expansion, refracting the *Logos* into the kaleidoscopic profusion of creaturely form that has graced our planet. This has not been a parallel, independent expansion leading to completely unique creatures but a derivative and integrated expansion. It is derivative because all things are derived in a hierarchical fashion from progenitors with whom they share generic substance. It is integrated because the *logoi* not only form a diverging hierarchy but also interact with each other during their formation to create new interrelations and new ontologies.

Chapter 3: The Christo-forming *logoi*

3.1 Chapter aims

In the previous chapter I sought to elucidate the several previous references to the *logoi* and evolution in terms of what the *logoi* represent in the finite created order. I now want to consider what the *logoi* are on the other 'side' of the created-uncreated divide and thereby to clarify the nature of the divine-creature relationship as understood, or at least implied, by Maximus. Without this further perspective I run the risk of biasing the study towards those features of the *logoi* that appear to have an evolutionary character whilst neglecting other disanalogous or dissonant features that might result from a particular understanding of God's presence and action in the world.

The chapter will begin with a review of several interpretations that have been made of the *logoi* 'in' God (as ideas, wills, activities, or a person) along with their primary textual support.[148] Most of them have a long pedigree in Maximian scholarship but are seldom found juxtaposed and compared in the way that I feel is required to meet the needs of this study. I will offer my own synthesis of these interpretations before returning to the other side of the equation: how the *logoi* are 'in' creation. By examining the *logoi* from both perspectives, I will be in a good position to form a view as to the nature of the divine-creation relationship according to Maximus—a relationship that I shall describe as 'partially and dynamically panentheistic.' To stabilise this panentheism from sliding into either divine idealism or pantheism I will then, drawing on John Zizioulas, look at three disputed ways in which 'communion' can be balanced with 'otherness' (via: intelligible principle/being; energies/essence; or personal principle/nature). I will argue that, rather than opt for a single source of otherness, as others have tended to do, it is better to accommodate all three, since all three do a better job of accounting for the dynamic nature of the

[148] The reason for such diversity of interpretation is that Maximus is not completely clear on the precise ontology of the cosmic *logoi*. Blowers, "From nonbeing to eternal well-being: creation ex nihilo in the cosmology and soteriology of Maximus the Confessor," 178.

logoi as they transition from being to eternal well-being. Nevertheless, even if I am not correct in this, all three theories of communion and otherness collectively remain distinctly panentheistic and represent an understanding of divine-creature relations that is set apart from those more participatory frameworks that are characteristic of Western scholastic thought. It is this overall conclusion of panentheism that will inform the discussions of purpose and evil in chapters 4 and 5.

3.2 The *logoi* 'in' God

3.2.1 As divine ideas

As we saw in Chapter 2, Maximus uses the word *logos*/*logoi* to denote the rational principles or definitions by which creatures derive their diversity in being. Alongside the implied artisanal language of designs or specifications we find Maximus describing the *logoi* as pre-existing within God. For example, in *Ambiguum* 7 Maximus writes:

> From all eternity, He contained within Himself the pre-existing *logoi* of created beings. When, in His goodwill, He formed out of nothing the substance of the visible and invisible worlds, He did so on the basis of these *logoi*.[149]
>
> In God the *logoi* of all things are steadfastly fixed, and it is on the basis of these that God is said to know all things before they come into being, for in absolute truth, in Him and with Him are all things, even though all things—things present and things to come—were not called into existence simultaneously with their *logoi* or with their being known by God.[150]

Likewise, from the *Questions and Doubts*:

> ...each thing that has come to be according to its own *logos*, which exists in God, is said to be a member of God and to have a place in God.[151]

[149] *Amb* 7.16, DOML1:95
[150] *Amb* 7.19, DOML1:99
[151] *Qu Dub* 173, CCSG10:120.7-8, DP:128

As the above extracts show, the *logoi* of beings, according to Maximus, pre-exist in God as his original intentions or instructions. The same *logoi* that define created things have also existed eternally in God, though creatures themselves have a finite and temporal beginning and are not co-eternal with God. All of which is perhaps not surprising. If God is the source of all things, then he alone must be the origin and exemplar for all that is good, true, beautiful, wise, principled and rational.[152] Nothing else eternally co-exists with God from which God could derive any paradigm or inspiration. The implication is that the *logoi* in creation are not adventitious outputs of an arbitrary act of will, but are derived from God, rooted in God, and reflect what can only be God, since there is nothing else to reflect.[153]

In emphasising the pre-existence of the creation-defining *logoi* in the godhead, Maximus is offering, or, at least, implying an anthropomorphic and psychological metaphor of the divine creative act in which God has ideas in his mind of what he is going to create before[154] actually creating.[155] I am certainly not the only one to interpret the *logoi* as divine ideas and Tollefsen thinks the interpretation is even an 'obvious' one to make:

> In one sense it seems obvious that what we have described above presents a doctrine of divine ideas…If we look to Maximus' examples above, there can be no doubt: the *logoi* are divine ideas for the different kinds of creatures. The ideas secure beings in their differentiated variety, each kind according to its own identity. The *logoi* determine beforehand, which means in God's eternal contemplation, what beings are to be according to their essence. God conceives these eternal patterns as acts of God's will in

[152] e.g. in *Ad Thal* 51.3, CCSG7:395.20-25, FOTC:305 Maximus talks of God having intermingled among sensory creatures those that are 'resonances [*apēchēmata*] of His own magnificence.'

[153] Sherwood, *The early Ambigua of Saint Maximus the Confessor and his refutation of Origenism*, 170, fn.61.

[154] 'Before' in the logical sense rather than the temporal sense.

[155] It is true that Maximus does not use the word 'idea' in the above passages, though in the *Commentary on the letters of St Dionysius* we read: '...before things were made, God's Providence existed without beginning prior to any created thing in God's ideas or exemplars, [*ideas kai noēseis tou Theou*] that is, in His eternal thoughts...and it is in these ideas or thoughts of God that things yet to be made were pre-formed.' *Schol Dionys* PG4:569CD (translated in Loudovikos, *A eucharistic ontology: Maximus the Confessor's eschatological ontology of being as dialogical reciprocity*, 25.) However, the authorship of the scholia has been contested. See: Hans Urs von Balthasar, *Cosmic liturgy. The universe according to Maximus the Confessor.*, trans. Brian E. Daley (San Francisco: Ignatius Press, 2003), 359-87.

> accordance with which God creates beings in such a way that they occur in the world at the proper time for each creature.[156]

Indeed, the same conclusion has been reached by a number of eminent Maximus scholars, including Sherwood, Florovsky, Dalmais, and Von Balthasar,[157] to whom could be added examples from more recent scholarship.[158] I stress this, because as we shall see in the next section, not all scholars agree. Many prefer to place the emphasis on divine volition as an act of God, rather than divine ideas as pre-existing entities within God.

To the extent that the *logoi are* ideas or intentions, they serve as a causal link or bridge between God, as cause, and creatures, as effects. Just as a product of human craftsmanship could be said to be derived from the human artist, the same could be said of God's ultimate primordial act of creation, even though in God's case, he does not utilise any external media.[159] Despite the pivotal role that *creatio ex nihilo* was to have in Christian protology (a doctrine which Maximus strongly affirms),[160] the case for creation being at least in some sense *ex Deo* (*ek Theou*) is quite compelling[161] and we owe it to Maximus for his emphasising of this important and somewhat neglected aspect of creation, which later became known as divine exemplarism—a doctrine with a long history, culminating in Aquinas' notion of the divine ideas.[162]

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[156] Tollefsen, "Christocentric Cosmology," 312.

[157] Listed in Loudovikos, *A eucharistic ontology: Maximus the Confessor's eschatological ontology of being as dialogical reciprocity*, Ch.2.

[158] e.g. John Dillon and Daniel J. Tolan, "The ideas as thoughts of God," in *Christian Platonism: a history*, ed. Alexander J.B. Hampton and John Peter Kenney (Cambridge: Cambridge University Press, 2021), 50; Chenoweth, "A Maximian framework for understanding evolution," 168.

[159] Contrary to an early view (e.g. held by Justin Martyr) that God fashioned the world from the pre-existing formless void of Genesis 1:2. Gerhard May, *Creatio ex nihilo: the doctrine of 'creation out of nothing' in early Christian thought*, trans. A.S. Worrall (London and New York: T&T Clark International, 2004), 124.

[160] For example: '[The mind]...is amazed at how from nothing he has brought into existence everything that is.' *De Char* 4.1, PG90:1048B, GB:75. Daniel Heide has also pointed out that in *Amb* 10.99, Maximus equates both *creatio ex nihilo* and *creatio ex Deo*: '*...ek Theou tou aei ontos ta panta ek tou mē ontos genesthai...*' ('...it must be accepted that all things have been created from the eternally existing God from nothing...'). Heide, "The word as sacrament: the eucharistic ontology of Maximos Confessor," 159.

[161] For examples of Maximus' use of *ek Theou*, see: *Myst* 2, CCSG69:16.224, JA:56; *Amb* 10.99, DOML1:308, *Qu Dub* 104, CCSG10:78.7, DP:98. Such terminology also has much biblical grounding, such as in Wisdom 11:20, Colossians 1:16, Acts 17:28, Romans 11:36.

[162] For a concise history of pre-Christian and early Christian exemplarism, see: Tollefsen, *The Christocentric Cosmology of St Maximus the Confessor*, Ch.2. Dillon and Tolan, "The ideas as thoughts

3.2.2 As divine wills

The *logoi* are no mere inert definitions or ideas but are the very creative power and will of God.[163] Quoting Dionysius with approval, Maximus says:

> Saint Dionysios the Areopagite teaches us that Scripture calls these *logoi* "predeterminations" and "divine wills." The disciples of Pantainos (the teacher of the great Clement, who wrote the Stromateis) also say that it is the habit of Scripture to call them "divine wills."[164]

And in commenting on Romans 1:20 he says:

> The principles of beings—which were prepared before the ages in God, in a manner known only to Him, and which men customarily call "good wills"—are invisible in themselves, yet are "clearly visible in the things that are made," when, that is, they are seen with the eyes of the intellect.[165]

Texts such as these have led some commentators to claim that the *logoi*, in God, should be regarded as divine wills rather than divine ideas; or at least that the latter term should be used only with caution.[166] At first sight the distinction between will and idea might seem to be trivial or redundant: both could be seen to be psychological states awaiting implementation and realisation.[167] But the notion of will also introduces, beyond a mere predetermined plan, the elements of freedom

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of God." For an account of Aquinas' exemplarism, see: Gregory T. Doolan, *Aquinas on the divine ideas as exemplar causes* (Washington D.C.: The Catholic University of America Press, 2008). For a more general treatment, see: Thomas M. Ward, *Divine ideas*, ed. Paul K. Moser and Chad Meister, Cambridge elements: religion and monotheism, (Cambridge: Cambridge University Press, 2020).

[163] Sherwood, *The early Ambigua of Saint Maximus the Confessor and his refutation of Origenism*, 176.

[164] *Amb* 7.24, DOML1:107

[165] *Ad Thal* 13.2, CCSG7:95.6-10, FOTC:123

[166] See for example: Louth, "St. Maximos' doctrine of the *logoi* of creation," 80; Vladimir Lossky, *The mystical theology of the eastern church* (Crestwood, NY: St Vladimir's Seminary Press, 1976), Ch.5.

[167] According to John Dillon and Daniel Tolan, 'Although one might not be able to separate divine thinking from divine willing neatly, it is clear that Maximus wishes to emphasize the existence of the ideas in God's will in order to maintain God's transcendence. This much is clear when Maximus writes, 'For it is not possible...that He who is beyond all beings should know beings in a manner derived from beings, but we say that He knows beings as His own wills'.' Dillon and Tolan, "The ideas as thoughts of God," 50.

and power to act, which perhaps has the effect of safeguarding against certain wrong conclusions that could be drawn about God's creative action.

Is it possible, then, for the *logoi* to be interpreted as both ideas *and* wills?[168] Examining our own thought processes, we might be inclined to think that the planning of an action precedes its willing such that the plan and the will are separated at least logically if not temporally. But this need not be the case with God in whom knowing and willing are eternally one with himself. Yet the distinction between these two terms, I would suggest, is helpful in raising our consciousness of how things might have been different. Plans bespeak an exemplarist *ex Deo* origin whereas wills imply a voluntarist *ex nihilo* origin.[169] 'All plan and no will' might suggest a fixed and inevitable universe of absolute pattern, evoking pantheism or idealism. 'All will and no plan' might suggest a fluid but arbitrary universe of absolute chaos.[170] But a plan and a will that are coincident, if not identical, ensures that God's will *is* his plan, and his plan *is* his will—eternally.[171] Another way of viewing the simultaneity of plans and wills is to think of their being two causes rolled into one: the formal cause and the efficient cause; the former denoting rationality and intelligibility and the latter denoting power and action.[172] We shall return to the subject of Aristotelian causation in §3.3.2.

For a better understanding of some of the possible motivations behind the reticence to accept the *logoi* as divine ideas it is instructive to turn to some of its

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[168] Tollefsen points out that the identity of will and the *logoi* was not obvious even to Palamas who, writing 600 years later, thought they were separate and that the distribution of the *logoi* in the cosmos was down to the exercise of a separate divine will. Tollefsen, *The Christocentric Cosmology of St Maximus the Confessor*, 147.

[169] '[*creatio ex nihilo*]...tends to concentrate on creation as an act of will or power...' Gunton, *The Triune creator: a historical and systematic study*, 55.

[170] A vision of a world thoroughly impregnated by the divine will can lead to the very idea of a natural order being a 'quasi-blasphemous intrusion.' Lydia Jaeger, *What the heavens declare: science in the light of creation* (Eugene, OR: Cascade Books, 2012), 55-6.

[171] Tollefsen gets the balance right in distinguishing two modes of divine causality operative in the world: the *logoi* defining the essence of creatures via formal or exemplary causation; and the *Logos* acting as an efficient cause by 'bringing what is essentially defined from non-being to being.' See: Tollefsen, *The Christocentric Cosmology of St Maximus the Confessor*, 215.

[172] As Tollefsen observes: 'In St. Maximus' philosophy there is a close connection between God as paradigmatic cause and God as efficient cause. The *logoi* have the dual aspects of essential definitions and acts of will. In the act of creation the paradigms are imprinted in an otherness brought from non-being into being. The *Logos* gives, in addition to the essential contents, both being and remaining (or continuation) (*to einai kai to diamenein*). I suppose one could suggest that the being and remaining is what is expressed in the Pauline term that beings exist 'through Him'.' Tollefsen, "Causality and movement in St. Maximus' Ambiguum 7," 91.

strongest critics. In his classic work, *The Mystical Theology of the Eastern Church*, Vladimir Lossky attempts to differentiate the Eastern concept of the divine ideas from its Western equivalent developed first by Augustine and later by Aquinas. Lossky claims that bringing the divine ideas into the inner being of God, as he claims was done in the West, has the effect of disparaging the created world by depriving it of its original character and grounding it too much in the Trinitarian essence of God. For Lossky,

> [t]he ideas are not...the eternal reasons of creatures contained within the very being of God, determinations of the essence to which created things refer as to their exemplary cause, as in the thought of St. Augustine which later became the common teaching of the whole Western tradition and was more precisely formulated by St. Thomas Aquinas. In the thought of the Greek Fathers the divine ideas are more dynamic, intentional in character. Their place is not in the essence, but in 'that which is after the essence', the divine energies: for the ideas are to be identified with the will or wills [*thelēmata*] which determine the different modes according to which created beings participate in the creative energies.[173]

What Lossky seems to be saying here is that if the divine ideas (and presumably the *logoi*) are identified too closely with the divine essence (as they are in the West) then they lose their voluntary, intentional character and become something more akin to an involuntary emanation from God whereby it is difficult for creatures to gain any true identity apart from God. Instead, if the ideas are identified with the divine energies, then an ontological connection with God is maintained at the same time as their being free acts of God's will.

In a similar vein, John Zizioulas denies that the *logoi* correspond to thoughts in God for fear that creation will then be a necessary product of the divine mind rather than a free act of love.[174] He labels the *logoi*-as-divine-wills a 'revolution' for the way in which they liberate Christian thought from the influences of Platonism and Neoplatonism.[175] Others have expressed a similar worry about the 'Platonizing' effect

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[173] Lossky, *The mystical theology of the eastern church*, 95.

[174] The same concern is expressed from within other theological traditions. See for example: Jaeger, *What the heavens declare: science in the light of creation*, 37.

[175] John D. Zizioulas, *Lectures in Christian dogmatics*, ed. Douglas H. Knight (London: T&T Clark, 2008), 87-8.

of regarding the *logoi* as divine ideas or pre-existing 'ontic realities.'[176] Behind this objection may lie a worry that divine ideas imply that God is composite (threatening divine simplicity),[177] or that the ideas have been unduly reified as ontological entities (challenging God's supremacy and aseity).[178]

While these are all valid concerns, a risk of regarding the *logoi* as divine wills *only* is that we portray a God who is monarchical and capricious, who creates through the exercise of sheer power and freedom of will without there being any contribution from himself; the end result being an abysmal separation and distance between God and creation.[179] But such a dichotomy between divine wills and ideas is not necessary.[180] To harmonise the two, one could surely agree that the *logoi* are indeed divine wills but allow that these wills must have some pre-existing *content* or *form* if the results of God's creative willing are not to be arbitrary or adventitious.[181] That the *logoi* defining the form of creatures pre-exist eternally in God does not imply that those forms will necessarily and involuntarily be brought into existence as finite beings. For that to happen, something additional is needed: God's will to convert those forms into finite being. Without this distinction between form and being it is perhaps understandable that some should be concerned that eternal divine forethought implies a co-eternal creation.

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[176] See for example: Louth, "St. Maximos' doctrine of the *logoi* of creation," Ch.1; Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*; Sotiris Mitralexis, *Ever-moving repose: a contemporary reading of Maximus the Confessor's theory of time* (Cambridge: James Clarke & Co., 2018), Ch.4; Lars Thunberg, *Microcosm and mediator: the theological anthropology of Maximus the Confessor* (Chicago: Open Court, 1995), 77; Zizioulas, *Lectures in Christian dogmatics*, 83-88.

[177] Jordan Daniel Wood, "Creation is incarnation: the metaphysical peculiarity of the *logoi* in Maximus Confessor," *Modern Theology* 34, no. 1 (2018): 84.

[178] A particular concern for proponents of the *analogia entis* whereby it is impossible for God and creatures to be related to something they have in common. Erich Przywara, *Analogia entis. Metaphysics: original structure and universal rhythm*, trans. John R. Betz and David Bentley Hart (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2014), 233.

[179] John Macquarrie, *In search of deity: an essay in dialectical theism*, The Gifford Lectures, 1983-4, (London: SCM Press Ltd, 1984), Ch.3.

[180] Paul Blowers agrees: 'In my judgment it is a both/and, not an either/or. Maximus does not entirely jettison the noetic dimension of the *logoi* in order to define them exclusively in terms of divine intention and activity.' Blowers, "From nonbeing to eternal well-being: creation ex nihilo in the cosmology and soteriology of Maximus the Confessor," 177.

[181] John Polkinghorne's comment, that '[t]he divine will alone is the source of created being,' is typical of a voluntaristic bias in the thinking of many Western scholars. John Polkinghorne, *Science and Christian belief: theological reflections of a bottom-up thinker* (London: SPCK, 1994), 74.

3.2.3 As divine energies

The notion of the divine energies (*energeiai*) is most commonly associated with St Gregory of Palamas and the Hesychast controversy[182] but its origins stretch back to Aristotle and the Neoplatonists, reaching Maximus via Dionysius the Areopagite, and the Cappadocian fathers.[183] Palamas was trying to defend the authenticity of a beatific union with God, claimed by the monks on Mount Athos, while the Cappadocians and Dionysius were trying to explain how one could participate in God given the ineffability and inscrutability of his essence. The proposed solution was to consider the visible and knowable activities of God in distinction from his invisible and unknowable nature; to distinguish the transitively and temporally enacted manifestations occurring *ad extra* from the eternal and unchanging hypostases of the divine persons *ad intra*. For Gregory of Nyssa and Gregory of Nazianzus the *energeiai* are things existing 'eternally around the divine nature' (*ta peri tēn theian phusin*), corresponding to the names, attributes and works of God by which he is capable of being apprehended by us, as opposed to his *ousia* or essence, which is beyond being and unknowable.[184] Although conceptually distinct from the divine essence,[185] the energies are in some sense God himself, since God *is* his attributes; rather like Moses' seeing of the 'back parts' of God was tantamount to seeing God, yet not seeing him at the same time. For many in the West—for example, those following Thomas Aquinas—the doctrine of the divine energies is seriously problematic both in the way it seems to create ontological levels and unrealised potential within God, and the way

[182] For an introduction, see: Lossky, *The mystical theology of the eastern church*, Ch.4; Norman Russell, *Gregory Palamas and the making of Palamism in the modern age* (Oxford: Oxford University Press, 2019).

[183] The definitive historical review of the energies is: David Bradshaw, *Aristotle East and West: metaphysics and the division of Christendom* (Cambridge: Cambridge University Press, 2004). For an account of Maximus' understanding of the energies see: Vasilis Karayiannis, "The distinction between essence and energy according to Maximus the Confessor," in *Divine essence and divine energies: ecumenical reflections on the presence of God in Eastern Orthodoxy*, ed. Constantinos Athanasopoulos and Christoph Schneider (Cambridge: James Clarke & Co, 2013), 232-55.

[184] Bradshaw, *Aristotle East and West: metaphysics and the division of Christendom*, 166-7.

[185] For more on what this 'distinction' amounts to, see: David Bradshaw, "Essence and energies: what kind of distinction?," *Analogia* 9 (2019): 5-35; David Bradshaw, "The concept of the divine energies," in *Divine essence and divine energies: ecumenical reflections on the presence of God in Eastern Orthodoxy*, ed. Constantinos Athanasopoulos and Christoph Schneider (Cambridge: James Clarke & Co, 2013), 27-49.

in which it limits the believers' final beatific union with God.[186] It is, however, outside the scope of this study to enter into the details of this controversy. Instead, the doctrine of the divine energies will be assumed as a starting postulate within the Eastern tradition within which Maximus is situated. The question which presents itself here is whether, or to what extent, the *logoi* can be considered to be divine energies in Maximus' thought. It is a question that is difficult to answer definitively as Maximus himself is not very clear on the relation between the two. Therefore, in what follows, I will first offer an argument that the *logoi* are effectively a kind of energy, the kind that become instantiated as created things. I will then revert to what is perhaps the majority view that the *logoi* and energies are quite different entities, with the former being the vehicles for the latter, or vice versa.

One text that might lead us to think that the *logoi* are a kind of energy can be found in *Ambiguum* 22 where Maximus describes how contemplation of the diversity of material objects proceeds in two stages from an awareness of their defining rational principles (*logoi*) to a knowledge of the infinite energies of God that lie behind them:

> For different things would not be different from each other if their *logoi*, according to which they came into being, did not themselves admit of difference...so, too, when the intellect naturally apprehends all the *logoi* in beings and contemplates within them the infinite energies of God, it recognizes the differences of the divine energies it perceives to be multiple and—to speak truly—infinite.[187]

From this text some commentators have concluded that the *logoi* and energies are synonymous in Maximus' thought.[188] Strictly speaking, however, the passage does not say that the energies *are* the *logoi*, only that the energies can be contemplated *within* the *logoi*.

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[186] Rowan D. Williams, "The philosophical structures of Palamism," *Eastern Churches Review* 9, 1-2 (1977): 30, 31, 40.

[187] *Amb* 22.2, DOML1:449

[188] See: Lars Thunberg, *Man and the cosmos: the vision of St Maximus the Confessor* (Crestwood, NY: St Vladimir's Seminary Press, 1985), 140; Loudovikos, *A eucharistic ontology: Maximus the Confessor's eschatological ontology of being as dialogical reciprocity*, 98; Joseph P. Farrell, *Free choice in St. Maximus the Confessor* (South Canan, PA: St. Tikhon's Seminary Press, 1989), 139; Calinic Berger, "A contemporary synthesis of St Maximus' theology: the work of Fr. Dumitru Stāniloae" (paper presented at the Knowing the purpose of creation through the resurrection: Proceedings of the symposium on Maximus the Confessor, Belgrade, 2012), 403, commenting on Stāniloae's view.

To gain further insight into Maximus' understanding of the relation between the two, we can turn to a famous passage in *Chapters on Knowledge* where he talks of the works (*erga*) surrounding God, which semantically are very close to the concept of energies or activities (*energeiai*). There he distinguishes two types of work: those that begin in time and those that do not:

> God's works which began in time are all beings which exist by participation [*ta onta metechonta*], for example, the different essences of beings, for they have nonbeing before being. For there was a time, when beings which exist by participation were not. The works of God which did not happen to begin to be in time are participated beings, in which participated beings share according to grace, for example, goodness and all that the term goodness implies, that is, all life, immortality, simplicity, immutability, and infinity and such things which are essentially contemplated around him [*peri auton*]; they are also God's works, and yet they did not begin in time.[189]
>
> ...What began in time is and is said to be what it is and is said, by participation with what did not begin in time.[190]

The participated beings are divine works that have no beginning, are contemplated around the essence of God, and are participated in by grace.[191] It is in these uncreated works that God's creatures—his temporal works—participate; not in the divine essence *per se*, but in something that is distinct, but not separated from, the divine essence. This leads to three ontological levels or distinctions: God's essence; God's eternal uncreated works encircling his essence; and God's created works (creatures) participating in the uncreated works.

If we can assume that the *erga* are the *energeiai*, then the question arises as to how the *logoi* map onto these three ontological positions (one essence and two *erga/energeiai*). One possibility is that the eternal works/energies are synonymous with those *logoi* that are of the most transcendent or universal kind, such as those

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[189] *Cap Gnost* 1.48, PG90:1100D, GB:136

[190] *Cap Gnost* 1.50, PG90:1101B, GB:137

[191] As Marius Portaru has documented, Maximus's understanding of participation is quite diverse. Here Maximus is using the word in its ontological sense. See: Marius Portaru, "The vocabulary of participation in the works of Saint Maximus the Confessor," in *Via lui Nabot/Naboth's vinyard: studia theologica recentiora*, ed. Octavian Gordon and Alexandru Mihãilã (Clujeanã, Romania: Presa Universitarã Clujeanã, 2012), 295-317; Marius Portaru, "Gradual participation according to St Maximus the Confessor," in *Studia Patristica*, ed. Markus Vinzent (Leuven: Peeters, 2013), 281-93.

corresponding to God's intelligible attributes.[192] If so, we can see how creatures must participate in these 'higher order' *logoi* or energies in order to receive their own analogous attributes. For example, one of the uncreated works around God's essence is Beauty. God wills to exemplify this uncreated work through the exercise of his will and rational determination and thereby produces a beautiful flower. Once we contemplate the flower, we can comprehend that the flower owes its beauty to participating in the energy of Beauty that is forever circling God's essence. To this extent, then, what might be called the transcendental and universal features of creation are works that began in time and participate in the transcendentals that exist eternally around the Godhead, being at one with his essence but distinct from it.

We should not deduce from this, however, that *every* aspect of creation is participating directly in divine transcendentals. The *logoi* of particulars, defining the unique shape and composition of *this* particular flower, must find their exact counterpart in the godhead before they can be traced back further to any higher-level, generic or transcendental *logoi*.[193] This is because, if the *logoi* prescribe and define nature in the exhaustive and all-encompassing way that Maximus seems to indicate, then there must come a point in the specification of the flower when its own particularity (what later Western scholasticism would term 'haecceity' or 'thisness') must be specified by the *logoi* of particulars. Whatever it is in this flower that makes its beauty only analogously related to God's Beauty and not identical with it must itself be specified by God; at least if we are to avoid the implication that there are aspects of finitude that God does not understand, or cannot predict, or cannot control; and at least if we are to be consistent in our interpretation of Maximus. This possible reading of Maximus is close to that of Clement Yung Wen who distinguishes two types of *logoi* in Maximus: the *logoi* of beings and the *logoi* of virtues. The former are the pre-determinations of creatures while the latter are the divine energies

[192] For example, in *Amb* 10.119, DOML1:341 Maximus states the highest *logoi* to be God's goodness and love.

[193] '...the *logoi* pertain to particulars, so that there is a one-to-one correspondence between *logoi* and created things, while the perfections are universals in which many creatures participate.' Eric David Perl, "Methexis: creation, incarnation, deification in Saint Maximus Confessor" (PhD Yale University, 1991), 159.

around (*peri*) the divine essence, similar to what I am terming transcendentals. He claims that creatures participate in the *logoi* of virtues, just as I am proposing, though he does not go on to discuss the non-participatory means by which particulars might be specified.[194] In summary then, according to this reading of Maximus, the *logoi* correspond very closely to the energies in that both have a pre-existence in God (positioned short of God's very essence), and both go out of God to define and materialise created things.

Notwithstanding the above, it is probably fair to say that most commentators take a different view, seeing the *logoi* and energies as different entities having different roles.[195] For example, the energies are said to be responsible for 'concretising' the *logoi*, promoting beings from non-existence to existence;[196] or the *logoi* are said to be 'finitizing' the infinite energies of God, such that God is present by his energies and not his essence.[197] In both cases, one thing is emanating from God and another thing is serving to ground or limit that emanation; they just differ as to which is the emanator and which is the grounder or limiter. The end result, however, could perhaps be said to be the same: creation is upheld and vested with both the *logoi* and the divine energies.

A third option, somewhere between the two previous views, has been advanced by Bradshaw, who suggests that the *logoi* are *energeiai*, but that not all *energeiai* are *logoi*. As he explains:

> '[Maximus] splits the Cappadocian conception of the divine energeiai into three: one part relating to creation (the *logoi*), another to God's eternal attributes (the "things around God"), and the third to the activity and energy of God that can be shared by creatures (for which he tends to reserve the term *energeia*). The point of using the term *logos* rather than *energeia* is to emphasize that God is present in

[194] Clement Yung Wen, "Maximus the Confessor and the problem of participation," *Heythrop Journal* 58 (2017): 11.
[195] Farrell, *Free choice in St. Maximus the Confessor*, 139; Bradshaw, *Aristotle East and West: metaphysics and the division of Christendom*, 206.
[196] Karayiannis, "The distinction between essence and energy according to Maximus the Confessor," 246.
[197] Marius Portaru, "Classic philosophical influences: Aristotle and Platonism," in *The Oxford handbook of Maximus the Confessor*, ed. Pauline Allen and Bronwen Neil (Oxford: Oxford University Press, 2017), 137; Heide, "The word as sacrament: the eucharistic ontology of Maximos Confessor," 183.

> creatures, not only as their creator and sustainer, but as their meaning and purpose.'[198]

Whichever way the relation of the *logoi* and the energies is eventually resolved, the purpose of this section has been to highlight briefly the potential of the divine energies to offer some ontologically intermediary position for the *logoi*; a position that is somewhere in between the creatures they define and the God who, according to Maximus and the Eastern tradition, is beyond definition.[199] Although not without their exegetical and interpretative problems, the energies can provide an ontological 'safe harbour' for the *logoi*, guarding against implications of divine idealism or pantheism.

3.2.4 As the second person of the Trinity

A third and final way in which Maximus says the *logoi* are 'in' God is as the *Logos*, the second person of the Trinity. This may seem a rather obvious thing to say given the historical development of the *logos* doctrine and the derivation of the plural noun *logoi* from its singular,[200] but with Maximus it is much more profound than meets the eye. It is also worth noting at the outset that this option places the *logoi* at the heart of the godhead, inasmuch as any person of the Trinity could be said to be the divine 'heart.' At any rate, it seems a quite different solution to the previous one of locating the *logoi* within the divine energies which could be said to be more 'pericardial.' It is, however, a solution compatible with the *logoi* being divine ideas and/or wills, since these anthropomorphic terms are rightly appropriable by members of the Trinity who, after all, are persons.

The most obvious sense in which the *logoi* could be said to be in the *Logos* is as parts within a whole. In Maximus' seminal introduction to the *logoi* in *Ambiguum* 7, one might be forgiven for thinking that this is what he meant, at least in the opening

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[198] Bradshaw, *Aristotle East and West: metaphysics and the division of Christendom*, 206. This might imply that examples of *energeiai* that are not *logoi* are those refractions of the divine attributes that remain circling around God without being realised and instantiated outside God.

[199] For example, Maximus says, '[God]...is by nature in the same class as absolutely nothing of the things that are, and for this reason, he allows us to say rather that he is not, because it is more properly said of him that he transcends being.' *Myst* pref. CCSG69:9.109-12, JA:50

[200] According to Philo, the *Logos* was the sum total or place of the ideas. John Dillon, *The middle Platonists, 80 B.C. to A.D. 220*, Revised edition ed. (Ithaca, NY: Cornell University Press, 1996), 159.

paragraphs where we find statements such as '...the many *logoi* are one *Logos*, seeing that all things are related to Him without being confused with Him...'[201] and '...each of the intellective and rational beings...insofar as it has been created in accordance with the *logos* that exists in and with God, is and is called a "portion of God"...'[202] Likewise, in *Ambiguum* 17 we find a passage where the relation between *Logos* and *logoi* could be read as a simple part-whole relationship:

> When, however, we exclude the highest form of negative theology concerning the *Logos*—according to which the *Logos* is neither called, nor considered, nor is, in His entirety, anything that can be attributed to anything else, since He is beyond all being, and is not participated in by any being whatsoever—when, I say, we set this way of thinking aside, the one *Logos* is many *logoi* and the many are One.[203]

But notice here how Maximus prefaces this straightforward conclusion with the caveat that it can only be reached if we 'exclude' the familiar apophatic stance towards God as 'beyond all being'. It would depend on viewing God as another being—albeit a supreme being—that can divide itself up and portion itself out as the beings of creation; not necessarily in an exhaustive way such that the God and nature are the same, but in a way that sees God as partially distributed among his creatures. Such an 'ontotheological' view of God, which impugns God's transcendence, is not what we might expect of Maximus, so it comes as no surprise that elsewhere Maximus has something very different to say, which is worth quoting in full:

> Then, as regards scientific inquiry into that which is really true, the intellect—for reasons one may readily appreciate—will find the power of any such inquiry ineffective and its method useless, for it provides the intellect with no means of understanding how God—who is truly none of the things that exist, and who, properly speaking, is all things, and at the same time beyond them—is present in the *logos* of each thing in itself, and in all the *logoi* together, according to which all things exist. If, therefore, consistent with true teaching, every divine energy indicates through itself the whole of God, indivisibly present in each particular thing, according to the *logos* through which that thing exists in its own way, *who, I ask, is capable*

[201] *Amb* 7.15, DOML1:95
[202] *Amb* 7.17, DOML1:97
[203] *Amb* 7.20, DOML1:101

> *of understanding and saying precisely how God is whole in all things commonly, and in each being particularly,* without separation or being subject to division, and without expanding disparately into the infinite differences of the beings in which He exists as Being, or with out being contracted into the particular existence of each one, or without contracting together and fusing all the differences of these beings into a single totality, but on the contrary is truly all things in all, never going out of His own indivisible simplicity?[204]

Here Maximus is really clear that God is not so much divided into all things but *fully* present in each particular being. Lest this claim be misunderstood or thought in some way to be a hyperbole or a metaphor, Maximus admits that it is beyond our usual 'scientific' means of understanding. Somehow, in a way that defies our finite mathematics, the *Logos* distributes himself via the *logoi* in such a way that he is not divided or replicated in the process, and in such a way that the *logoi* are each fully the *Logos* without losing their separate identity. A paradoxical unity-in-distinction is achieved whereby the *logoi* are differentiated from the *Logos* and from each other whilst simultaneously being identical to the *Logos* in His entirety; a logic that would seem to go beyond the familiar Neoplatonic logic of a cause being present within its effect to a cause being *identical* to its effect.[205]

Why does Maximus make this paradoxical and provocative claim with its dangerously pantheistic overtones? At least two possibilities come to mind. The first could stem from a desire to safeguard an orthodox understanding of the divine simplicity—a defensive and conservative position. The second, could arise from a desire to apply an 'incarnational logic' to the whole of creation—a more constructive and radical position.

The first, defensive or conservative position, can be seen in the previously quoted passage, where in the last sentence, Maximus refers to God's simplicity having been preserved in the act of creation. If the *logoi* had gone forth from the *Logos* as parts from a whole, then God's simplicity might have been compromised since it would imply God was a composite precursor containing within himself

[204] *Amb* 22.2-3, DOML1:449-51 emphasis mine.
[205] Even though we might speak of the *logoi* emanating from the *Logos*, the relation between them is not, strictly speaking, causal. Heide, "The word as sacrament: the eucharistic ontology of Maximos Confessor," 64.

unrealised predeterminations or plans. If, however, the plural *logoi* were only divided upon 'exiting' the *Logos*, but remained 'fused' as a single *Logos* beforehand, then it is difficult to see how creation could have been premeditated in the way that Maximus describes. It seems something has to be compromised: either God is not simple, or creation is an arbitrary act of will without prior intellection. But Maximus wants to have it both ways. He wants the *Logos* to be the grounding principle for all creaturely differences, but he also wants those differences to remain fully possessed of their original source so as to respect the simplicity and unity of the Godhead. We therefore have a paradoxical 'both-and' situation, similar to that of the Trinity. Just as the *Logos*, Father and Spirit are distinct persons yet each fully God, so too the *logoi* of creation are distinct ideas/wills/energies and yet are each fully the *Logos*. Thus, one could interpret Maximus as meaning what he says, but doing so for the simple reason of conservatively defending the doctrine of divine simplicity. However, there is reason to think that Maximus wanted to say something much more radical than this.

The second, constructive and more radical position has recently been expounded by Jordan Daniel Wood.[206] For Wood, Maximus is using the NeoChalcedonian 'Christo-logic' of the historical incarnation to depict created nature *as a whole* to be enhypostatised in the *Logos*—that is to say, creation effectively *is* incarnation. A full discussion of Wood's long argument would take us beyond the scope of this study so I will confine myself to some salient points more relevant to the scope of science-engaged theology.

Wood wants to take literally Maximus' bold statement that '...the *Logos* of God (who is God) wills always and in all things to accomplish the mystery of his embodiment,'[207] unlike some of his predecessors who see this kind of language as merely metaphorical.[208] For Wood, and for Maximus, there is no natural relation or mediation between the God and the world; God and the world share no common

[206] Wood, "Creation is incarnation: the metaphysical peculiarity of the *logoi* in Maximus Confessor."; Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*; Wood, "Creation is incarnation: the metaphysical peculiarity of the *logoi* in Maximus Confessor."
[207] *Amb* 7.22, DOML1:107
[208] For example, Tollefsen, in: Tollefsen, *The Christocentric Cosmology of St Maximus the Confessor*, 67, 80, 135.

quality. Yet somehow creation is both *ex nihilo* and *ex Deo*. 'How could both be true?' asks Wood.[209] His answer is to appeal to hypostasis, the metaphysical principle that actualises and particularises every real being. The *logoi* are more than just ideas or forms, they are in effect the person of the *Logos* dwelling without declension in every universal identity and in every particular difference; or at least, argues Wood, this will eventually be the final outcome at the eschaton. Until then, creation is not really creation in any true sense at all. Thus, Wood first exacerbates the tension between *ex nihilo* and *ex Deo* by arguing that creatures are not merely divine in the weak sense of being defined and constituted by divine ideas or energies, but in the strong sense that they are the very person of the *Logos* himself, though sharing no common nature. Having seemingly raised the stakes in the direction of pantheism, Wood then tries to diffuse this implication by suggesting that the *Logos*' 'movement' out of the Godhead and into creation is one of hypostatic instantiation rather than formal participation. Since a hypostasis is, by definition, inscrutable and devoid of formal content, it acts as a receptacle permitting differences of nature to remain unmixed and unconfused thereby providing personal identity without unity of natural substances. The *Logos*'s investment in every creature is therefore total but without the natures of the *Logos* and the creature becoming merged or fused. Wood, therefore, takes literally Maximus' paradoxical claim that the *Logos* is the *logoi* just as much as the *logoi* are the *Logos*, but tries to avoid the pantheistic implications of this 'Christo-logic' by means of the metaphysics of hypostasis. More will be said of Wood's position in §3.4.3.3 when I will have occasion to raise some problematic implications.

3.3 The *logoi* 'in' creatures

3.3.1 As universals and particulars

The relationship between unity and difference in Maximus' thought, or between universals and individuals, is an important starting point for understanding the

[209] Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 67.

pervasiveness of the *logoi* in creation; for example, to know whether they are constitutive of all levels or strata of finite reality, or only of generic substances.

The concept of individuation has a long history in philosophical theology[210] but Maximus' own understanding of the subject was, I suggest, influenced by three streams of contemporary thought to which he was exposed. The first is the Porphyrian (Aristotelian) 'bundle theory' of individuation, the second is the Cappadocian notion of *hypostasis* to specify individuals, and the third—linked to the second—is the Cappadocian theory of immanent universals.[211] I will consider each in turn.

Porphyry of Tyre was a pupil of Plotinus and, at the request of one of his pupils, wrote an introduction to Aristotle's Categories (the *Isagoge*) that became a standard textbook for centuries to come.[212] According to Porphyry, the individual is the end result of successive divisions from the most generic genus to the most specific species. The individual man Socrates, for example, can be defined by a nested set of shared properties: substantiality, corporeality, animality, humanity, and finally 'Socrateity.' At each level in the nested hierarchy a choice has to be made to say how the species or genus at that level is different from the one above it, for example, what it is about humanity that differentiates it from animality. Hence, at the very bottom of the hierarchy, the individual is specifiable as a unique series, or 'bundle,' of differences that separate it from all other individuals at the same level. There is some evidence that Maximus subscribed to this bundle theory.[213] In *Opusculum* 26 we find him quoting with approval the Porphyrian definition of individuality: 'An 'individual' is, according to the philosophers, a collection of properties [*idiōmatōn sunagōgē*], and this bundle [*athroisma*] cannot be contemplated in another; according to the

[210] Johannes Zachhuber and Alexis Torrance, *Individuality in late antiquity* (Farnham: Ashgate, 2014); Jorge J. E. Gracia, *Introduction to the problem of individuation in the early middle ages* (Munich: Philosophia Verlag, 1984); Peter King, "The problem of individuation in the middle ages," *Theoria* 66 (2000): 159-84.

[211] Sebastian Mateiescu, "The doctrine of immanent realism in Maximus the Confessor," in *Platonism and Christian thought in late antiquity*, ed. Panagiotis G. Pavlos et al. (London and New York: Routledge, 2019), 201-19.

[212] Porphyry, *The Organon, or logical treatises of Aristotle, with the introduction of Porphyry*, 2 (London: Henry G. Bohn, 1853).

[213] It is not possible to say whether Maximus had read Porphyry or Aristotle, though Tollefsen believes he may have read them second-hand from the Neoplatonist Stephanus. Tollefsen, *The Christocentric Cosmology of St Maximus the Confessor*, 15.

Fathers, such are Peter or Paul, or someone else, each of whom is distinct from other men by virtue of their own, personal properties.'[214]

At the heart of this hierarchical construction of the individual lies the Aristotelian notion that substances (*ousiai*) pervade all levels of the hierarchy from universals to particulars, with the latter having precedence over the former as so-called 'primary substances.' But a very different understanding of individuation was developed by the Cappadocian fathers that was also to have an important influence on Maximus. According to Christophe Erismann, the Cappadocians replaced the Aristotelian idea that *ousiai* extend all the way down to individuals with the notion that *ousiai* exist only as commonly-shared substances (universals), and that what constitutes the uniqueness of an individual is its *hypostasis*.[215] Aristotle's primary substance—the individual—is therefore not a substance but an *hypostasis*, whereas Aristotle's secondary substance—essence—is the *ousia*, which is of necessity commonly-shared across multiple *hypostaseis*. Maximus seems to endorse this position when he states that 'An essence is [...] according to the Fathers, a natural entity [*ontotēs phusikē*] which is [predicated] of several which differ by hypostasis.'[216]

The Cappadocian appropriation of *hypostasis* to designate individuality was born out of the need to defend the consubstantiality of the persons of the Trinity whereby the differences between the persons do not amount to anything substantial that might either add to the divine essence or replicate the Godhead. It is effectively an account of *immanent* universals. The persons of the Trinity are equal possessors of a single divine essence (the immanent universal) rather than being participants in a fourth essence (transcendent universal), and rather than being merely conceptually designated as having a shared substance (nominalism).[217] Maximus would seem to

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[214] *Opusc* 26, PG91:276AB. Quoted in: Tollefsen, *The Christocentric Cosmology of St Maximus the Confessor*, 128.

[215] Christophe Erismann, "Maximus the Confessor on the logical dimension of the structure of reality," in *The architecture of the cosmos: St. Maximus the Confessor new perspectives*, ed. Antoine Levy et al. (Helsinki: Luther-Agricola-Society, 2015), 59.

[216] *Opusc* 26, PG91:276A. Quoted in Erismann, "Maximus the Confessor on the logical dimension of the structure of reality," 60.

[217] For further background, see: Richard Cross, "Gregory of Nyssa on universals," *Vigiliae Christianae* 56 (2002): 373; Dirk Krausmüller, "A conceptualist turn: the ontological status of created species in late Greek patristic theology," *Scrinium* 16 (2020): 233-52; Johannes Zachhuber, "Universals in the Greek church fathers," in *Universals in ancient philosophy*, ed. Riccardo Chiaradonna and Gabriele Galluzzo (Pisa: Edizioni della Normale, 2013).

take the same view when he states: 'God alone exercises providence over all things…including universals and particulars…For if the universals subsist in the particulars, and do not in any way possess their principle of being and existence in themselves, then it is quite clear that, if the particulars were to disappear, the corresponding universals would cease to exist.'[218]

Thus it would seem there is some ambiguity in Maximus' understanding of individuation, combining, as he does, the Porphyrian/Aristotelian view and the Cappadocian/non-Aristotelian view. The reason for this might lie in what Erismann calls Maximus' 'two theories of universals:' his theory of the *logoi* and his theory of universals 'properly speaking'[219]—which, Erismann thinks, cannot be combined and should be kept separate. When considering universals properly speaking, Maximus can conceive of their suppression when the individuals in which they abide are destroyed; after all, if a universal exists only 'in the many' then it stands to reason that destroying the many also destroys the universal. In contrast, the *logoi* (as 'pseudo universals') are, as we shall see in Chapter 4, immutable and indestructible for the simple reason that they eternally 'pre-exist' in the *Logos*. Therefore, destroying a creature may destroy the *logoi* instantiated in that creature but will not destroy, as it were, their 'back-up copies' in God.[220]

A possible reason why Maximus incorporates both philosophies of individuation is that he needs each of them to accommodate his different understandings of universals. On the one hand, hypostatic individuation allows him to affirm the classic theory of universals (according to Plato), since the emphasis in that theory is on the transcendence of the universals. The universals are what constitute reality and bind reality together, whereas individuals serve as mere receptacles for universal natures. Hypostasis in this scheme is then just a placeholder term for what is not comprehensible: an individual stripped of all its intelligible

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[218] *Amb* 10.101, DOML1:313

[219] Erismann, "Maximus the Confessor on the logical dimension of the structure of reality," 58.

[220] Tollefsen thinks this would be true if the *logoi* were merely abstract ideas, and he cites a hypothetical example of a rare Norwegian butterfly which, if it went extinct, would still remain in the mind of the entomologist. He does not, however, think the same applies to the *logoi* owing to their more concretely real existence. As shall become clear from my own interpretation, I see the *logoi*'s concreteness or immanence to be due to their finite mode of existence in creation. Therefore, if their finite instantiation is destroyed this does not affect their eternal existence in, or as, the *Logos*. See: Tollefsen, "The concept of the universal in the philosophy of St Maximus," 81, fn. 42.

meaning. On the other hand, the Porphyrian bundle theory allows Maximus to affirm the immanence of the *logoi*, in which all reality is pre-specified from top to bottom in a hierarchical process of expansion and contraction from the *logoi* of particulars to the *logoi* of species and genera. By being specified by the *logoi*, individuals and particulars gain the dignity of being 'really real;' in fact just as real and good as the universals they 'carry,' without the insinuation that they are mere vehicles for what really matters.[221]

There is, however, one reason for thinking that Maximus did not see such a clear separation between the '*logoi* bundle' theory of reality and the 'universals-plus-hypostasis' theory of reality, and that is that he deliberately conflates the two in his use of the term '*logos* of hypostasis,' in contradistinction to the *logos* of nature.[222] The *logos* of hypostasis is not, like all the other *logoi*, an intelligible principle, but a principle beyond intellectual comprehension. This seems to be what Maximus is referring to in *Ambiguum* 17 where he laments the difficulty of getting to the bottom of what constitutes creaturely existence:

> ...no being [*ouden*] whatsoever coincides in its essence [*tōn ontōn*] with what is and is called the assemblage of characteristics that are recognized and predicated of it, but to the contrary is something different from these characteristics, to which they all refer, and which holds them all together, but is in no way held together by them—for it is not derived from them, nor is it identical with them, or with anything from among them, neither is it derived from some of them, or from one of them, nor is it to be numbered among any of the things that are, and are said to be, around it...[223]
>
> What human being...can know the intelligible principles [*logous*] of beings *as they are in themselves*, and how they are distinct from each other?[224]
>
> When endeavouring to look more deeply into these intelligible principles [*logous*] of the things mentioned above...one is left feeling

[221] 'It is also to be noted that among the *logoi* of beings, which have such an important place in Maximian ontology as rational principles, there are *logoi* of individuals, but also of properties, qualities or even events. Basically everything that is willed by God does have a *logos*. Only evil and what does not belong to God's good will is deprived of *logos*.' Dionysios Skliris, "Catholicity and individuality in the Christology of Saint Maximus the Confessor: existential implications," *Theologicon* 6, 1 (2017): 71.
[222] *Opusc* 26, PG91:264A
[223] *Amb* 17.6, DOML1:387
[224] *Amb* 17.8, DOML1:389, emphasis mine.

> completely debilitated and speechless, for the intellect finds nothing to grasp, except for the divine power [*theias dunameōs*].[225]

There is something about the *particular existence* of a creature that, for Maximus, is beyond definition when we look more deeply. How a creature is, in itself, goes beyond the intelligible principles by which it is formally defined and constituted. Maximus recognises that the ultimate substratum of creaturely existence—as creatures rather than as divine ideas—is to be located not in intelligibility but in divine power.[226] In the same way that it becomes necessary, at some point, to take an apophatic stance towards understanding God, so too, our understanding of creaturely being-*qua*-being ends in negation and silence. Just as we cannot pinpoint residual prime matter after removing all attached properties, neither can we say what it is to exist as a finite creature once we have removed all the intelligibility afforded by the *logoi*.[227] This is why, for Maximus, the word hypostasis serves not just to anchor universals in particular individuals but also to specify finite existence in general, which is the highest (most generic) level of the Porphyrian tree.[228]

In summary, Maximus' two understandings of universals and particulars would seem to collapse into one in the light of the *logoi* doctrine. Whilst it is true that Maximus does understand individuals in terms of hypostases, those hypostases are themselves subject to specification by the *Logos*, which is why there are *logoi* of hypostases. Nothing—not even the obscurity of individuality—is left outside the divine predetermination, even though from our creaturely perspective, individuality might defy intelligibility.

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[225] *Amb* 17.10, DOML1:393

[226] '...where formal procession can account for nothing of what is truly subsistent—I mean the individual or person—precisely there we encounter perhaps the most palpable preeminence of "divine power".' Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 75.

[227] What I am articulating here is related to the 'bundle theory of *matter*' that has been attributed to Gregory of Nyssa. According to this theory, all (finite things) are bundles of intelligible form, all the way down, without remainder. See: Gerd Van Riel and Thomas Wauters, "Gregory of Nyssa's "bundle theory of matter"," *Journal of Early Christian Studies* 28, no. 3 (2020): 395-421. Joshua Schooping, "Touching the mind of God: patristic Christian thought on the nature of matter," *Zygon: Journal of Religion and Science* 50, no. 3 (2015): 583-603. To save this view from a form of divine idealism, I am claiming that the substratum or receptacle for the bundle of intelligible form is the (unintelligible) finite mode of existence: that which makes the difference between being 'inside' God and 'outside' God.

[228] Valery V. Petroff, "Huparcho and huphistēmi in Maximus the Confessor's Ambigua," in *The architecture of the cosmos: St. Maximus the Confessor new perspectives*, ed. Antoine Levy et al., Schriften der Luther-Agricola-Gesellschaft (Helsinki: Luther-Agricola-Society, 2015), 113.

3.3.2 As substantial form

In §2.4.1 we considered the defining and constitutive role of the *logoi* as a starting point for any comparison with evolutionary biology. We saw how they exist in our space-time reality (and not just in the mind of God) and how they serve to specify creaturely form in all its dimensions, whether that be hidden genotype, visible phenotype, or ramifying relations with the surrounding environment. In this section we will take a closer look at what this means philosophically and scientifically.

Perhaps the most obvious philosophical language with which to explicate the constitutive role of the *logoi* in creation is that of Aristotelian causation. Considering four of the classic Aristotelian causes[229]—material, efficient, formal, and final—only the material cause is inappropriately applied to God's act of creation, for God is not material or dividable in the way that this cause implies. Maximus was in fact one of the first to reject the Neoplatonic sense of a material emanation when he argues in *Ambiguum* 7 that a created thing participates in God but 'does not flow forth from God' (*ouk aporreei Theou*).[230] The efficient, formal and final causes, however, have had no difficulty being incorporated into participatory accounts of creation, where for example, they have been mapped onto the 'appropriated' roles of the persons of the Trinity (e.g. Father as efficient cause, Son as formal cause, and Spirit as final cause).[231] I am not aware of Maximus using such terminology explicitly, but all three causal roles are very much implicit in his *logoi* doctrine.[232] Take for example the following passage:

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[229] The full *turba causarum* ('swarm of causes') within Platonic and Aristotelian metaphysics comprises: *id ex quo* (that from which—the material cause); *id a quo* (that by which—the efficient cause); *id in quo* (that in which—the formal cause); *id ad quod* (that toward which—the paradigm (exemplar) cause); *id propter quod* (that because of which—the final cause); and *id per quod* (that through which—the instrumental cause). See: Carlos Steel, "Why we should prefer Plato's Timaeus to Aristotle's Physics? Proclus' critique of Aristotle's casual explanation of the physical world," *Bulletin of the Institute of Classical Studies* 46, 78 (2003): 181.

[230] *Amb* 7.17, DOML1:97-99, Stephen E. Gersh, *From Iamblichus to Eriugena: an investigation of the prehistory and evolution of the Pseudo-Dionysian tradition* (Leiden: Brill Archive, 1978), 18.

[231] Davison, *Participation in God: a study in Christian doctrine and metaphysics*, Ch.2.

[232] Admittedly, the result is a very Logo-centric appropriation of the divine work of creation which could be said to neglect the other persons of the Trinity. For alternative accounts that stress Sophia (Wisdom) and Spirit, see: Sergius Bulgakov, *The bride of the lamb*, trans. Boris Jakim (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2002). Celia Deane-Drummond, *Creation through wisdom: theology & the new biology* (Edinburgh: T&T Clark, 2000).

> What are the intelligible principles [*logoi*] that were first embedded within the subsistence of beings, according to which each being is and has its nature, and from which each was formed [*eidopepoiētai*], shaped, and structured, and endowed with power, the ability to act, and to be acted upon, not to mention the differences and properties in terms of quantity, quality, relation, place, time, position, movement, and inclination...[233]

Here we see the *logoi* embedding not only a structural form (formal cause), but also a power to act (efficient cause), and a natural inclination or purpose (final cause).

Further insight into the Aristotelian causal powers of the *logoi* can be gleaned by recalling some of their psychological designations within the godhead. First, the *logoi* as divine ideas would seem to be congruent with the notion of forms and formal causes:[234] either extrinsic formal causes when seen from the divine perspective (i.e. when the *logoi* are 'in' God as paradigms or exemplars); or intrinsic formal causes when seen from the created perspective (i.e. when the *logoi* are 'in' creation as shaping or defining form).[235] Intrinsic formal causation is more controversial because it implies a sharing or bridging between God and creation that would imply pantheism; a point to which we shall return. Second, the *logoi* interpreted as divine wills and energies would seem to be more aligned with their role as efficient causes; the sense of making things happen rather than of defining what exactly is made. That leaves, thirdly, the final cause, which is manifest in two ways: externally or transcendentally, as the direction given by God to the *logoi* in their journey from being to eternal well-being (see §2.4.2); or internally and immanently, as the embedded instructions that the *logoi* carry with them to propagate further *logoi* (as we saw in §2.4.4). Efficient causation alone lacks content and direction and bespeaks will without reason and power without focus.[236]

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[233] *Amb* 17.7, DOML1:389. See also: *Amb* 21.5, DOML1:427 where Maximus talks of 'the cause' (*aitian*) that is present in all the *logoi*.

[234] Portaru, "Classic philosophical influences: Aristotle and Platonism," 139.

[235] Admittedly, such a distinction within formal causation is not made by Maximus. The preposition most often used in connection with the *logoi* is *kata*—e.g. all things are made *in accordance with* the *logoi (Amb* 7.22*)*—which is somewhat ambiguous as to extrinsic or intrinsic formal causation. See: Heide, "The word as sacrament: the eucharistic ontology of Maximos Confessor," 32, fn.44.

[236] W. Norris Clarke, *The one and the many: a contemporary Thomistic metaphysics* (Notre Dame, IN: University of Notre Dame Press, 2014), 201.

Turning now to a more scientific understanding of the *logoi* as they exist in creation, we might recall how the divine ideas, wills or energies, while not representing a separate ontology within the Godhead, did at least provide a valuable 'heuristic interface' between the unintelligible divine essence and that which is truly outside God, 'filling the gap,' as it were, between uncreated and created being.[237] In the same way, when faced with the mysterious and unintelligible nature of finite created being, one might ask if there is an equivalent heuristic interface in creatures allowing us to approach them and understand them to some degree despite their bottomless alterity. Following Ian Barbour, I would like to propose that this equivalent to the *Logos* (as divine ideas/wills/energies) on the part of creatures is—to borrow a term from modern-day science and technology—their 'information content.'[238]

But what exactly is information and in what sense does it exist within creatures? To answer this question, we can distinguish between at least three different meanings of the word information.[239] The first is that of counting, syntactic or Shannon information: a mathematical description of the differences that exist within some pattern or structure. The greater the number of differences, the larger the amount of information needed to describe or specify the pattern or structure. A crystal lattice or a uniformly repeating series of sounds has relatively low information content whereas a random array of dots has a relatively high information content.[240]

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[237] Although not his preferred option, Zizioulas recognises that energies can act as a bridge between uncreated and created natures: 'Divine essence cannot be known or communicated—this safeguards the otherness of God. It is only through the energies that communion between God and creation is realized. Since the energies are an aspect of God's being, communion is ontological in character, but it is so while respecting and maintaining otherness, by means of the distinction between essence and energy.' John D. Zizioulas, *Communion and otherness* (London and New York: T&T Clark, 2006), 27.

[238] Ian G. Barbour, "Five models of God and evolution," in *Philosophy, science and divine action*, ed. LeRon F. Shults, Nancey Murphy, and Robert John Russell, Philosophical studies in science and religion (Leiden: Brill, 2009), 41.

[239] John C. Puddefoot, "Information theory, biology, and Christology," in *Religion and science: history, method, dialogue*, ed. W. Mark Richardson and Wesley J. Wildman (New York & London: Routledge, 1996), 301-19; Niels Henrik Gregersen, "The Triune God and the triad of matter," in *Matter and meaning: is matter sacred or profane?*, ed. Michael Fuller (Newcastle: Cambridge Scholars Publishing, 2011), 103-17.

[240] We tend to think that regular patterns or structures are more 'ordered' but, according to David Bohm, an apparently random array is not disordered but ordered to a very high degree. This has interesting implications for the emphasis usually placed on pattern and regularity as hallmarks of design. Perhaps the greater information content of the random or chaotic is in greater need of metaphysical explanation than the regular and structured! David Bohm, *Wholeness and the implicate order* (London: Routledge, 1980), 149.

The second meaning of information is that of 'shaping' information, corresponding to the original meaning of the word, to 'in-form,' or to supply the intrinsic formal cause of an object. The sense here is of an immanent presence of the information, causing something to be what it is rather than something else. The third type of information is 'meaning' or 'semantic' information. This is more than just an external description of differences or an internal constitution of differences, but a message intended to be read, understood and acted upon. Semantic information has prescriptive or imperative content rather than merely descriptive or indicative content, and as such, has the capacity to be in error[241]—all of which sounds teleological, but can be given a naturalistic ('adaptive') interpretation in terms of natural selection.[242] For example: 'the function of a heart is to pump blood' means 'hearts have been selected to pump blood,' and 'hearts that fail to pump blood are malfunctioning' means 'hearts that fail to pump blood are selected against'.

The three types of information come together in an overall process of 'informing' in which an agent seeks to achieve a purpose by encoding and sending instructions to a receiver, which then decodes and carries out the instructions. Transposing this threefold understanding of information into God's act of creation, some theologians have seen creation as an *ad extra* semiotic construction of the Trinitarian relations,[243] or Trinitarian 'speech-act' in which the Father sends the Word to accomplish his purposes by means of the Spirit,[244] or the product of the *Logos* as 'generative matrix of all that was, is, and will be.'[245] Young Bin Moon advocates a model in which the Father selects information, the Son encodes the information, and the Spirit decodes it.[246] In a similar way, Terry Wright, Niels Gregerson and Arthur Peacocke argue that the Son's role is to encode and convey information while the

[241] Peter Godfrey-Smith, "Information in biology," in *The Cambridge companion to the philosophy of biology*, ed. David L. Hull and Michael Ruse (Cambridge: Cambridge University Press, 2007), 107.
[242] Ernst Mayr, "The idea of teleology," *Journal of the History of Ideas* 53, no. 1 (1992): 132.
[243] Andrew J. Robinson, "C.S. Peirce as a resource for a theology of evolution," *Zygon: Journal of Religion and Science* 39, no. 1 (2004): 111-36.
[244] Barbour, "Five models of God and evolution," 41.
[245] Niels Henrik Gregersen, "God, information, and complexity: from descriptive to explorative metaphysics," *Theology and Science* 11, no. 4 (2013): 406.
[246] Young Bin Moon, "God as a communicative system sui generis: beyond the psychic, social, process models of the Trinity," *Zygon: Journal of Religion and Science* 45, no. 1 (2010): 118.

Spirit's role is to actualise or instantiate the information in creation, as the following quotations bear out:

> Taking my lead from Polkinghorne, I submit that informational causality may be interpreted feasibly as active divine presence. Informational causality understood as God's active presence provides a useful framework for explicating divine action. The promise of active information lies in its potential for suggesting how God acts; that is, God acts through infusing God's life into the world.[247]
>
> …the *Logos* is the formative principle in God, and functions also as the informational resource of creation, while the "Holy Spirit" is the divine energy that also energizes the world of the living.[248]
>
> What is transmitted across the 'interface' between God and the world may perhaps be conceived of as something like a flow of information—a pattern-forming influence…the *Logos*, the Word, of God may be taken to emphasize God's creative patterning of the world and so as God's self-expression in the world.[249]

In a similar vein, Keith Ward claims that '[t]he notion of semantic information is extensible to cover the idea of a cosmic, unembodied consciousness, which carries and transmits the informational code for the construction of this and any possible universe. That is the mind of God.'[250]

All these views are congruent with Maximus' *logoi* doctrine, and from two perspectives. On the one hand, the *logoi*, interpreted as divine wills, correspond to the active, semantic or instructional sense of information. Here we have the *Logos* acting as powerful utterance sending forth instructions as efficient causes, assisted by the Holy Spirit who acts as decoder or implementer. On the other hand, the *logoi*, interpreted as divine ideas, are equivalent to the syntactic and shaping information

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[247] Terry J. Wright, "Is informational causality primary causality? A study of an aspect of John Polkinghorne's account of divine action," in *God and the scientist: exploring the work of John Polkinghorne*, ed. Fraser Watts and Christopher C. Knight (Farnham: Ashgate, 2012), 49.

[248] Niels Henrik Gregersen, "God, matter, and information: towards a Stoicizing *Logos* Christology," in *Information and the nature of reality: from physics to metaphysics*, ed. Paul Davies and Niels Henrik Gregerson (Cambridge: Cambridge University Press, 2010), 325.

[249] Arthur Peacocke, "Sciences of complexity: new theological resource?," in *Information and the nature of reality: from physics to metaphysics*, ed. Paul Davies and Niels Henrik Gregerson (Cambridge: Cambridge University Press, 2010), 266.

[250] Keith Ward, "God as the ultimate informational principle," in *Information and the nature of reality: from physics to metaphysics*, ed. Paul Davies and Niels Henrik Gregerson (Cambridge: Cambridge University Press, 2010), 300.

that ends up being permanently vested in creation as its intrinsic formal cause. The *Logos* is present in all creatures as their *logoi* upholding their shape, in the broadest sense of the word, with perhaps the Holy Spirit ensuring that the shape continues to be upheld in finite existence. Thus, divine information is not just formative in the sense of giving rise to something that was not previously there but also *in*-formative in the sense of maintaining something in its intelligible existence once its origin has been commanded. Such a view finds a modern-day philosophical counterpart in 'Informational Structural Realism' in which all material objects are *constituted* by information (*in re*), rather than just being *specified* by information (*ante rem*) or *described* by information (*post rem*).[251] The information by which and of which things are made is tantamount to relations between 'relata.' Relata are themselves composed of further information and relata, all the way down. Similar informational or relational ontologies have been proposed by Tim Ingold, Susan Oyama, and Hriti Sharma.[252]

The key point in these theories of information is that information is an ontic reality accessible to science, even if it can never be decomposed or reduced to anything other than itself. Everything is information insofar as it is intelligible. Therefore, if all information is really the finite manifestation of the *logoi* then the *logoi* (and the *Logos*) are, by definition, amenable to anything or anyone capable of reading and interpreting that information.[253] What Maximus says about the *logoi* in creation can at least partly be understood by science and the scientist as the information content of the world. If the *logoi* define creatures then it is by their

[251] John Archibald Wheeler's famous aphorism 'it from bit' points to the now popular idea that the ultimate nature of physical reality is information. This is a neo-Pythagorean view of the cosmos in which 'The universe is fundamentally composed of data, understood as *dedomena*, patterns or fields of differences, instead of matter or energy, with material objects as complex secondary manifestation'. Luciano Floridi, *Information: a very short introduction* (Oxford: Oxford University Press, 2010), 70. See also: Luciano Floridi, *The philosophy of information* (Oxford: Oxford University Press, 2011).

[252] Tim Ingold, *Being alive: essays on movement, knowledge and description* (London and New York: Routledge, 2011); Susan Oyama, *The ontogeny of information: developmental systems and evolution*, 2nd Edition, revised and expanded ed. (Durham, NC: Duke University Press, 2002); Hriti Sharma, *Interdependence: biology and beyond* (New York: Fordham University Press, 2015).

[253] *Contra* Ladouceur who asserts without argument that 'The *logoi* are not something that a biologist, a geologist or an astronomer will discover but rather the spiritual sense of creation originating in God, God's intention for created things and the goal toward which they strive.' Paul Ladouceur, *Modern Orthodox theology: 'behold, I make all things new'* (London and New York: T&T Clark, 2019), 220.

shaping information; if the *logoi* give rise to new creatures then it is by their semantic (instructional) information; and if the *logoi* speak to us through our contemplation of creatures then it is by their semantic (revelatory) information.[254] Of course, this should not be interpreted to mean that the *Logos* is nothing more than information, only that his constitutive mode of finite existence outside the divine essence is as that which 'in-forms.'

3.4 The nature of the God-creation relationship

Having considered how the *logoi* might be said to occupy their positions on either side of the uncreated-created divide it is now time to step back and reflect upon what this implies for the overall relationship between God and creation.

3.4.1 The same logoi in God and creation

Before we do that, however, it is important to forestall a potential objection to this analysis. It could be argued that the *logoi* on each side of the uncreated-created divide are not the same *logoi* but have undergone some kind of declension upon emerging from the *Logos* and entering creation. Or to put it another way, one could claim that the *logoi* as ideas, wills, energies or person eternally existing in God are not the very same ideas, wills, energies and person that take on finite reality in creation. Those likely to render such an objection may feel that Maximus' understanding of God as radically transcendent would preclude him from suggesting that anything could be shared between God and creation, or that his Platonic mindset would bar him from implying that objects in the sensible realm are identical to their intelligible exemplars. When we see what Maximus actually says, however, these objections are not sustainable. Although Maximus does believe in a God who is beyond being, and has undoubtedly been influenced by Platonic and Neoplatonic thinking, he does not conform to Western scholastic expectations of a participatory

[254] For more on information manifesting as well as instructing, see: John F. Haught, "Information, theology, and the universe," in *Information and the nature of reality: from physics to metaphysics*, ed. Paul Davies and Niels Henrik Gregerson (Cambridge: Cambridge University Press, 2010), 382-404.

metaphysics in which any similarity to God must be said on the basis of a 'yet greater dissimilarity.'[255] Instead, we find in quite plain language that what was 'in' God, as his knowledge, emerges into finite being *without diminution*:

> ...if beings possess perfection by divine foreknowledge, but emerge as imperfect when they enter existence by means of creation, then either they are not that which was foreknown, but something other, or else the difference between the two constitutes a clear weakness on the part of the Creator, who was not able to realize fully in creation what He had envisioned in His foreknowledge, so that its nature might have more closely approximated its essence.[256]

Here Maximus reinforces the *ex Deo* aspect of creation by clarifying that not only could creatures be said to pre-exist in God as plans and intentions, but those plans and intentions are brought to fruition without impediment or error. The *logoi*—which are simultaneously plans and wills—are perfectly constitutive of the creatures that they specify; not in the sense that God's creative action is involuntary, but in the sense that when he does choose to create, what he creates is in perfect correspondence with his 'planned-will' (or his 'willed-plan'). There is no Neoplatonic thinning out of the great chain of being as it emanates from the One.[257] To be sure, every creature bears only an image or a trace of the uncreated essence to the extent that it is modelled on that. But every creature, as a pre-intended being, is that very same being as idea, will, energy or person. It could not otherwise be so without there being something left to chance, or without there being something outside of God's control. Unlike a human craftsman, God is not constrained by lack of craftsmanship or by the intractability of artistic media: what he thinks is what he gets and what he gets is with reference to no other model than his own self. Textual support for this conclusion is to be found not only when Maximus is thinking of creation being pre-defined and pre-willed, but also when he is thinking of creation as being 'pre-personed.' In *Ambiguum* 33 he says the *Logos* (the second Person of the Trinity) 'becomes thick' (*pachynetai*) in three ways: in creation, in Jesus Christ, and in the

[255] Norman P. Tanner and Giuseppe Alberigo, eds., *Decrees of the ecumenical councils: from Nicaea I to Vatican II*, vol. 1 (Washington DC: Georgetown University Press, 1990), Canon 2, 232.
[256] *Amb* 42.23, DOML2:167
[257] Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 70.

letters of Scripture—not the language one would use to describe an attenuation of the *Logos* as it enters creation.[258] If we add to this the statements in *Ambiguum* 7 concerning the *logoi* being the *Logos*, and the *Logos* desiring to embody himself in creation, we have, it seems to me, a clear message: that Maximus wants us to understand the *Logos*/*logoi* in God as the *very same Logos*/*logoi* in creation.[259]

3.4.2 Sources of communion and otherness

If, then, the *logoi* that define and constitute creatures are the very same *logoi* that pre-exist in God, what is to prevent the conclusion that God and creation are identical; what, in other words, supplies the 'otherness' that could protect against divine idealism or pantheistic monism?

To answer this question I turn to John Zizioulas' summary of three Greek Patristic solutions to bridging the gulf between God and creation by which both a 'communion' *and* an 'otherness' can be maintained.[260] The sources of communion he names as: (1) the *Logos* as an immanent principle of intelligibility; (2) the energies of God; and (3) the *Logos* as a personal principle.[261] They are similar to my own analysis of how the *logoi* subsist in God except that where I observe the distinction between ideas and wills, Zizioulas restricts the scope of his first category to intelligence and knowledge rather than including any volition. With each of these sources of communion, Zizioulas identifies a corresponding principle of otherness that offsets the communion between God and creation, preventing it from becoming a monistic union. In the case of the *Logos* as immanent principle (or my *logoi* as ideas and wills) he identifies materiality as the source of otherness. In the case of communion achieved at the level of divine energies, otherness is to be found in the non-sharing of the divine essence, which itself remains transcendent and unknowable. Finally, in the case of the *Logos* as a personal principle, he sees otherness grounded in natures, with personal communion achieved via hypostatic union (in the same way that in the

[258] *Amb* 33.2, DOML2:63-5

[259] Such symmetrical coinherence could be classified according to Thomas Ward's 'containment' exemplarist theory of divine ideas as opposed to the Thomistic 'imitative' theory. Ward, *Divine ideas*.

[260] Zizioulas, *Communion and otherness*, 22ff.

[261] I have, in fact, changed the order in which they occur in Zizioulas' book so that they can be more easily compared with my fourfold listing of the ways in which the *logoi* subsist in God.

incarnation, the incommensurable divine and human natures were unconfused and unmingled while being united under the single personhood of the *Logos*). Of the three, Zizioulas prefers the third (personal principle), on the grounds that it elevates creation to an act of incarnation in which God is personally present without any confusion or bridging of divine and created natures. With regard to the other two options, he sees communion via immanence of the *Logos* as too overwhelming, since materiality is not up to the task of providing otherness, whereas communion via energies, he thinks, links the whole of the Trinity with creation (since energies are common to each person) thereby diminishing, in his view, the role of the incarnation.

Zizioulas' analysis is a good summary of distinctions that lie at the heart of some longstanding disagreements in the Eastern tradition's understanding of creation.[262] At risk of some oversimplification, we have on the one hand, theologians like Zizioulas and Florovsky who have wanted to stress the *ex nihilo* aspect of creation (in which otherness is maximised), and on the other hand, those like Bulgakov and Sherrard, who have wanted to stress the *ex Deo* aspect of creation (in which communion is maximised). Both groups, it might be said, can call upon Maximus to defend their position.

In the light of this established controversy, it would be foolhardy of me to attempt any resolution in a study that is primarily aimed at science-engaged theology, and I certainly do not wish the study as a whole to be held hostage to any future outcome of the debate. Nevertheless, it seems to me that despite the variety of options on offer for achieving a communion and otherness, they all share a view of the divine-creation relationship that is significantly different from other more participatory approaches that were to become prominent in later Western scholasticism. What they have in common is that they seek to crystallise out *that which is both in* God (rather than merely *from* God) *and also in* creation (rather than merely *with* creation), whilst leaving behind a residue that accounts for their fundamental otherness. This is in contrast to participatory metaphysics that denies any univocal bridging between creator and creature (that would threaten divine transcendence by forming an overarching third entity), in favour of an analogical

[262] Andrew Louth, "Theology of creation in Orthodoxy," *International Journal of Orthodox Theology* 8, no. 3 (2017): 51-76.

relationship between all aspects of creator and creature without remainder. Not wishing to enter what is a highly complex and nuanced subject, my point is simply that insofar as Maximus' *logoi* doctrine is aligned more with the communion-with-otherness model than with the participatory model, the distinctives of the former need to be emphasised in any engagement with evolutionary biology.

3.4.3 A partial and dynamic panentheism

A term that is often found in connection with Eastern Orthodox, communion-with-otherness accounts of creation is 'panentheism.'[263] What I want to argue next is that all three varieties of Zizioulas' communion-with-otherness could best be described as a version of panentheism that is both 'partial' and 'dynamic.' But before doing so, some background to panentheism and its forerunner, pantheism, is in order.

Pantheism—the idea that everything is God and God is everything—has long been a temptation in Christian theology but its status *outside* mainstream orthodoxy has been relatively uncontroversial.[264] However, its close cousin, panentheism—the idea that everything is somehow 'in' God—is somewhat more complicated, both in its precise articulation and in its status with respect to doctrinal orthodoxy.[265] According to the *Stanford Encyclopedia of Philosophy*, 'Panentheism considers God

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[263] Eastern scholars particularly known for their appropriation of this term include Kallistos Ware, Alexei Nesteruk and Christopher Knight. See for example: Kallistos Ware, "God immanent yet transcendent: the divine energies according to Saint Gregory Palamas," in *In whom we live and move and have our being: panentheistic reflections on God's presence in a scientific world*, ed. Philip Clayton and Arthur Peacocke (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2004), 157-68; Kallistos Ware, "Through creation to the creator," in *Toward an ecology of transfiguration: Orthodox Christian perspectives on environment, nature, and creation*, ed. John Chryssavgis and Bruce V. Foltz (New York: Fordham University Press, 2013), 86-105; Alexei V. Nesteruk, "The universe as hypostatic inherence in the Logos of God: panentheism in the Eastern Orthodox perspective," in *In whom we live and move and have our being: panentheistic reflections on God's presence in a scientific world*, ed. Philip Clayton and Arthur Peacocke (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2004), 169-83; Christopher C. Knight, "Theistic naturalism and the Word made flesh: complementary approaches to the debate on panentheism," in *In whom we live and move and have our being: panentheistic reflections on God's presence in a scientific world*, ed. Philip Clayton and Arthur Peacocke (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2004), 48-61.

[264] Gunton, *The Triune creator: a historical and systematic study*, 37.

[265] The origin of the word has been attributed to the German idealists, Karl Krause and Friedrich Schelling. Philip Clayton, "Panentheisms East and West," *Sophia* 49 (2010): 183. Since its original coinage the word has taken on a range of meanings. For reviews of the many panentheistic options available, see: John W. Cooper, *Panentheism: the other God of the philosophers* (Nottingham: Apollos, 2007); Philip Clayton and Arthur Peacocke, *In whom we live and move and have our being: panentheistic reflections on God's presence in a scientific world* (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2004).

and the world to be inter-related with the world being in God and God being in the world.'[266] Beyond that basic definition, there are versions of panentheism that go much further, incorporating such themes as the cosmos being God's body, God's dependence on the cosmos, cosmos as a sacrament, and divine passibility in the face of cosmic change.[267] As a cluster of somewhat different theological accounts, panentheism has been said to be an on-going theological research programme rather than a specific theological thesis.[268] It is important therefore that any claim to a panentheistic position be accompanied by some careful qualification to avoid being implicated in the full spectrum of ideas that it includes. In what follows, the species of panentheism that I will be proposing falls far short of the most radical kind.

What I am about to propose about Maximus' *logoi* doctrine could be said to be panentheistic,[269] but with the important proviso that it is only partially so, and for four reasons. First the 'en' in panentheism, in the way I am using it, is referring to God being in creation and not the other way round. God is donating something of, or from, himself to creation but creation is not donating anything of, or from, itself back to God. The ontological causal arrow is only one-way, from God to creation. Second, whichever source of communion we prefer—intelligible principles, energies or personhood—that source is not tantamount to God in his entirety but only a 'part' of him, even though the word 'part' is not to be understood in any way that would impugn divine simplicity. Third, in the case of the *logoi* as intelligible principles, God's presence in creation is only partially constitutive of creation, as its substantial form, but not its finite existence. Finite existence per se comes from somewhere else, or rather, nowhere else, since the way in which creation exists—its mode of being—has no intelligible precedent and no material precursor: it is truly *ex nihilo*. Such a view is consistent with that of Florovsky when he states: 'In creation there is projected from

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[266] John Culp, "Panentheism," in *Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta (Winter 2021, 2021). https://plato.stanford.edu/archives/win2021/entries/panentheism/.

[267] Michael W. Brierley, "Naming a quiet revolution: the panentheistic turn in modern theology," in *In whom we live and move and have our being: panentheistic reflections on God's presence in a scientific world*, ed. Philip Clayton and Arthur Peacocke (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2004), 1-15.

[268] Georg Gasser, "God's omnipresence in the world: on possible meanings of 'en' in panentheism," *International Journal for Philosophy of Religion* 85 (2019): 44.

[269] And I am not the first to do so. See Paul Ladouceur's review of those who have 'retroactively' placed Maximus in the 'panentheist camp.' Ladouceur, *Modern Orthodox theology: 'behold, I make all things new'*, 219ff.

out of nothing a new reality which becomes the bearer of the Divine idea, and must realize this idea in its own becoming.' This, he goes on to claim, is the reason why '...the pantheistic tendency of Platonic ideology and the Stoic theory of "seminal reasons" (*spermatikoi logoi*) is altogether overcome and avoided.'[270] Fourth, the panentheism advocated is, to borrow terminology of Jay McDaniel, 'emanationist' and not 'relational,'[271] in the sense that it is describing a unilateral ontological dependence (of the world on God) and not a mutually defining ontology (e.g. of God realising himself through the world).[272] As Andrew Louth points out, the cosmic vision of Orthodox theology (and Maximus) is panentheistic only as it '...envisages a relationship between the universe and God that stresses God's immanence in the universe and sees the universe as finding its purpose or goal...in union with God, or more boldly deification. If differs, however, from some modern forms of panentheism in that there is no sense in which God may be said to be affected by the cosmos itself.'[273] This type of 'partial' panentheism is therefore one that steers a tight course between the Scylla of pantheism (whereby God and the world are so closely associated that the two are co-constitutional) and the Charybdis of idealism (in which creation is effectively a drama staged within the theatre of God's mind.)[274] To see why this is the case, we need to return to Zizioulas' three sources of communion and otherness.

3.4.3.1 Communion via logoi, otherness via materiality

First, in the case of the immanently constitutive *logoi* as embedded formal, efficient and final causes, the factor that ensures they are 'transported' out of the divine mind is what Zizioulas calls 'materiality,' but what I prefer to call 'finite mode of being.'

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[270] Florovsky, *Creation and redemption*, 61-2.
[271] Jay B. McDaniel, *Of God and pelicans: a theology of reverence for life* (Louisville, KY: Westminster John Knox Press, 1989), 28.
[272] A Thomistic way of expressing this would be in terms of 'real relations.' God causes creatures, but creatures do not cause anything in God. The relation between God and creatures is therefore real on the part of creatures but only 'notional' or 'ideal' on the part of God. Thomas Aquinas, *Summa theologica*, trans. Fathers of the English Dominican province, vol. 1, Complete English Edition in Five Volumes, (Notre Dame, IN: Christian Classics, 1948), Q.28.
[273] Louth, "The cosmic vision of Saint Maximos the Confessor," 184.
[274] A view that even Gregory of Nyssa may have held. See: George E. Karamanolis, *The philosophy of early Christianity* (London and New York: Routledge, 2014), Ch.2; Schooping, "Touching the mind of God: patristic Christian thought on the nature of matter," 583-603.

There is something mysterious about the creation of that which is not God, the act by which God switches the existential status of creatures from being divine ideas to finite beings. It is impossible to pinpoint or describe what constitutes creation's actuality outside the Godhead for the simple reason that any attempt to do so leads only to an intelligible description that itself is a *logos* principle which might never have left the Godhead. In the same way that we cannot prove that we are not in a computer simulation by giving reasons (which themselves might be simulated), we cannot give an account of creation's finite being without collapsing such accounts into creation's form. A similar problem exists in getting to the bottom of matter itself. Stripping form from matter simply leads to new form that takes its place, all the way down, *ad infinitum*. As Lossky observes 'there will always remain an 'irrational residue' which escapes analysis and which cannot be expressed in concepts; it is the unknowable depth of things, that which constitutes their true, indefinable essence'[275] and '…we shall need a sort of apophaticism in reverse in order to arrive at the revealed truth of creation *ex nihilo*, out of nothing.'[276] God is beyond predication and so, as it happens, is finite being.[277] Maximus himself adopts an apophatic stance to what lies at the heart of creaturely existence when he says '...one is left feeling completely debilitated and speechless, for the intellect finds nothing to grasp, except for the divine power.'[278] A placeholder term to denote this inexpressible act of finite existence and individual instantiation is 'hypostasis,' a term which grounds natures, substances, and accidents in a particular actuality.[279] Although some have stressed the personhood implicit in hypostasis,[280] it is its individuating and 'concretising' meaning that is most appropriate to discussions of creation as a whole, since the personal meaning cannot plausibly apply to inanimate and non-sentient creatures[281]

[275] Lossky, *The mystical theology of the eastern church*, 33.
[276] Lossky, *The mystical theology of the eastern church*, 91.
[277] Knight names this an 'apophatic critical realism' by which there are aspects of both God and created things that are unknowable by us. Christopher C. Knight, *Eastern Orthodoxy and the science-theology dialogue*, Cambridge Elements, (Cambridge: Cambridge University Press, 2022), 87.
[278] *Amb* 17.10, DOML1:393
[279] G.L. Prestige, *God in Patristic thought* (London: SPCK, 1956), 188.
[280] For example, see: Zizioulas, *Communion and otherness*, Ch.2.
[281] According to Lossky (Lossky, *The mystical theology of the eastern church*, 51.) hypostasis can mean either existence *per se* or a particular differentiated individual (an instance of a nature). I am using the word here in the former sense, but with the added qualification that there can be multiple modes of existence, or *tropoi huparxeōs*, such as the hypostasis of the persons of the Trinity, the hypostasis of

(unless one takes the route argued by Wood—see below). Thus, through the *logoi* as divine ideas, God intentionally specifies creaturely form and purpose, whereas through the divine will and power, God hypostasises those forms and purposes into actual finite creatures having existence outside the Godhead.[282]

3.4.3.2 Communion via energies, otherness via essence

Second, in the case of the divine energies, since God's constitutive presence in creation is by means of his activity or work, we need not worry that God is therefore present in his entirety. As we considered in §3.2.3, the energies are truly God inasmuch as they are eternal and uncreated, but they are conceptually distinct from his essence.[283] God's going out of himself to create has come about neither through a donation of part of his essence, nor through a complete translocation of his essence into a different realm or mode of existence. Instead, it has resulted from an outpouring of his energy or activity beyond the limits of the Trinitarian relations into that which is not God. In contrast to the first solution where the divide between God and creation is within creatures (between their intelligible form and unintelligible being) here, in this second solution, the divide between God and creation is to be located in the godhead itself.

3.4.3.3 Communion via person, otherness via natures

The third approach to communion and otherness is quite different from the first two. It respects the alterity between God and creation at the level of natures but claims that communion is achieved through a mode of personal hypostasis rather than via intelligible principles or energies. It effectively seeks to apply the metaphysics of the

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the incarnate Christ, the hypostasis of finite reality as a whole, or even the hypostasis of creation within the human mind (Knight, *Eastern Orthodoxy and the science-theology dialogue*, 115.). See also Petroff's analysis which reaches a similar conclusion. Petroff, "Huparcho and huphistēmi in Maximus the Confessor's Ambigua," 99.

[282] We might think here of the Holy Spirit supplying the power to instantiate the divine ideas in a finite mode of existence or the 'breath' that conveys the Word.

[283] For a recent exposition of a panentheistic God-world relation via the divine energies see: Flavius D. Raslau, "Nature's powers and God's energies," *Zygon: Journal of Religion and Science* 57, no. 1 (2022): 60-83; Travis Dumsday, "Palamism and dispensationalism: comment on Raslau's integration of Orthodox theology with contemporary metaphysics of science," *Zygon: Journal of Religion and Science* 57, no. 4 (2022): 889-911; Flavius D. Raslau, "Response to Dumsdays "Palamism and dispositionalism"," *Zygon: Journal of Religion and Science* 57, no. 4 (2022): 912-32.

incarnation of Jesus Christ to the universe as a whole. Amongst its proponents, perhaps the most persuasive modern-day advocate is Jordan Daniel Wood, whose work I referred to in §3.2.4.[284] Wood's commendable desire not to water down Maximus' incarnational logic, leads him to take an ahistorical or metahistorical view of the incarnation in which the union of Jesus of Nazareth with the second person of the Trinity is the focal point and archetype for the whole of creation, even though as an historical event, it occurred in the middle of history.[285] Creation has no hypostasis of its own, but finds its concrete reality only by being enhypostasised in the *Logos*, in just the same way that Jesus' human nature had no human personhood of its own but was the person of the Son of God. According to Wood, Maximus' Neo-Chalcedonian 'Christo-Logic' '...belies any asymmetric relation between created and uncreated natures for the simple reason that they share no (abstract) relation at all...'[286] The mystery of creation is precisely the mystery of Christ—to be God and not God simultaneously.[287] A detailed response to Wood's argument cannot be entered into here, though two problematic implications are worth mentioning in passing.

First, it is all well and good to claim that created nature as a whole is made real by being 'hosted' by the hypostasis of the second person of the Trinity, but this says nothing of how created nature is itself internally defined and differentiated; for example, how human nature is different from, say, elephant nature, or how one human individual (e.g. Peter) is different from another (e.g. Paul). Since, as Wood points out, a hypostasis is devoid of intelligible content and is indifferent to the nature being enhypostasised,[288] the role of the *Logos* in his scheme seems incapable of supplying these principles of created differentiation. It is as if the *Logos* acts merely

[284] As well as Zizioulas and Wood, others who prefer this reading include Alexei Nesteruk, who sees the universe as hypostatically inhering in the *Logos*, and Dionysius Skliris who thinks that creaturehood gains ontology only through the hypostatic union. Nesteruk, "The universe as hypostatic inherence in the Logos of God: panentheism in the Eastern Orthodox perspective."; Skliris, *On the road to being: St Maximus the Confessor's syn-odical ontology*, 57.
[285] John Behr takes a similar view of the ahistorical nature of the incarnation. See: John Behr, *John the theologian and his paschal gospel: a prologue to theology* (Oxford: Oxford University Press, 2019), 5; John Behr, *The mystery of Christ: life in death* (Crestwood, NY: St Vladimir's Seminary Press, 2006).
[286] Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 137.
[287] Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 141-2.
[288] Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 30.

as a receptacle[289] to contain created nature alongside divine nature, the two natures being identical in the way they are instantiated but utterly separated as far as their 'contents' are concerned. In Wood's words: 'hypostatic identity generates natural difference.'[290] Yet, the *logoi* (which are also the *Logos*) are surely not indifferent to nature. It is precisely the role of the *logoi* in Maximus' protology, as we have seen, to define and constitute creaturely form. In doing so they convey and impart intelligible content, from the most generic entities to the most particular. Wood does not deny that the *logoi* play this role,[291] but he does not address (at least not clearly enough for me) how the hypostatising role of the *Logos* sits alongside the 'en-naturing' role of the *logoi*, or how the former gives rise to the latter. If the intelligibility of created nature (unlike its hypostatic existence) is derived from the *logoi*, which are themselves the *Logos*, it does not seem correct to say that there is *no* natural relation between God and creation. Neither Jesus' human body, nor the cosmos as a whole, are amorphous monolithic entities, but both bear intelligible structure and meaning. And that structure and meaning is not a product of some whimsical random volition but is derived from God the *Logos* himself. It is not enough, therefore, to attribute merely the *existence* of created nature (its 'thatness') to its enhypostasisation as the *Logos*. The form that created nature takes (its 'whatness') must also be accounted for, and is indeed accounted for by the *logoi*. In his summary of Christo-logic, Wood states that '...the Word's hypostatic (not natural) identity to created nature...generates the principles (*logoi*) and corresponding powers of all creatures...'[292] But what are those principles and powers if not their natures? While I have suggested that creaturely otherness might be found in created nature's finite hypostasis, Wood denies that created nature has any hypostasis of its own and he grounds otherness in natures rather than in hypostases. But if the *Logos*, via the *logoi*, is 'crafting all things from within,' as Wood admits,[293] then there appears to be some

[289] Like the Receptacle of Plato's Timaeus, that '...invisible and characterless sort of thing, one that receives all things and shares in a most perplexing way in what is intelligible, a thing extremely difficult to comprehend...' 51a-b Plato. "Timaeus." Translated by Donald J. Zeyl. In *Plato: Complete Works*, edited by John M. Cooper, 1224-91. Indianapolis and Cambridge: Hackett Publishing Company, 1997, 1254

[290] Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 39-43.

[291] Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 73.

[292] Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 53.

[293] Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 23.

over-determination going on, with the *logoi* supplying both natures *and* hypostatic existence. The result is a panentheism much closer to the pantheistic end of the spectrum than I have been proposing.

The second problematic implication of Wood's reading of Maximus lies in his prioritisation of the *end* of creation over its beginning and middle. Only at the end can creation-as-incarnation come to fruition, and so only at the end can creation be what it truly is. But it is just here that the metaphysical handiwork of the hypostasis comes unstuck. If creation can only exist enhypostasised as the *Logos*, and that enhypostasisation has not yet happened or is not yet complete, then what does that say about the sensible world which we now inhabit?[294] Are we to imagine a partial enhypostasisation, or are we to say that our current world does not yet really exist? The former is, to my knowledge, not an option in Neo-Chalcedonian metaphysics, while the latter is surely absurd and nihilistic. Rather, it seems obvious that our current world *does* exist and, even though it is not yet in its final deified state, it is not lacking entirely in goodness and intelligibility. And that goodness and intelligibility, even now, must be supplied by the *Logos*/*logoi* or else it would not be good and intelligible in the first place. Therefore, the *Logos*/*logoi* supply not just the hypostasis of created nature, but also that created nature itself, even in its currently immature, incomplete or damaged state. Furthermore, if the current world is merely an illusion, then attempts to bring together scientific and theological accounts of the world will likely be futile, since the only 'true creation' lies 'beyond place and time,' inaccessible to science.[295]

It may well be that I have misunderstood Wood, or that Maximus is himself confused or incoherent in his understanding of the relationship between the current world and the final deified cosmos. But whether or not my objection to Wood's reading of Maximus is correct, the fact remains that both of us see in Maximus' protology a very strong *ex Deo* theme, leading to a much closer relationship between God and creation than is to be obtained by a voluntaristic, *ex nihilo* account or a

[294] Wood recognises this problem in a section entitled 'Time and Incarnation' where he attempts to show that the historical incarnation is what actualizes the *logoi* of every age, not just the final age. But this implies that the current world is already fully enhypostasised in the Logos. Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 187-91.
[295] Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 190.

depletively emanationist, Neoplatonic account. Wood might not care to join me in calling it panentheistic, and we may disagree on the role of natures or hypostases, but we are united in thinking that Maximus' cosmic vision is very different from later Western participatory schemes.

3.4.3.4 Communion and otherness via all three: logoi/materiality, energies/essence, and person/natures

I might have misunderstood Wood—or his scheme might be more complex and nuanced than I realise—but it strikes me that one way of 'saving' his account (or my caricature of it) from disqualifying itself from any engagement with science (including evolutionary biology) is to consider that the panentheism that it amounts to is dynamic as well as partial. Indeed, I suggest that each of Zizioulas' communion-with-otherness perspectives—*logoi*, energies, and person—can be brought to bear in explaining creation, *if* the dynamic character of the *logoi* can be recognised. I touched upon this in §2.4.2 and will have occasion to return to it in Chapter 5 when considering the underlying evolutionary nature of the *logoi* as being good.

Wood, in effect, focuses on the *logoi* in their final state of eternal well-being, when all of creation will be united with the *Logos* in what could be described as an eschatological panentheism.[296] He underplays, however, the *logoi* in their previous two positions along the Maximian triad of being; that is to say, their being and their well-being. Unlike the *logoi* of eternal well-being which are atemporal or supratemporal, these earlier stages along the *dromos*, take place fairly and squarely in the realm of finite space-time, accessible to us as contemplative observers, and accessible to modern science. It seems utterly implausible to me that, in all of his writing about the role of the *logoi* and divine energies in creation, Maximus should really be referring to creation in its final outcome rather than creation as it is now. Why would he bother to distinguish between the three stages of the *dromos* if he intended the entire journey to be referring to events beyond our current realm? It is much more likely that Maximus is painting a picture of the *logoi* (and/or energies)

[296] A term famously coined by John Polkinghorne. Polkinghorne, *Science and Christian belief: theological reflections of a bottom-up thinker*, 168.

transitioning creatures from an ontological position of incompleteness (though nonetheless real and good) to one of final fulfilment and maturity (in some sense 'super-real' and God-like). Whether this amounts to a 'gradual cosmic incarnation' or a partial divine indwelling followed by a step-change of a final hypostatic union is a separate question, and one which would take us beyond the scope of this study.[297] Here, my aim has merely been to suggest a way of reconciling the different panentheistic readings of Maximus that can allow us to say something positive and constructive about our current finite reality whilst also recognising its ultimate grounding and consummation in the supra-temporal incarnation inaugurated in Christ.

3.4.4 Objections to panentheism based on participation

Apart from any exegetical objections to the legitimacy of my panentheistic reading of Maximus, there is an important philosophical one that I must now address. It runs along the lines that a better account of the *logoi* can be given in terms of participation rather than in terms of creation being 'in' God or vice versa. This is a huge and complex subject that could easily drag into this study much later scholastic thinking and terminology and would turn the study into a comparison of Maximus and Aquinas, which it is not intended to be. Nevertheless, I cannot resist a brief excursus into the question of participation, if only to make more explicit the panentheistic position I am advancing, lest it be considered a form of participation in disguise.

The metaphysical concept of participation is an ancient one, and in its most general sense refers to a constitutive structure whereby a being or beings share to varying degrees in a positive quality or perfection that they receive from a donating source that alone enjoys the fullness of the quality or perfection.[298] Plato was the

[297] Contrasting views include John Behr, who states 'The Incarnation...is not 'an episode in a biography', an event now in the past, but the ongoing embodiment of God in those who follow Christ.' Behr, *John the theologian and his paschal gospel: a prologue to theology*, 5. and Ian McFarland, who says 'God is no more present or active in Jesus than in any other creature...the incarnation involves no "quantitative" increase in divine presence.' Ian A. McFarland, "Always and everywhere: divine presence and the Incarnation," in *The gift of theology*, ed. Rosemary P. Carbine and Hilda P. Koster (Minneapolis, MN: Fortress Press, 2015), 75.

[298] Jacob H. Sherman, "A genealogy of participation," in *The participatory turn: spirituality, mysticism, religious studies*, ed. Jorge N. Ferrer and Jacob H. Sherman (Albany, NY: State University of New York Press, 2008), 82.

father of Western participatory thinking and the first to use participation (*methexis*) as a way of maintaining a relationship between the divine and human realms. According to his theory of Forms,[299] the identity of a material (or 'sensible') object was not to be found entirely within itself but was located beyond itself in the source of all reality, the 'intelligible' realm of the Forms. Hence, a beautiful flower not only possesses its own intrinsic beauty, but also participates in the eternal, immutable Form of Beauty, which is also participated in by other beautiful things. The two realms are not related by the univocal logic of solid bodies, but neither are they entirely different or equivocally related. Instead, they are related analogically: ontologically different but nevertheless related.

The exact nature of participation through analogical relatedness was to become the subject of much analysis in Western scholastic thought, particularly by Thomas Aquinas, who distinguished three different modes of participation, some of which were more suitable in describing the relationship between creation and God.[300] But none of this much later sophistication is needed to appreciate how Maximus would have understood participation, as creation simply having a *part in* God.[301] For Maximus, the biggest mystery of ontological participation was how creatures could have a part in God without God's nature being divided and without creatures themselves becoming God. It is not a problem that Maximus tries to resolve using any Byzantine metaphysics available to him, but one he simply affirms as an unresolved paradox:

> If, therefore, consistent with true teaching, every divine energy indicates through itself the whole of God, indivisibly present in each particular thing, according to the *logos* through which that thing exists in its own way, who, I ask, is capable of understanding and saying precisely how God is whole in all things commonly, and in each

[299] Plato's theory of participation in the Forms appears in a number of his works, such as *Phaedo*, 78-80, *Timaeus*, *Phaedrus*, 249e, and *Symposium*, 206a-211c.

[300] For an introduction to all three and detailed treatment of the first, see: Jason A. Mitchell, "Aquinas on Esse Commune and the first mode of participation," *The Thomist: A Speculative Quarterly Review* 82 (2018): 543-72.

[301] For Maximus' understandings of participation see: Vladimir Cvetković, "Maximus the Confessor's view on participation reconsidered," in *A saint for east and west: Maximus the Confessor's contribution to eastern and western Christian theology*, ed. Daniel Haynes (Eugene, OR: Cascade Books, 2019), 231-44; Portaru, "Gradual participation according to St Maximus the Confessor," 281-93; Portaru, "The vocabulary of participation in the works of Saint Maximus the Confessor," 295-317; Wen, "Maximus the Confessor and the problem of participation," 3-16.

> being particularly, without separation or being subject to division, and without expanding disparately into the infinite differences of the beings in which He exists as Being, or without being contracted into the particular existence of each one, or without contracting together and fusing all the differences of these beings into a single totality, but on the contrary is truly all things in all, never going out of His own indivisible simplicity?[302]

In this striking passage, Maximus accepts that although it is the divine energies and not the divine essence that are present in each created thing, nonetheless these energies carry the fullness of God into creation without diminution or division. There is no suggestion of anything resembling analogical relatedness, and the word *methexis* does not even appear in the Greek text. With statements like the above we cannot expect to find Maximus offering reasons why a partial panentheism will not work. If anything, he seems to be embracing panentheism wholeheartedly, though apophatically.

Recalling the discussion of the relationship between the *logoi* and the divine energies in §3.2.3, any ontological 'scaling down' between God and creation could be said to have already taken place within the Godhead in moving from the divine essence to the *logoi*/energies.[303] One might think therefore that there is no need to speak of any participative or analogical relationship between the *logoi* and creatures, since the relationship is straightforwardly identical or univocal, at least with regard to creaturely form. If anything, it is the relationship between the essence and the energies that needs apophatic language and not the relationship between the *logoi*/energies and creation. Likewise, it would seem, there is no need to speak of God's very being occupying all things since the whole point of the energies is to provide an intermediate between God's essence and finite creation that can allow talk of God being constitutively immanent without the blasphemous implication that creatures *are* God. One might therefore have expected Maximus to have adopted more circumspect theological language, taking advantage of the subtle distinctions

[302] *Amb* 22.3, DOML1:451

[303] Here, Jordan Daniel Wood and I are in agreement: '...Maximus never says creatures participate their *logoi*. A creature's own *logos* is the principle "by which" it participates divine perfections...It is *how* a creature participates at all, not *what* it participates.' Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 75.

afforded by the essence-energies distinction. Instead, we find him throwing caution to the wind and referring to God's very being within creation and, in other passages, referring to the *logoi* as the *Logos* and vice versa.

Despite Maximus' paradoxical stance that would seem to be consistent with modern notions of panentheism, it is possible to find some commentators claiming that Maximus was claiming only a participatory relationship between creatures and God, and even between creatures and the divine energies. Vladimir Cvetković mentions the above passage from *Ambiguum* 22 as one involving the 'mystery of participation' even though the word *methexis* is not used, and even though the mystery appears to be one of a simultaneous co-identity rather than having a part in something.[304] It is not my intention to enter into a textual analysis about whether Maximus really intended a metaphysics of participation, but I will give Cvetković and others[305] the benefit of the doubt and assume that the relationship between creatures and God—and even between creatures and God's energies—is indeed one of participation. That being the case, I will ask exactly how participation can help in any way to avoid the implication of panenetheism, if indeed it does.

Analogical participation and panentheism have something in common. Both refer to a similarity despite an even greater dissimilarity. The 'en' in panentheism is pointing to a part of one thing that is 'in' another thing, resulting in a certain similarity between the two owing to their sharing of a common component. The 'part' in participation is serving the same function, implying that a part of one thing is vested in another and responsible for a certain shared likeness. In neither case is there any suggestion that the sharing of something in common comes at the expense of either party, or that the thing shared in common dominates the relationship. Panentheism is not pantheism, and so a panentheistic relationship between creation and God must be one of part to whole, even if it is an infinitesimal part, rather than one of mutually exclusive alterity. Participation (of the kind being used here) is analogical and not

[304] Cvetković, "Maximus the Confessor's view on participation reconsidered," 243.

[305] e.g. Tollefsen who argues that the *logoi* define the capacity (*epitēdeiotēs*) for a creature to participate in the energies. Torstein T. Tollefsen, "Did St. Maximus the Confessor have a concept of participation?," *Studia Patristica* 37 (2001): 623. And Wood who says 'A creature's *logos* is the principle "by which" it participates divine perfections...It is *how* a creature participates at all, not *what* it participates.' Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 75. Emphasis original.

univocal, so the relation of the part to the whole is not one of individuals to community or species to genus but one of finite effect to transcendent cause. Both terms, then, despite their very different theo-philosophical backgrounds, can allow for a disparity between God and creatures consistent with an *ex nihilo* understanding of creation. Neither term necessarily implies an attenuated view of God in which he is merely a being among beings albeit a supreme example—although some other versions of panentheism might incline in that direction. If there is a difference between participative and panentheistic understandings of the God-creature relationship then the difference lies not in their view of God's nature, but in their view of the 'part' of one that is 'in' the other. The key question facing both understandings is: granted that a 'part' of one (God) occurs 'in' the other (creation) and gives rise to a certain likeness between the two, how is it possible to deny that this 'part' is just as much divine when it occurs in creation as when it remains in God? This is where the two words—participation and panentheism—tend to diverge in meaning. Proponents of participation would tend to deny any symmetrical ontology of the part in God and the part in creation, arguing that the 'part' being referred to is not ontological but only analogical or metaphorical. Proponents of panentheism on the other hand would tend to affirm that the part in question is equally possessed by both God and creation and is an immanent reality rather than a mental abstraction.

Returning to Maximus, a question that proponents of participation need to answer is: if the *logoi* are in some sense 'divine' because they are in God (e.g. as his ideas or energies) why are they not equally divine when they take up residence as creaturely form (as their intrinsic formal cause)? There are, I believe, two main types of response to this question. The first involves an outright denial of the existence of any third intermediate entity bridging God and creatures, and the second accepts the existence of an intermediate entity but insists that its nature is radically different when present in God compared to when it is constitutive of creation. The first I call the 'useful fiction' objection to panentheism and the second the 'non-multiple realisability' objection.

3.4.4.1 The useful fiction objection

The force behind this objection is that there is no reality to God's pre-intentions once executed, or at least not in any way we could ever comprehend. When we look at the world in its amazing complexity and diversity we are tempted to abstract from it intelligible content that we consider to be a separate ontology—'information'—which, owing to its non-materiality, seems an obvious candidate to pre-exist in God's mind.[306] When properly abstracted, information is a true and reliable descriptor of objects that can be stored in our own minds and can even be replicated into other non-human storage media. It is therefore an obvious extrapolation to think that God could be the primordial storage medium in whom the very same information can reside and in whom it was originally created.[307]

According to the useful fiction objection, this is a mistake. Just because we can carve nature in various useful ways, according to shape, size, quantity, composition, force fields, probabilities, etc. does not mean that these specifications have any existence in God himself. For all we know, the way God 'thinks' about creation and the way he pre-specified it might be in some super-complex mode that would forever lie outside the purview of human science or human imagination. Or taken further, to think that God even *thinks* is itself a useful fiction designed to meet our anthropocentric limitations. Some commentators on the Thomistic divine ideas have argued that divine exemplarism is a '...splitting of the singular creative act...the degrading of divine simplicity into dueling "faculties"...the fraudulent elevation of the world into the very mystery of God's life'.[308] They deny any cognitive 'moments' of creation within God and see creation as a flash of artistic insight rather than a deliberative selection between alternatives. God creates by a single act of knowing

[306] Puddefoot, "Information theory, biology, and Christology," 312.

[307] 'The biblical idea of divine Word or *Logos* resembles the concept of information. In Greek thought, the *Logos* was a universal rational principle, but biblical usage also expressed the Hebrew understanding of Word as creative power. The Word in both creation and redemption can indeed be thought of as the communication of information from God to the world.' Barbour, "Five models of God and evolution," 41.

[308] Paul J. DeHart, "Improvising the paradigms: Aquinas, creation and the eternal ideas as anti-Platonic ontology," *Modern Theology* 32, no. 4 (2016): 617; Paul J. DeHart, "The creature makes itself: Aquinas, the de-idealization of the eternal ideas, and the fate of the individual," *Theological Studies* 78, no. 2 (2017): 412-34. See also Berger, "A contemporary synthesis of St Maximus' theology: the work of Fr. Dumitru Stăniloae," 399, fn.61. who claims that Stăniloae's view of the *logoi* is that they had no real pre-existence in God but are only 'potentials' in God or in the *Logos*.

and willing based in a single exemplar of God's own essence with no need to posit any intermediate steps. Such a view may be attractive to those Maximus interpreters who see the *logoi* as wills and not ideas. However, as we have seen, there is no reason, at least in the case of Maximus, to eschew the exemplarity of the *logoi* given how the Eastern concept of divine energies offers metaphysical space in which to situate the ideas—a luxury that is not open to Thomists for whom the divine ideas *are* the divine essence.

A somewhat different version of what I am calling the useful fiction argument has been articulated by Tollefsen. He claims that the immanence of Maximus' universals is of such a concrete nature that they cannot exist in any mind, let alone God's mind. According to Tollefsen, 'For Maximus there is no divine Mind intermediate between the Trinity and creatures, and God cannot be an indirect creator of the cosmos. God is the immediate maker of all being and therefore the principles of being, the *logoi*, belong to God and not as in Neoplatonism to the paradigm in the Intellect.'[309] If I have understood him correctly, Tollefsen is saying that the immanent realism of Cappadocian universals is such that they cannot exist in anything other than creatures. There is nothing abstractable about them *post rem* or *ante rem* that would allow them to be in God in any meaningful way. Interpreting creaturely form as information that can be separately hosted in God is merely an act of human imagination that has no bearing on any ontological pre-existence of creaturely form in God.

In my view, the main problem with the useful fiction objection is that it misses the point behind Maximus' insistence that the *logoi* are principles pre-existing in God. Granted that much of the language being used is necessarily anthropomorphic, it does not follow that words like 'principle' and 'pre-exist' are totally fictional and devoid of meaning. To see this, we need to go back to why these words are being used of the *logoi*. Maximus wants to show, contrary to the Origenists, that creation is as God originally intended and not the result of some punitive concession. As such, creation has its origin in God himself and is unavoidably bestowed with God's goodness. Therefore, one could say that, by definition, creatures share something

[309] Tollefsen, "The concept of the universal in the philosophy of St Maximus," 79.

with God, something that pre-exists in God, and something that has always been God. Dissecting out what that 'something' is and how it exists in creatures and in God is admittedly difficult, but we can at least be certain that it is something real and not fictional. To deny that God ever had any pre-intentions to create or ever supplied any paradigms by which to create is to imply that creation is involuntary and aleatory.[310] It is to take the principle of *ex nihilo* to such an extreme that the intelligibility and goodness of the universe is either a complete mystery or a complete fluke.

3.4.4.2 The non-multiple realisability objection

In our modern information technology age, we take for granted what could be called the 'multiple realisability' of data: that data—especially digital data—can be stored in many different ways (e.g. on an abacus, in a computer, or in a human mind) and yet remain the same and unaffected by the medium in which it is stored. Data, according to this modern view, are like real universals that exist immanently and singularly across multiple particulars. Each particular is equivalent to a different medium in which the same data resides. When we transfer data from one medium to another, we may think we are replicating it, but since there is no change in the data *qua* data, we could just as legitimately say that the data have remained a single undivided entity. Substitute *logoi* or divine ideas for this notion of data and we can see why, to the modern mind, it makes no sense to think of the *logoi* not being equally realisable within the Godhead and creatures. Yet this is exactly what is implied by opponents of panentheism who claim that the formal similarity between God and his creatures is analogical and not univocal. Somehow, the data defining or comprising form is different when 'in' God compared to when it is 'in' creatures. Going in the direction from creatures to God, the data have undergone some transcendentalising upgrade, while going in the direction from God to creatures, the data have undergone some attenuating downgrade.[311]

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[310] To say this does not mean that God in any sense deliberated over his pre-intentions. But just because God's ideas and will are unified, simple and eternal does not mean they do not exist in God.

[311] For example, Yonghua Ge thinks that 'An idea exists only in the intellectual order, but not in the order of reality. An idea in God's mind is thus not identical to a form that actually exists in a creature.' Yonghua Ge, *The many and the one: creation as participation in Augustine and Aquinas* (Lanham, MD: Lexington Books, 2021), 135.

An ancient word not too distant in meaning from the computer hardware terminology I have been using is 'mode' (*tropos*). The word mode is a qualifier of existence, adding some further meaning about the *way* something exists in addition to the brute fact of its existence. It is sometimes used to designate the difference between form existing in an exemplar donor and the same form existing in an image-bearing receiver, so that when a form is received into another it comes to be present in the manner or mode of the recipient, not in the mode of its source. Hence, when it comes to creatures, their part in the divine is said to be only in the mode of finite creatures and not in the same mode as it is within God himself.[312]

To illustrate the effect that mode has on form, Andrew Davison, in his recent book on participation, uses an example from everyday life: a piece of music played from a CD and the same piece played by a live string quartet.[313] The modes of the musical form are entirely different and some of the form is lost in the transition from live quartet to hi-fi reproduction. But this illustration appears to confuse two things. It confuses the nature of the beings that host the information and the information itself. Yes, of course it is true that living, breathing musicians are vastly superior to CDs and hi-fi systems. It is also true that a live performance donates something to the hearer that CD play-back does not. But despite these distracting differences intended to show how form cannot be in God in the same way as it in creatures, the illustration fails to show that there is not *still something* co-inherent in both media, even acknowledging the excess to be found in the live performance (or in God). We see this at the most superficial level when the CD and the artists' live performance are both labelled in the same way, as say, 'Beethoven's 5th Symphony'. But more convincingly, the co-inherent similarity can be specified completely by reference to the musical score which can be followed during a live performance and during a CD play-back. There is a common denominator between the two and this is the data encoded by the musical score, which has survived countless realisations, first as an unfolding idea in Beethoven's mind, then as handwritten ink on paper, then as

312 For example, according to Aquinas: '...even though the rest of things were to receive a form that is absolutely the same as it is in God, yet they do not receive it according to the same mode of being.' Aquinas, Thomas. *Summa Contra Gentiles*, Book 1. Translated by Anton C. Pegis. New York: Hanover House, 1955-57, 32.3

313 Davison, *Participation in God: a study in Christian doctrine and metaphysics*, 147-8.

performances by many different orchestras, then as vinyl records and loudspeaker outputs, and finally as CDs, magnetic discs and much more.

But perhaps there are other reasons why we cannot conclude that the data are the same on both sides of the infinite-finite divide. If we assume that data can have no separate existence outside either creatures or God (i.e. there is no third Platonic realm) then this means that data cannot exist without being hosted on a divine or creaturely medium. But when we look into how data is stored, we find that further data is needed to specify exactly *how* it is encoded in a particular medium. For example, we find that a genetic code is hosted by nucleotides in DNA which in turn are hosted by atoms in certain configurations, and so on all the way down to quarks, quantum fields and beyond. Likewise, we find that the same genetic code, occurring this time in a bioinformatics database, needs to be defined by further data specifying the magnetic properties of the computer hard drive on which the code is written, and so on. A pyramid of infinitely regressing data sets is needed to uphold the most simple of initial data. Or to put it another way, any difference needed to create information is itself dependent on further differences and cannot be fully specified without an endless deferral of differences. A key question then is whether such an infinite regress applies to finite creatures such that they remain indefinable owing to their finitude. Perhaps only in the Godhead is their defining data fully 'backed up' by an infinite regress of defining differences. In which case, might we have here a way of rescuing creaturely form from a panentheistic dependence on God? At first sight, form looks to be univocally shared between God's mind and creatures, but it can only be imitated by creatures, since creatures do not possess the infinite depth of being in which to ground the endless differences that form requires.

Unfortunately, while it may be true that the informational nature of *logoi* in the *Logos* is more *completely* defined, *some* of the data is still univocally related to the not-fully-backed-up data in creatures. It is not like being-*qua*-being where I have argued there is no common ground at all between creatures and God. Rather, informational form in creatures bears a part-whole relationship to the same information in the mind of God. Creaturely *logoi* are a subset of more completely defined and grounded divine *logoi*. In as much as they overlap, they are also identical. So, for example, the DNA code 'defining' a horse needs endless specification of

difference (DNA, atoms, quarks, etc.) to ground its information content. The source of those differences must eventually run out in creatures because they are finite, but in God they can go on forever. *Yet before they run out in creatures, they still bear a one-to-one correspondence with the same differences specifying the horse logos within the Logos*. Therefore, the lack of groundedness of the data in creatures does not allow us to escape the charge of (partial) panentheism since there is still *some* univocal correspondence between, as it were, the *logoi ad intra* and *logoi ad extra*.

As one final attempt to resist panentheism, we might consider that perhaps the problem lies with our earthly illustrations. Perhaps there is still a way for the *logoi* to exist in God in a superior way[314] whilst still bearing an isomorphic relationship to creaturely form; a way for the *logoi* to be subsumed into the ineffable simplicity of God without losing their intentional and definitional roles. Paul DeHart has discussed this question in terms of 'knowing more is knowing less'.[315] He claims that the created order cannot represent an increment in ontological possibility compared to God, otherwise God's aseity would be undermined. Creation must not only be different from God it must also be less than God. The resolving of God's essence and knowable self into the detail of the *logoi* or divine ideas is therefore not a coming-into-focus but a decomposition of what is already perfectly known. God's prior knowledge is not a brute force enumeration of all possibilities but a pre-containment in a more perfect way. DeHart uses a number of analogies to illustrate the more perfect accommodation of form within God compared to that which exists in creatures, which I have listed below and to which I have added some more of my own:

- Apprehending whiteness as a whole rather than having to sample every instance of whiteness
- Using a chess playing algorithm rather than having a look-up table of every possible move and counter-move

[314] Or as Aquinas puts it, in a more 'eminent' way. See: Thomas Aquinas, *Quaestiones diputatae de potentia* (Westminster, MD: The Newman Press, 1952), q.7, a.5, answer.
[315] Paul J. DeHart, "What is not, was not, and will never be: creaturely possibility, divine ideas and the creator's will in Thomas Aquinas," *Nova et Vetera* 13, 4 (2015): 1038.

- Knowing infinity as a simple concept rather than knowing it by counting to infinity
- Knowing a fractal image by means of its mathematical equation rather than plotting out a graph of its form
- Knowing music as it written in score rather than how it is performed in time[316]
- A quantum wave form prior to its collapse
- Creation being a refraction rather than a reflection of God.[317]
- God's nature and being as a 'limit case' of created being; for example, as a circle is the limit case of a polygon.[318]
- An infinite line being the essence of all lines, just as God is the essence of all finite essences.[319]

The first member of each pair is meant to be a higher cognitive condition, or a superior ontology designed to illustrate how concepts could exist in God compared to how they are in the world. In each case, God knows the form of individual things (e.g. a white thing, a chess move, an integer, etc.) in a more 'eminent' way, as Aquinas would say. In each case the finite particular participates in a 'concentrated' state within God.

I agree that these are powerful metaphors for how form might be 'stored' in God in a more eminent way. In each case, the eminence derives principally from its more efficient compressed nature, which is certainly congruent with the simplicity of God. Taken to its limit, one could say that within the simplicity of God are 'compressed' all manner of relations that could emanate as equations, algorithms, fields, vectors, matrices, etc. Clearly the examples are meant to be analogies or metaphors to illustrate a way in which the form of a created existent participates in a more excellent version of the same form within the Godhead. I am not sure, though,

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[316] See Peacocke's analogy of God being 'in' the performance of Beethoven's 7th Symphony. Arthur Peacocke, *God and the new biology* (London: J.M. Dent & Sons Ltd, 1986), 96.
[317] Ian A. McFarland, *The word made flesh: a theology of the incarnation* (Louisville, KY: Westminster John Knox Press, 2019), 54.
[318] Barry Miller, *The fullness of being: a new paradigm for existence* (Notre Dame, IN: University of Notre Dame Press, 2002), 141ff.
[319] Nicholas of Cusa, "On learned ignorance," in *Selected spiritual writings* (Mahwah, NJ: Paulist Press, 1981), 102-6

that the examples avoid the potential for univocity between created form and exemplar form in God. The acid test to my mind is not whether a form exists in God in a more compressed or transcendent fashion but whether God's understanding of the creaturely form in himself is in any way under-representing the creaturely form as a created finite entity. Is there anything about a live musical performance that cannot be known by reviewing the score, or anything about a real fractal pattern that cannot be appreciated by understanding the fractal equation? If so, it implies there is something inaccessible to God in the explicate state and something about the eventual form of creatures that has not been known in advance by God. It would be as if God is too perfect to possess finite form as an object of knowledge and is unable to have anticipatory knowledge of the creature's simple form within himself. It would be as if there is something so basically primitive about creatures that escapes even God's knowledge.

Returning to Maximus, the co-existence of the *logoi* across God and creation ensures that God's ideas are willed into finite existence just as he had intended, right down to the particulars that describe how creatures are different from God's own exemplars. A beautiful butterfly is certainly participating in the transcendental form of Beauty, but that which defines this particular butterfly, setting it apart from other butterflies, must be specified univocally. Otherwise, we have an infinite regress in which finite particulars must participate in their pre-existing divine particulars but need extra particulars to specify how they themselves differ from their divine exemplars. The fact that Maximus is clear about the *logoi* specifying all levels of finite reality, and the fact that the *logoi* (whether divine ideas, wills, energies, or the *Logos*) have an ontology that is distinct from the divine essence, means that we can safely speak of a non-participatory, univocal relationship between God and the world that runs no risk of 'onto-theology',[320] since what is bridging God and the world is God himself (as the *logoi*) and not some third entity standing over God and the world. What prevents this from merging into pantheism—in which the world is *nothing but* the divine *logoi*, energies or person of the *Logos*—is the corresponding otherness

[320] Ontotheology is the error of treating God as a being among beings.

that accompanies each of the possible sources of communion: finite mode of existence, essence, or natures.

3.5 Chapter conclusions

The aim of this chapter was to examine the wider ontological implications of Maximus' *logoi* doctrine as a prelude to testing the compatibility of that doctrine with some of the more theologically challenging aspects of biological evolution that were deliberately omitted in Chapter 2 but which will form the goals of Chapters 4 and 5. Of necessity, the examination has been brief, but by structuring it around the questions of the role and location of the *logoi* within God and creation, it has hopefully represented most of the readings of Maximus to be found in the secondary literature. The results of the analysis are that the *logoi* can be viewed in God and creation in four main ways: as rational principles, as wills, as energies, and as a person. The first two imply that God is vested in creatures as their intrinsic formal, efficient, and final causes, though not as their material cause. The third means that even though God is immanently present, he is so only as his energies and not as his essence. And the fourth suggests that the presence is also a personal and hypostatic one, even though a full incarnational union with the *Logos* remains an eschatological event, rather than a present reality. Taking into account the various conflicting strategies for balancing communion with otherness, I have argued for an irenic synthesis that leads to a cosmological vision most capable of entering into dialogue with the natural sciences; one which respects the radicality of Maximus' cosmic incarnation without severing it from any connection with our current world. The resulting vision is one I call 'partially and dynamically panentheistic.' 'Partially,' because, of the many varieties of panentheism on offer, this one claims only a limited ontological coinherence between God and the world. The bridging is limited because, although God is truly 'in' creation, there are significant remainders in God and in creation—finite mode of existence, essence, or natures—that are not shared with

the other, thus making the 'en' of panentheism bilaterally non-coincident,[321] and thereby avoiding pantheism and idealism. 'Dynamically,' because the nature of God's 'being in' creation is also changing, from a presence of initial ontological constitution of form, to one of cosmic hypostasisation, corresponding to the migration of the *logoi* from their being, to their well-being, and on to their eternal well-being. Overall, the *logoi* may be regarded as 'Christo-forming' the cosmos,[322] by converting it steadily, though never completely, into the divine: through intelligible form (because God is truth); through energy and will (because God's actions overflow beyond himself); and through personal presence (because God is personal). I have also examined some potential objections from those who might have expected more of a participatory framework guiding the interpretation of Maximus' *logoi* cosmology, and concluded that there is no need to fear a univocal bridging of the *logoi* into creation given the safeguards against onto-theology afforded by the various sources of otherness. Thus, without denying participation, Maximus' protology *surpasses* participation.

This brief foray into the philosophical theology of the Maximian *logoi* could well be defective or jejune in places, but I hope that overall, one general overarching point can survive any disagreement over details. That is, that Maximus' understanding of the *logoi* is such that it accentuates the immanence of God, the sharing of Godself with creation, and the ongoing internal activity of God in all things; more so, perhaps, than with those more cautious participatory schemes wherein similarity is always tempered by even greater dissimilarity and where divine presence is expressed preferentially in terms of power (as efficient cause) rather than form (as formal/final cause).[323] The job of this chapter has been to make this clear. Not because it benefits my opening argument of Chapter 2. Quite the contrary. A more 'immanentist' and panentheistic view of the divine-creature relation is 'bad news' when it comes to accounting for dysteleology and evil, as we shall now discover.

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[321] That is to say, not a complete overlap without remainder.

[322] 'The cosmos is not only Christo-centric. It is also Christo-form.' Wood, "Creation is incarnation: the metaphysical peculiarity of the *logoi* in Maximus Confessor," 98.

[323] I freely admit that this is a conjecture since nowhere in this study do I compare Maximus' *logoi* cosmology with, say, Aquinas' divine ideas, or with other Western participatory schemes. However, monarchical views of God in which his power and will in creation are emphasised over his presence have long been noted, e.g. see Macquarrie's critique of views of God that emphasise divine transcendence at the expense of divine immanence in Macquarrie, *In search of deity: an essay in dialectical theism*, 14.

Chapter 4: The purposeful *logoi*

4.1 Chapter aims

We are now mid-way on our journey to explore the alleged evolutionary resemblances of Maximus' *logoi* cosmology. We started out in Chapter 2 by observing some eerie similarities between the *logoi* and evolution. We found that the *logoi* encode the informational and instructional content of all organisms, diverge hierarchically from the most generic to most particular, appear in a chronological sequence, and interact and co-constitute in convergent as well as divergent ways—all of which mirrors the evolution of life in terms of its genotypic and phenotypic composition, its descent with modification from ancestral progenitors, its slow unfolding in time, and its complex integration at the level of individuals, populations, communities and ecosystems. Then in Chapter 3 we went on to consider the ontological status of the *logoi* as causes (in God) and as effects (in creation) noticing how there is no diminution in their proceeding from God to creation with the result that there is an inextricable union between God and creation that is comprised of something shared between the two, whether that be rational principles, energies, or hypostatic personhood.

Chapter 2 could be said to have served its purpose in showing that there is indeed some truth in what previous authors have noticed about the *logoi* and evolution, yet it left unsaid some potential disanalogies that become manifest only when further aspects of the *logoi* and evolution are taken into consideration. Some of those aspects were brought to light in Chapter 3 concerning the radical immanence of God in creation, which, as we shall see, will have the effect of raising the stakes as to what we might expect of any creation-through-evolution on account of God not orchestrating creation from afar but partaking of creation as its immanent constitution and on-going cause. Other aspects remain to be exposed by a closer attention to the specific mechanisms and actual progression of Darwinian evolution as currently understood and observed, namely its apparent lack of direction and

purpose, and its apparent wastefulness and cruelty. Still other aspects, deliberately overlooked in Chapter 2, concern further properties and behaviour of the *logoi* that are seemingly less congruent with evolution, and which require explanation or accommodation, if an overall thesis of the 'evolutionary *logoi*' is to be plausibly maintained.

The goal of the current chapter and the next is to flesh out the counterarguments to an evolutionary interpretation of the *logoi* that arise from these other more disturbing facts of evolution and these other more 'inconvenient' truths about the *logoi*. The task will be divided along the lines of the *process* of evolution (and its resulting trajectory)—to be addressed in this chapter—and the *outcome* of evolution (the products it generates along the way)—to be tackled in Chapter 5. I will be arguing that both counterarguments can be defeated or mitigated by a closer attention to what the *logoi* entail and by a recourse to broader resources from the Eastern tradition.

4.2 Defining the problem of evolutionary dysteology

Evolution is often said to be random, blind, haphazard, and purposeless; in a word, a process involving a lot of 'chance.'[324] Sometimes the glee with which this is stated betrays an underlying atheistic or nihilistic ideology for which evolution supplies the ultimate justification.[325] But other times, it is based on sound reasons to do with the

[324] There are many different ways of understanding 'chance.' Plutynski *et al.* list five senses in which the word 'chance' has been used in the foundational literature of the NDS: fundamentally indeterministic mutations; random sampling of populations or progeny; a proxy for probabilistic outcomes; rare catastrophic events such as floods or meteor strikes; and outcomes such as genetic drift that oppose directional selection. Anya Plutynski et al., "Chance in the modern synthesis," in *Chance in evolution*, ed. Grant Ramsey and Charles H. Pence (Chicago and London: The University of Chicago Press, 2016), 79-81. Lydia Jaeger lists several different meanings of 'chance' such as a-causality (ontological or epistemological), coincidence of separate causal chains, absence of efficient or final cause, or unpredictability. Lydia Jaeger, "Chance in a created world: how to avoid common misunderstandings about divine action," *European Journal for Philosophy of Religion* 7, no. 3 (2015): 154-69. Denis Alexander classifies the use of chance in the evolutionary biology literature into rhetorical, epistemological, ontological, and metaphysical. Denis R. Alexander, "Evolution, chance, necessity, and design," *Zygon: Journal of Religion and Science* 57, no. 4 (2022): 1069-82.

[325] Richard Dawkins being the prime example with statements such as 'The universe that we observe has precisely the properties we should expect if there is, at bottom, no design, no purpose, no evil, no

mechanism of evolution and our empirical observation of its outcomes. The mechanism is indeed a *blind* process in that a range of variants is offered up to the environment for selection, rather than the environment specifying exactly what variants are produced. It is indeed *random* insofar as many sources of variation go back to point mutations in DNA caused by cosmic rays that in turn are the result of unpredictable events at the quantum level (though the ensuing *selection* of these mutants is far from random).[326] It is indeed *contingent* in the sense of being a historical, path-dependent process in which previous changes cannot be erased but have to be built upon, as evidenced by sub-optimal solutions and vestigial traits.[327] These facts alone are sufficient to account for evolutionary change being a process of trial and error, albeit a cumulative process rather than one which starts each time from ground zero. Good solutions to life in a given environmental niche can only be arrived at by countless wasted attempts and dead ends, since all the time the process is one of passive filtering rather than active directing. Add to these facts the additional fact that the environment itself[328] is relentlessly changing, and we have all the ingredients needed to make evolution look thoroughly haphazard and lacking in overall purpose.

Of course, it is important not to overstate the case. In Chapter 2 I explained how some of the earlier NeoDarwinian narratives of contingency, divergence, competition, and selfishness have been moderated in recent years by greater recognition of the roles of necessity, convergence, cooperation, and altruism. Evolution *does* involve chance, but 'chance operating in a law-like framework,'

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good, nothing but pitiless indifference.' Richard Dawkins, *River out of Eden: a Darwinian view of life* (London: Weindenfeld & Nicolson, 1995), 133.

[326] Some in the Extended Evolutionary Synthesis camp have tried to downplay this random aspect by pointing out that sometimes mutation rates are enhanced, or that mutation sites are narrowed down in response to environmental stresses. While this an important qualification, it is still not tantamount to the environment specifying what mutations are needed: filtering must still take place. Also, it is important to bear in mind that these mechanisms of 'directed mutagenesis' must themselves have evolved as a way of enhancing evolvability.

[327] e.g. vestigial limbs in cetaceans and the recurrent laryngeal nerve of the giraffe. Ridley, *Evolution*, 60.

[328] Comprised of spatially and temporally varying conditions of geology, climate, flora and fauna, not to mention the occasional meteorite strike. Darwin himself thought that the biological (i.e. competitor) environment drove evolutionary change more than the physical environment. Darwin, *On the origin of species*, 400.

weighting evolutionary outcomes in certain directions.[329] It is easy to overlook just how 'un-random' life actually is in places,[330] with its hierarchical organisation, its parallel solutions, its spontaneous assembly of complex structures, and its shifting distribution to a tail-end of complexity.[331] Morphological complexity is also much less than what seems possible based on the number of genes that most organisms possess.[332] And while it is true that evolution does not reveal a narrow tree of life in which intermediates peel away to reveal an apical shoot containing God's final end,[333] there are nonetheless some significant recurring themes on 'life's copiously branching bush,'[334] such as intelligence, camera eyes, and social organisation: God's favourite themes of life, if you will. There is no single axis of progress, but there are multiple branches of wondrous innovation. Earlier dogmatic pronouncements of an entirely contingent and hence unrepeatable course of evolution have been qualified by greater recognition of constraints that tend to channel evolution into similar end points even from widely different starting points.

Theology can happily embrace this re-balancing of chance and necessity, particularly as a scientific correction to overly stark portrayals of evolution intended to imply that evolution is necessarily purposeless.[335] Of course, such a metaphysical conclusion was never really a valid output of science in the first place. But now, even

[329] Peacocke, "Biological evolution—a positive theological appraisal," 363.
[330] For accounts of evolution's apparent orderliness and directionality, see: William R. Stoeger, "The immanent directionality of the evolutionary process, and its relationship to teleology," in *Evolutionary and molecular biology: scientific perspectives on divine action*, ed. Robert John Russell, William R. Stoeger, and Francisco J. Ayala (Vatican City and Berkeley, CA: Vatican Observatory Publications and Center for Theology and the Natural Sciences, 1998), 163-90; Creegan, *Animal suffering and the problem of evil*, Ch.8; Denis Alexander, "Order and emergence in biological evolution," in *The future of creation order*, ed. Gerrit Glas and Jeroen de Ridder (Cham, Switzerland: Springer, 2017), 151-69.
[331] As Stephen Jay Gould famously argued (correctly, in my view), we must be careful not to talk about 'progress' in terms of an increase in complexity as if there has been a serial replacement of less complex by more complex species, when really all that has changed through time is the distribution of species. If we were to rank species according to complexity, mammals would occupy the tail end of a very skewed bell curve, with bacteria representing the modal average. Stephen Jay Gould, *Life's grandeur: the spread of excellence from Plato to Darwin* (London: Jonathan Cape, 1996).
[332] Sean B. Carroll, "Chance and necessity:the evolution of morphological complexity and diversity," *Nature* 409 (2001): 1108.
[333] Gould, "Redrafting the tree of life," 30-54.
[334] Stephen Jay Gould, *Wonderful life: the Burgess Shale and the nature of history* (London: Penguin Books, 1989), 35.
[335] The assertion that evolution is unguided by any agent, including God, is a philosophical 'add-on.' R. van Woudenberg and J. Rothuizen-van der Steen, "Both random and guided," *Ratio* 28 (2015): 332-48; Alexander, *Is there purpose in biology? The cost of existence and the God of love*.

by established scientific consensus, there are as many cases of law-like behaviour that might be suggestive of hidden agency as there are of disordered behaviour that might imply no agency. However, as I have argued elsewhere,[336] theology would be ill-advised to place too much significance in these counterexamples to evolution's haphazard mechanism and direction. This is because phenomena such as necessity, constraint, convergence and cooperation may be 'false friends' to theology in that they may eventually give way to deeper underlying causes that turn out to be seemingly arbitrary and unstructured. But more importantly, even if such phenomena *do* turn out to be irreducible to natural selection, they cannot hide the undeniable prevalence of much that is still divergent and stochastic. Witness the adaptive radiation of insects (particularly beetles), the explosion of unique body forms in the Burgess Shale, and the cometary extinction that paved the way for the rise of the mammal-like reptiles. None of these are law-like, predictable phenomena yet they have led to such amazing diversity and creativity. To imply that God is more 'involved' in the convergent and law-like than in the divergent and chaotic is to risk a God-of-the gaps mentality whereby God is found only in the things we cannot explain or the things we can admire.

Therefore, while there may indeed be local pockets of convergence and directionality, the general consensus is that evolution is erratic, and multi-directional when seen from the perspective of the evolution of life as a whole. It is also faltering and episodic, resulting in a severely stunted 'bush of life' with many branches having undergone premature termination (through extinction events). Furthermore, it is a disjointed bush, with many new species and groups arising suddenly (at least over the resolution of millions of years that the fossil record is capable of revealing) rather than gradually and continuously from previous lineages. Being careful not to stray into any moral considerations of this process (which we will address in the next chapter), the mere *configuration* of events through time is enough to make many doubt that there is any intelligent agency responsible for the premeditated design of the living world.

[336] Jackson, "Theological implications of Simon Conway Morris's portrayal of convergent biological evolution," 2-29.

4.3 Questioning the problem of evolutionary dysteleology

If one stops to think about it, however, there is a certain irony in the theological objection to evolution based on its apparent lack of purpose, which has its origin in the classic questions of divine action and divine providence more generally. What *should* the world look like, we might ask, if we are to be satisfied that God is working out his purposes in it? Perhaps, we might think, it should show more signs of order, both statically at any one point in time, and dynamically when we observe how things change or emerge through time. Just as a human architect would build a house in a structured, logical way with its end function in mind, perhaps we should expect God to work in a similar way, revealing his eventual goal along the way, in the same way that we can see the final outcome of 'house' from the emerging shape of the timber frame or the foundations. But herein lies the irony. The predictable intermediaries from which we might take comfort that God is at work as a purposeful designer are the very same ones that can eventually form the basis of empirically derived laws, which, before we know it, can become 'naturalised' in a way that excludes God. Too much predictability in nature can push God to the margins, leaving him to be the first cause and/or the final end, but without any need for his involvement in between; that is to say, deism.

Unless we would prefer deism to be true, there must be theological grounds to reject the conclusion that God cannot be achieving his purposes through disorderly, contingent, or even random events. Certainly, the biblical record does not portray God exercising his providential governance with transparency and directness. On the contrary, there are strong dialectical themes of divine will labouring against or working through disorderly historical events.[337] Also, in everyday life most Christians would not dream of thinking that the unpredictability of the weather, the arrival of the next bus, or the outcome of a human birth would preclude their being governed

[337] J. Matthew Ashley, "Is it providential, by chance? Christian objections to the role of chance in Darwinian evolution," in *Chance in evolution*, ed. Grant Ramsey and Charles H. Pence (Chicago and London: The University of Chicago Press, 2016), 116.

by God, so it would seem inconsistent to think that God cannot also be in control of the process of Darwinian evolution.

To be sure, *how* God achieves his control, and the extent of that control, are different questions and ones that have occupied theologians for centuries. But if our intuitions of divine action and divine providence seem well-founded from a synchronic perspective there seems little reason to doubt them from a diachronic perspective. All of which is to say that the opening problem statement of this chapter—that chance events in evolution are a problem for theology—is on shaky ground from the start, even before we consider how Maximus' *logoi* might be brought to bear on the problem.

Another way of challenging the premise that the process of evolution is incompatible with a purposeful and intentional designer is to consider the possibility that the combination of law-like and stochastic elements in evolution is exactly what we should expect to arise from personal agency rather than impersonal forces. Keith Ward and Richard Swinburne call this the 'personal explanation'[338] in which freedom, value and purpose play a part in our understanding of the world and God's action within it. Just as the freedom of a human person may be manifested in unpredictable one-off decisions, so too the freedom of God may be inferred from the seemingly arbitrary outcome of evolutionary change occurring at the level of individual survival. And just as the values and purposes of a human person may be discerned by their recurring customs and habits, so too God's overall plans in evolution may be glimpsed in some general tendencies and outcomes such as a general increase in complexity, or a convergence towards intelligence, consciousness and spirituality. Both of these aspects of personal agency are contained within Maximus' use of the *logoi* as cosmological principles. They are both wills and ideas. As wills they emphasise God's freedom to enact whatever he likes. As ideas, they limit that freedom to act according to God's very own nature and attributes. It is therefore not surprising that we see within creation and within the evolutionary process a mixture of order and disorder, nomic regularity coupled with erratic heterogeneity. A fully ordered cosmos and a

[338] Keith Ward, "Theistic evolution," in *Debating design: from Darwin to DNA*, ed. William A. Dembski and Michael Ruse (Cambridge: Cambridge University Press, 2004), 270; Richard Swinburne, "God as the simplest explanation of the universe," *European Journal for Philosophy of Religion* 1 (2010): 1-24.

fully predictable process would look more crystalline and robotic than personal, whereas a fully random cosmos and creative process would look completely amorphous and unintelligible even to those seeking inanimate explanations. There is therefore a further irony in arguments purporting to show that the random nature of natural selection is incompatible with theism, since the very unpredictability of evolution is exactly what one might expect of a supreme personal agent exercising its free will.

Having offered these qualifications to the theological problem of the dysteleology of evolution, a reasonable question is therefore, why bother to write this chapter if the problem can be dismissed at the outset? The answer is that Maximus' understanding of the *logoi* includes a number of elements that seem to exacerbate the problem, prompting one to wonder if his *logoi* cosmology is *especially* incompatible with the chance events of evolution, in a way that would not be the case for most other theologies of creation. In addition, my panentheistic reading of Maximus' *logoi* doctrine has important consequences for *how* we should understand God exercising his providential care in creation even in the face of perplexing chaos and disorder. But before we come to these potentially problematic aspects of the *logoi* and panentheism, we must, in order to gain a balanced picture, see what Maximus has to say about the problem of disorder—even though, of course, he could not have framed it in terms of *evolutionary* disorder.

4.4 Maximus on providence, fragility and disorder

I will consider providence and divine action more generally in §4.5.3.1, but here will focus on what Maximus has to say about the subject. The idea of God's providence (Greek: *pronoia*) is scattered throughout the Maximian corpus, and for the following brief account I have drawn heavily upon Benevich, Tollefsen and Thunberg.[339]

[339] Grigory Benevich, "Maximus Confessor's teaching on God's providence," in *The architecture of the cosmos: St Maximus the Confessor. New perspectives.*, ed. Antoine Lévy et al. (Helsinki: Luther-Agricola-Society, 2015), 123-40; Thunberg, *Microcosm and mediator: the theological anthropology of Maximus the Confessor*, 66-72; Tollefsen, *The Christocentric Cosmology of St Maximus the Confessor*, 182ff.

Maximus defines providence as God's attentive care for all things and the purpose of God whereby all beings receive their most favourable assistance and direction.[340] The saints '...praise the providence of God [*Theou pronoian*], which has become all things in everyone, and through all things is present to all.'[341] Beneath that general level of description lies much interesting detail concerning how Maximus understands the 'care' to be implemented, which may be grouped into a number of specific themes, as follows.

4.4.1 Ontological providence

As we saw in §2.4.4, Maximus sees the world to be in a state of constant flux which, if left to its own devices, would tend towards annihilation. Hence, he recognises the need for divine providence to maintain the finite ontology of creation. In *Chapters on Love* he states:

> Only the infinite and all-powerful substance which created all things is simple, of one form, unqualified, peaceful, and undisturbed. Every creature, on the other hand, is a composite of substance and accident and in constant need of divine Providence since it is not free from mutability.[342]

Unlike God, who is simple and immutable, creatures are potentially mutable owing to their composite natures and are therefore in need of God's constant providential upholding to prevent their disintegration into their component parts. This ontological providence is to be distinguished from other forms of providential care, which are spelled out in *Ambiguum* 10. There Maximus distinguishes between five different modes of contemplation: being, motion, difference, mixture, and position. The contemplation of being leads us to think of God as the one, ultimate source of all being, whereas the contemplation of motion and difference points us to the plurality and diversity of all created things.[343] He uses the word 'judgment' to indicate a just

[340] *Amb* 10.100, DOML1:309-312
[341] *Amb* 10.2, DOML1:153
[342] *De Char* 4.9, PG90:1049B, GB:76
[343] 'Motion…manifests the providence for beings, and through it we contemplate the unvarying essential identity of beings in their particular species. In seeing these integral modes of distinct existence, we acquire concepts of Him who holds together and preserves them all in an ineffable union, in such a way that each is clearly distinct and marked off from the other, consistent with the principles

distribution of natural differences, in opposition to the Evagrian and Origenistic idea that bodily differences arose from God's retributive or corrective judgement following their falling away from God.[344] The differences arise from the natural principles (*logoi*) according to which they were created. Again, in contrast to the Evagrian category, Maximus uses the word providence not to signify a restitution to original unity but an original and proper ordering of the world according to God's original intentions and end.[345] This emphasis on God's on-going maintenance of the stability, harmony and equilibrium of the natural world corresponds to our modern-day notion of 'General Providence' in which God upholds and sustains the natural order in a reliable and to some extent predictable manner. It is to be contrasted with the final two modes of contemplation—mixture and position—which refer to the position of the human mind in relation to the Good, which can choose to depart from its own *logos*, thus going against its nature and purpose. As Tollefsen observes:

> Even if man brings himself out of harmony with the basic principle of his being, he does not slip out of God's providence. God circumscribes the cosmos instituted by the *logoi*, so that none of His creatures can risk being separated from God and be dissolved into non-being...The free acts of rational creatures, which do not conform to the cosmic logic, are estranged from the *logos* of providence. But this does not mean that sinful creatures are outside of the divine care.[346]

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according to which they were created. Difference, moreover, signifies judgment, which is evident in the just distribution to all things of a natural potential commensurate with the substrate of their being (in accordance with the principle of each [*hekasta logōn*]), by which we are instructed that wise distributor is God' *Amb* 10.36, DOML1:205-6

[344] This point is explained by Maximos Constas when, in the *Responses to Thalassios* 63, Maximus is keen to point out that his use of the terms 'judgement' and 'providence' are not meant to connote correction of some cosmic failure, but maintenance according to God's original plan. See: the Confessor Maximos, *On difficulties in sacred scripture: the responses to Thalassios*, ed. David G. Hunter, trans. Maximos Constas, The fathers of the church, (Washington DC: The Catholic University of America Press, 2018), 470, fn.51.

[345] 'Now by providence I do not mean "convertive" providence, which is the special ordering of things within the care of providence, returning whatever has gone astray to its proper course, but rather that power which holds the universe together, keeping it aligned with the inner principles [*logous*] according to which it was originally created. And by judgement I do not mean retributive action, which seeks to inflict punishment on sinners, but rather the salutary and differentiated distribution of beings, which assures that all beings, consistent with the principles [*logois*] according to which they were created, possess an inviolable and unchanging equilibrium I their natural identity, for from the beginning the Creator judged precisely what each thing would be, and how, and how much it would be, and so brought all things into being.' *Amb* 10.37, DOML1:207

[346] Tollefsen, *The Christocentric Cosmology of St Maximus the Confessor*, 182-83.

To the extent that the human creatures make decisions that go against the divinely intended order, the actions and activities that result from those decisions could be thought of as lying outside Maximus' ontological providence (or General Providence in modern parlance).[347]

4.4.2 Responsive/personal providence

For Maximus, God's providence encompasses everything: the quotidian affairs of human beings as well as the grand structure and drama of the cosmos. Against those who might doubt God's ability to exercise providence or who might underestimate what such providence entails, Maximum gives a heart-warming description of the complexity that God has to deal with in caring for mankind, whose personal proclivities and choices generate a vast range of scenarios that God must painstakingly superintend. The vision that Maximus paints is that of a thoroughgoing attention to detail rather than a broad-brush oversight, extending to the 'teeming details that exceed the comprehension of man's mind.'[348] All of this might seem quite 'micro-managing,' but Maximus elsewhere emphasises our active participation in the detailed providential oversight of our lives. In his first letter to a patrician named George, Maximus states: 'Making difference between things that depend on us and what does not depend on us, let us believe that the fulfilment of the second entirely depends on God's Providence, while the fulfilment of the first besides God's Providence depends also on our will (γνώμη).'[349] According to Benevich, this means

[347] For the ancients, it would have been difficult to imagine mankind being capable of fundamentally altering the fabric of the natural world, hence Maximus was on safe ground to assert that the rational principles upon which the universe was built were inviolable. Nuclear fission, genetic engineering, ecological devastation, and the future possibility of transhumanism have made such thinking less intuitively obvious for us today. The boundary between Maximus' *logoi* (rational principles) and *tropoi* (modes of being) has become blurred, or so it might seem.

[348] 'For if the differences and variations among human beings are great and indeed incomprehensible, as are the differences between one man and another, and even between one man and himself, in ways of life and customs, in opinions, choices, and desires, in their needs, their skills, their knowledge, and pursuits, in the virtually infinite thoughts of their minds, and in all the changes they undergo in all that happens to them in each day and hour...then it follows of necessity that providence, which by precognition [*prognōstikōs*] has comprehended all the particulars in their individuality, will appear to be different, manifold, and complex, and adapt itself to all the teeming details that exceed the comprehension of man's mind, extending itself to fit each particular thing or thought, down to the minute movements that occur in the soul and the body.' *Amb* 10.104, DOML1:317-9

[349] *Ep* 1, PG91:368D, translated by Benevich in Benevich, "Maximus Confessor's teaching on God's providence," 132.

that '[i]n the sphere of things that depend on us, that is, in the area of vices and virtues, a kind of interaction between our will and God's Providence either occurs or not. However, this interaction is not reduced in Maximus to a banal cooperation.'[350] The role of synergy between divine and human agencies must therefore be an important consideration of providence, but as this study is looking at the common denominator of biological creaturehood as it emerges through evolution, I will not dwell further on this type of providence that is probably only relevant to rational human beings.

4.4.3 Holomeric/delegative providence

An aspect of ontological providence worth emphasising is the way in which, for Maximus, the *Logos* attends to the whole-part relationships that comprise the universe. No category or mode of existence goes unnoticed, and nothing is exempt from bearing a rational principle that governs its self-existence and goal. Whether it be permanence, order, position, motion, harmonious conjunction of extremes through intermediaries, agreement of parts with wholes, unconfused union, succession of kinds without violation of nature—'all of this...[says Maximus]...clearly shows that all things are efficiently held together by the providence of God who created them.'[351] It is as if Maximus is claiming that God is not taking any short-cuts in his providence by caring only for general principles and letting the details fend for themselves. On the contrary, it is the particulars that really matter; without them there would be no universals since universals exist only insofar as they are immanently instantiated as particulars (see §3.3.1). Not only does God's providence extend to the entirety of creation such that nothing is devalued by being further away from him than anything else, but God also harnesses the goodness and rationality of what he has made to assist in the goodness and definition of other co-created creatures. As we saw in §2.4.4, the *logoi* '...are positively defined by their own *logoi*, and by the *logoi* that exist around them and which constitute their defining limits.'[352] Maximus does not speak explicitly, as Aquinas was later to do, in terms of primary

[350] Benevich, "Maximus Confessor's teaching on God's providence," 132.
[351] *Amb* 10.100, DOML1:311
[352] *Amb* 7.19, DOML1:101

and secondary causation, but this notion is implicit in his hierarchical thinking of the cosmos in which generic *logoi* emanate and help define specific and particular *logoi*. The whole dynamic structure is both held together as a whole by God (the *Logos*) *and* by each other (the *logoi*).

4.4.4 Convertive/teleological providence

A final aspect of providence is the recapitulation of all things in Christ, described by Maximus in terms of convergence or return (*epistroph*ē), corresponding to the reversal of the radii in his Dionysian circular image of the *Logos* and the *logoi*.[353] This is not to be confused with Origenist *apokatastasi*s, but an eschatological alignment of all things with the *Logos*, which in the case of human beings entails a moral alignment of their *tropoi* to their original *logoi*. It is a transformation rather than a restoration, and is made possible by the incarnate *Logos* who fulfils the task of uniting the extremes of the cosmos following humankind's failure to do so.[354] Jesus is the wisdom and prudence of God, whose wisdom sustains the universals and whose prudence 'embraces the parts from which they are completed...and through Himself draws into one those that are separated, dissolving strife among beings, and binding together all things in peaceful friendship and undivided concord...'[355]

4.5 Inconvenient truths about the *logoi* with respect to evolutionary change

It is clear, then, that Maximus recognises the fragility of the world and the need for divine stabilisation which is achieved by the *logoi* as they define parts and wholes and create a complex mutual enmeshment of the cosmos that prevents it from falling apart and diverging indefinitely. From this perspective it might seem that the *logoi* are fully concordant with evolution in that they supply the regulative principles that

[353] For more on the use of this image to describe providence, see: Vladimir Cvetković, "Predeterminations and providence in Dionysius and Maximus the Confessor," in *Dionysius the Areopagite between orthodoxy and heresy*, ed. Filip Ivanović (Newcastle upon Tyne: Cambridge Scholars Publishing, 2011), 146.
[354] *Amb* 41.6, DOML2:109-10
[355] *Amb* 41.11, DOML2:119

hold things together in states of mutual dependency, cooperation, or coalescence. While all this may be true, we must now confront some 'inconvenient truths' of the *logoi* that tend to jar with the canonical view of evolution being a process of haphazard change resulting from the accidental matching of randomly-generated variants to a heterogeneous and ever-changing environment. Four inconvenient truths about the *logoi* will be considered in this chapter—their inviolability, purposefulness, immanence, and all-determining nature—leaving a fifth—their goodness—to be addressed in Chapter 5.

4.5.1 The inviolable logoi

Perhaps the most obvious incongruent truth about the *logoi* with respect to biological evolution is that the *logoi*, according to Maximus, are unchanging and unchangeable, which implies that the creatures that they define must also have an indestructible natural identity. This is a recurring theme in Maximus' writings repeated in many different locations, as the following examples illustrate:

> ...all beings, consistent with the principles [*logois*] according to which they were created, possess an inviolable and unchanging equilibrium in their natural identity, for from the beginning the Creator judged precisely what each thing would be, and how, and how much it would be, and so brought all things into being.[356]
>
> What human being...can know the intelligible principles of being [*tous logous tōn ontōn*] as they are in themselves, and how they are distinct from each other? Who can grasp how they have an immovable, natural rest, and a natural movement that prevents them from being transformed [*metapiptousan*] into one another?[357]
>
> Those who have made a careful study of the nature of beings say that one of nature's laws is the unwavering and unalterable permanence of the inner principle [*logou*] according to which each nature exists and came into being...If, then, this is true, it is obvious that the law of nature, which by necessity preserves inviolate the principle of nature [*hōsper ton logon aparabaton phulattei tēs phuseōs*], likewise maintains nature's place absolutely immovable according to its position.[358]

[356] *Amb* 10.37, DOML1:207
[357] *Amb* 17.8, DOML1:389
[358] *Amb* 31.7, DOML2:47-9

> For in general there has never existed, nor is there now, nor will there ever be, any nature among created beings, subsisting according to its own principle [*heautēs logon*], that is anything other than what it is at present; and it is not now nor will ever be in the future something it was not in the past.[359]

The inviolability of the *logoi* could hardly be plainer. Maximus even rules out the possibility that they could be 'transformed into one another'—as we might have hoped they could do if they were to correspond to genetic or phenotypic identities.

I am not the only one to notice this problem. Vincent Rossi, a former student of the Metropolitan Kallistos Ware,[360] has written a rather polemical paper in which he vehemently rejects the possibility that the Confessor's theology could support an evolutionary cosmology, insisting instead that it 'positively militates against such a view' and that it is 'particularly refractory to evolution.' As negative interpretations of Maximus and evolution are hard to come by, I will use his paper as convenient foil in this and the next section. Amongst his many arguments is one directed at the inviolability of the *logoi*.[361]

Rossi claims that the fact that evolution entails a continuous transformation of living creatures puts it at odds with Maximus' cosmic vision in which the fixity of created nature is rooted in the *Logos*, and which, he says, is also an important 'Chalcedonian principle.' Interestingly, Rossi concedes that a limited amount of change in creaturely form *is* permitted within Maximus' vision and that this accounts for variations *within* created kinds, such as the differences between individual members of the same species that allow the species as a whole to respond in a versatile way to new environments.[362] The explanation for this exception is to be found in Maximus' distinction between 'essential nature' (*logos phuseos*) and 'mode of existence' (*tropos hyparxeōs*). There can be, he thinks, no change of essential

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[359] *Amb* 42.30, DOML2:179

[360] Rossi, "Clash of the paradigms: the doctrine of evolution in the light of the cosmological vision of St. Maximos the Confessor." The paper contains no page numbers so the following quoted extracts lack page number references.

[361] Rossi raises three main categories of objections to evolution: 1) the unproven nature of evolution as a scientific 'fact'; 2) the materialistic world-view that accompanies evolution; and 3) various details of the evolutionary process that are at odds with Maximus' *logoi* doctrine. In this study I am only interested in objections in the third category.

[362] He mentions the iconic examples of Darwin's finches and the Peppered Moth.

natures since God's wills and designs are irrevocably predetermined in the *Logos*, but there *can* be differences in the way that those essential natures are expressed at the level of individual creatures in the different modes in which they can exercise freedom—all within the bounds of their created natures.[363] So, while Rossi rules out any macro-evolutionary departure from pre-fixed natural kinds, he does seem to accept the possibility of some micro-evolutionary change allowed by limited changes in a creature's mode of existence.

As for the Chalcedonian principle being violated, Rossi does not fully explain what he means by this. He is perhaps suggesting that the metaphysical principles describing the union of the divine and human nature in the incarnation should also apply to the 'union' of separate created natures as they co-exist in time and space on earth. Just as the divine and human natures combine in one hypostasis 'without confusion, without change, without division, and without separation,' so too, the multitude of created living kinds co-habit, exchange, compete, and reproduce, but without undergoing any substantial change that would lead to their natures becoming mingled.[364] Why the metaphysics of the incarnation should have to apply to creation as a whole is not explained,[365] but presumably the need to avoid any 'con-fusion' of created and uncreated natures in the incarnation parallels the need to avoid any implication that God's eternal plans and wills for creation are confused and subject to change. If the Chalcedonian principle is violated and natures *can* change then not only is God 'changing his mind' but the target of his grace—human nature—is ephemeral and not clearly demarcated. Human nature may look sufficiently unique today but going back in time it would have become blurred into its ancestral intermediates, while going forward in time there is no guarantee that it will not become blurred once more following further evolution of the human species. This, I assume, is why Rossi invokes Chalcedon.

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[363] 'Every innovation, generally speaking, takes place in relation to the mode [*tropon*] of whatever is being innovated, not in relation to its principle of nature [*logon tēs phuseōs*], because when a principle is innovated it effectively results in the destruction of nature, since the nature in question no longer possesses inviolate the principle according to which it exists. When, however, the mode is innovated—so that the principle of nature is preserved inviolate—it manifests a wondrous power, for it displays nature being acted on and acting outside the limits of its own laws.' *Amb* 42.26, DOML2:173

[364] Presumably, he would be thinking here of the impossibility of different species to inter-breed.

[365] He does not argue for a cosmic incarnation, like Wood, for example.

As I see it, there are two problems with Rossi's appeal to the inviolability of the *logoi* in rejecting evolution. The first is a textual one. Whilst it is true that Maximus talks about modes of existence, it is not at all obvious that he intends to apply this principle to non-human living creatures in order to account for how individuals differ within a given essential nature (a point to be discussed further in §4.5.4). It is much more evident that Maximus applies the concept to explain how human beings exercise their moral free will, aligning their *tropoi* with their *logoi*, or not. But even if there is some textual ambiguity in Maximus' use of the word *tropos*, this ambiguity is overshadowed somewhat by Maximus' application of the *logoi* to *all* levels of creaturely existence from the highest to the lowest; even to the *logoi* of particulars and the *logoi* of *hypostaseis*. There is no getting round the fact that for Maximus, the *Logos*' investiture in the ontology of creation is all-embracing; the *logoi* as divine wills and specifications have gone forth into all things: nothing is left to chance. All of which is contrary to Rossi's allowance for some random (i.e. non-divinely willed) variation at the level of individual ontologies; an allowance that is ironically inconsistent with his objection to evolution on the grounds of its randomness.

The second problem with Rossi's appeal to the fixity of the *logoi* is that it betrays a naïve view of the relation between God and creation, and one which is not shared by Maximus. It seems that for Rossi, there must be a simultaneous and instantaneous relationship between the *logoi* of natures and the *Logos*. All created ontology must appear at once in order truthfully to reflect the unchanging nature of the divine will and divine mind. If created natures appeared *seriatim* then it would imply successive temporal stages in God's will, thereby impugning divine simplicity and impassibility. This, anyway, is how I interpret Rossi's claim that 'Evolution as transformism of species is denied in the Maximian cosmology by the preexistent *logoi* fixed in God and coming to existence as qualified substances in the sensible world in harmony with God's creative intentions.' In other words, significant change to the content of the sensible world is not possible because its content has already been timelessly (pre-)determined by God.

It is surprising that Rossi should seem to equate temporal change in the nature of creatures with temporal change in God's will or mind given what he says about Maximus' view of time:

> The whole tenor of the Confessor's thought aspires to the contemplation of things from the Godward standpoint. Hence, the notion of time will have a radically different value than that of the earth-bound conceptualizing characteristic of the scientific paradigm. From the Godward perspective of Maximos, simultaneity will predominate over sequentiality, and time will be seen to possess no "substantiality" at all.[366]

The simultaneity of time from God's perspective should therefore reassure us that any change in the essential nature of creatures over time, however that essentiality is observed or defined, should not imply that God has been temporally improvising or experiencing a serial stream of consciousness in his decision making. Maximus alludes to this in *Ambiguum* 42:

> But if the principles of things [*logoi*] exist permanently in God, then the purpose of God, who created all things, must be changeless concerning them—for God's purpose cannot be contained within the boundaries of time, nor does it admit of change relative to the changes that take place among the things that are subject to it—and thus the existences of these principles are clearly incorruptible.[367]

Here Maximus seems to be warning against drawing conclusions as to the mutability of God's will from the mutability of things in the world; what plays out as a changing temporal series in the world is eternally pre-enfolded in God.

Perhaps, then, I have misunderstood Rossi, and the reason for his objection to the mutability of created natures is not to do with any implied mutability in the divine mind but more to do with the simple fact that Maximus thinks that there is a permanency of discrete created natures. If Maximus believes that the *logoi* are inviolate, along with the essential created natures that they define, then to observe any change in essential created nature, or to deduce that any such change has occurred in the past, is to directly contradict Maximus' vision. Either Maximus or modern science is correct, but they cannot both be true. At least those are the only two options implied by Rossi's argument.

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[366] Rossi, "Clash of the paradigms: the doctrine of evolution in the light of the cosmological vision of St. Maximos the Confessor."
[367] *Amb* 42.15, DOML2:151

But this is a false dichotomy. While it is clear that Maximus believes the *logoi* to be immutable, it is not at all clear how the *logoi*'s immutability maps on to the immutability of living creatures, and it is also not clear to what extent Maximus' claim of *logoi* immutability is driven by empirical observation of the natural world or by the theological principle that God's will is steadfast and unchanging, as exemplified by the quotation above. It may well be the case that Maximus assumed that created kinds were fixed, which after all, would have been the default assumption amongst his Byzantine, Aristotelian-influenced peers, and would have been empirically obvious to any observer of the natural world at that time.[368] This empirical 'truth' about the natural world could have been what led Maximus to insist on the inviolability of the *logoi*. If there is an isomorphic correspondence between the *logoi* and the creatures they specify, then if creatures are fixed, so are their *logoi*. But would Maximus have claimed the same thing about the *logoi* had he known that natural kinds *do* change through time? If I am correct in thinking that the real value in claiming the immutability of the *logoi* lies in its affirmation of the goodness of creation then I suspect that even if Maximus *had* known about evolution and seen how creaturely kinds can undergo slow transformations through time, he would still not have altered his claim that the *logoi* are inviolable, though he might, instead, have modified his view as to *how* that inviolability is reflected in creation; that is to say, what exactly a *logos phuseos* corresponds to in the creature it specifies. We shall never know.

But the real question being asked here is not whether Maximus would have accepted evolutionary change had he been told about it, but whether the *logoi* doctrine on its own merits exhibits congruence with the facts of modern-day evolutionary biology. If, as previously discussed, the motivation behind the *logoi* doctrine was to affirm the goodness of creation arising out of its derivation from God—notwithstanding its *ex nihilo* actualisation—then it seems perfectly compatible with this motivation that the *Logos* could generate a continuous range of created natures, all of them inviolably fixed as firm intentions, but appearing to us as slowly

[368] 'Maximos assumes that natures are fixed—all his contemporaries did—but his thought is open to the idea of evolution, say, as a way of expressing God's providence...' Louth, "The cosmic vision of Saint Maximos the Confessor," 189.

varying populations. If everything ontological is planned and willed by the *Logos* it matters little whether those ontologies appear discontinuously separated over space or time, or not, since the presence or absence of discrete ontological boundaries between created natures is no prerequisite for their having been created in an intentional way. We do not need evolutionary diachronic change to see this. Even from a synchronic perspective, we now know (in a way that Maximus and his contemporaries could not) that the living world is enormously enmeshed, showing as much evidence of continuity as discontinuity. A classic example is a 'ring species' like a gull, which gradually changes around the circumference of the globe from one species to another: a frozen synchronic snapshot of diachronic evolutionary change.[369] Therefore, even if Maximus *did* think that natural essences were fixed in accordance with the commonly-held view of the time, the fact that we no longer observe this to be the case does not detract from the more important aspects of his *logoi* cosmology; namely, that all creatures are intentionally derived from the *Logos* but in a finite mode of existence.

Before leaving the subject of mutability, there is one final objection made by Rossi and this concerns the soteriological consequences of any evolutionary change. Rossi is worried on two counts: first, that individual created things might lose out on being united to God; and second, that mankind might turn out to be an ephemeral object of God's grace. With regard to the first concern, Rossi states:

> ...what makes each created thing different is its own unique inner essence (*logos*), and it is precisely that inner essence that is mysteriously one with the divine *Logos* as image to Archetype. The inner essences of all things are beloved by God and are thus inviolable and destined by the Divine intention woven into their inner beings to be drawn into unity with Him. They were not created to disappear, but to be consummated in their movement toward unity in their supreme Archetype, the *Logos*, the Essence of essences.

It is puzzling as to why Rossi thinks evolution has any bearing on an individual's movement towards God. It is populations that evolve and not individuals. Whatever it is that constitutes the unique identity of an individual creature and whatever it is that makes the individual creature capable of entering into a salvific relationship with

[369] Ridley, *Evolution*, 50.

God remains the same over its lifetime regardless of any evolution that might have taken place in its ancestors or might yet take place in its descendants. If there is any room left for the concept of fixed natural kinds within modern day biology it can perhaps be found in the notion of the invariant individual rather than the species.[370] No matter how much a human being undergoes *moral* change as she seeks to align with the *Logos*, and no matter how much a human being undergoes *physical* change as he suffers ageing, trauma or disease, the real personal identity of that human remains constant throughout. Tropic change does not nullify '*logoic*' permanence.

The second worry that Rossi articulates is more difficult to answer satisfactorily, and is a concern with evolution more generally rather than a concern arising uniquely from Maximus' *logoi* doctrine. The fact that humankind arose relatively late in earth's history and may continue to evolve into new species suggests to Rossi that Maximus' 'law of grace' has been violated, by which he means the special place that God has for humankind as the recipients of not just the natural law and the written law but saving grace. Specifically, '...evolution violates the law of grace by rendering human nature, and hence the humanity of Christ himself, contemptible as a transitory and evanescent form.' The possibility that *Homo sapiens* might continue to evolve into new species in the distant future raises some real theological issues, akin to issues raised by the possible discovery of sentient life on other planets. To discuss these issues here would take us too far off topic, except to say that they impact on many areas of Christian doctrine (e.g. Christology, soteriology, eschatology) that are relevant to many, if not all, Christian traditions. They are not issues specific to Maximus' *logoi* doctrine or to the Eastern Orthodox tradition per se, and for this reason, I will not attempt to address them any further in this study.

[370] This has been argued by Andrew Davison from a Thomistic perspective. Andrew Davison, "'He fathers-forth whose beauty is past change', but 'who knows how?': Evolution and Divine Exemplarity," *Nova et Vetera* 16, 4 (2018): 1067-102.

4.5.2 The teleological logoi

A second challenge to an evolutionary understanding of the *logoi* lies in the *logoi*'s intrinsic purposefulness[371] in contrast to the standard NeoDarwinian dogma that evolution is a happenstance affair. The *logoi* embody final causes as well as efficient and formal ones. As wills, they are not just intentions for God to create but the purposes he has for the things he has created.[372] Everything is on a course (*dromos*) from being, to well-being, and eternal well-being. The purposes are not only externally imposed but are internally 'lived out' on account of the *logoi* also being the *Logos*—a person, having personal goals. But rather than dwell on the case for the teleological *logoi*, which appears fairly self-evident from all that has already been said, I will instead return to Vincent Rossi's critique in which his second main theological objection concerns purpose. Rossi sums up his objection as follows:

> Since the created world is rooted in the *Logos* as Origin and End, the sacred cosmology of Maximos would oppose the evolutionary paradigm's axiom of the random basis of motion and change with the idea of the purposive nature of motion in all created beings as the aspiration implanted by God in each created nature to move toward its consummation in Christ...
>
> Evolution implies a form of motion that cannot be understood worthily of God, because since [sic] it is based on randomness and chance, it denies the purposiveness and all-knowing Providence of God in creation.

Here Rossi is restating what I have already described as the theological problem of lack of purpose in evolution. He opposes God's eternal purpose with evolution's randomness and chance, implying that if God were really in control then the events of evolution would show more signs of *being* controlled. To say that God achieves his purposes through wayward, random events is, for Rossi, to say something unworthy of God. There is no need for me to repeat what I think are the fallacies and

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[371] I prefer the word 'purposeful' rather than 'purposive' since it tends to imply an active intentionality towards a global goal, rather than a mere passive fitness for a local or immediate function.

[372] Dionysios Skliris, "The ontology of mode in the thought of Maximus the Confessor and its consequences for a theory of gender," in *Mustard seeds in the public square: between and beyond theology, philosophy, and society*, ed. Sotiris Mitralexis (Wilmington, DE: Vernon Press, 2017), 45-6.

inconsistencies of this viewpoint (see §4.3) so, instead, I will move on to the more subtle aspects of Maximus' *logoi* doctrine that have escaped the notice of Rossi.

Rossi thinks that the directionality of the *logoi* makes them incompatible with the aimlessness of evolutionary change, but we have already seen how, at a day-to-day level, an apparent lack of direction of events is no indicator that God is not in control to bring about his purposes. But do the *logoi* tend to *enhance* the sense of God's providential oversight of evolution and do they make it *more difficult* to comprehend? It will come as no surprise that, in my view, a '*logoic*' interpretation of evolution (or an evolutionary interpretation of the *logoi*) strengthens rather than weakens a vision of God's intimate involvement with creation from its inception and throughout its implementation. I will develop my argument for why I think this is the case in the next section (§4.5.3), but for now I will offer the following anticipatory remarks.

First, according to my reading of Maximus—but not Rossi's—the *logoi* are all-encompassing of creation, from the most generic genera to most particular individuals, with the result that God's providential oversight of the evolutionary process is comprehensive and complete. Naturalistic accounts of evolution are necessarily restricted to entities and causes that science can observe and measure, but this apparent autonomy does not preclude God's simultaneous oversight. Natural selection may seem to be an agent-less process, but as Doru Costache explains 'Selections are possible [only] because, beyond environmental challenges and the survival of the species, before the universe began, the divine *Logos* drew the plan of a creation that would evolve...'[373] Putting to one side the question of the freedom needed for moral responsibility which only applies to humans (as far as we know), the teleological drive of the *logoi* is omnipresent, ensuring that no creature is allowed to drift into non-existence but always follows its God-given purpose. The same could *not* be said of Rossi's hybrid scenario where the *logoi* only determine the essential natures of creatures, leaving individual differences to be defined by their modal (*tropic*) status. Such a view I would describe as 'semi-deistic' in that God sets the general parameters but leaves the details to chance—and in the case of non-sentient

[373] Costache, "*Logos*, evolution, and finality in the anthropological research: towards a transdisciplinary solution," 258.

creatures it really *does* mean chance, since they have no independent agency with which to control their *tropoi*.

Second, the *logoi* offer a different way of thinking about divine agency in evolution, one that sees God's action occurring from *within* creatures rather than as an externally imposed force or an initially imposed starting condition. Rossi laments the tendency in modern science to, as he puts it, 'apotheosize force over form,' by which I take him to mean the tendency in science to prefer explanations in terms of efficient cause over explanations in terms of formal cause. Here we are in complete agreement—except Rossi misses an opportunity to see Maximus' *logoi* doctrine as a way of recovering the place of the formal cause in understanding evolution. If we are to take seriously Maximus' insistence that the *logoi* are: (1) the inviolably willed predeterminations of all things, (2) that they are constitutively immanent in creatures, (3) that they have been 'transported' from God to creation without loss of fidelity, and (4) that they are the very *Logos* of God, then surely theology should no longer hold evolution at arm's length, doubting its divine sanction, and hoping its more worrisome aspects would go away. It suggests to me that theology should instead be looking more positively for ways to integrate the *Logos* into the evolutionary narrative, reflective of his immanent involvement, his personal investment, and his effusive disclosure at all stages within what has been called a 'theodrama.'[374] It is time for theology to reclaim evolution for the *Logos*.

4.5.3 The immanent logoi

The evidence for the immanence of the *logoi* and the *Logos* in creation has already been presented in Chapter 2 with its panentheistic implications outlined in Chapter 3. No mention has been made so far of how this immanence might align with evolutionary change, and the question can be avoided no longer. Though it will initially appear to be problematic, it will, on closer inspection, prove to be an asset when trying to understand evolutionary change theologically. To provide some background orientation, I first need to show where my panentheistic reading of the *logoi* falls within the broad range of theories of providence and divine action.

[374] Celia Deane-Drummond, *Christ and evolution: wonder and wisdom* (London: SCM, 2009), 33-59.

4.5.3.1 Providence and divine action

Providence, from the Latin *pro-videre*, to foresee, is the idea that God has advance sight of the world's needs, by which he is able to uphold, sustain, govern, and respond to it.[375] Read maximally in the West, providence leads to virtues of confidence, patience, gratitude and expectation, though it also comes with the dangers of superstition, pious delusion, and fatalism.[376] Traditionally, providence is divided into General Providence (GP) and Specific Providence (SP), the former referring to the continuous dependency of the world upon God, without whom it would collapse into the nothingness from which it came, and the latter referring to God's personal relationality to the world. While GP emphasises the baseline inability of the created order to subsist autonomously, SP acknowledges God's action above the baseline to effect special change outside the normal law-like behaviour of GP. While GP is a continuous, all-embracing, unidirectional act of God, SP is a discontinuous, specific, and two-directional dialogue and exchange between God and his creatures.

There are two antitheses of providence. One is deism, in which God's creation is a singular act, endowing creation with autonomous powers and allowing it to progress of its own accord without hindrance from, or later interaction with, God. The implication would be that if God does subsequently take an interest in his creatures and wants to help them in some way then he has to intervene and disrupt the natural order he has put in place. The second is monergism: the attribution of agency solely to God at the expense of the freedom and the responsibility of intellectual creatures. Under monergism, providence collapses into divine self-interest as creation has no separate existence that could become the target of God's loving kindness. As Scheffczyk insightfully notes: 'A separate doctrine of Providence makes sense only where the world is seen as something ontic, possessing a relatively

[375] For this very brief introduction I have drawn upon the following: David Fergusson, *The providence of God: a polyphonic approach* (Cambridge: Cambridge University Press, 2018); Michael J. Langford, *Providence* (London: SCM Press, 1981); Leo Scheffczyk, *Creation and providence* (London and New York: Burns & Oates and Herder and Herder, 1970); Maurice Wiles, *God's action in the world* (London: SCM Press, 1986).
[376] Fergusson, *The providence of God: a polyphonic approach*, 1-2.

independent being vis-à-vis God, so that God must also set it a goal and assume its governance.'[377]

Since both creation and providence entail an interaction between God and his creatures, the question arises as to the nature of that interaction; whether it is something we can observe, investigate and understand rather than just assert from special revelation. Objects that are all-pervasive tend to be difficult to observe since it is difficult to adopt a detached perspective when immersed in the very thing we are observing. For this reason, GP, as a continuous, all-embracing act of God, is impossible to distinguish from the workings of the natural world with all its regularities and contingencies. Whatever natural mechanisms we uncover (whether through reductionistic or holistic analysis), they are all upheld by divine action according to GP, unless we take a deist position and claim that God is no longer involved at all. For these reasons, GP leads to the relatively uncontroversial notion of General Divine Action (GDA), which due to its all-pervasiveness and vacuity (in a good sense), renders it scientifically untestable and congruent with any discoveries that science can make.

It is only when we come to a consideration of SP that theology raises its head above the parapet to become a target for scientific critique. In order for SP to be 'special'—so it is often thought—there must be something different about the way God acts compared to how he does so throughout his GP, which raises the question as to how this so-called Special Divine Action (SDA) sits alongside his GDA. If GDA is congruent and non-interventionist with respect to known natural processes, does SDA, instead, intervene and interfere with those processes in a way that is potentially observable by the natural sciences? For some, these implications of SDA are not problematic. The bible writers, after all, paint a picture of an omnipotent God who supernaturally intervenes throughout history to achieve his purposes; added to which, the sporadic and unpredictable nature of those interventions makes it hard for science to investigate them in real time, and makes no difference to the normal

[377] Scheffczyk, *Creation and providence*, 176-77.

conduct of science.[378] For proponents of divine intervention, the laws of nature are descriptive rather than prescriptive, and causal closure of the universe is merely a methodological assumption that we do not have to accept. Intervention, they claim, is underserving of its pejorative connotations.[379] For others, however, the whole idea of God having to intervene in his very own processes is a mark of weakness rather than omnipotence and omniscience.[380] In response to this perceived impiety, various 'non-interventionist' models of SDA have been put forward to harmonise God's special action with the assumed causal closure of the universe.

The first approach is to accept the 'special-general' distinction in how God acts but to deny that it entails any difference in the actual mechanisms he uses. In what has been called 'subjective divine action', God's actions are ubiquitous and invariant with regard to his utilisation of natural laws and processes, *but it is our perception of those actions* which makes the difference to whether we deem them commonplace or out of the ordinary. Not surprisingly, this view has received severe criticism, evoking quips such as 'God's *inaction* in the world' or 'a sit down and watch God'.[381] Not only does it subsume SDA into GDA, but it also runs the risk of denying any action on the part of God at all. There is no guarantee that any perception we might have of God acting in some way towards us (say by answering our prayers) actually aligns with God's intentions; everything is of our own construction, moulded by our own psychological and social environment. Subjectivists might claim however that God ensures that we *do* make the correct interpretations that align with his intentions to reveal, but then that begs the question of how God applies his SDA in our minds to effect such interpretations in the first place.

A more popular model of non-interventionist SDA is the objective type, often known by its acronym NIODA—'Non-Interventionist Objective Divine Action.' With this model, special acts of God are not figments of our pious imagination but are real

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[378] William P. Alston, "Divine action: shadow or substance?," in *The God who acts: philosophical and theological explorations*, ed. Thomas F. Tracy (University Park, PA: The Pennsylvania State University Press, 1994), 49.

[379] Alvin Plantinga, "What is "intervention"?," *Theology and Science* 6, no. 4 (2008): 369-401.

[380] Speaking, I suspect, for many, Scheffczyk objects that '...for God to intervene directly in the order he has once set up would not only be repugnant to the judgement we have reached by examining reality; it would be repugnant to God's own perfection.' Scheffczyk, *Creation and providence*, 200.

[381] Nicholas Saunders, *Divine action & modern science* (Cambridge: Cambridge University Press, 2002), 23-24.

events intended by God to evoke awe and wonder, to communicate his intentions, or to effect some change. The challenge for NIODA proponents is to see how all this extraordinary action occurs without God breaking any of his own laws; that is to say, without infringing the causal closure of the natural world. As Sarah Lane Ritchie has pointed out, two philosophical presuppositions are implicit in NIODA.[382] The first is the privileging of scientific knowledge and the second is an assumption of incompatibilism with regard to divine and creaturely action. The scientific privileging is perhaps understandable given the empirical success of science, the tendency for God to work through natural processes, and the rarity of miracles. The incompatibilist assumption is, however, more problematic. It verges on incoherence because a causally closed, fully deterministic system is by definition one which excludes any divine action if God is outside nature. How then does God gain a foothold within his own hermetically sealed system to effect any SDA? In practice, NIODA proponents break the impasse by allowing that the natural world is not completely closed after all, but offers restricted entry points for God to act without being noticed: 'causal lacunae' or 'hidden variables'[383] by which God's agency can, as it were, interface with the universe: what Austin Farrer famously dubbed the 'causal joint'.[384] Without a causal joint, the relation of God to the world is one of either complete independence (deism) or complete control (monergism or occasionalism). With a causal joint, God can share his agency with the world in a zero-sum fashion; for example, 60% God + 40% Creatures. At least these would appear to be the available alternatives.

[382] Sarah Lane Ritchie, *Divine action and the human mind* (Cambridge: Cambridge University Press, 2019), Ch.2.

[383] The ignorance of which leads to the assignment of probabilities less than one and greater than zero for the occurrence of events. See: Elliott Sober, "Evolutionary theory, causal completeness, and theism: the case of "guided" mutation," in *Evolutionary biology: conceptual, ethical, and religious issues*, ed. Paul R. Thompson and Denis M. Walsh (Cambridge: Cambridge University Press, 2014), 31-44.

[384] Austin Farrer, *Faith and speculation: an essay in philosophical theology* (Edinburgh: T&T Clark, 1988), 65.

Various locations have been claimed for the putative causal joint, such as quantum events,[385] chaos,[386] whole-part interaction of the universe,[387] and the human mind.[388] Once God has achieved a specific action via the causal joint, the resulting phenomenon, if it were ever brought to the attention of science, would need to be assimilated under the 'laws of nature.' However, as it would be difficult to imagine how our current laws could flex to accommodate what could be the 'random' actions of a personal agent, some have posited 'higher laws' that might forever be inaccessible to science.[389] The 'Divine Action Project'—a collaboration between the Vatican Observatory and the Center for Theology and the Natural Sciences—has spent twenty years exploring these and other candidates for God's non-interventionist action in the world and there is, as yet, no sign of a consensus.[390] This has led Nicholas Saunders to lament that contemporary theology is therefore in a state of crisis;[391] an exaggeration that demonstrates how fixated the science-theology community has become on NIODA mechanisms to the neglect of another option: 'theistic naturalism.'

4.5.3.2 Theistic Naturalism

Theistic Naturalism is an entirely different way of thinking of divine action that, according to Sarah Lane Ritchie, refuses to engage in the interventionist/non-interventionist debate and eschews the fundamental distinction between natural

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[385] Robert John Russell, "Divine action and quantum mechanics: a fresh assessment," in *Philosophy, science and divine action*, ed. LeRon F. Shults, Nancey Murphy, and Robert John Russell (Leiden: Brill, 2009), 351-403.
[386] Robert John Russell, Nancey Murphy, and Arthur R. Peacocke, eds., *Chaos and complexity*, 2nd ed., vol. 2, Scientific Perspectives on Divine Action (Vatican City State and Berkeley, CA: Vatican Observatory Publicataions and Center for Theology and the Natural Sciences, 2000).
[387] Arthur Peacocke, *Paths from science towards God: the end of all our exploring* (Oxford: Oneworld, 2001).
[388] Philip Clayton, *Mind & emergence: from quantum to consciousness* (Oxford: Oxford University Press, 2004).
[389] See for example: William R. Stoeger, "Conceiving divine action in a dynamic universe," in *Scientific perspectives on divine action: twenty years of challenge and progress*, ed. Robert John Russell, Nancey Murphy, and William R. Stoeger (Vatican City State and Berkeley, CA: Vatican Observatory Publications and The Center for Theology and the Natural Sciences, 2008), 242.
[390] Their twenty year 'capstone' publication is: Robert John Russell, Nancey Murphy, and William R. Stoeger, eds., *Scientific perspectives on divine action: twenty years of challenge and progress* (Vatican City State and Berkeley, CA: Vatican Observatory Publications and The Center for Theology and the Natural Sciences, 2008).
[391] Saunders, *Divine action & modern science*, 215.

and supernatural. According to Ritchie, theistic naturalism reflects a 'theological turn' in the approach to providence and divine action. It is committed to theological frameworks emphasising God's immanence and interactive presence with all of nature as a normative feature of what it means to be fully natural, with no need to privilege the quantum world, chaos, or the mind as special channels for divine action.[392] God's action, according to theistic naturalism, is: 1) objective, in that it acknowledges the reality and intent behind God's actions (i.e. alleged actions are not always our subjective imagination); 2) non-competitive, in that it allows nature an autonomy that God does not need to suspend or disrupt (i.e. agency comprises 100% God + 100% creatures); and 3) non-scientistic, in that it rejects a metaphysical naturalism that prioritises science in determining what is real and refuses to capitulate to science in the way that theories of NIODA arguably do. Despite their mutual opposition, non-interventionism, interventionism, deism, and metaphysical naturalism all share, ironically, in a common presumption that nature's default ontology is one that excludes divine action.[393] Theistic naturalism stands outside this contest and declares them all to be mistaken. God's transcendence does not come at the expense of his immanence: 'nearness to God and genuine creaturely autonomy grow in direct rather than inverse proportion to God's transcendence.'[394] Ritchie describes three paradigm examples of theistic naturalism which I will summarise as Thomistic, Pneumatological, and Panentheistic. I will briefly outline the first two naturalisms before spending more time on the third, which not surprisingly, I will be arguing is the best fit for Maximus' immanent *logoi*.

4.5.3.3 Thomistic Naturalism

Thomistic theistic naturalism refers to models of 'double agency' or 'overdetermination' in which both God and creatures exercise their agencies without competition. There are at least three versions, attributable to Thomas Aquinas, Austin Farrer, and Kathryn Tanner. Aquinas's version makes reference to God's employment of secondary causal agents that are both sustained and empowered by God whilst

[392] Ritchie, *Divine action and the human mind*, 190.
[393] Ritchie, *Divine action and the human mind*, 312.
[394] Ritchie, *Divine action and the human mind*, 243.

retaining their individual freedom to act.[395] Austin Farrer's version points to the incommensurable gulf between God and creation that precludes the possibility of ever finding a causal joint or lacuna by which God can act unnoticed; indeed he argues that any attempt to explain the means by which God engages with creation would '...degrade it to the creaturely level and place it in the field of interacting causalities.'[396] Kathryn Tanner's version is similar, in emphasising the radical, non-contrastive nature of God's transcendence such that all divine action operates 'orthogonally' to the creaturely 'plane.' As a result, '[t]here need be no contradiction in saying relations that are free or contingent along the horizontal axis of created order are determined to be so in a vertical relation of absolute dependence upon divine agency'.[397] According to Tanner's scheme, there is no way for us to understand or explain how the two planes intersect or interact, for any such explanation would then form part of our universe and be subsumed by it and enter into competition with it. As Tanner explains, 'The difference between God and the world is an unnameable difference since, as the transcendental precondition for the possibility of all categorical distinctions, it is not itself specifiable by those same modes of distinction'.[398]

The attractive aspect of all these versions of double agency is that they respect an ancient apophatic understanding of God's ontological alterity and radical transcendence in which no comparison with creation is ever really possible. As a result, double agency is entirely compatible with evolution.[399] Proponents of double agency argue that it should not be a surprise to find mystery and paradox lying at the heart of any interaction between God and creation, and that accusations of incoherence are missing the point by assuming that finite analytics can embrace both

[395] Ignacio Silva, *Providence and science in a world of contingency: Thomas Aquinas' metaphysics of divine action* (London: Routledge, 2021).
[396] Farrer, *Faith and speculation: an essay in philosophical theology*, 62.
[397] Kathryn Tanner, *God and creation in Christian theology* (Oxford: Basil Blackwell, 1988), 90.
[398] Tanner, *God and creation in Christian theology*, 67.
[399] Nicanor Pier Giorgio Austriaco, "In defense of double agency in evolution: a response to five modern critics," *Angelicum* 80, no. 4 (2003): 947-66; Mariusz Tabaczek, "Thomistic response to the theory of evolution: Aquinas on natural selection and the perfection of the universe," *Theology and Science* 13, no. 3 (2015): 325-44.

God and creation.[400] A less attractive aspect of double agency theories, however, is their implication that God is external and distant from creation, operating as it were at arm's length, even if the operation is continuous and not deistic. And this is perhaps where other types of theistic naturalism can offer a more balanced perspective involving immanence as well as transcendence.

4.5.3.4 Pneumatological Naturalism

The second theistic naturalism—and the first that has more of an emphasis on divine immanence—is what Ritchie calls 'pneumatological assist,' though I would prefer to give it the broader title of pneumatological naturalism.[401] Pneumatological naturalism has roots in Pentecostal theology in which the tactile, affective and emotive take precedence over the cognitive and propositional. The experience of God's responsive activity is theologically normative with the result that nature is inherently involved with and charged with the Spirit's presence. The dualistic opposition of the natural and supernatural is rejected in favour of a wholly supernatural, enchanted world in which miracles are simply intensifications of the same divine presence and activity already inherent in creation. 'Acts of God' are not therefore additional content but greater access to, or awareness of, God's enduring presence. The somewhat static image of Tanner's dual ontic planes is replaced by a much more dynamic image in which nature is constantly changing and evolving in response to the Spirit 'blowing where it wills.' In some versions of pneumatological naturalism the Spirit is guiding nature to an eschatological end point, injecting new informational content to offer proleptic anticipations of the world to come for those with the eyes of faith to see. Compared to the other varieties of double agency, pneumatological naturalism would seem to be a step in the direction of greater divine immanence with an emphasis on the Spirit's power and spontaneity acting intimately and responsively on the creaturely plane, and with less emphasis on God's sovereign predetermination of the created order. It does, however, take a holistic view of divine action in which the Spirit

[400] David B. Burrell, "Divine action and human freedom in the context of creation," in *The God who acts: philosophical and theological explorations*, ed. Thomas F. Tracy (University Park, PA: The Pennsylvania State University Press, 1994), 103-09.
[401] Ritchie, *Divine action and the human mind*, Ch.9.

is all pervasive,[402] and so, in common with double agency, sees no need to look for any specific entry points for the Spirit to act.[403]

4.5.3.5 Panentheistic Naturalism

The third theistic naturalism considered by Ritchie, and arguably the most immanentist of them all, is the one she terms 'panentheistic naturalism.'[404] Largely based on Christopher Knight's Eastern Orthodox-inspired views, this model of divine action starts with a view of the world subtly different from that commonly assumed in the West. Instead of a world that can be left to its own devices into which God must intervene, this Eastern perspective is that God was never absent from the world in the first place: there was no 'pure nature' to which grace was added as a supernatural gift, but creation was already an act of grace.[405] Like its pneumatological cousin, panentheistic naturalism sees God actively involved on the created plane, but mediated by the *Logos* (Word) rather than (or as well as) the Spirit. While pneumatological naturalism sees the Spirit suffusing, enchanting or pervading the world, panentheistic naturalism sees the Word constituting, assuming, or embodying the world. The former still retains a sense of externality with the Spirit penetrating from the outside, while the latter is more fully immanent, with the *Logos* and the world being effectively co-inherent from the outset. For this reason, in some of his more recent work, Knight prefers to label his panentheistic model as 'incarnational naturalism.'[406]

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[402] The holistic and comprehensive nature of divine action shared by both Thomistic and Pneumatological Naturalism is in stark contrast to those views which see God acting from bottom up or top down. For an excellent account of this multi-level account of divine action, see: Mariusz Tabaczek, *Divine action and emergence: an alternative to panentheism* (Notre Dame, IN: University of Notre Dame Press, 2021).

[403] Ritchie does however point out differences of emphasis among proponents of pneumatological naturalism. For example, Amos Yong talks of the Spirit breaking into the natural order and locates the causal joint in the laws of nature which are forever changing in response to the Spirit's movement.

[404] Ritchie, *Divine action and the human mind*, Ch.8.

[405] Lossky, *The mystical theology of the eastern church*, 101.

[406] Knight's model has been developed in the following publications: Knight, *Eastern Orthodoxy and the science-theology dialogue*; Christopher C. Knight, *The God of nature: incarnation and contemporary science* (Minneapolis, MN: Fortress Press, 2007); Christopher C. Knight, "Theistic naturalism and "special" divine providence," *Zygon: Journal of Religion and Science* 44, no. 3 (2009): 533-42; Knight, "Theistic naturalism and the Word made flesh: complementary approaches to the debate on panentheism," 48-61; Christopher C. Knight, *Wrestling with the divine: religion, science, and revelation* (Minneapolis, MN: Fortress Press, 2001); Christopher C. Knight, "Divine action: a Neo-Byzantine model," *International Journal for Philosophy of Religion* 58 (2005): 181-99.

The choice of Word rather than Spirit as the vehicle of immanence also has the effect of prioritising rationality over power, and determination over freedom. Thus, Knight speaks of 'fixed instructions' woven into the tapestry of laws of nature that anticipate divine responses to all specific situations likely to arise in the course of cosmic history. Divine action is thereby a single act occurring outside space and time, though experienced by creatures as 'real-time' responses to contingent events. Importantly, since these fixed instructions are: (1) constitutive of the material world and not new information injected at the appropriate time in history,[407] and (2) tantamount to the *logoi* of God, the obvious charge of a deism is defeated, since God can hardly be an 'absentee landlord' if he is already present as the very fabric of finite reality. The notion of fixed instructions has been developed further by some modern theologians along the lines of 'cosmic "if" statements'[408] and 'active information.'[409] It also resembles the ancient Stoic idea of *logikos spermatikos*, though with a much more dynamic aspect capable of addressing specific providence as well as general providence.

4.5.3.6 The logoi as Knight's 'Fixed Instructions'

It would not be surprising to find, given our shared starting points, that Knight's incarnational naturalism bears more than a passing resemblance to my own interpretation of Maximus' *logoi* doctrine, but it is worth looking closely to see where any similarities and differences might actually lie.

First, the word 'instructions' agrees with the *logoi* being premeditated rational actions resulting from the exercise of will, while the word 'fixed' points to the divine origin of those instructions, that is to say, outside space and time, unchanging, and encompassing the whole of the created order. If the fixed instructions are the *logoi*, and the *logoi* are the *Logos* (as Maximus insists), then the instructions are indeed as immutable and indefeasible as the *Logos* himself, at least from an eternal

[407] Contrary to Polkinghorne's model. See: Polkinghorne, *Science and Christian belief: theological reflections of a bottom-up thinker*, 76.
[408] Daniel W. Darg, "Cosmic if-statements," in *God and the scientist: exploring the work of John Polkinghorne*, ed. Fraser Watts and Christopher C. Knight (Farnham: Ashgate, 2012), 93-125.
[409] Wright, "Is informational causality primary causality? A study of an aspect of John Polkinghorne's account of divine action," 33-50.

perspective. From a finite perspective, the unfolding of the *logoi*, or the execution of the instructions, might appear to be the result of an extemporising agency, but this is only an illusion resulting from our own epistemological limitations.

Second, a more challenging question is what Knight's instructions are actually instructing: do they specify merely ontological events (creation proper), or do they also specify behavioural or psychological events, such as the sanctification resulting from prayer and virtuous living? The illustration that Knight uses of parents wanting to anticipate their daughter's financial needs by setting up conditional instructions with her bank might suggest the latter as well as the former. But this is problematic from a Maximian perspective. For Maximus, it is not a person's *logos* that changes when undergoing spiritual change but her *tropos*, or mode of being, and does so according to her free will.[410] Any so-called divine 'instructions' received by the human in these situations cannot have the same determinative ontological status as the *logoi*. Thus, if Knight wants the fixed instructions to cover all interactions with creation then, I would suggest, the Maximian *logoi* do not fit the bill. For the purposes of the current project, we do not need to consider the case of humanity since we are restricting ourselves to a common denominator of divine action that applies to all living creatures, though it is worth noting in passing, that granted the uniqueness of the human being with its divine image and free will, it would not be surprising if the *logoi*, acting as fixed instructions for purely ontological ends, were supplemented with other modes of divine action to account for the interaction of God with human volition. Thomistic or pneumatological naturalism may therefore be more appropriate models of divine agency in the case of God's interaction with human agency.[411] In this way, the deterministic implications of fixed instructions at the level of nature in general could be avoided for the special case of humans entering into personal and morally responsible relationships with God. Limiting fixed instructions to the ontological and not the psychological also serves to separate God's action from so-called moral evil attributable to human action, though as we shall see in the next

[410] Skliris, *On the road to being: St Maximus the Confessor's syn-odical ontology*, 46ff.
[411] This is consistent with David Fergusson's pluralist or 'polyphonic' approach in which he argues that providence should not be restricted to a single mode of divine action. Fergusson, *The providence of God: a polyphonic approach*.

chapter, it does not avoid the problem of natural evil, in particular that produced as a by-product of evolution.

Third, the interrelated and co-constitutive nature of the *logoi* is less explicit in Knight's fixed instructions but can be inferred to some extent from their fixed nature. If the fixed instructions represent a simple, unitary, and complete act on the part of God (as befits his divine simplicity) then their execution over finite chronological time must involve some sequential unfolding. If this unfolding were to be performed in a way analogous to an exterior agent, like a builder following instructions to build a house, then there is no reason to think that any of the intermediate stages would be viable products in themselves since they are merely a means to an end, or parts that will eventually form a whole. Human artists do not need to ensure that their tools and materials are themselves works of art; brushes, paints and canvass are merely instruments for the task of achieving the desired final painting. But this is not how God chose to 'paint' the cosmos according to incarnational naturalism. There are no dispensable transitional states since the person of the *Logos* is incarnated in everything. As instructions unfold, they embody new creatures which simultaneously personify new instructions for further creatures. *The instructions are simultaneously intermediates and end points*.[412] When viewed as a temporal series, the whole compass of created being takes on the appearance of an internally-derived hierarchy or network in which earlier instructions are found embedded within later forms; all

[412] The theological significance of God working through evolution to generate new creatures that are themselves instruments for future creatures was recognised as early as 1891 by J.R. Illingworth:

> Now when we look at nature in this way, and watch the complex and subtle processes by which a crystal, a leaf, a lily, a moth, a bird, a star realize their respective ideals with undisturbed, unfailing accuracy, we cannot help attributing them to an intelligent Creator. But when we further find that in the very course of pursuing their primary ends, and becoming perfect after their kind, the various parts of the universe do in fact also become means, and with infinite ingenuity of correspondence and adaptation, subserve not only one but a thousand secondary ends, linking and weaving themselves together by their mutual ministration into an orderly, harmonious, complicated whole, the signs of intelligence grow clearer still....All this is in perfect harmony with our Christian creed, that all things were made by the Eternal Reason; but more than this, it illustrates and is illustrated by the further doctrine of His indwelling presence in the things of His creation; rendering each of them at once a revelation and a prophecy, a thing of beauty and finished workmanship, worthy to exist for its own sake, and yet a step to higher purposes, an instrument for grander work.

J.R. Illingworth, "The incarnation and development," in *Lux Mundi: a series of studies in the religion of the incarnation*, ed. Charles Gore (London: John Murray, 1891), 139.

of which echoes what we have seen of Maximus' vision of the expanding and contracting hierarchy of the *logoi*. The evolutionary process is, according to panentheistic or incarnational naturalism, not only a process for producing the living, but also a *living process*, endued with an autopoietic power derived, no less, from the creator's personal presence in the very things he is making.[413]

Fourth, that everything is sustained and governed by the *logoi from the inside* is very much integral to Knight's incarnational model of divine action. According to Maximus' understanding of God's providence, everything is upheld not just through God's power to keep finite being in existence but also through his loving delegation to a complex equilibrium of secondary causes that maintains a balanced environment suitable for the flourishing of all creatures (see §4.4). This view does not pertain just from a synchronic perspective; it also applies to, and indeed is derived from, a diachronic unfolding of complex interrelations, or to put it in Knight's words, to a '...teleological dynamism [that] comes about, not through some external created "force," but through the inherent presence of God's word in the *innermost essence* of each created thing.'[414] In other words, the creative drive and accompanying purpose of the cosmos is 'pre-packaged' on the inside of nature rather than imposed from the outside of nature, with God creating through the Word's own propagation of himself into all creatures. Most emphatically, this does not mean that God is somehow the material cause of creation, budding off his own body to form the cosmos, but only that, via his ideas/energies/person, he is the original, fixed source of the rational, intelligible content of all that is, even while the mode of existence of the cosmos (the closest thing to a material cause) is that which is truly *ex nihilo*.

Having located my own partially panentheistic understanding of the Maximian *logoi* within Knight's incarnational naturalism, we must now consider how this uniquely Eastern model of divine action bears upon the problem of evolutionary dysteleology, beyond the more general theological concerns already mentioned. I

[413] The change in perspective from external assembly to internal actualisation has the effect of also shifting attention from a chronological climax to a holistic all-encompassing *telos*. Hence, Knight comments '...all things are drawn—by their very nature and not by some external "force"—not only towards the eschatological state but also towards various intermediate goals associated with the journey towards that state.' Knight, *Eastern Orthodoxy and the science-theology dialogue*, 46.
[414] Knight, "Divine action: a Neo-Byzantine model," 184. Emphasis mine.

will suggest in the next two sub-sections two particular implications that are unique to *logoi*-based panentheism. The first, that it enhances our confidence in God's purpose in evolution, and the second that it poses no threat to Darwinism despite its 'preformationist' overtones.

4.5.3.7 Immanence enhances purpose

If the problem of purpose in evolution is a problem for all theology and all models of divine action, then one might ask: is it any worse for Knight's incarnational naturalism and my own partial, dynamic panentheism? In one sense it is, because God's immanent participation in creation makes it all the more puzzling as to why God should have taken such a long and circuitous route utilising such a 'noisy' process. In another sense, however, it is not. The fact that God has vested himself in creation and the creation process means that any apparent deficiency, must, by definition, be an illusion and an artefact of our finitude or sinfulness. If, within the grand drama of evolution, the chronological intermediaries are as much embodying the *Logos* as the beginning and end points, then the entire performance must have meaning, dignity and value. All animals, plants, fungi, bacteria, no matter how quirky or serendipitously generated, are *logoi*-infused, and *Logos*-declaring. Even if, as some have argued, the ultimate purpose of evolution was the Incarnation of the *Logos* in Jesus of Nazareth,[415] the evolutionary intermediates leading up to Christ are not just instruments or parts to be assembled, but bear their own integrity as God's own creatures, formed from God's very own wills and intentions.

According to more externalist and Platonic understandings of the divine creative process, disorder and confusion might have been an expected outcome of

[415] For example, Chenoweth, who writes 'Seen through a Maximian framework, the end of evolution is not merely the advent of human beings, but a particular human being: Christ.' Chenoweth, "A Maximian framework for understanding evolution," 175. This plays into the hands of those who claim that lack of guidance implies lack of deity on the basis that any products of evolution not lying on the path to humanity appear wasteful and indicative of a lack of overall control and purpose. Alvin Plantinga also falls into this trap when he frames the evolutionary problem of purpose in terms of God's intending to create creatures *of a certain kind* being incompatible with the randomness of evolution. Affirming that God intended to create all creatures and not just certain kinds avoids this apparent mismatch between what God was aiming for and what was actually produced because even the apparently unsuccessful ephemeral species and individuals are fully intended. Alvin Plantinga, *Where the conflict really lies: science, religion, and naturalism* (Oxford: Oxford University Press, 2011), 11.

God's orchestration of inanimate matter in a state of flux, with God gaining the upper hand at the scale of universals but chaos reigning at the level of particulars. Such a vision might fit nicely with what we observe in evolution with a sense of progress at the level of phyla, classes, orders, families and species, but a sense of unpredictable contingency at the level of populations and individuals. But this is not Maximus' vision. For Maximus, everything—or at least everything belonging to God's good will—derives its ontological integrity from the *logoi*, whether they be the *logoi* of higher or lower taxa, the *logoi* of individual organisms, the *logoi* of interrelations between organisms, or the *logoi* of the hypostatic existence of every finite creature. As Andrew Louth remarks, '...because the world has been created by God through his *Logos*, it can no longer be regarded as a pale reflection of eternal reality, as with Plato's world.'[416] Absolutely nothing is left to chance, and anything resembling an uncaused object, property, quality, or event must be merely a reflection of our own epistemological limitations or anthropocentric biases.[417] For example, we are accustomed to thinking that a meandering course—say that of a river, a drunkard, or a dithering schoolboy—is the result of constraint, incapacity, or inattention, respectively. Obviously, none of these descriptions apply in the case of a traditional understanding of God, so we must be mistaken in thinking that the haphazard in evolution is a mark of God's absence.[418] On the contrary, it is a mark of God's presence very much 'in, with, and under' all things.

It is also important not to adopt an overly reductionist stance that seeks intelligibility only in the analysable and decomposable. While Maximus insists that each *logos* is also fully the *Logos*, he also points out that the *logoi* as a collective whole is also the *Logos* in a more communal sense. For this reason, we should step back and

[416] Louth, "The cosmic vision of Saint Maximos the Confessor," 188.

[417] 'Signs of divine purposiveness within creation may be much different and much more subtle than those we associate with human intentionality, and are probably not susceptible to detection by the sciences. Thus there may be such a divine intention or purpose driving evolution. However, the evidence for it is not embodied in concrete evolutionary history and products in an obvious or unambiguous way, susceptible to scientific analysis.' Stoeger, "The immanent directionality of the evolutionary process, and its relationship to teleology," 185.

[418] Nicola Hoggard Creegan lists three responses to the problem of divine hiddenness in evolution: deism (creation has no *telos*), process theology (creation has an evolving *telos*), and constructionism (nature has a fixed but unseen *telos*). The Maximian model I am describing would fit into the third category. Nicola Hoggard Creegan, "A Christian theology of evolution and participation," *Zygon: Journal of Religion and Science* 42, no. 2 (2007): 502.

consider the meaning of life in its entire composite state. When we do, we can see that it is not a rigidly uniform crystal lattice that can be broken down into self-similar fractal structures, but an immense network of entangled relationships, neither entirely random, nor entirely structured. Each creature may do its part of symbolising and imaging God (like a pixel on a TV screen or an ommatidium in the compound eye of an insect), but all creatures together (as total screen or eye) provide a higher fidelity panoramic image of the *Logos*—to be sure, still only a partial image, but one waiting to be transformed into the perfect image of the *Logos*.[419]

4.5.3.8 Immanence does not imply crude 'preformationism'

The second main category of implication to which we must turn when considering the compatibility of incarnational naturalism with evolutionary biology is that of its scientific validity. The idea that God works from the inside of nature, cascading his fixed instructions from within, might sound like the now scientifically discredited theory of 'preformationism,' in which organisms originate from miniature forms of themselves encapsulated within their parents, like nested Russian dolls.[420]

Originally an ancient idea, preformationism fell out of favour in the 19th Century to be replaced by epigenetics, the theory that organisms arrive at a final adult form by developing from simpler, premature forms, and having the ability to be affected by their environment.[421] Lamarck's theory of evolution was an example of such an epigenetic theory whereby an internal driving force towards greater complexity in individual organisms could be modulated by environmental selection and the resulting acquired characteristics transmitted to offspring.[422] Although Darwin initially supported Lamarck, the French school of evolutionary thought to which

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[419] As Andrew Davison notes, 'There is considerable promise in saying that the processes of evolution explore the ways in which the likenesses of the perfections of the divine essence can be exhibited and combined in varying degrees.' Davison, "'He fathers-forth whose beauty is past change', but 'who knows how?': Evolution and Divine Exemplarity," 1098.

[420] Ironically, the original meaning of the word 'evolution,' from the Latin *e-volvere*, 'to roll out of,' more closely describes preformationism than later theories of evolution, which could account for Darwin's initial reluctant to use the word (it does not appear in the first edition of *The Origin*).

[421] Dao H. Ho, "Historical perspective of transgenerational epigenetics," in *Transgenerational epigenetics: evidence and debate*, ed. Trygve Tollefsbol (London: Academic Press, 2014), 17.

[422] Stephen Jay Gould, *The structure of evolutionary theory* (Harvard: Harvard University Press, 2002), 175-81.

Lamarck belonged, with its predilection for internal teleology, was regarded with distaste in Victorian Britain where biologists were eager to find laws more similar to those of Newton in which objects respond passively to external forces rather than remain under the control of 'occult' internal drives.[423] Darwin's theory satisfied the prevailing 'physics envy' by supplying a similar externalist model for biological change. By analogy to gravitational attraction, the external environment provides the 'force' by which varying organisms can be filtered and selected, without the need for any internal propensities. As Depew and Weber have pointed out, the search for laws of nature to which physical or biological entities must comply fitted a concept of God whose will was supreme;[424] a will exercised at a distance through the mechanistic mediation of secondary causes—not quite a deistic picture, but one in which God stands aloof from his creation 'pulling the strings' or 'pressing the levers.'

In the light of this historical background, it is perhaps easier to appreciate why any notion of God's action taking place from the inside of creation or from the inside of creatures could be viewed, scientifically speaking, as a retrograde step, taking us back to Aristotelian thinking in which objects possess their own inner teleological drives.[425] There are, however, good reasons why such an admonitory reaction is misplaced. First, as Étienne Gilson has pointed out, the invocation of final causation is, strictly, a metaphysical move and not a scientific claim.[426] Even biologists use the teleological language of design as a convenient shorthand when explaining anatomical, physiological, cellular, and molecular functions, when they should really be talking of effects and not functions.[427] Incarnational naturalism is likewise a metaphysical description of the world that can be overlayed quite happily on any

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[423] Depew and Weber, *Darwinism evolving: system dynamics and the genealogy of natural selection*, 69.

[424] Depew and Weber, *Darwinism evolving: system dynamics and the genealogy of natural selection*, 68.

[425] There were some, however—most notably Aubrey Moore—who realised that Darwin's theory offered a way to reintroduce the Aristotelian notion of God's immanent action in creation, as opposed to the more Platonic externalist action typical of Paleyan natural theology. See: Aubrey Moore, "The Christian doctrine of God," in *Lux mundi: a series of studies in the religion of the incarnation*, ed. Charles Gore (London: John Murray, 1891), 41-81; Richard England, "Natural selection, teleology, and the Logos: from Darwin to the Oxford neo-Darwinists," *Osiris* 16 (2001): 270-87.

[426] Étienne Gilson, *From Aristotle to Darwin and back again: a journey in final causality, species, and evolution* (San Francisco, CA: Ignatius Press, 1984).

[427] e.g. see the three categories of biological teleology proposed by Mayr in: Mayr, "The idea of teleology," 124ff.

scientific explanation without challenging the science or becoming itself scientifically testable. Second, the divine action envisaged by incarnational naturalism is immanent not just to living creatures and their phylogenetic lineages but to the whole of creation. There is nothing derived from God's goodness that escapes being defined and sustained by the *Logos*; and that includes the environments that living things occupy. The *logoi*, as fixed instructions, permeate everything, interacting in unimaginably complex ways to bring about new creaturely form.

There are three senses in which the *logoi* as immanent fixed instructions might be deemed 'preformationist,' only one of which, in my view, is mistaken. The first and clearest sense in which incarnational naturalism resembles preformationism is at a theological and metaphysical level: all creation is pre-formed in God as his pre-determined ideas and wills. It is surely not possible to be more 'pre-formed' than to reside in the simplicity and ineffability of the Godhead. Just *how* creaturely form does 'exist within' God without impugning divine simplicity is a separate matter (see Chapter 3), and just how this creaturely 'pre-form' emerges from the Godhead into creation is also an open question. But at this highest level, theology should not hesitate to affirm that incarnational naturalism is preformationist. Only a theological or metaphysical claim is being made and there are no problematic implications for science.

A second sense in which the *logoi* or fixed instructions can be seen to be preformationist without embarrassment to theology, is that they operate within—and indeed constitute—a closed physical system. They are a 'one-act' of God that unfolds itself into everything without the need for divine supplementation.[428] Nothing takes God by surprise and nothing has been left to chance, so there is no need for an injection of new information (in the way of Polkinghorne) or new instructions to compensate for anything new that has arisen or anything that was overlooked by God at the beginning. Despite appearances to the contrary, there is no real competition taking place between creatures. There is no struggle for existence, as if creatures are the sole bearers of their capacity to exist. All takes place within an unfolding whole in which the *Logos* is present at every juncture and within every

[428] Creation as one act or action of God was first argued by Maurice Wiles. Wiles, *God's action in the world*, 28.

apparent conflict. We shall have more to say about whether there are any limits to this picture in the next chapter when we come to consider aspects of creation that might not be considered to be good and might not be part of God's fixed instructions, but as an interim conclusion, a theological preformationism seems fully congruent with what might be called a naturalistic preformationism. That is to say, a preformationism not in the narrow, literal sense of all form being encapsulated in miniature within previous forms, but in the broader sense of a complete causal closure within the creaturely plane in which all future states of the cosmos are contained within past states with no need for any topping up from the 'outside' (as with theological understandings of divine intervention). According to this view, both the natural cosmos, and the fixed instructions of which it is comprised, are one and the same closed system.

All that remains is to mention a third sense of the word 'preformationist' to which the fixed instructions do *not* correspond, and that is the original crude sense of linear encapsulation. We must not picture the *logoi* emanating from the *Logos* in solely a linear hierarchical fashion. To be sure, there is an element of such serial propagation to be seen in the hierarchical relationships that have arisen from phylogenetic descent, but it is a mistake to think that such lineages have arisen self-sufficiently with all the information needed for their evolution being compressed simply in the genomes of ancestors. No, the *logoi* required for directing evolution clearly includes not just genetic information but also phenotypic and environmental information; complex bundles or clusters of information, in fact, that co-evolve and participate in causal relations in complex, multiple directions.

In summary, therefore, as long as preformationism is understood in the broader sense of complete specification by antecedent causes then the unfolding of fixed instructions should find no opposition from the biological sciences.

Over and above all that has been said about the compatibility of divine immanence with Darwinian evolution, it should be noted that modern Darwinism is in any case, less 'contingentist' and 'externalist' than it used to be and hence more congruent with incarnational naturalism. Darwinism has itself undergone much evolution from its original Victorian ancestral 'species,' which has had the effect of bringing the science closer to the metaphysics of the Maximian *logoi*, even if there is

no necessity for them to be aligned. Of the many twists and turns that could be recounted in the evolution of Darwinism, two stand out as being particularly relevant to the current discussion: the changing significance of chance and the changing direction of causality.

With regard to chance, the initial hope was that Darwin would be the biological equivalent of Newton offering a mechanistic law by which descent with modification could take place. In this he succeeded. The replacement of purpose with mechanism, though scandalous to many, was at least consistent with the prevailing mechanical view of the universe in which God could be literally 'super-intending,' achieving his purposes from above. However, Darwin overstepped the mark in allowing chance to figure in his theory in a way that was not canonical within the ontology of the Newtonian tradition. The natural selection of statistical distributions was not seen as a 'true cause' (*vera causa*) and was seen as a threat even to the notion of a remote superintending God.[429]

As we have seen, this apparent lack of causality has persisted as a theological worry right into the present day, manifested in creationist arguments about the improbability of life evolving from random events, or the claim that evolution is an intrinsically random (i.e. a-causal) process—a perennial misunderstanding of the process of natural selection, which is ultimately a deterministic process.[430] While variants may indeed be randomly (a-causally) generated, their survival into future generations is very much *caused* by their ability to enhance their own survival and reproduction within their current environment. There is no reason why the *logoi* should unfold according to any particular causal logic and absence of any such logic has no bearing on their inviolability as God's wills and predeterminations.

Of course, natural selection is only one side of the coin; the side that is causally intelligible. The other side of the coin—the generation of variability—may be less so. Although much variation could, in theory if not in practice, be explained in terms of macroscopic causal chains (e.g. a virus inserting itself into a genome, or a

[429] Depew and Weber, *Darwinism evolving: system dynamics and the genealogy of natural selection*, 149.

[430] As argued in: Brendan Sweetman, *Evolution, chance, and God: understanding the relationship between evolution and religion* (New York and London: Bloomsbury Academic, 2015).

chromosome undergoing recombination during meiosis), some variation owes its origin to DNA base changes that find their ultimate cause in ontologically-indeterministic radioactive decay. Does this mean, then, that the production of such variants prior to their being selected lies outside the scope of the fixed instructions? I think not. God does not abandon his creatures. All variants, even those not on the line to future species (i.e. not selected for), are cherished by God and are just as much pre-willed and pre-defined as those that end up being selected according to causal principles that we can comprehend. This does not mean that incarnational naturalism should be hoping that the reigning 'Copenhagen' interpretation of quantum mechanics be superseded by the 'hidden variables' interpretation. Even if ontological indeterminacy is the 'end of the road' with regard to scientific understanding, the immanence of the *Logos* and the *logoi* guarantees that everything is as non-random as God himself, even if some 'deep-down' things appear, for the moment, to be unintelligible.

The second change that Darwinism has undergone in recent years is a softening of its traditional reliance on natural selection and genetic inheritance as the sole causative elements accounting for evolutionary transformation. The so-called 'adaptationist paradigm' has come under attack from various quarters (e.g. from neutralism, spontaneous emergence, and constraints), as has the inviolability of the Weismann barrier separating germ line change from somatic change. The net effect is to complicate considerably the facile image of new variants appearing randomly and reacting passively to selection pressures imposed from the environment. The relevance of all this to incarnational naturalism and panentheistic immanence is that biological evolution seems a lot more 'democratised' with respect to causal mechanisms than previously thought and therefore more congruent with a God who is working within the whole network of nature than with a God who acts by causing passive bodies to come under the influence of externally applied laws.

4.5.4 The determinative logoi

The fourth of the inconvenient truths about the *logoi* that tend to militate against a blind, aleatory evolutionary process is that their action appears to be exhaustively deterministic. As we saw previously, there are, it seems, no ontological levels or

corners of creation that escape being defined and specified by the *logoi*, either by single *logoi*, or by a combination of *logoi* including surrounding *logoi*. Except for the special case of human beings[431] (and possibly angels) who are free to exercise their wills in or out of line with their *logoi*, there is nothing else in nature that possesses autonomous powers of self-determination, nor anything that is left to chance. Nothing can come into being that is contrary to divine purpose.[432] This, at least, is how I am inclined to understand Maximus. The subject is, however, a neglected one in Maximian scholarship. Maximus does not explicitly address the question of the freedom of the *non-human* creation, so it is perhaps dangerous to draw conclusions from absence of evidence. Some have pointed out that creation is in a 'reciprocal dialogue' with God, but on close examination, the textual evidence seems directed at humans alone, with whom God enters into a synergistic relationship of wills.[433] Some have gone as far as claiming that the malleable mode (*tropos*) of existence that bestows human freedom also applies somehow to non-humans. This is something I must now address.

The question of non-human determinism is probably the most contentious part of my whole study, and all the more so because denial of non-human freedom deprives the theologian of that important escape route by which God can be exculpated as the author of natural evil, as we shall discuss in the next chapter. If God is not in direct control of the details, then he may be excused for any things that 'go wrong' as a result of those details.[434] Any apparent aimlessness or collateral damage in evolutionary history can then be blamed on nature's 'tactical' freedom while any apparent directionality and goodness in evolution can be credited to God's 'strategic' control or occasional intervention. In addition, a fully deterministic universe (in all

[431] *Amb* 42.31, DOML2:181, *Opusc* 1, PG91:21D-24B. This hybrid scenario of divine determination could be construed in terms of Plantinga's 'weak occasionalism.' Alvin Plantinga, "Law, cause, and occasionalism," in *Reason and faith: themes from Richard Swinburne*, ed. Michael Bergmann and Jeffrey E. Brower (Oxford: Oxford University Press, 2015), 141.

[432] *Amb* 42.16, DOML2:151-3

[433] Loudovikos, *A eucharistic ontology: Maximus the Confessor's eschatological ontology of being as dialogical reciprocity*; Nikolaos Loudovikos, "Being and essence revisited: reciprocal logoi and energies in Maximus the Confessor and Thomas Aquinas, and the genesis of the self-referring subject," *Revista Portuguesa de Filosofia* 72, no. 1 (2016): 117-246; David Bradshaw, "St. Maximus on time, eternity, and divine knowledge," in *Studia Patristica*, ed. Sotiris Mitralexis (Leuven, Paris and Bristol CT: Peeters, 2017), 79-93.

[434] Though he may still be held responsible for allowing the whole system in the first place.

things except human volition) would seem to condemn non-human life to a servile, robotic existence. Animals, plants and rocks become mere outgrowths of God with only their finite mode of existence to prevent them from being God himself. Some have argued that it is unfitting of God to 'micro-manage' creation in this way and that to let things progress autonomously from 'chaos to order' is a grander accomplishment than direct determination.[435] Others have argued that autonomous self-actualisation through contingent evolution was the *only way* in which God could have created certain biological values, including beings capable of entering into loving relationships with him.[436]

There are various versions of the view that God does not deterministically design all the events of evolution. One is that God sets up nomic regularity without concerning himself with the minutiae. Darwin famously asked Asa Gray, professor of botany at Harvard, whether he thought God had determined that a particular swallow should snap up a particular gnat at a particular instant. Gray's answer is not recorded, but many today would say 'no.'[437] Another more radical version is that God somehow coaxes rather than controls the world, or that God even responds as a passible being to creation (i.e. process theology).[438] But one can also find less extreme versions within the Eastern Orthodox tradition where the classical attributes of God, such as omnipotence, omniscience and impassibility, have been retained. For an example of this more doctrinally moderate approach, I turn to Doru Costache, who

[435] Michael J. Murray, *Nature red in tooth and claw: theism and the problem of animal suffering* (Oxford: Oxford University Press, 2008), Ch.6; Robin Collins, "Divine action and evolution," in *The Oxford handbook of philosophical theology*, ed. Thomas P. Flint and Michael C. Rea (Oxford: Oxford University Press, 2009), 246.

[436] Southgate, *The groaning of creation. God, evolution and the problem of evil.*, 48.

[437] A recent influential author who seems to take this view is Denis Alexander, who cites the Darwin-Gray exchange approvingly. Alexander, "Evolution, chance, necessity, and design," 1080-1. Another example is a paper by Eirkem and Søvik, who argue that evolution's value lies in the true novelty it can produce; novelty that is even a surprise to God! Asle Eikrem and Atle Ottesen Søvik, "Evolutionary theodicies — an attempt to overcome some impasses," *Neue Zeitschrift für systematische Theologie und Religionsphilosophie* 60, 3 (2018): 428-34.

[438] Examples include: Barbour, "Five models of God and evolution," 35; John F. Haught, "Darwin, design, and divine providence," in *Debating design: from Darwin to DNA*, ed. William A. Dembski and Michael Ruse (Cambridge: Cambridge University Press, 2004), 229-45; McDaniel, *Of God and pelicans: a theology of reverence for life*, 35; Bradford McCall, "The God of chance and purpose," *Theology and Science* 17, no. 1 (2019): 133-42.

is one of the few scholars from the Eastern tradition to have written on science-engaged theology, and on evolution in particular.[439]

Like me, Costache is not afraid to interpret the Maximian *logoi* in terms of constitutive informational structure rather than just divine wills:'

> In the conception of St Maximus, the universe and any part of it, including man, have a λογος φυσεως (του ειναι), a reason to be that constitutes the definition and sense of that being, determines it to be what it is, and makes its contemplation possible. Existing before time, the reason to be is the model/paradigm of that being but not the being itself, although it is not separated from it. The reason to be is a divine intention (which is the way God acts) that takes concrete shape in a dynamic model; it is an informational structure that lies at the being's core...[440]

But despite this similarity, Costache does not conclude that the *logoi* attain their ontological objectives in any straightforward execution of God's invincible will, even though he agrees that God's will operates internally within creation rather than from without. Rather, he argues that God's energies work in cooperation or synergistically with the forces of nature to achieve his ultimate purpose of cosmic deification. These points can be seen (highlighted by me) in the following extract:

> God has brought the universe into existence out of nothing, but in order to bring the cosmos from the initial chaos to the present state of consistency and complexity God has worked, and still does, within and through creation's natural movement. This secures the unity and connection of all things within the cosmos. What makes possible the permanent convergence of divine and cosmic factors is that matter—or created nature—is *supernaturally configured from within.* The

[439] Other scholars I could have drawn upon are Polycarp Sherwood, Lars Thunberg and Paul Blowers, each of whom tries to use *tropos* as the means by which a non-human creature can undergo change while its *logos* remains invariant. Sherwood appeals to *Amb* 15.5, DOML1:367, but the passage in question contains no mention of *tropos* in the Greek, and indeed Maximus refers there to the motion of creatures being 'according to the principle of flux and counterflux [*kata roēn kai aporroēn logō*]'—that is to say being brought about by *logoi* rather than *tropoi*. Thunberg and Blowers both make appeal to *Amb* 42, which as I shall argue, points only to the malleability of creatures during divine supernatural intervention, and not to any normal or natural agential freedom and autonomy that non-humans possess. See: Sherwood, *The early Ambigua of Saint Maximus the Confessor and his refutation of Origenism*, 165; Thunberg, *Microcosm and mediator: the theological anthropology of Maximus the Confessor*, 74-5; Blowers, "Unfinished creative business: Maximus the Confessor, evolutionary theodicy, and human stewardship in creation," 180.

[440] Costache, "*Logos*, evolution, and finality in the anthropological research: towards a transdisciplinary solution," 257.

> divine configuration of matter refers to the *rational principles* in things, by which the pretemporal blueprint of the universe is translated into the concreteness of created existence, and to the *divine energies* that permeate the cosmos. As a result, the universe is an open field for the exercise of divine activity, an activity which, *due to God's humble adjustment to the circumstances of the creation, operates in conjunction with the natural factors at play in the universe*.[441]

But where, we might ask, does the universe—especially the non-sentient, non-conscious universe—gain its autonomy and freedom to act alongside the *Logos*, given that all things, from the most generic to the most particular, have according to Maximus, been pre-defined by the *Logos* before the foundation of the universe? For Costache, drawing on the work of Dumitru Stăniloae and John Zizioulas, the answer seems to lie in the *mode of existence* of all things which gives all finite ontology a certain energy of its own, enabling it to enter into a synergistic relationship with God. The following passage bears this out:

> A being can be all that is inscribed in its λογος φυσεως; its possibilities are rendered concrete in the manner of its being (τροπος υπαρξεως) or its physical/natural movement (κινησις φυσικη). Its directed becoming or natural movement leads to the activation and complete fulfilment of the being's possibilities (ενεργεια), to its perfect state and shape, a process that takes place by the wisdom and in the presence of the organising *Logos*.[442]

Costache attributes creation's plasticity or flexibility to its mode of existence (*tropos huparxeōs*), a term often used in connection with the Trinity,[443] and which Maximus does apply to the miraculous transformations that creatures can sometimes

[441] Doru Costache, "The Orthodox doctrine of creation in the age of science," *Journal of Orthodox Christian Studies* 2, 1 (2019): 63. Emphasis mine.
[442] Costache, "*Logos*, evolution, and finality in the anthropological research: towards a transdisciplinary solution," 257. Italics original.
[443] See, for example, *Amb* 10.39, DOML1:209, *Amb* 23.4, DOML2:9 and Skliris' account in: Skliris, *On the road to being: St Maximus the Confessor's syn-odical ontology*, 43-4. Another writer to invoke the idea of a flexibility in nature is Radu Bordeianu, who borrows Stăniloae's term 'plasticized *logoi*' to refer to the *logoi* in creation that are capable of being corrupted by human action. See Bordeianu, "Maximus and ecology: the relevance of Maximus the Confessor's theology of creation for the present ecological crisis," 105.

undergo.[444] However, it is difficult to find any evidence that Maximus thought non-human creatures could somehow modify their own *tropoi* or that their *tropoi* could spontaneously depart from their *logoi* without God's intervention.[445] To be fair, Costache does not employ this concept to address theological challenges posed by evolution as that is not his main objective. However, Costache's view of a synergy between the *Logos* and creation via the *tropos huparxeōs* does offer a possible route to denying that there is in fact a problem of purpose in evolution. It provides a basis for arguing that what we see as the apparently erratic and unpredictable course of evolution is simply a product of creation exercising its own autonomous energy towards greater complexity, all the while being conditioned by God's immanent blueprint of final cosmic deification. This will no doubt be an intuitively attractive option for many, but there are some serious problems with any approach to divine action in evolution that might appropriate Costache's views of *tropos* and synergy, at least within a Maximian framework.[446]

First, it seems to be a reversion to an externalist account of creation in which God interacts with the world from the outside. Creation is first brought into existence as the 'other' and then God enters into synergetic relations with it, as if there is a 'pure nature' to which grace is added as a supernatural gift, contrary to Lossky's famous maxim.[447] The issue remains even if the meaning of 'synergy' is given the additional Chalcedonian twist of a hypostatic union of two different natures. As we

[444] *Amb* 42.26-29, DOML2:173-9. As John Zizioulas comments, 'According to [Maximus]…everything that is said to exist possesses a *logos physeos* or *ousias* and a *tropos hyparxeos*, a hypostasis. There is no substance "in the nude," as it was already observed by the Cappadocian Fathers, and this means for Maximus that there is no substance in the world that does not possess its *tropos*, its mode of being.' See: Zizioulas, *Communion and otherness*, 150-51.

[445] According to Andrew Louth, '...the fall only affects rational creatures, as it is only the possession of a rational will that makes it possible for *logos* and *tropos* to get out of alignment.' Andrew Louth, "St. Maximos' distinction between logos and tropos and the ontology of person," in *Maximus the Confessor as a European philosopher*, ed. Sotiris Mitralexis et al. (Eugene, OR: Cascade Books, 2017), 160. In a personal communication, Fr Louth has written, '...so far as I can see Maximos only uses *tropos hyparxeōs* of humans, for in the case of animals, lacking freewill, the *tropos hyparxeōs* would have to be identical with the *logos tēs ousias*.'

[446] A similar admission of the freedom and autonomy of creation is made by Sergius Bulgakov. Despite equating the Divine Sophia with the Creaturely Sophia in a manner reminiscent of the *Logos* of God and the *logoi* of creation, he concedes that 'The relative novelty of the world compared with its divine "Principles" consists in the fact that the world has a certain self-creativity based on the divine forces implanted in it.' See: Bulgakov, *The bride of the lamb*, 55.

[447] 'The Eastern tradition knows nothing of 'pure nature' to which grace is added as a supernatural gift. For it, there is no natural or 'normal' state, since grace is implied in the action of creation itself.' Lossky, *The mystical theology of the eastern church*, 101.

saw in Chapter 3 when discussing Jordan Wood's reading of Maximus, the problem with any proposed hypostatic union of the *Logos* with creation as it stands today (as opposed to its final intended state) is that creation, even though incomplete and to some extent corrupted, is still entirely derived from God. There was never any primordial state that the *Logos* could assume *that was not already derived from and constituted by the Logos*. Therefore, to talk of God *creating* by interacting synergistically with what he has made is to create an unnecessary circularity in which the *Logos* unites with what is already himself.

Second, I am not sure that the use of *tropos huparxeōs* as the source of aimlessness in the evolutionary record can bear the burden expected of it. In *Ambiguum* 42, after reminding us that 'Every innovation, generally speaking, takes place in relation to the mode of whatever is being innovated, not in relation to its principle of nature...'[448] Maximus goes on to describe in some detail how various biblical miracles such as the burning bush and the turning of the Nile into blood are events in which the underlying natures (bush and river) are unchanged, but their modes of existence are transformed by God's action. In each example, the 'tropic' change is exerted by God from the outside and entails no change of creaturely *logos* of nature.[449] Considering, then, the evolutionary process: to make an exact parallel with Maximus' meaning, we would have to say that God draws out of creatures new *modes* of existence that, while not affecting their current nature, lead to the production of new natures in the future. For example, a creature having a defined *logos* might incur a germ line mutation (a new *tropos*) that renders some of its progeny marginally different from its parents, which after generations of selection, eventually leads to a speciation event (new *logoi*) at some point in the future. Here, the randomness of the tropic change, and the contingency of the selection pressure for the said tropic change, can be regarded as the source of the apparent aimlessness of the resulting lineage, while at the same time, the whole haphazard process has

[448] *Amb* 42.26, DOML2:173

[449] According to Skliris 'Maximus was trying to achieve in this way a certain synthesis between on the one hand a "Hellenic" demand for permanence, that would allow theoretical contemplation and which is satisfied by the concept of *logos*, and, on the other, a "Judaistic" demand for freedom and contingency inside history, where a certain dialogue between god and man can take place, through miraculous divine interventions, human answers, and surprising divine counter-answers.' Skliris, *On the road to being: St Maximus the Confessor's syn-odical ontology*, 46.

generated new *logoi* that turn out to be God's intended wills and designs all along. This, at least, is one way of interpreting Costache's views on divine activity 'operating in conjunction with the natural factors at play in the universe.' The change in *tropos* occurs in history as an entirely spontaneous and uncaused event (i.e. a 'natural factor at play') but the resulting generation of new *logos*, though appearing a natural historical event, is in fact rooted in God's eternal predetermined will and fixed instructions.[450]

At face value this construal of Costache's scheme produces an attractive compromise between creaturely freedom and divine determination in evolution. To my mind, however, it does not do justice to Maximus' *logoi* doctrine. If the *logoi* are really to be indefeasible as freely willed divine ideas then their execution cannot be dependent on autonomous modes of being, for then, either God is not in control of what emerges in evolution or he will have to act in competition with his own creation, intervening correctively to ensure his end goals are realised. That, at least is what follows if the *tropoi* arise as autonomous or uncaused events. If, however, the *tropoi were* to have antecedent causes then the *tropoi* would qualify as unfolding 'fixed instructions' along with all the other *logoi*, and would be indistinguishable from the *logoi* as essential informational components instructing and constituting creatures. In short, it is one thing to admit that evolution *looks* haphazard and directionless, but another thing entirely to say that it *really is*. But the latter is what seems to be implied by vesting so much in the *tropoi huparxeoi* as a-casual intermediaries in the creation process.

[450] Another way of describing the synergistic interaction between the *Logos* and creation, not considered by Costache, is Maximus' own metaphor of divine 'play' that can be found in *Amb* 71. As Blowers explains, 'The *Logos*-at-play bespeaks the Creator's urge to cajole and "tease" the creation toward its true destiny, using all created "playthings" at his disposal…"Play" and "chaos" together tell the tale of a *creatio continua* whereby the *Logos* is ever doing a new thing in providentially nurturing and transfiguring the cosmos…' Paul M. Blowers, "On the "play" of divine providence in Gregory Nazianzen and Maximus the Confessor," in *Re-reading Gregory of Nazianzus: essays on history, theology, and culture*, ed. Christopher W. Beeley (Washington, D.C.: Catholic University of America Press, 2012), 216. See also: Dmitry Kurdybaylo, "Some notes on "playing Logos" in Ambiguum 71 of St Maximus the Confessor," *Scrinium* 17 (2021): 239-54.

4.6 Chapter conclusions

Unlike some approaches to the problem of purpose, a partial panentheism incorporating these features of creation cannot dismiss the radical contingency of the evolutionary process as being something unintentional, instrumental, or incidental. Like the incarnational naturalism of Christopher Knight, it must acknowledge that an unavoidable conclusion of God's own participative investment in creation is that everything is at once 'a purpose fulfilled' and 'a purpose in motion'. No matter how insignificant a creature might seem, or how accidental its arrival in the world might appear, it has by virtue of its immanent *logoi*, the full dignity of a creature planned and willed by God for its own sake—a mini-incarnation of the *Logos* one might say. To that extent, every creature represents God's purpose already realised, having value to God as an end in itself. But that is not all. The *logoi* ensure that creatures are also bearers of future meaning. They carry fixed instructions that encode for new creatures and new creaturely interrelations which we can observe in the gradual unfolding of information within the evolutionary process and in the operation of God's providence. Such a Maximian-inspired vision stands in stark contrast to those apologetic responses to evolution that seek to distance God from the apparently random, chaotic or divergent. But keeping a distance is not an option for a panentheistic or incarnational understanding of God's action in creation and my argument has been that theology should welcome the repercussions of such intimacy between God and creation.

Chapter 5: The good *logoi*

5.1 Chapter aims

Whereas the aim of the previous chapter was to address the issues raised by the (blind) *process* and (lack of) *direction* of evolution, the aim of the current chapter is to address those issues raised by the *products* and *outcomes* of evolution: specifically, how the natural evil resulting from Darwinian natural selection could possibly be congruent with the goodness of the *logoi* and how it could ever be disclosive of the *Logos*.

Any mention of evil runs the risk of raising theological expectations to unrealistic levels, so I should say at the outset that my ambitions in this chapter are merely suggestive and certainly not intended to be conclusive. The subject of evil is well trodden and hugely controversial, not to say, at times, even incendiary. I enter this territory therefore with trepidation, knowing that with any sentence I could alienate the reader through over-simplification, trivialisation, or insensitivity, let alone unsound arguments. Having said that, the perspective I will be offering—derived from Maximus and the Eastern tradition—is relatively under-represented in the science-engaged theology literature, so I hope that I can be forgiven for painting some broad-brush strokes rather than presenting a detailed picture of how the *logoi* vision might be accommodated within the evolutionary problem of evil. What follows falls definitely into the category of 'scope for future research' and it is my wish that scholars within the Eastern tradition will pursue these lines of thought with greater knowledge and expertise than I can muster. In summary, I shall be offering three lines of argument for why my panentheistic reading of Maximus' *logoi* cosmology is not undermined by the collateral suffering, death and extinction that seem inevitable consequences of evolution.

The first is that to see the good *logoi* in creation we need to discern their true evolutionary endpoint, which is not a future biological 'omega point' or convergence, but a supra-temporal transformation to an eternal well-being in God. Even in a world

without sin, we would be mistaken if we took creation at face value without taking into consideration its dynamic character, the movement to its intended and ultimate purpose. Without this complete picture in which creation is seen as its end as well as its beginning and middle, we will always struggle to see it as being fully good.

The second is that, drawing on the relatively neglected Eastern notions of 'garments of skin' and a simultaneous fall and creation, I will be offering a third alternative between the two opposing tendencies of either rejecting evolution outright or interpreting its evils as necessary goods. This middle way will be to distinguish those aspects of Darwinian evolution that are as God originally intended from those that constitute secondary accretions. As far as I have read, no-one has ever suggested this before, but the Eastern interpretation of the Genesis account would allow this possibility without any conflict with evolutionary chronology.

The third, most speculative and controversial argument, is that the suffering taking place during evolutionary change is a suffering experienced by God himself. I will tentatively suggest that by virtue of the immanent coinherence of the *logoi* in God and creation, God suffers not just *for* creatures or even *with* creatures, but *as* creatures. Suffering is therefore in some sense not the evil we think it is, but is part of the very nature of God.

5.2 Defining the problem of evolutionary evil

The problem of evolutionary evil could be regarded as special case of the larger problem of natural evil, which in turn, is part of the well-known evidential problem of evil.[451] The existence of pain and suffering has always been sufficient to make some people doubt the existence of a good and omnipotent God, but the pain and suffering incurred by our animal ancestors as part of the process by which God has created the world may look to some like an egregious abuse of power in which animals have no choice but to suffer as instruments for the sake of some greater purpose. Animals

[451] Daniel Howard-Snyder, ed., *The evidential argument from evil* (Bloomington, IN: Indiana University Press, 1996); Michael L. Peterson, ed., *The problem of evil* (Notre Dame, IN: University of Notre Dame Press, 2017).

that by and large have no capacity for moral choice or culpability become pawns in some cosmic drama or 'horror show' orchestrated by God.[452] The problem is exacerbated by a number of salient facts about evolution that are easily overlooked. In his recent book on the problem of animal suffering, John Schneider points out four aspects of the Darwinian world that highlight the seriousness of the moral problem of evolution.[453] First, the deep evolutionary time over which evolution has taken place means that suffering is no mere 'blot' on the otherwise clean record of God's action in the universe. God took a long time to get where he wanted to in creating through evolution. Admittedly the worst suffering had to await the evolution of complex nervous systems, but that was still hundreds of millions of years ago. Second, the plurality of different animal worlds that have been left by the wayside en route to our current world is quite astonishing. Over 99% of species that have ever lived have gone extinct, and many of those represent groups that have very different body plans than exist today. Third, bacteria, viruses and other parasites—what Schneider calls 'anti-cosmic micro-monsters'—have plagued our world from the very beginning, causing immense suffering and death, often through prolonged disease, as opposed to the relatively quick death of a predator killing its prey for food. Fourth, evil, according to Schneider, is inscribed into the very essence of evolution through its being inefficient, wasteful and brutal. It is not simply that the outcomes of evolution include some incidental collateral damage, but the whole process of competition for limited resources is the engine by which 'new and endless forms most beautiful' emerge.

As a result of these four facts, the natural evil that has existed in the world is many times greater, quantitatively and qualitatively, than pre-modern people, ignorant of evolution, could ever have imagined. If we thought that the 'randomness' of evolution was a problem for a theology of creation, then the cruelty of evolution is even more problematic. Combined, they present a formidable challenge for any theology taking seriously the facts of evolution and the classic attributes of God, panentheism being no exception. In fact, the challenge is even worse for the kind of panentheism I have derived from Maximus. If the *logoi* are the *Logos*, if the *Logos* is

[452] Schneider, *Anmal suffering and the Darwinian problem of evil*, 36.
[453] Schneider, *Anmal suffering and the Darwinian problem of evil*, 20ff.

the Good, and if the *logoi* are constitutively immanent in all things directing their form and final end, then it would seem that the second person of the Trinity is implicated in all the cruelty of evolution; more implicated than if he were merely orchestrating events from the outside of creation, as in those accounts of creation that prefer to stress God's transcendence over his immanence. There are two reasons for this. The first is that if the *logoi* are exhaustively defining all levels of creation then there is nothing outside God's control, and no way of absolving God from perpetrating evolutionary evil. The second is that if the *logoi* are doing all this from the inside—as intrinsic formal and final causes—then they are, in some sense, also *in* the events of evolution and, it would seem, *in* the tragic outcomes of evolution. As we saw in Chapter 3 that sense of being 'in' creation can range from presence as divine ideas/wills, presence as divine energies, or presence as the *Logos* himself, depending on one's interpretation of Maximus. But whichever mode of presence one prefers, it would seem to make God not only complicit in evolutionary evil but also a perpetrator of it in the most direct and intimate way. That is to say, he not only wills it, but he also personally accomplishes it, not 'contracting out' the evil, but executing it himself. All in all, then, the evolutionary problem of evil is particularly problematic for Maximus' *logoi* cosmology and enough to cause one to wonder whether an evolutionary interpretation of the *logoi* is really compatible with the facts of biological evolution.

5.3 Questioning the problem of evolutionary evil

In chapter 4 I questioned the premise of the so-called problem of evolutionary dysteleology but nevertheless went on to accept it at face value and look for solutions to it from within my panentheistic account of the Confessor's *logoi* doctrine. The same questioning of the premise can be made in the current case of the problem of evolutionary evil, although now, I do not wish to ally myself with those who might attempt to do so.

The questioning takes two forms. The first—sometimes known as NeoCartesianism—is to deny that there is a problem on the grounds that non-human

animals do not suffer in a way that is morally problematic.[454] The cognitive capacity of animals, it is claimed, is too limited to allow them to dwell on their pain, and thereby truly to suffer. Pain for animals is merely a signal for avoiding danger that is reacted to but not contemplated; at least not in the self-conscious way by which humans can re-live their anguish. The second—known as Sceptical Theism—is to deny that there is a problem on the grounds that we ought to be sceptical about our ability ever to discern the true purposes that God has for allowing evil in general and animal suffering in particular.[455] Owing to our finitude compared to God's transcendence, it is even to be expected that we will never be able to understand all the entailment relations between God's purposes and the events of the world. Hence the problem of evolutionary evil can be defeated, even if it cannot be solved.

Neither attempt at denying the premise is sufficiently compelling for me to dismiss the problem of evolutionary evil as having no relevance to the Confessor's *logoi* cosmology. With regard to the first, modern scientific evidence would tend to support the view that 'higher' animals, and even some 'lower' animals (e.g. octopuses), do show many of the same behavioural and physiological responses to trauma, disease, threat, and loss as humans. It would therefore seem dangerous to assume that they do not share at least something of the same subjective experience of pain. Suggestions to the contrary are in any case not likely to go down well in many of today's societies that are much more sensitive towards animals and their welfare than ever before in human history. Besides, the problem of evolutionary evil extends to more than just subjective suffering. It also refers to the acts of violence and destruction that lead to the loss of life at an individual and group level. While the notion of violence might have no ethical relevance in the case of many non-rational creatures, the loss of existence of anything must surely be, almost by definition, an event that is not good, since to exist is to be good.

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[454] See discussion in: Schneider, *Anmal suffering and the Darwinian problem of evil*, Ch.3; Trent Dougherty, *The problem of animal pain: a theodicy for all creatures great and small* (New York: Palgrave Macmillan, 2014), Ch.4.

[455] Michael Bergmann, "Skeptical theism and the problem of evil," in *The Oxford Handbook of Philosophical Theology*, ed. Thomas P. Flint and Michael C. Rea (Oxford: Oxford University Press, 2011), 374-400.

The other tactic—of saying we can never be sure that there is not a solution—has its merits as a means of undercutting the logical problem of evil, but is of no help in evaluating whether alternative theologies of creation are more or less compatible with the disvalues generated by evolution. It has also been criticised as leading to moral scepticism: if we cannot be sure of reasons God has for allowing evil, then we cannot be sure we are doing the right thing in trying to prevent or ameliorate evil.[456]

I therefore conclude that attempts at forestalling the evolutionary problem of evil by denying that it is even a problem are ineffective. Like the vast majority of theologians, I will take it as read that evolutionary disvalues are a real problem in need of a solution, and even more so in the case of the panentheistic account of creation that I have argued best represents Maximus' *logoi* cosmology.

5.4 Creation immature, in motion, and future-defined

5.4.1 Falling upwards

My first apologetic for the evolutionary *logoi* in the face of evolutionary evil is that the *logoi* are not yet fully manifest owing to their dynamic and provisional status. Much goodness that we might have expected to see is missing, since what we are observing is 'work in progress,' an immature state containing only hints and shadows of the completed work to come. This is not to say that all aspects of evolutionary biology are tantamount to a privation of the good. Natural evolutionary evil might not be entirely attributable to what is missing. But before trying to explain how additional elements might have intruded upon what is good, we must first parse creation according to its spiritual *ontogeny* versus its spiritual *ontology*; we must distinguish that which is merely juvenile (but good) from that which is alien (and not good). Such is not an easy task for any theologian, but is particularly difficult within a Western Augustinian framework in which an historical fall from an initial paradisiacal

[456] Stephen Maitzen, "The moral skepticism objection to skeptical theism," in *The Blackwell companion to the problem of evil*, ed. Justin P. McBrayer and Daniel Howard-Snyder (Malden, MA: Wiley Blackwell, 2013), 444-57.

state tends to be seen as the default cause of all that is overtly evil or even simply lacking in perfection.

By contrast, the Eastern tradition prefers the notion of a 'falling upwards' from an initial immature state to an eschatological consummation or summing up in Christ.[457] In §2.4.2 we considered how the *logoi* are moving along a course (*dromos*) involving a beginning, a middle and an end, corresponding to Maximus' triad of the *logoi* of being, well-being, and eternal well-being. 'Being' is equivalent to creation, 'well-being' to history, and 'eternal well-being' to eschatology (outside space and time). The journey involves advancement, maturation and completion, and so any snapshot of creation from mid-way along the journey (i.e. from our current historical vantage point) should be seen in terms of the height gained since the beginning or, better still, the height yet to be reached until the end—rather than a *fall* from the beginning. As a result, the *logoi* are not fully theophanic until discerned from their end, their *logoi* of eternal well-being. As Skliris puts is, '…the Fall is a fall not from a perfect past where the perfection of man would have already been accomplished, but *a Fall from the future*, i.e., from what man might have achieved had he not fallen. In such a view, we can understand the meaning of Adam's Fall only *a posteriori* by examining what was the case in Christ.'[458] The unavailability or hiddenness of God in creation can thus be attributed, at least partly, to the fact that the universe is still coming into being. To read nature correctly we need to read it deeply rather than literally and superficially, and that means attending to its end as well as its beginning and present.[459]

The idea of ontological development rather than ontological decline allows for more hermeneutical flexibility when it comes to interpreting evolution and its products. Instead of being compelled to assume that all disvalue is due to sin, it becomes possible, at least in theory, to regard some disvalues as being marks of an ephemeral finite mode of being en route to a complete and permanent mode of

[457] Attributed originally to Irenaeus. See: Irenaeus of Lyons, *Against heresies*, trans. Alexander Roberts and William Rambaut, vol. 1, ed. Alexander Roberts, James Donaldson, and A. Cleveland Coxe, Ante-Nicene Fathers, (Buffalo, NY: Christian Literature Publishing Co., 1885), 4.38.3. Also: Gunton, *The Triune creator: a historical and systematic study*, 52-6.
[458] Skliris, *On the road to being: St Maximus the Confessor's syn-odical ontology*, 147. Emphasis original.
[459] John Haught, *Deeper than Darwin: the prospect for religion in the age of evolution* (Boulder, CO: Westview Press, 2003), 49.

deified being. But this is only in theory; in practice it is very difficult to separate disvalue due to sin and disvalue due to immaturity. One possible way of separating the two would be to compare the results of before and after the arrival of the first humans, in what might be regarded as a 'longitudinal control study.' Any disvalue prior to humans cannot be due to sin[460] and can only be due to immaturity, whereas any disvalue after humans came on the scene could be as a consequence of humanity's fall. By subtracting disvalue before and after the fall we could then isolate that which is due to the journeying *logoi* and that which is due to humankind's actions. Of course, when we make this comparison, we find that death and suffering in animals preceded the arrival of *Homo sapiens* and, as far as we can tell, the main mechanism of evolution by natural selection has remained the same across the transition. Though humankind has undoubtedly done much more damage to the planet than evolution could ever have done, the basic engine of biological evolution has not become worse as a result of the introduction of sin. At first sight it looks like we cannot attribute the vast majority of the extinction, death and suffering of non-human animals to human sin and it will therefore have to be put down to the natural and good progression of the *logoi* from well-being to eternal well-being.

5.4.2 Simultaneous creation and fall

But this is where the Eastern (and Maximian) tradition can offer a solution or an aid: the notion of a simultaneous and co-extensive creation and cosmic fall,[461] occurring outside time as a 'meta-historical event.' As Christopher Knight explains:

> We may not be able to say precisely when the first human decision was made, within our space-time universe, to "rebel against God" and thus to manifest within time a "supra-temporal" attitude already meta-historically chosen. Nevertheless, we cannot avoid accepting that such a decision must, at some point in time, actually have been made. Thus, even if we feel the need to speak of a gradual emergence of a moral sense, and of "Adam's" decision to rebel against God as being constituted in history by many individual decisions, we can still affirm the historical basis of the Genesis story *provided that we see the cosmic "consequences" of this rebellion as*

[460] Assuming causality always follows the arrow of time.
[461] Asserted by Maximus on three separate occasions: *Ad Thal* 59.12, CCSG22:61.260-70, FOTC:422, *Ad Thal* 61.2, CCSG22:85.8-21, FOTC:434, *Amb* 42.7, DOML2:135.

> *occurring before its historical manifestation. This is possible if we can see this historical manifestation as having been, in some sense, "anticipated" by God in his ordering of the creation.*[462]

The possibility of a simultaneous creation and cosmic fall, whereby God has already put in place the consequences of humankind's sin in anticipation of it, opens up new avenues of speculation as to what creation might have looked like according to God's 'original intentions.' If a cosmic fall was present from the beginning, then no longitudinal comparison of before and after the committing of the first sin is possible. Instead, we are free to speculate what might be the sin-induced components of creation that have been intrinsic to all creation at all times, the subtraction of which from the cosmos might reveal an underlying remainder that represents creation as it was originally meant to be: a creation that is still evolving, that is still not permanent or perfect but is nonetheless good by virtue of its being comprehensively defined by the *Logos*. As far as I am aware, no Eastern scholars in science-engaged theology have attempted such a speculative subtraction.

Western scholars, on the other hand, operating either within a literal biblical narrative of a cosmic fall coinciding with the arrival of the first humans, or a purely moral fall lacking in any cosmic consequences, have been burdened with how to explain the prevalence of evolutionary (non-human) suffering millions of years before the appearance of humans. Aside from Young Earth Creationism and some minority views such as retro-active causation[463] or a primordial angelic fall,[464] most have opted to accept the reality of evolutionary suffering as part of God's 'original' intended means of generating biological diversity and complexity. Without human sin to blame, reasons have therefore to be sought for why God chose to use evolution by natural selection rather than by some other means; those 'other means' usually

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[462] Christopher C. Knight, *Science and the Christian faith: a guide for the perplexed* (Yonkers, NY: St Vladimir's Seminary Press, 2020), 188. Emphasis mine. Rather than interpret the simultaneity of creation and fall in terms of divine 'anticipation,' Alexander Khramov prefers to see the fall as having actually happened, but in some pre-mundane existence outside our current space and time. Alexander V. Khramov, "Fitting evolution into Christian belief: an Eastern Orthodox approach," *International Journal of Orthodox Theology* 8, no. 1 (2017): 87. He lists a number of modern theologians who have taken this view, such as Canon Peter Green, Normal Williams, and Nikolai Berdyaev.

[463] William Dembski, *The end of Christianity: finding a good God in an evil world* (Nashville: B&H Publishing Group, 2009), Part IV.

[464] Michael Lloyd, "The fallenness of nature: three non human suspects," in *Finding ourselves after Darwin*, ed. Stanley P. Rosenberg (Grand Rapids: Baker Academic, 2018), 270ff.

amounting to some kind of instantaneous creation that bypasses suffering and death. Thus has arisen a plethora of evolutionary theodicies attempting to show how evolution might have been the only way, or the most fitting way, for God to have created life as we know it; and to show how evolutionary evil might be instrumental in securing some greater good for individual suffering creatures.[465] In other words, the fact that animal suffering pre-dates sin inclines many Western theologians to assume that evolution by natural selection must have always been God's original intention and it motivates them to look for ways of seeing the disvalues of evolution as being somehow good and natural—a move which has been described as a 'failure of theological nerve.'[466]

But this is not the only option available. By contemplating a creation that comes into existence with a cosmic fall, and by entertaining the possibility of an original upwards fall into greater maturity, the Eastern tradition can avoid the West's simple dichotomy of either Darwinian evolution *or* special creation, and can hold its nerve against the temptation to redefine evolutionary disvalues as being good, all the while avoiding any conflict with the findings of natural science. It opens up a third intermediate option of some kind of originally intended non-Darwinian evolution by which creation could reach maturity *without* the death, violence, suffering and wastage that characterises our present actual world. Or to put it in terms of the *logoi*: it offers a cosmos defined and unfolded by the *logoi* according to God's eternal plan and fixed instructions that realises his ambition to effect the mystery of his embodiment in all things. Anything we see in evolution that is incongruent with the *logoi* must therefore be something additional; an overlay or intrusion. As we shall see in the next section, the Eastern tradition has a name for this alien component of creation: the 'garments of skin' that clothe creation and obscure the underlying *logoi*. If we could only see through the garments and discern the underlying *logoi*[467] then

[465] As well-documented in a number of recent volumes such as: Sollereder, *God, evolution, and animal suffering: theodicy without a fall*; Murray, *Nature red in tooth and claw: theism and the problem of animal suffering*; McDaniel, *Of God and pelicans: a theology of reverence for life*; Schneider, *Anmal suffering and the Darwinian problem of evil*.

[466] Ted Peters and Martinez Hewlett, *Evolution from creation to new creation: conflict, conversation, and convergence* (Nashville: Abingdon Press, 2003), 158.

[467] In *Amb* 10.63-64, DOML1:253-7, Maximus considers the revelation of Jesus' glory during his transfiguration to be symbolic of the spiritual meaning of Scripture and nature shining through his garments.

we would be able to see not only their being (their origin), but also their well-being (their historical development), and their eternal well-being (their final deification outside time). Only then would we be able to understand 'creation-as-it-is-meant-to-be,' not as some initial static ideal, but a movement towards an eternal rest in the *Logos*. With such an unclouded view, we would finally be able to see that creation was always meant to be an evolutionary process rather than an immediate consummation, and that being unfinished is not the same thing as being corrupted by sin or its consequences. Once again, this is an argument to the effect that Maximus' theory of the *logoi* is *already* an evolutionary theory in which there is real progress and an ultimate end. The evolution in question is the temporal outworking of God's eternal fixed instructions, without which nothing could come into being or be sustained in being. It is taking place before our very eyes, even though those same eyes are obscured from seeing properly owing to the garments of skin that veil the underlying *logoi*. If creation was always meant to be evolutionary, and fundamentally good, then we must be careful not to confuse that which is transitional and incomplete with that which is damaged and unintended.

5.4.3 Logoi evolving

But how might we go about seeing behind the garments to the underlying meaning of the *logoi*? A full answer to this question must await my discussion of what the garments of skin actually are, but a partial answer can be gleaned by understanding how the *logoi* map onto created reality. Recalling Skliris' exposition of the Maximian *dromos* according to which the *logoi* pass from being, to well-being, to eternal well-being, therein lies a crucial aspect of Maximus' *logoi* cosmology as it pertains to the modern-day theology of biological evolution. The two outer members of the *logoi* triad—being and eternal well-being—fall ultimately outside time and space,[468] and, as such, lie beyond the purview of the natural sciences. Cosmology is not equipped to address the question of the ultimate cause of all finite existence, and evolutionary biology cannot tackle the question of the ultimate purpose and destiny of living

[468] Strictly speaking, the '*logoi* of being' appear 'at the right time' (i.e. at some point in evolutionary chronology) but their ultimate origin lies altogether outside space-time in the *Logos*.

things. The temptation to look for, or hope for, an ultimate temporal endpoint to biological evolution, whether it be Teilhard de Chardin's Omega Point or Simon Conway Morris' evolutionary convergences, must therefore be resisted. While human beings at least can align their *tropoi* with their *logoi* of well-being and prepare themselves for deification, non-human creatures—as I argued in §4.5.4—have no free control of their *tropoi* and are entirely dependent on God for their eventual deification. But in both cases, whether humans or non-humans, there is a discontinuity in the transition from well-being to eternal well-being; a discontinuity of grace, in which final union with God is assured beyond the confines and limitations of finite space and time.

In chapter 2 I argued that there are good grounds for aligning the progression of the *logoi* with evolutionary biology in terms of rational specification, hierarchical classification, and relational co-constitution, but it is important to be clear that this alignment applies only to the *logoi* of being and the *logoi* of well-being. It does not apply to the final destiny of the *logoi* as their eternal well-being.[469] And we do not just need to take Maximus' word on this; for three reasons. First, as we saw in Chapter 4, there is no empirical evidence for an overarching trajectory or endpoint in evolution. While some, like Conway Morris, have correctly pointed out the phenomenon of multiple evolutionary convergences as a corrective to the idea that evolution is entirely contingent and haphazard, there are few, if any, evolutionary biologists today who would claim that the tree of life has an overall trajectory or a dominant apical shoot.[470] Second, we have the historical incarnation. Jesus' birth, death and resurrection occurred in the midst of history and yet was a microcosm of the entire cosmic process, inaugurating the process that all creation would follow. If, as some would say, the chief purpose of evolution has already been fulfilled in the historical incarnation, there is no reason to expect it to reach any further

[469] This does not mean that relational co-constitution will not pertain in the eschatological state (it might even be enhanced), but that biological evolution will not continue to play the role that it had in the previous eras of being and well-being.

[470] If there is an overall trajectory it is in things like physical size or complexity, rather than in the dominance of one taxonomic group over another. Of course, the human race is unique in its ability to wipe out most other species, but this would be a Pyrrhic victory, as we are now discovering to our cost. The risk of becoming the sole or dominant shoot of the tree of life is that the tree will cease to exist!

consummation. Third, to look for an overall terminal endpoint of biological evolution is to neglect the situation of the vast majority of individual living creatures who will have died well before the end of the cosmos has been reached. If *individual* deification is not to take place in space and time then neither is there is any reason to expect the deification of species, genera and higher taxonomic groups to take place in space and time. The final goal of individual creatures throughout evolutionary history is not subordinated to any final outcome of biological evolution, but exceeds biological evolution. While biological evolution may continue for billions of more years, the true evolution of the cosmos will take a different route, transcending the limitations of physical and biological 'matter.' As Jack Mahoney observes, 'Jesus triumphed over death, and his death was more than a striking moral example of the extent to which altruism could draw one; it was also in evolutionary terms a cosmic achievement for humanity, taking our species through the evolutionary cul-de-sac of individual extinction to enter into a newer form of human living.'[471]

5.4.4 Logoi evolution continues beyond science

The hiatus between the *logoi* of well-being and the *logoi* of eternal well-being—a hiatus at least from our finite perspective, but not from God's eternal perspective—is perhaps one of the keys to understanding the hiddenness of the *logoi*. In Chapter 3 I argued that on the creaturely side of the God-creation divide, the *logoi* are equivalent to immanent information that defines creaturely form and purpose and supplies instructions for on-going progression in the lifetime of the individual and the lifetime of the species. Defining the *logoi* in this way could lead us to think that the *logoi* are therefore easy to discern, being amenable to all the scientific methods capable of observing and measuring information, whether it be of the shaping and semantic variety. We can now see that this would be misguided, since by those methods we gain only a partial understanding of the *logoi*: the *logoi* of being and well-being, but not the *logoi* of eternal well-being. Since creation is ultimately defined by its end rather than by its beginning, the inability of science to 'see' the *logoi* of

[471] Jack Mahoney, *Christianity in evolution* (Washington, DC: Georgetown University Press, 2011), 51.

eternal well-being constitutes a major limitation in its power to discern the truth. As Panayiotis Nellas points out: 'The evolution of the image [to Christ the Archetype] thus surpasses the bounds of creation—bounds which those who see only the matter of the image find themselves obliged to set since they are ignorant of the image itself—and reaches infinity. *Evolution in this way is understood in all its dimensions—not only in those which are determined by scientific observation—and is given its true and full value.*'[472] I take this to mean that cosmic evolution is much more than Darwinian natural selection, and much more than biological evolution by any mechanism. By recognising this limitation, we can make some progress. We can resist the temptation to look for easy answers via simplistic extrapolations from what is to what will be. Of course, this is not to deny *any* connection between the *logoi* of being and the *logoi* of eternal well-being; after all, the same *logoi* perdure throughout. All creation (not just humankind) is, in one sense, made in God's image to varying extents and anticipates and signals its final destiny in conformance with that image. But this destiny is realised only through radical discontinuity as well as continuity.

The commendable desire to 'read the *Logos* off' nature based on nature's theophanic potential is fraught with difficulties, chief of which is the correct discrimination of alien intrusions into the underlying good, whether the intrusions be attributed to sin, mystery, chance, or necessity. We will come to this in the next section. But the difficulty I have wanted to stress in this section is that of not giving sufficient attention to the 'eschatological datum,' the true creation and true cause of all that is. Whilst not wishing to claim, as some have done, that creation is caused from the future (privileging the future over the past and present),[473] it is nonetheless correct to say that without plotting the eschatological datum point, our graph is incomplete and misleading. The *logoi*, as fixed instructions, act holistically on past, present and future substances, relations and events. To see properly we must

[472] Panayiotis Nellas, *Deification in Christ: Orthodox perspectives on the nature of the human person* (Crestwood, NY: St Vladimir's Seminary Press, 1987), 42. Emphasis mine.

[473] I agree with Peters and Hewlett when they say that the *telos* of creation is not to be found in Teilhard's 'Christification principle' within the biological evolutionary process. However, when they talk about 'God's eschatological act retroactively consummating all that has gone before' I worry that they are locating the *Logos only* in the *logos* of eternal well-being and not equally in the *logos* of being and well-being. Another proponent of the 'power of the future' is Pannenberg. Wolfhart Pannenberg, *Basic questions in theology*, trans. G.H. Kehm, vol. 2 (London: SCM Press, 1971), 234-49.

perceive the trajectory of an ontology that first begins outside the realm of science, then enters the realm of science, before finally reaching completion beyond the realm of science again. As Terrence Ehrmann has argued, science restricts us to the *stripitus naturae* (noise of creation) and is deaf to the *carmen Dei* (song of God) and as a result we remain *Homo sciens* instead of *Homo sapiens*.[474] Contrary to prevailing scientism, it is those who contemplate the *logoi* in their tripartite entirety that think most 'logically,' not those who dwell merely on the 'logic of science.'[475]

5.4.5 Dynamic contemplation of the logoi

It is, however, one thing simply to advance this theological argument and an entirely different matter to practise what the argument is preaching. The discernment of the *logoi* of creation was for Maximus as spiritual practice, being the second of his three stages of spiritual advancement that he modelled on Evagrius: *praxis* (practical action); *theoria* (contemplative vision); and *theologia* (mystical union).[476] Each stage is hard work. To see the world as God sees it (*theoria physike*) requires ascesis to rid passions that distort the world as a place to satisfy human desires.[477] That at least, is the ethical prerequisite. But having prepared the mind by controlling the body, how does one actually go about discerning the *logoi* and what is the end result? The answer to these questions is not immediately clear in the literature. Perhaps, with the psalmist we should look up at the stars, or stare intently at a leaf, waiting to be enthralled by a sense of God's presence. Whilst not in any way wishing to demean such practices, I would like to suggest a more straightforward way in which we can

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[474] Terrence Ehrman, "Evolution and providence: discovering creation as Carmen Dei," *Theology and Science* 13, no. 3 (2015): 271-87.

[475] Christopher C. Knight, "Divine action and the laws of nature: an Orthodox perspective on miracles," in *Science and the Eastern Orthodox church*, ed. Daniel Buxhoeveden and Gayle E. Woloschak (Abingdon, UK: Routledge, 2011), 49. See also D.S. Wallace-Hadrill, *The Greek Patristic view of nature* (Manchester: Manchester University Press, 1968), 120. 'In the light of Christ he [the Christian] can see nature in terms of its divinely-appointed end, and therefore cannot be satisfied with any partial view of it...What they [the Greek fathers] will not allow is the idea that the scientific view is the whole view. To those who have seen a glimpse of the fulfilment of nature in Christ, the scientific view is manifestly not the whole, though it may be helpful and is certainly interesting. The whole view—what Gregory of Nazianzus called the 'knowledge of the realities themselves—is the view seen in terms of purpose and end, and the end, teleologically and chronologically alike, is Christ.'

[476] Adam G. Cooper, *The body in St Maximus the Confessor* (Oxford: Oxford University Press, 2005), 61.

[477] Norman Wirzba, "Christian theoria physike: on learning to see creation," *Modern Theology* 32, no. 2 (2016): 211-30.

ascertain the *logoi* in creation. Rather than attempting to gaze more deeply into the nature of things we should scan things more broadly; and rather than seek some immediate noetic awareness we should exercise some discursive reasoning too.[478] What I am suggesting is that, in all that has been written of the hiddenness of the *logoi*, a simple fact that has been overlooked in regard to their hiddenness is their moving, dynamic, evolving nature. This means that any attempt to contemplate the *logoi* from a static, synchronic perspective, no matter how deeply, is likely to fail. Instead, we should attempt to follow the trajectory of the *logoi* and for that we need, as it were, a movie camera rather than a still shot type of spiritual imaging. To illustrate what I mean by this, I will be linking the three-staged evolution of the *logoi* (from being, to well-being, to eternal well-being) to Christopher Southgate's three-lensed perception of God's glory in creation—*gloria mundi*, *gloria crucis*, and *gloria excelsis*—which he expounds in his 2008 book *Theology in a suffering world: glory and longing*.[479]

The first and simplest level of contemplation is to see nature as creation and to see God's glory as a whole through what he has made: the *logoi* of being and the *gloria mundi*. Most people of faith see at least this much, even without any ascesis. Unfortunately, those who remain at this level also have the habit of glossing over the 'shadow side' of creation, attributing it to sin or mystery, or without even giving it any thought at all. It can lead to a vapid aestheticism and a bowdlerising of creation whereby divine glory is acknowledged only in the ornamental, nostalgic and innocuous. The glory of God manifest in the flower, the sunset, or the starlit sky is readily acknowledged, but not the cougar butchering a gazelle, or the ichneumon wasp parasitising its larval host.[480]

To see more clearly than this, according to Southgate, we need to ascend to the next level of contemplation, and realise God's glory even in the suffering of creation,

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[478] Here I am querying Bradshaw's privileging of immediate noetic awareness over discursive scientific reasoning as the way to see nature as it really is. David Bradshaw, "Nature as a manifestation of the divine: the divine *logoi* and the divine energies," *International Association for Environmental Philosophy* (2015): 1.

[479] Christopher Southgate, *Theology in a suffering world: glory and longing* (Cambridge: Cambridge University Press, 2018).

[480] Southgate, *Theology in a suffering world: glory and longing*, 32. See also Charles Taylor's historical account of this view. Charles Taylor, *A secular age* (Cambridge, MA: The Belknap Press, 2007), Ch. 9.

the *gloria crucis*, or in Maximus' language, the *logoi* of well-being. This is not the being of creation *per se*, but the struggle of all living things to reach their end, whether that be non-sentient creatures battling for survival in a competitive and degradative environment, or self-conscious human beings exercising their free will to align their *tropoi* with their *logoi*. At this second level it is possible to make greater sense of God's glory in the world through various ways of seeing. For example, seeing how even destructive creatures are enjoined to praise God,[481] seeing creation as a passion play or theodrama,[482] seeing Christ's own suffering as being in solidarity with creation,[483] or seeing how goodness can arise out of suffering.[484] But even though this second level of contemplation brings about a more complete vision of the *logoi* than the first level with its naïve sentimentality, we still have to concede that even at this second level, there is much that remains ambiguous and troubling, which, as Southgate points out, can lead to responses that range from anger to longing.[485]

The third and final stage of contemplative *theoria* corresponds to the discernment of Maximus' *logoi* of eternal well-being and Southgate's *gloria in excelsis*. It involves seeing beyond the current state of affairs to an eschatological consummation. Not a forward extrapolation of current causal processes to a final endpoint of biological evolution, nor a backwards extrapolation to an initial paradisiacal state to which creation will cyclically return (as with Origen), but a transformative deification lying outside space and time that was always the original plan of God.[486] At this most advanced stage of contemplation it should be possible to glimpse creation through a new lens of hope, in which problematic species and behaviours can be seen for what they really are when deified: a cougar without its canine teeth, perhaps; a cougar chasing but never actually catching a deer;[487] or a

[481] Southgate, *Theology in a suffering world: glory and longing*, 131.
[482] Deane-Drummond, *Christ and evolution: wonder and wisdom*, 33-59.
[483] Sollereder, *God, evolution, and animal suffering: theodicy without a fall*, Section 2.8.
[484] Sollereder, *God, evolution, and animal suffering: theodicy without a fall*, Section 2.6.
[485] Southgate, *Theology in a suffering world: glory and longing*, 142.
[486] As Cooper states, 'The custom of determining the end or purpose of a thing by reference to its beginning or cause was ancient and well-established. Yet because of the fall, direct access to the beginning of human nature is impossible. The fall has ruled out the Platonic ideal of recollecting or returning directly to one's origins. Instead, one must learn one's beginning by turning to the end: 'No longer, after the transgression, is the end revealed from the beginning, but the beginning from the end. (quoting Maximus *Ad Thal* 59).' Cooper, *The body in St Maximus the Confessor*, 63.
[487] Southgate, *The groaning of creation. God, evolution and the problem of evil.*, 88-9.

deadly hunt turned into a bloodless sport.[488] While some of these speculations can border on the ludicrous, the aim is not to imagine what an animal might look like once stripped of any capabilities to do harm to others, but to imagine what aspects of the animal are good and worthy of being conserved, enhanced, and immortalised. This, of course, is not easy in the case of, say an apex predator, whose whole body is adapted in countless ways for a life of hunting, killing, dismembering, and protein digesting. How, for example, does one decide what behaviour, body plan, organ, tissue, or metabolic process is good when it is divorced from its carnivorous function? A lay person admirer of the gracefulness of the cheetah might see goodness in the cheetah's feline form or hunting prowess, whereas a zoologist or biochemist specialising in big cats might see goodness worth preserving in the exquisite design of the cheetah's digestive system.

With hindsight, evolutionary biologists often make much use of the concept of 'preadaptation' to make educated guesses as to how phenotypes adapted to one environmental challenge could become commandeered into entirely new functions under changing selection pressures.[489] Evolution never goes back to ground zero but always builds on what currently exists. By the same token, the resurrection will not entail a complete recreation of living things but an extension and enhancement of what is already present, albeit into a new function that is difficult to imagine. It might have been hard enough to imagine 150 million years ago how terrestrial reptiles could have evolved into aerial reptiles and how limbs could have been requisitioned to become wings. How much more difficult it is then to predict how the physical natures of animals currently deployed for 'evil' ends could be preadapted for a good eschatological function outside space and time.[490]

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[488] Bethany Sollereder, "Exploring old and new paths in theodicy," *Zygon: Journal of Religion and Science* 53, no. 3 (2018): 732.

[489] For example, the theory that proto-birds evolved feathered limbs to catch insects which were later used to jump longer distances and then to fly. Ridley, *Evolution*, 264.

[490] The Apostle Paul applies an analogous argument in answering the question 'How are the dead raised?' in 1 Corinthians 15:35 (New Revised Standard Version). By appealing to the unimaginable differences between different types of flesh and their respective glories, he implies that some equally unimaginable difference will pertain between our fleshly bodies and our new spiritual bodies.

5.5 'Garments of skin'

5.5.1 Addressing unequivocal evolutionary evil

In the previous section I argued that before we address the apparent incompatibility of the good *logoi* with evolutionary evil, we must first recognise the original evolutionary character of the *logoi* in which nature proceeds from a state of immaturity to a state of maturity-in-deification; a dynamic coming-to-be of creation that is occurring anyway regardless of what sin might have added over and above this process. By recognising that creation is good but not yet complete, we can minimise the risk of confusing incompleteness with corruption and avoid writing off those aspects of creation that do not fit with our preconceived notions of what is good or beautiful.[491]

But having completed this important ground-clearing exercise, the question of the origin and nature of *unequivocal* natural evil and its compatibility with the *logoi* still remains and must now be addressed; for, even after allowing for the immaturity of creation and its lack of perfection on account of its finitude and movement towards its end, we are still left with an alien residue that cannot, it seems, be attributable to the *logoi*. Examples of what I am thinking of here include: (1) the egregious suffering of animals that exceeds what might be expected in a world where pain is simply a useful warning signal; (2) the premature death of organisms that have never had the chance to flourish and which add no material or moral value to any other organism's life; and (3) the violence inflicted by creature upon creature, whether the result of instinctive necessity (e.g. a predator hunting for food), or apparently needless cruelty (e.g. a predator toying with its prey). All of these examples pre-date the arrival of humankind and therefore cannot be the sequalae of human sin; at least not in a world where God's responses must follow the temporal causation of humankind's actions.

As previously stated, Maximus' view of a simultaneous creation and fall[492] may be combined with the broader Eastern patristic concept of 'garments of skin' (from

[491] And thereby avoiding the curse of Isaiah 5:20 aimed at those who call evil good, and good evil!

[492] For a broader discussion of the concept of a simultaneous creation and fall being part of a distinctive Eastern approach see: John Boojamra, "Original sin according to St. Maximus the Confessor," *St Vladimir's Theological Quarterly* 20, no. 1 (1976): 19-30.

Genesis 3:21) to yield a cosmic fall account that does not conflict with an evolutionary chronology. It is now time to say more about this important but neglected topic.

5.5.2 The 'Garments of Skin' in Greek tradition

According to Panayiotis Nellas' definitive exposition,[493] various Greek church fathers[494] interpreted the garments of skin to mean the mortality given to man in advance of his creation and in anticipation of his sin.[495] They represent God's response to human sin pre-built into the cosmos. Although not to be identified with the body *per se* (*contra* Origen), the garments consist of both the *psychological* accretions of sensual pleasure, anger, gluttony, insatiate greed, self-indulgence and profligacy, and the *somatic* accretions of sex, conception, birth, pollution, nipple, food, excretion, growth, adulthood, old age, sickness, and death[496]—that is to say, more or less biological life as we know it. The combined psychosomatic unity of these garments overlaid on our natural, God-given *logoi* cause us to inhabit a world in constant flux, mutation and change in which 'life has been transmuted into survival.'[497] The garments serve two functions: (1) a penalty and necessary means of survival in the postlapsarian state; for example, sexual reproduction allowing the human race to continue in a different way than originally planned;[498] and (2) a remedy, by which humans can recognise the garments they are wearing and either

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[493] Nellas, *Deification in Christ: Orthodox perspectives on the nature of the human person*, Part 1.

[494] Including Methodios of Olympus, Gregory of Nyssa, Gregory of Nazianzus, and Athanasius. Also Maximus: '[God] gave the body the inherent capacity to suffer, undergo corruption, and be totally dissolved, which is made clear by *the girding with dead skins*, according to Scripture, which says that creation itself was made subject to corruption, not willingly, but for the sake of Him who subjected it in hope—because God created matter in this way from the beginning, according to his foreknowledge, in view of the transgression He had already seen in advance' *Amb* 8.2, DOML1:145 emphasis mine. Maximus also attributes the laws of nature (conception through seed, natural birth and corruption) to sin. *Amb* 31.2, DOML2:389-41.

[495] Nellas, *Deification in Christ: Orthodox perspectives on the nature of the human person*, 46.

[496] Nellas, *Deification in Christ: Orthodox perspectives on the nature of the human person*, 48-9. quoting Gregory of Nyssa's *On the soul and the resurrection*, PG46:148C-149A.

[497] Nellas, *Deification in Christ: Orthodox perspectives on the nature of the human person*, 47.

[498] Nellas quotes St John of Damascus: 'But since God, who knew all things before they came into being, knew in his foreknowledge that humans would transgress and be condemned to death, he made them male and female in anticipation and ordered them to increase and multiply,' (*On the Orthodox Faith* 4, 24, PG94:1208D). Maximus also believed that since God became man without the use of sexual reproduction, God must have 'originally' intended another way for humans to multiply had they not fallen. See: *Amb* 41.7 DOML2:111. Although Maximus does not refer to sex as a garment of skin, he is demonstrating here the same kind of counterfactual prelapsarian thinking as Nyssa, and the same that I am doing here with evolution.

choose to take some of them off (i.e. those which cause us to sin)[499] or be thankful for those others over which we have no control and which allow us to continue living. If one were to classify this combined 'garments-of-skin-plus-simultaneous-creation-and-fall' model, one might say it was a type of cosmic fall/soul-making theodicy but one in which sin and natural evil are linked not in a temporally causal way, but in a timelessly structural way.[500] The fact that the garments of skin are the result of divine anticipation or a pre-mundane fall may give this a distinctly Origenist flavour in which materiality becomes devalued. However, the big difference here is that the underlying evolutionary nature of the *logoi* is still material but involves a unidirectional eschatology of perfection rather than an eschatology of cyclical return.[501]

5.5.3 Interpreting the Garments of Skin today

In §5.4 we saw how difficult it is to discern the *logoi* of creatures owing to the need to see the *logoi* of eternal well-being (and the *gloria in excelsis*), without which we gain only a partial and incomplete vision of *logoi* en route to their final *teloi*. Now we are faced with the additional difficulty of the garments of skin occluding correct vision of even those *logoi* of well-being that ought to be visible to us in our own spatiotemporal realm. It could be argued that the difficulty is not as great as we might imagine. Many of the garments of skin are clearly human behavioural tendencies that are easy to discount as not belonging to the *logoi* of humans. We need only look at Jesus Christ, even in his pre-resurrection state, to see one who was without sin, who modelled for us the psychological components of a perfect human nature. Likewise,

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[499] Nellas, *Deification in Christ: Orthodox perspectives on the nature of the human person*, 83.

[500] For more on this distinction see: James Henry Collin, "Soul-making, theosis, and evolutionary history: an Irenaean approach," *Zygon: Journal of Religion and Science* 54, no. 2 (2019): 537.

[501] I differ here from Alexander Khramov who offers a more Origenistic interpretation of the Eastern church fathers in which the eschaton is a restoration of an ahistorical Eden, and Adam's sin causes cosmic evolution from the Big Bang onwards. In his words, 'Evolution does not correspond to the six days of creation, as theistic evolutionists usually state; rather, it should be considered as a process of "putting on" the garments of skin, the way by which the fallen humans got their mortal animal bodies.' In other words, he sees *all* of evolution as being garments of skin, and not just the 'unpleasant' aspects. He does not, however, address Maximus' *logoi* doctrine, and it would be interesting to see how he would explain the primordial evolution of the *logoi*, which appears to have no dependency on humankind's sin. Khramov, "Fitting evolution into Christian belief: an Eastern Orthodox approach," 75-105.

many dysfunctional physical conditions are obviously not good, not defined by *logoi*, and must instead, we can assume, be garments of skin. Again, we need only look at how Jesus Christ exposed the non-normality and non-goodness of premature death, disease and infirmity when he raised people from the dead and performed other miraculous cures; all of which might be thought of as partial exorcisms in which Jesus casts out, or rather, *casts off*, various garments of skin that were impeding a correct view of the underlying *logoi* of human nature and the human individual.

More challenging, however, are those apparently normal and essential (rather than dysfunctional) attributes of living organisms that still involve violence, destruction and decay. Was Gregory of Nyssa going too far to include, for example, feeding and excreting in his list of the garments of skin? It is certainly difficult to imagine life as we know it without the input of energy and without the selective assimilation of materials and the elimination of waste products. Our whole ecosystem depends for its stability on the transfer of energy and materials between its various occupants, whether willingly given or not. In a world of limited resources, it seems inevitable that those organisms that compete better will survive for longer, either as tokens (original individuals) or as types (replicated individuals). Even if we take on board the undeniable importance of behavioural cooperation, symbiotic association and spontaneous self-assembly—as the proponents of the Extended Evolutionary Synthesis insist we should—it is still likely to be the case that in a world of finite resources, those that cooperate, 'symbiose,' or self-assemble *better than* others will prevail over less capable contenders.[502] It seems that in our material world, conflict and competition are inevitable and that there will always be 'winners' and 'losers,' which is why great efforts are made to find theodicies or defences for why God has chosen to create using a process that involves pain, suffering and violence. To deny the legitimacy of such 'disvalues' would seem to deny the possibility of any complex, flourishing life, given what we now know about our

[502] I agree with Southgate when he points out that '...cooperation in nature can be, indeed would be expected to be, self-interested. Indeed what might at first appear altruistic can often be explained in terms of evolutionary advantage to that individual or lineage. So very intricate networks of cooperative behaviour are perfectly compatible with a strongly Darwinian reading of the world. Therefore, observation of the extent of cooperation in the biosphere cannot be attributed to the loving design of the Creator without reference to competition between creatures.' Southgate, *Theology in a suffering world: glory and longing*, 102.

collective dependency on each other's demise. Much life would not be possible if bacteria or cockroaches bred exponentially and unchecked. We rely on death to make room for life; not just life of the same species, but the life of altogether different species such as herbivores, predators, parasites, scavengers, and decomposers.[503] When we appreciate how invested we are in each other's existence it becomes difficult to dismiss those creatures whose purpose includes doing violence to other creatures, without whom we would be overrun with rampant monocultures.

The same is true when we think from a diachronic rather than a synchronic perspective. According to the standard NeoDarwinian account, new life has emerged through a process of natural selection in which competition, differential survival, arms races, and covert exploitation are all seen as having played essential roles in the evolution of outstandingly diverse, complex, and beautiful new life forms. One might even say that such has been the success of natural selection that we *need* it to be blessed and we *need* its violence to be sanctified, for without it, we can think of no other way by which creatures can flourish and the diversity of creatures be generated and maintained. In the absence of sin to blame, God must have had a good reason to use violence, suffering and death in the process of executing his divine will to create. His hand must have been forced. Evolution by natural selection must have been the 'only way.'[504] Or so the thinking goes.

5.5.4 Revisiting the mechanisms of Darwinian evolution

But does this way of thinking reflect a failure of our theological imagination? Is there another way to call out the evil of natural selection for what it is—evil—without making God directly complicit in it, and of course without force-fitting science to harmonise with a 4,000-year-old earth and an original paradisiacal state? Are there

[503] Considering a world without predators and grazers, Robin Attfield concludes that '[p]erhaps the truth here is that a world of nothing but flora is logically possible, but that if it were created and provided with laws of nature at all similar to those of the actual world, it would be very shortlived in the absence of herbivores and of funguses...and that a sustainable world of such a character but consisting only of flora is impossible.' Robin Attfield, *Creation, evolution and meaning* (Aldershot: Ashgate, 2006), 128.

[504] Referring of course to Southgate's evolutionary theodicy of the same name. Southgate, *The groaning of creation. God, evolution and the problem of evil.*, 47-8.

really only two options on the table: creation by a nearly instantaneous (i.e. 6 day) fiat, or creation by 'full-blooded' Darwinian evolution?

I would like to suggest that the Maximian/Eastern protology outlined so far, provides a third option, and one not often encountered in standard treatments of evolutionary theodicy. To recap, the essential elements of this protology are as follows:

1. The intrinsically evolutionary nature of the *logoi* as they go forth from the *Logos* expanding as they come to be in time and space, and contracting back to the *Logos* as they flourish in well-being and find their final repose in eternal well-being.
2. A meta-historical creation and fall in which humankind's rebellion against God (symbolised by the Genesis 1-3 story) was simultaneous and coextensive with creation as a whole. Sin does not come into existence at some point in finite time and space but pre-exists as an eternal, structural concomitant of humankind's freedom.
3. The consequence of that meta-historical rebellion is a meta-historical, pre-mundane cosmic fall, in which so-called garments of skin have been superimposed on the evolving *logoi* as both a punishment and a compassionate concession to allow life to continue in a mode protected to some extent against the self-destructive power of its own actions.

The advantage of this scheme is that evolution *per se* needs neither to be rejected outright, nor to be accepted outright. There is room for a middle way in which *some* aspects of Darwinian evolution are good (those that correspond to the *logoi* going forth) and *some* which are not good (the garments of skin that are accompanying and obscuring the *logoi*).

How, then, is it possible to make such a distinction when the various components of evolution appear to come as a 'package deal'? I would like to suggest one possibility. It is often assumed that essential components of Darwinian evolution are natural selection, competition, differential survival, and extinction.[505] These

[505] For example, Southgate claims that '...a world of competition and natural selection was the only way God could give rise to creaturely values of the sort we know to have evolved in the biosphere of

components appear to be necessary, if unfortunate, consequences of organisms inhabiting a world of finite resources. If, however, the finitude of the earth's resources is itself a 'garment of skin' imposed by God as a concession, then perhaps in the absence of such a concession, organisms could have evolved without experiencing any competition due to resource conflicts.[506] Darwinian evolution could have consisted solely of the 'good aspects'—variation and adaptation—without the 'bad' aspects—competition and natural selection. A world of infinite environmental niches could theoretically have accommodated all the variation produced by mutation and recombination. Although natural death might still have occurred, there would have been no premature death due to competition or predation. Evolution would still have taken place but in a much more extravagant fashion, with no culling of 'weaker' lineages or domination of one lineage over another. It could even have proceeded in the same haphazard fashion it does in our current world except with no dead-ends. Of course, one could say that it would also involve a hypothetical loss: the absence of the cougar or the deer whose hunting or escaping prowess would never have had the chance to flourish.[507] However, if the ability to cause harm and suffering will one day be eliminated, then there is no reason why the redeemed versions of the cougar and the deer could not have emerged via different phylogenetic routes in a world of infinite resources.

The distinction between the 'good' evolution of the *logoi* en route to their final *telos* in Christ and the 'bad' evolution introduced by the garments of skin raises the question as to the ontological status of these garments. Presumably they are not themselves defined by *logoi*, since the *logoi* are wholly good, being themselves the *Logos*. Could they instead be defined by the absence of *logoi* as states of privation,

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Earth.' Christopher Southgate, "Does God's care make any difference? Theological reflection on the suffering of God's creatures.," in *Current paths and emerging horizons in ecotheology*, ed. Ernst M. Conradie et al. (London: Bloomsbury T&T Clark, 2014), 101.

[506] I am making the assumption here that the competitive forces that lead to character displacement usually incur some loss, such as the death of those individuals that lack the requisite phenotypic variation or plasticity to adjust to the resource shortage (e.g. to choose an alternative foodplant other than the one that is in short supply). I admit, however, that competition is not always necessarily harmful—e.g. if there is enough phenotypic variation and plasticity in the population to accommodate the resource shortages.

[507] As Holmes Rolston III has famously put it, 'The cougar's fang has carved the limbs of the fleet-footed deer, and vice versa.' Rolston III, *Science and religion: a critical survey*, 134.

or by a special *tropos* or mode of existence?[508] Further research is needed in this area, but a clue as to where the answer might be found lies in Maximus' distinction between the different wills of God (*thelēmata epi theou*): his good will (*kat' eudokian*); his dispensatory will (*kat' oikonomian*); and his concessive will (*kata sugchōrēsin*).[509] These distinctions find their use in the context of salvation where, for example, the crucifixion is the result of God's concessive will rather than his good will and is therefore according to *tropos* rather than according to *logos*.[510] In the context of creation, however, they could be interpreted to mean: the good will to accomplish eventual deification of the cosmos (i.e. creation as it should be); the dispensatory will to employ an evolutionary process of maturation; and the concessive will to allow 'non-good' elements to intrude upon that process (for the purpose of remedial punishment).

5.5.5 Microcosmic solidarity of humans and non-humans

Before concluding this section on the garments of skin, I need to address an obvious potential objection to this Maximian/Eastern protology, and that is why non-human creation should have been affected by humankind's meta-historical sin in the first place. What moral grounds does God have for inflicting pain and destruction on animals due to human sin?[511] Just because the 'original sin' occurs outside space and time (or is purely hypothetical)[512] does not make its consequences any less unjust if those consequences entail harm towards creatures that are not able to sin themselves and thus not individually culpable. For many, a cosmic fall would

[508] Maximus refers to the way in which pain and death are a 'pedagogical mode' (*tropos paidagōgias*) which Christ himself exemplified in the pain and the death of the Cross, and, through the gestation and parturition of the Virgin Mary. See Skliris, "The ontology of mode in the thought of Maximus the Confessor and its consequences for a theory of gender," 54.
[509] *Qu Dub* 83, CCSG10:66.2-5, DP:89
[510] Skliris, "The ontology of mode in the thought of Maximus the Confessor and its consequences for a theory of gender," 48.
[511] Schneider, *Anmal suffering and the Darwinian problem of evil*, Ch.5.
[512] 'Nothing created is evil. Nevertheless, his [Maximus'] understanding of a double creation—in which he follows a tradition reaching back to the two Gregories, Origen, Clement, Philo, and perhaps Plato himself—allows him also to think of Adam's fully sensual material incorporation simultaneously as a punitive and an assistive divine act. Adam's creation as a composite being formed from the dust of the earth and the breath of God (Gen. 2:7) and his fall are simultaneous, so much so that for Maximus any actual, empirical prelapsarian existence is purely hypothetical.' Cooper, *The body in St Maximus the Confessor*, 80.

therefore seem to be the worst of all falls, since its effects do not merely propagate vertically (down generations of the same species), but horizontally (across different species).

While not claiming that the intuitive repulsiveness of a cosmic fall can ever be satisfactorily answered, the Eastern tradition—and Maximus in particular—does offer a perspective that is often overlooked in those more Augustinian frameworks that emphasise will over nature and see the incarnation as merely a remedy for sin, along with crucifixion and resurrection.[513] I am referring here to the Eastern emphasis on the role of man (i.e. humankind) as a microcosm and the role of the Incarnation to fulfil man's microcosmic role.

The most well-known account of man's microcosmic role is to be found in *Ambiguum* 41 where Maximus outlines his vision of mankind as the cosmic mediator and microcosm of a divided creation. Alluding to Porphyry's famous tree in which the cosmos is classified dichotomously into five divisions, Maximus situates man (or rather humankind) as a bridge between the superior and inferior extremes of five different layers of reality: uncreated and created; intelligible and sensible; heaven and earth; paradise and inhabited world; and male and female. Humankind [*anthrōpos*] was meant to be '...like a most capacious workshop containing all things, naturally mediating through himself all the divided extremes, and who by design has been beneficially placed amid beings...' [514] The implication is that these divisions (*diaireses*) were not mean to be the final state of affairs but temporary configurations in need of fulfilment or consummation; the original good evolution of the *logoi*. Maximus explains how humankind was supposed to facilitate a union at each of the five levels, but failed to do so, paving the way for Christ to achieve what humankind could not, implying that the incarnation was always part of God's plan, irrespective of sin.[515] In the table below I have summarised the language Maximus uses to

[513] For a good overview of the difference in thinking between East and West on the subject of the Fall, see: Paul Ladouceur, "Evolution and Genesis 2-3: the decline and fall of Adam and Eve," *St Vladimir's Theological Quarterly* 57, no. 1 (2013): 135-76; Christopher C. Knight, "The fallen cosmos: an aspect of Eastern Christian thought and its relevance to the dialogue between science and theology," *Theology and Science* 6, no. 3 (2008): 305-17.

[514] *Amb* 41.2, DOML2:105

[515] As Nellas exclaims, 'Christ is not the result of an act of Satan!' Nellas, *Deification in Christ: Orthodox perspectives on the nature of the human person*, 37. See also: Paul M. Blowers, "Creation as the drama

describe the actions that humankind was meant to have taken, and those that Christ actually did take, in order to bring each level of the cosmos into unity.[516]

Division	**Humankind's action**	**Christ's action**
Male - female	'dispassionate condition of divine virtue' (§3)	Coming as a perfect man, by-passing sexual reproduction (§7)
Paradise - inhabited world	'proper holy way of life' (§4)	'Proceeded unhindered to paradise after his death' (§8)
Heaven - earth	'a life identical in virtue...with that of the angels' (§4)	'Ascension into heaven' (§8)
Intelligible - sensible	'knowledge equal to that of the angels' (§5)	The whole of our nature—soul and body—went to heaven (§8)
Uncreated - created	'through love' (§5)	'comes to God himself, appearing as a man' (§9)

Undoubtedly, much of this language is tropological (or moral) in nature, but there is also something ontological interwoven throughout Maximus' argument. The mediatory behaviour is only possible because of a pre-existing 'natural' relatedness owing to man having parts in common with the cosmos. As Maximus explains, this happens...

> [through mankind]...manifestly possessing by nature [*phusikōs*] the full potential to draw all the extremes into unity through their means, *by virtue of his characteristic attribute of being related to the divided extremes through his own parts*. Through this potential...man was called to achieve within himself the mode of their completion...by harmoniously advancing in an ascending sequence from the proximate to the remote and from the inferior to the superior...so that, by making of his own division a beginning of the unity which

of divine freedom and resourcefulness," in *Maximus the Confessor: Jesus Christ and the transfiguration of the world* (Oxford: Oxford University Press, 2016), 106-7.

[516] With the paragraph numbers of the Constas translation in brackets.

> gathers up all things to God their Author, and proceeding by order and rank through the mean terms, he might reach the limit of the sublime ascent that comes about through the union of all things in God...[517]

Without denying the important roles that virtue and love play in re-joining or recapitulating the cosmos to its creator (important certainly in modern considerations of our ecological responsibilities), I think it is clear from the above extract, that for Maximus, the whole-part relationship that humankind occupies with respect to the rest of creation is key to humankind's ability to fulfil its mandate. The whole of creation's dependency on humankind is by virtue of the stake that creation has had in humankind from the very beginning. The bringing forth of mankind (and the Son of Man) is, and always has been, essential to its stabilisation. As Christopher Knight explains:

> The incarnation in Jesus Christ is thus seen, not simply as a historical event, to be interpreted—as so often in Western Christian thinking—as a supernatural intrusion into the "natural" order. Rather, what occurs in the person of Jesus is, for this strand of theology, intimately linked both to the whole history of the redemptive process and to the act of creation itself. It takes up the fourth gospel's insight that the incarnation involves—as one Western scholar has put it—not "the sudden arrival of an otherwise absent *Logos*", but rather "the completion of a process already begun in God's act of creation.[518]

Although Maximus does not address or even acknowledge the natural evil arising from a cosmic fall, his answer to modern-day objectors, if he were alive today, would likely be along the lines of an appeal to ontological interconnectedness, rather than volitional unity. In the outward expansive movement of all creation the *logoi* of being are, as we have seen, hierarchically and immanently shared. The *logos* of Vertebrata unites all of us who are vertebrates; the *logos* of Mammalia unites all of us who are mammals. The meta-historical Adam, being a hypostasis of all these generic *logoi*, not only represents these *logoi* in an abstract federal-headship sense but also contains, or better still, *is*, these generic *logoi* constitutively. Therefore, when

[517] *Amb* 41.2, DOML2:105. Emphasis mine.
[518] Knight, *Eastern Orthodoxy and the science-theology dialogue*, 36.

Adam receives the consequences of his sin, all the generic *logoi* he represents/contains/is also receive the same consequences. In their coming to be, creatures were more than just individuals and particulars but were also singular universals and generic natures. Whereas now, in our current era of the *logoi* of well-being, any harm done to a whale has no effect on any other remotely located whale or indeed any other mammal, originally, in the aeon of the *logoi* of being, the harm done by Adam was transmitted structurally or 'holomerically' to the rest of creation to which he is constitutionally related. Finally, in the returning contractive movement of creation, the *logoi* of well-being and eternal well-being complete their evolution by being recapitulated in their head, the *Logos*.

It was always God's plan to have brought about this recapitulation through the incarnation in which the *Logos* completes the spiritual evolution of the cosmos by attaining full (re-)union with one of its species; an inaugurating act of grace to show how all creation will reach the same consummation. Christ, the first-born of creation, was the first to progress from being, to well-being, to eternal well-being.[519] As Paul Ladouceur says, '...[t]he goal of evolution was not the first *Homo sapiens*, but rather the Incarnation of the *Logos*, the assumption of human nature by "one of the Holy Trinity," Christ as the true Adam, the recapitulation of all nations, languages and generations, the alpha and the omega.'[520] Therefore, since the return of the cosmos was bound up in humankind's development and completion, the failure of humankind to cooperate with this process led concomitantly and inevitably to a failure of creation to reach its own goal. According to Nellas,

> The disruption which sin created in man brought with it the disruption of the cosmos. In creating man in the image of the King of the ages, God made him..."king of creation" and enabled him "to possess within himself the inward essences, the natures and the knowledge of all beings." *It was therefore unavoidable that the disruption of man should have brought about the disruption of the "essences" and the "natures" of beings, that is, the disruption also of creation*.[521]

[519] Knight, "The fallen cosmos: an aspect of Eastern Christian thought and its relevance to the dialogue between science and theology," 308.
[520] Ladouceur, "Evolution and Genesis 2-3: the decline and fall of Adam and Eve," 162. Emphasis mine.
[521] Nellas, *Deification in Christ: Orthodox perspectives on the nature of the human person*, 85. Emphasis mine.

Indeed, so intertwined are the *teloi* of human and non-human creation that the consequences of humankind's failure can be seen to be natural and intrinsic rather than supernatural and externally imposed. This is not an inheritance of guilt, a moral complicity, or a federal headship, but an ontological entanglement. As Nellas explains, it is according to the 'righteousness of creation' that mankind's hubristic action should have cosmic consequences:

> ...since the fall constitutes a real "hubris," there must also be a real and corresponding "penalty."...The penalty, however, which is naturally inflicted on the perpetrator of "hubris" comes not from the righteousness of God, which was neither wounded nor seeks satisfaction, but from the righteousness of creation. The laws of the latter continue to operate, but now in a disorganized and disordered way, and they involve man too in this disordered operation with the result that they draw him into misery and anguish. From this point of view, then, the union of man with the form of non-rationality, and the transformation of his natural functions into passions, that is, the "garments of skin," constitute the "penalty" which the very righteousness of creation imposes on man.[522]

In summary then, from a *sub specie aeternitatis* perspective, the essential role that humankind was meant to have in the maturation and unification of the cosmos made it impossible for human disobedience *not* to have a structurally damaging effect on that cosmos. In our Western way of thinking, we might recoil at the seeming injustice of Adam and Eve's punishment for sin being also inflicted on a non-human creation that was by and large minding its own business and in no way contributing to that sin. But for Maximus and the East, the non-human creation was never independent of humankind for its own creation and development and therefore any compromise in humankind's proper function would also compromise the non-human creation's proper ontological progression. Only through God's compensating action of clothing it with garments of skin could the cosmos hope to realise its originally intended, humanly mediated completion. Even without biological Darwinian evolution, a *logoi*-based creation is already an evolutionary process in which everything is mutually implicated.

[522] Nellas, *Deification in Christ: Orthodox perspectives on the nature of the human person*, 62.

5.6 'Suffering as'

5.6.1 Theocentric approaches to suffering

My third and final response to the overly simplistic opposition of 'good *logoi*' to 'evil evolution' is more tentative, and should be regarded as an 'optional extra' argument rather than an essential component of any Maximian or Eastern response to evolutionary evil. It is to suggest that evolutionary suffering is somehow rooted in God's own nature, or at least his divine ideas or energies, rather than in some opposing malevolent agency or some accidental by-product of a freely evolving cosmos. It is to accept that the suffering experienced by creatures in the evolutionary process is real, but that it is also the very same suffering experienced by God. It is not a new idea. Similar suggestions have been made by others, in what Sollereder classifies as 'theocentric' approaches to theodicies of non-human suffering.[523] But what I would like to propose, based on my panentheistic reading of Maximus, goes further than most theocentric approaches in arguing that God's constitutional immanence afforded by the *logoi* renders him a co-sufferer in a much more direct way than is usually claimed.

To set the scene, I will briefly outline three examples of theocentric approaches to suffering that vary in the degree to which God is involved with, or empathises with, creatures in their suffering. I will call these 'suffering for,' 'suffering with,' and 'suffering as,' which correspond to weak, moderate and strong levels of divine involvement or empathy, respectively.[524] I will then go on to position my partially panentheistic reading of the Maximian *logoi* along this spectrum, arguing that it represents the most radical version of 'suffering as,' therefore making it a strong

[523] Sollereder, *God, evolution, and animal suffering: theodicy without a fall*, 79.

[524] My use of prepositions to distinguish different ways in which suffering might be predicated of God resemble a similar use made by Gregersen to discriminate different understandings of the Incarnation. In 'strict sense incarnation' God is present 'as' the particular human male Jew, Jesus of Nazareth. In 'broad sense incarnation' God is present 'in, with, and under' all creatures. In 'soteriological incarnation' Christ co-suffers 'for' all creatures. Niels Henrik Gregersen, "Cur deus caro: Jesus and the cosmos story," *Theology and Science* 11, no. 4 (2013): 376.

defence against the accusation that the goodness of the *Logos* and the sufferings of evolution are incompatible.

5.6.2 'Suffering for'

The 'suffering for' approach encompasses those theories of atonement in which Christ represents humankind and creation by allowing himself to experience the same kinds of physical, psychological and spiritual suffering that they collectively suffer. By suffering on the cross in the person of his son, Jesus Christ, God shares in creation's suffering, standing with it in solidarity, knowing what it feels like in some equivalent sense.[525] Some versions go even further in claiming that the suffering experienced by Christ (and therefore by God) far exceeds anything that any mortal creature could undergo owing to the propitiatory nature of the sacrifice and the resulting alienation of Son from the Father. Whether or not that is the case, the common denominator of all 'suffering for' approaches is that the suffering experienced by Jesus Christ the Incarnate One is singular and different from all those other instances of suffering that are 'experienced' by ants, antelopes and apes. Though Christ's suffering might be of the same *type* as the suffering borne by other individual creatures, his suffering as an individual first century male Jew is a *token* of suffering that is spatiotemporally different from all those other tokens owned by other individual creatures that have ever lived or ever will live. Of course, this is precisely the point of the representational or substitutionary theories of atonement. According to these theories, atonement is achieved not by ameliorating current suffering but by securing future recompense or fulfilment. While it is true that Christ, being fully human, can empathise with our weaknesses,[526] the degree to which that empathy can relieve our *present* suffering depends strongly on our response to it, a luxury that other animals do not have since they lack the cognitive apparatus with which to discover and understand that Christ has been through the same thing they are going through (assuming all the while that theirs is not a unique suffering that even Christ's crucifixion cannot match). The 'suffering for' approaches sit well with

[525] Examples may be found in Sollereder, *God, evolution, and animal suffering: theodicy without a fall*, 79.
[526] Hebrews 4:15

the more voluntarist, strongly *ex nihilo*, approaches to creation in which there is an ontological chasm separating God and creatures. Just as the divine will was the sole cause of creation, so too, the divine will must be the sole (efficient) cause of redemption. God in Christ was a unique, one-off event, an intrusion into an otherwise externally orchestrated cosmos, with the sole purpose to effect a divine transaction that will result in the releasing of creatures from their bondage to sin, the benefits of which are to be gained in the life to come. Effectively, then, the 'suffering for' approach to reconciling the existence of suffering with the goodness of the *logoi* fails to take sufficient account of the individuality of creatures and their experiences here and now. It belongs more to the category of what Sollereder calls 'redemption approaches' in which creatures have to wait for the final eschaton to receive their recompense and fulfilment, whatever that might look like.[527]

5.6.3 'Suffering with'

A position more respectful of the individuality of creaturely suffering is the second—what I call the 'suffering with'—approach. Here God, in Christ, is not just offering himself as some kind of perfect exemplar of suffering from which all other creatures can draw their inspiration and comfort, but he is also present to, or alongside with, all creatures on an individual basis, sharing in their unique and individual events and experiences. Perhaps the most well-known exponent of this approach is Ruth Page, who coined the term 'pansyntheism' to describe God being 'with,' rather than 'above' or 'in,' creatures, thereby guaranteeing their freedom whilst maintaining constant divine involvement. In her own words, she '...takes what has traditionally been said of the constancy and fellowship of the Holy Spirit to make that the paradigm of the presence of God, rather than thinking of a distant God who then has to send the Holy Spirit in order to have a presence here.'[528] According to Page, God accompanies all creatures through their suffering as well as their good times such that each individual realises its purpose at every moment of its existence commensurate with its innate capacities. God knows what it is to be an eagle, a crocodile or a virus and therefore

[527] Sollereder, *God, evolution, and animal suffering: theodicy without a fall*, Ch.6.
[528] Ruth Page, *God and the web of creation* (London: SCM Press, 1996), 40.

knows how to connect uniquely with these creatures.[529] All creatures have a 'teleology now!' as she calls it,[530] that does not depend on any future eschatological state or any place within a wider system.[531] A maimed antelope does not need to wait for heaven or to appreciate its part in the ecosystem at large; it simply is known and loved by God and responds to God at a level of intimacy appropriate to its being an antelope.

I have much admiration for Page's scheme, in particular the way she alerts us to the possibility that God might be in restorative communion with all non-human creatures on a continuous basis, despite outward appearances to the contrary. Unfortunately, Page's scheme also comes with a variety of process theology attached. Her central thesis is that God did not *cause* anything in his act of creation, but simply allowed possibilities to come to fruition: a 'letting-be' rather than a making or designing.[532] God is therefore disconnected from the outcome of events even though he is accompanying them all the way. Everything is 'vulnerable to an upset' that lies outside of God's control, but at least God experiences the upset as it happens. Such a view of divine action in creation is far removed from Maximus' vision of a God who executes his predetermined thoughts according to his eternal and immutable will. One also might question how different pansyntheism is to more anodyne doctrinal statements of God's omnipresence. Page may be emphasising closeness or immanence, but she does not seem to be suggesting any divine-creaturely coinherence; for her, to do so would be only to exacerbate the problem of evolutionary evil. Overall, then, Page's pansyntheism is a step in the right direction in narrowing the gulf between God and creatures but is still a long way from Maximus' vision of a *Logos* who is constitutively and determinatively indwelling, rather than merely sympathetically close by.

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[529] Page, *God and the web of creation*, 70.
[530] Page, *God and the web of creation*, 63.
[531] Page, *God and the web of creation*, 71.
[532] Page, *God and the web of creation*, 3-5. She borrows the term 'letting-be' from John Macquarrie's theory of creation. See: John Macquarrie, *Principles of Christian theology*, Revised edition ed. (London: SCM Press Ltd, 1977), 217.

5.6.4 'Suffering as'

The third and final type of relationship that God could have with suffering creatures is not (only) to suffer for them, or with them, but to suffer *as* them. Clearly this is a non-starter for theologies of creation that would deny any ontological commonality at all between God and his creatures. When God, by virtue of his will, is merely an efficient cause (and not a formal cause) then there can be no imparting of Godself to the products of that will, for such products will bear a form derived entirely *ex nihilo*, along with their being. In such a situation the most that God can do is to either replicate the suffering in his own self ('suffering for') or to move as close as possible to the sufferer ('suffering with'). Even with more participative models of the divine-creature relationship, the degree to which God can empathise with suffering creatures is restricted by the limitations imposed by analogy: a likeness grounded in an even greater unlikeness. Besides, according to the normal 'rules' of participation, God does not participate in creatures, but creatures participate in God, yet it would seem that creaturely suffering logically precedes any divine suffering: God's 'com-passion' must follow our passion. Hence, a dogma of a complete and utter alterity between God and creatures faces the problem that God is fundamentally limited in his ability to identify fully with the sufferer, because in the final analysis, the two are irreconcilably different.

5.6.4.1 ...via Deep Incarnation

At this juncture one might want to object and claim that the Incarnation was God's solution to this impasse. Through the hypostatic union of two natures—human and divine—God, as the second person of the Trinity, was able to experience our human nature, and all the pain that goes along with it, without any diminishment to his own nature. Here perhaps we have a way of retaining a rigorous separation between the divine and created natures whilst allowing for them to come together in a way that facilitates a communication or sharing (of at least parts) of those natures across the divide. God became man that man might become God.

It would take me too far off-track to discuss the sophisticated thinking that has gone into working out how the metaphysics of the hypostatic union could have extended its benefits to all human beings. It is enough to say that while it might be

easy to see how human nature is 'captured' by the incarnation, it is less easy to see how the incarnation can assume human *individual* differences, or indeed non-human natures and individuals.[533] Through his experience as a first century male Jew, God knew what it was like to suffer as a representative individual human being, and could be said to be in metaphysical union with human nature in general. He could even, by virtue of his evolutionary ancestry, be said to be in union with all shared non-human generic natures instantiated in that individual: the eukaryote, vertebrate, amphibian, reptilian, mammalian, and primate natures. Of relevance here is Niels Gregersen's theory of Deep Incarnation,[534] in which

> God's own *Logos* (Wisdom and Word) was made flesh in Jesus the Christ in such a comprehensive manner that God, by assuming the particular life-story of Jesus the Jew from Nazareth, also conjoined the material conditions of creaturely existence ("all flesh"), shared and ennobled the fate of all biological life-forms ("grass" and "lilies"), and experienced the pains of sensitive creatures ("sparrows" and "foxes"). Deep incarnation thus presupposes a radical embodiment which reaches into the roots (*radices*) of material and biological existence as well as into the darker sides of creation: the *tenebrae creationis*.[535]

According to Gregersen, God became flesh (*sarx*) not just in the specific body of Jesus of Nazareth ('Type 1 *sarx*'), nor only in the sinful nature of human nature ('Type 2 *sarx*'), but also in the materiality of the cosmos as a whole ('Type 3 *sarx*').[536]

The problem with this scheme, as Richard Bauckham has pointed out[537] and Gregersen himself acknowledges,[538] is that the divergent nature of the evolutionary

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[533] Note that this is not the same question as whether Christ's two natures were 'specific' or 'individual.' According to Maximus, 'Christ possessed both the common and the particular parts from which he was composed.' *Ep* 15, PG91:557C (translated in Wood, *The whole mystery of Christ: creation as incarnation in Maximus Confessor*, 231, fn.60.) It is more a question of how the human particularity he did embody was adequate to represent and atone for all particularities.

[534] Niels Henrik Gregersen, "Deep incarnation: why evolutionary continuity matters in Christology," *Toronto Theological Journal* 26, no. 2 (2010): 173-88; Denis Edwards, *Deep incarnation: God's redemptive suffering with creatures* (Maryknoll, NY: Orbis Books, 2019).

[535] Niels Henrik Gregersen, "The extended body of Christ: three dimensions of deep incarnation," in *Incarnation: on the scope and depth of Christology*, ed. Niels Henrik Gregerson (Minneapolis, MN: Fortress Press, 2015), 225-6.

[536] Gregersen, "The extended body of Christ: three dimensions of deep incarnation," 232-3.

[537] Richard Bauckham, "The incarnation and the cosmic Christ," in *Incarnation: on the scope and depth of Christology*, ed. Niels Hentik Gregerson (Minneapolis, MN: Fortress Press, 2015), 45ff.

[538] Gregersen, "Cur deus caro: Jesus and the cosmos story," 388.

process makes it impossible for the human individual, Jesus of Nazareth, to adequately represent all life forms that need redeeming. No hypostatic union of the *Logos* with a particular creature can subsume all created natures,[539] such as those that subsequently diverged from the phylogenetic lineage leading to humans (e.g. flying eagles or swimming dolphins). Nor can a single incarnation unite all particulars, such as the sequence of events that makes *my* suffering uniquely painful in the particular body and mind that *I* possess. Deep Incarnation does not go far enough in circumscribing the ontology of all creatures since the 'flesh' which Jesus inherited was not representative of, let alone identical to, the many millions of creatures that do not lie on the phylogenetic lineage leading up to him. In response, Bauckham has argued that ecological connectedness rather than genetic relatedness might be a better way of extending the scope and depth of the incarnation, and Gregersen has suggested that Jesus' true identity could be constituted by the internal relations his body has with all other components of the cosmos. This may be true to some extent, but, in my view, it becomes rather tenuous when considering spatiotemporally remote ecosystems.

5.6.4.2 ...via Maximian panentheism

A Maximian panentheistic framework offers a radical alternative. The historical incarnation of the *Logos* in Jesus of Nazareth was not the only occasion when the *Logos* made an entry into creation: he was in it, comprising all of it, from the beginning. Therefore, when creation suffers, the *Logos* of God suffers, not *for* or *with* creation, but *as* creation. Of course, we must bear in mind the qualifications that were discussed in the previous chapters to prevent a collapse into pantheism or a degradation of divine simplicity. The *logoi* are instantiated outside the Godhead as hypostases of a finite mode of being, and the ontological bridging created by the *logoi* is between creatures and the divine ideas/wills/energies/person, and not between creatures and the divine essence. But even so, the much stronger sense of a divine constitutional immanence means that suffering, when it takes place, is located

[539] Or even all matter. Human beings comprise only 4% of the kind of matter in the universe. Alexei V. Nesteruk, "From deep incarnation to deep anthropology: hypostatic union and the universe in the image of imago Dei," *Theology and Science* 21, no. 1 (2023): 88.

simultaneously in creatures and in God. We must also remember that for God to be 'as' creation in some pan-incarnational sense does not mean God is to be identified with evil. As we saw in the previous section, the garments of skin are the safeguard against this.[540]

Others have made the same move, though without arguing in quite the same way I am doing from the immanence of the *logoi*. Perhaps the most well-known recent example is Holmes Rolston III, whose views on the 'cruciform' nature of creation, or on nature being a 'passion play,' were put forward in the 1999 publication of his Gifford Lectures. There he says in characteristically graphic style:

> The way of history too, like that of nature, only more so, is a via dolorosa. Since the beginning, the myriad of creatures have been giving up their lives as a ransom for many. In that sense, Jesus is not the exception to the natural order, but the chief exemplification of it. The secret of life is seen now to lie not so much in the hereditary molecules…The secret of life is that it is a passion play.[541]

Arthur Peacocke also made the connection between immanence and suffering, though he stopped short of using the preposition 'as' to describe God's relation to it:

> The ubiquity of pain, suffering and death as the means of creation through biological evolution entails, for any concept of God which is morally acceptable and coherent, that if God is immanently present in and to natural processes, in particular those that generate conscious and self-conscious life, then *we cannot but infer that God suffers in, with, and under the creative processes of the world with their costly unfolding in time*.[542]

A further example is Andrew Elphinstone's argument that pain is an integral part of creation, not as a moral consequence of sin, but as a plain biological fact of life; a fact

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[540] Since Gregersen does not draw upon the Eastern tradition of garments of skin, it is understandable that he should be wary of Deep Incarnation turning into a pan-incarnationalism or a pan-sacramentalism. '...deep incarnation does not suggest that God is simply incarnate in all that happens and takes place at any moment in the history of creation...it is not theologically tenable to identify incarnation with creativity. In that case God would also be incarnate as Holocaust, as hypocrisy, as anxiety, etc.' Niels Henrik Gregersen, "Deep incarnation and kenosis: in, with, under, and as: a response to Ted Peters," *Dialog: A Journal of Theology* 52, no. 3 (2013): 252.

[541] Rolston III, *Science and religion: a critical survey*, 289. See also: Holmes Rolston III, "Redeeming a cruciform nature," *Zygon: Journal of Religion and Science* 53, no. 3 (2018): 739-51.

[542] Peacocke, "Biological evolution—a positive theological appraisal," 371. Emphasis mine.

which serves all creatures and was even an instrument by which Christ was made perfect, according to the writer to the Hebrews.[543] And according to Blowers, Maximus describes in *Capita Theologica et Oeconomica* the 'intrinsic cruciformity of creation, and the divine intention for all creatures, at the level of their very *logoi*, to manifest the cross and resurrection.'[544]

It might be objected that for God to exist in some sense *as* his suffering creatures implies that suffering is part of the Godhead in some primordial way, rather than as a secondary response to creaturely actions.[545] If the *Logos*, through the *logoi*, constitutes creatures, and if it is of the very nature of creatures to suffer, then God must either be making himself suffer as a voluntary (masochistic) act, or it must also belong to his very nature or person to suffer. Here, Wood's argument that Maximus' incarnational 'Christo-Logic' also applies to creation might have an advantage: if the *logoi* are constitutive as the person of the *Logos*, then it becomes possible to say that God suffers (only) as a person, whilst the divine nature remains impassible.[546] But even if this is not right and suffering somehow penetrates to the shared divine energies, the audacity of this suggestion is not an entirely new idea. Southgate, in his *Theology in a suffering world*, discusses the concept of 'ur-kenosis:' an intra-Trinitarian self-emptying in which three moments of self-sacrifice might be discerned in the Godhead, namely, eternal generation, creation, and the cross of Jesus. He lists Hans Urs Von Balthasar, Sergius Bulgakov, and Paul Fiddes as those who have developed this idea, and Gerard Manley Hopkins as one who has expressed the idea in poetry.[547] To these could be added Niels Gregersen, who writes that:

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[543] Andrew Elphinstone, *Freedom, suffering and love* (London: SCM Press, 1976), 51.

[544] Blowers, "From nonbeing to eternal well-being: creation ex nihilo in the cosmology and soteriology of Maximus the Confessor," 180. Referring to *Cap Gnost* 1.66-67, PG90:1108AB with his own translation.

[545] That God can suffer outside the incarnation is held by contemporary theopaschitism. For the most part, theologians only accept divine passibilty in connection with the incarnation. However, as Paul Gavrilyuk has argued, an outright rejection of either divine passibility or divine impassibility is too simplistic. The two positions have always been highly qualified. For example, proponents of divine passibility would argue that if God experiences emotion he does so voluntarily and with only those emotions that are fitting to his nature, such as love. Proponents of divine impassibility would be reluctant to say that the incarnate *Logos* is unaffected by the suffering of the bodily Jesus of Nazareth, but that instead the *Logos* participated in the sufferings. Paul Gavrilyuk, *The suffering of the impassible God: the dialectics of Patristic thought* (Oxford: Oxford University Press, 2004).

[546] This would appear to be Maximus' view. See *Amb* 2.4, DOML1:13-15

[547] Southgate, *Theology in a suffering world: glory and longing*, 118.

> ...God was revealed in the cross of Christ (in the cross, not behind!). The cross itself—the experience of biological death, physical pain and mental anguish—is included in the identity of God. To the identity of God belongs also the humiliation. There is no longer any opposition between God' glory and the humiliation of Jesus. God'[s] heavenly glory is stretched so as to encompass the soil of the cruciform creation.[548]

While self-sacrifice is not necessarily the same thing as suffering, it does at least connote a condition of voluntary loss or privation within the Godhead, rather than one of unalloyed self-sufficiency and bliss. To that extent then, it is not surprising to find that creation should contain some level of intrinsic self-sacrificial behaviour with concomitant suffering, given that it is modelled on the divine nature and is co-inherently formed by the *Logos*/*logoi*. 'The lamb slain before the foundation of the world'[549] is thus a description of the *Logos sub specie aeternitatis,* a supralapsarian condition *ad intra* that finds its way into the economy of salvation. As Maximus himself says:

> The mystery of the Incarnation of the Word bears the power of the hidden meanings and figures of Scripture as well as the knowledge of visible and intelligible creatures. The one who knows the mystery of the cross and the tomb knows the principles of these creatures. And the one who has been initiated into the ineffable power of the Resurrection knows the purpose for which god originally made all things.[550]

[548] Niels Henrik Gregersen, "The cross of Christ in an evolutionary world," *Dialog: A Journal of Theology* 40, no. 3 (2001): 203. See also Michael Gorman's argument that kenotic humiliation belongs to the identity of God, based on his translation of Philippians 2:6-8: '*because* [rather than *although*] he [Jesus] was in the form of God he did not exploit equality with God but emptied himself.' Michael J. Gorman, *Inhabiting the cruciform God: kenosis, justification, and theosis in Paul's narrative soteriology* (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2009), 16-23.
[549] Revelation 13:8
[550] *Cap Gnost* 1.66, PG90:1108AB, GB:139-40

5.7 Chapter conclusions

As I implied in the introduction to this chapter, the problem of evil is one of the most difficult that theology faces in any context, so perhaps I have been rash to address it in a mere chapter. My only excuse is that no-one to my knowledge has sought to reconcile the goodness of the *logoi* in creation with the occurrence of *evolutionary* evil, therefore any discussion on this subject, no matter how sparse, is effectively breaking new ground.

The three harmonisations I have offered are not necessarily the only ones, and certainly those who take a different, less panentheistic reading of Maximus will prefer alternative approaches. We also saw in Chapter 4 how at least one scholar in the Greek Orthodox tradition prefers to reject evolution outright and sees no support whatsoever for an evolutionary interpretation of Maximus. I hope, though, that he and others of the same persuasion would agree with me, at least, in seeing the deeper sense in which the *logoi* are evolutionary, according to Maximus' triad of being.

My three suggested harmonisations are not intended to be complementary and non-overlapping; in fact, they may even be contradictory in places. Why, for example, would we need to invoke garments of skin to account for suffering if suffering is an integral part of the Godhead? Or do we need to construct a compound harmonisation to account for different types of suffering? These and many more unanswered questions that this chapter raises I offer as topics for further research among scholars within the Eastern tradition and the science-engaged theology community as a whole.

Chapter 6: Conclusions

6.1 Recapitulation

6.1.1 Original aims and provisional conclusion

This study, like its subject, the *logoi*, has undergone considerable procession and expansion since its original point of departure and it is now time for it to undergo some convergence and return, remembering why it set out in the first place. There were, we may recall, two main sources of inspiration for the study: the general paucity of attention to how Maximus' thought might be relevant to the natural sciences; and the specific throwaway comments made by several authors suggesting a link between Maximus' *logoi* and evolutionary biology.

With regard to the first motivation, the study has shown, if nothing else, that Maximus is a fecund resource from which to derive theological insights of relevance to science, even if he was not consciously or explicitly attempting to make the pre-modern equivalent of scientific claims. The sheer richness of Maximus' vision of the *logoi* cannot but invite attempts to correlate what he says about them with what we observe and experience in the natural world. There is so much to play with and so much that can be transposed from the abstract and metaphysical to the concrete and physical, if only as an experiment to see where it leads. It would not be surprising if the same fruitfulness could be found in other areas of scientific engagement with Maximus, for example in the psychological sciences, with regard to the will and emotions, for which Maximus is equally renowned. At least from the perspective of evolutionary biology, it is hoped that the current study has begun to fill a gap in the Maximus literature and to point the way for others to follow.

It is, however, with regard to the second main source of inspiration that the success, or otherwise, of this study must be judged. The provocative statements found in the secondary literature formed the basis of my hypothesis that the *logoi* are in some sense 'evolutionary,' mirroring in some way the evolution of biological organisms through time. The testing of that hypothesis using primary textual material

led to the provisional conclusion that the defining, dynamic, temporal, and interrelated nature of the *logoi* did indeed comport with the way in which organisms can be defined by their genotypes and phenotypes, which are ever-changing through time through an expansive process of descent with modification in which the resulting ecosystems and communities are massively interconnected and interdependent.

How this resemblance should have come about is an interesting question. The likelihood is that Maximus was, to an extent, building on a pre-existing hierarchical view of nature expounded by the likes of Dionysius and Porphyry; but these philosophical views could in any case have been grounded by any casual observation of natural history, where commonalities and differences can be seen between and within natural kinds. What makes Maximus' account more evocative of evolution, however, is the way the *logoi* ontologically constitute rather than merely describe, and the way in which they emerge in time rather than form a static snapshot of reality. Without realising it, Maximus turns the vertical tree of life around by ninety degrees and gives it a horizontal time axis. Not only that, he unwittingly describes the way in which life evolves, not just through independent branching but also through co-evolution, resulting in the complex entanglement of needs and identities, thereby agreeing even with today's more sophisticated accounts of evolution that emphasise convergence and cooperation as well as selfishness and competition. The same could not be said of Porphyry's tree which remained a timelessly static scheme, with Porphyry himself being undecided as to whether it was meant to be an abstract mental construct or to bear ontological significance.[551] Divinely prophetic or accidentally prescient, Maximus develops his *logos* cosmology in a way that anticipates our modern evolutionary understanding of how God created life on earth and for that we can be thankful. In an age plagued with polemical accounts of creation and evolution, it is refreshing to find a church father who goes beyond a hexaemeral commentary (grist for the mill for the 'creationist') and thinks more deeply about the origins of the world and the relationship between God and creation.

[551] 'I shall omit to speak about genera and species, as to whether they subsist (in the nature of things) or in mere conceptions only...' Porphyry, *The Organon, or logical treatises of Aristotle, with the introduction of Porphyry* (London: Henry G. Bohn, 1853), Ch.1.

6.1.2 Challenging and refining the provisional conclusion

To arrive at my initial and provisional confirmation of the hypothesis for an evolutionary interpretation of the *logoi* I freely admitted to undertaking a rather biased approach of cherry-picking only those aspects of the *logoi* that seemed congruent with evolution and only those aspects of evolution that seemed congruent with the *logoi*. This was in order to assemble a quick and plausible case in support of the original authors whose reference to the evolutionary *logoi* I had originally discovered. It was to show that their views were not without clear evidence in the writings of Maximus—perhaps even more then they realised or were prepared to say. My initial claim that there is *at least some* link between Maximus' *logoi* and evolution would therefore appear to have been substantiated.

Before moving on to consider possible incongruous or disanalogous aspects of the *logoi* with respect to evolution, we paused in Chapter 3 to ask the question of what the *logoi* really are, where they are 'located' on either side of the created-uncreated divide, and indeed whether they are the very same entities when 'in' God as compared to when 'in' creation. This philosophical interlude was not meant to be a tendentious collusion with the provisional conclusion reached in Chapter 2 but, on the contrary, to raise the stakes for both those conclusions and for any additional findings still to be made from a wider exploration of the *logoi*. What the *logoi* are, and how they relate to God and creation, will impact our theological understanding of evolution, leading us to either to rejoice in evolution as a God-given or even God-endowed process, or else to accept evolution grudgingly as a puzzling and inconvenient phenomenon not in keeping with how we expect God to create and exercise his providence.

The outcome of Chapter 3, though controversial in detail, was, overall, to affirm in Maximus a much greater sense of God's immanence in the world than is perhaps encountered in later Western, scholastic accounts that rely more on participatory metaphysics. The *logoi*, as either ideas/wills, energies, or the second person of the Trinity, are the same in God as they are in creation; and in creation they specify and constitute the intrinsic form of creatures, though not their finite mode of existence. God can therefore be said to be 'in' creation, though not as his essence. The *logoi*

therefore act as a bridge, creating a communion between God and creation, whilst leaving some residual uniqueness on either side that is not shared. I called this a 'partial and dynamic panentheism.' 'Partial,' because not all of God (i.e. his essence) is in creation, and not all of creation (i.e. its finite mode of existence) is indwelt by God. 'Dynamic,' because the way in which God is in creation is itself evolving. The *logoi* are evolving from their initial position as *logoi* of being, to their interim position as *logoi* of well-being, to their final position as *logoi* of eternal well-being. I also contested the view that the final transtemporal stage in the triad is all that matters for defining 'true' creation on the basis that failure to respect the reality of the *logoi* in our current temporal world is to leave the world bereft of God, and the *logoi* isolated from any engagement with natural sciences.

Armed with this understanding of the ontological basis of the *logoi*, we went on to consider in Chapters 4 and 5 some further aspects of the *logoi* which do not seem to resonate well with evolution and some further aspects of evolution that are particularly worrying to theology, especially a theology in which God is immanently present. In Chapter 4 I named several 'inconvenient truths' about the *logoi* which jar somewhat with the idea of the *logoi* following a haphazard evolutionary course in the real world. These were that the *logoi* are inviolable, teleological, immanent, and determinative. I argued that none of these were really problematic from a theological or scientific perspective despite initial appearances. The inviolability of the *logoi* refers to their constancy within God as his unchanging and eternal ideas, wills, energies or Person, not the way in which they unfold in finite space-time. Their teleological nature is not to be found in the trajectory of biological evolution, but in their trans-temporal movement towards a consummation outside life as we know it. Tempting as it is to look for signs of direction in biological evolution and attribute these to divine purpose, the implication of any such move is that the rest of evolution is not divinely purposed. The error of this way of thinking is exposed by the final two 'inconvenient truths' of the *logoi*: their immanent presence and determinative action. It is difficult to think of events in evolution being left to drift outside divine control when God himself is present in all things, constituting their substances, relations and powers. Even if from our perspective some events such as genetic mutations could be said to be random and uncaused, this cannot truly be the case if

God himself is defining and upholding them from the inside. I showed that this view of God's all pervasive, suffusive control is congruent with a well-known theory of divine action known as incarnational or panentheistic naturalism in which God acts from the inside of things (as 'fixed instructions') rather than as an external orchestrator, with therefore no need for intervention, and no need to reject the causal closure of the universe assumed by science. Whilst this perspective of divine immanence in evolution is not new, it is I believe, the first time that Maximus' *logoi* doctrine has been shown explicitly to support it.

Finally, in Chapter 5 I confronted the most difficult and most inconvenient truth of the *logoi* that stands diametrically opposed to evolution: their goodness. Whether they are divine ideas/wills, energies, or the *Logos* himself, the *logoi* are either participating in the Good, or are the Good personified. As such, they cannot define or control anything that is not good. Moreover, they ought to be theophanic, communicating God's presence and goodness at all times. But these expectations stand in stark contrast to the evil outcomes of evolution: the collateral death, destruction and violence that is an inevitable consequence of the natural selection of blindly generated variants struggling for survival in an environment of limited resources. Without claiming any definitive solution to this evolutionary problem of evil, I offered three tentative solutions or mitigations in the hope that the concept of the evolutionary *logoi* might still remain plausible even in the face of this vexing aporia.

To clear the ground, I first attempted to show that at least in principle, we should be wary of labelling all evolutionary phenomena that strike us as 'unbecoming' of God as being evil or the absence of good. To do this I drew upon the Eastern tradition's view of creation as a process of maturation with the incarnation originally intended as a final elevation rather than a remedy or reparation. If we are happy to accept that the ultimate, 'really real' individual creature is the deified one, and that it cannot achieve deification in this life but must await the final eschaton, then we should have no difficulty in accepting that the ultimate, 'really real' species or genus is one that must also await consummation beyond what is possible in biological evolution. Therefore, when we observe evolution and its products, we

should expect to see incompleteness and immaturity—maybe even messiness and disorder—since we do not see the full picture of where the *logoi* end up.

In practice, however, it is difficult to point to unadulterated immaturity because overlaid on everything is much that is unequivocally 'not-good.' It is difficult to point to any underlying transitional nature of, say, a lion when much of what constitutes 'lion-ness' are adaptations to a life of violence. To help navigate this issue, I called upon two more distinctively Eastern resources that are very much neglected in the realm of science-engaged theology: the notion of 'garments of skin' as remedial and punitive concessions imposed by God in anticipation of humankind's sin; and the view that the Fall was coincident and coextensive with creation rather than a punctiliar event in time. I argued—admittedly very speculatively—that perhaps there are garments of skin to be found in certain 'bad' components of Darwinian evolution (e.g. competition and selection) that have been added to what would have been otherwise an entirely 'good' mechanism (e.g. variation and adaptation). And since there was never any time when creation was not already fallen and encumbered with garments of skin, there is no way of falsifying this claim by looking at how evolution operated before the fall, because there was in fact no 'before.' In this way, evolution per se, can be saved from outright rejection (by fundamentalist creationists) or from outright accommodation (in theodicies seeking to justify a non-hamartiological origin of evolutionary evil). Instead, underlying everything we see, there is a good evolution in progress that lies beyond the limited capability of biological evolution, and beyond the restricted vision of those who expect to see God only in the *logoi* of being and well-being.

My last attempt at mitigation was to enter the arena of theocentric approaches to theodicy in which God's own suffering is seen to be compensatory or ameliorative for creatures playing their part in suffering for the sake of evolutionary creation. I suggested that a panentheistic reading of Maximus' *logoi* allows a radical restatement of the idea that God is either suffering *for* creation or suffering *with* creation. Instead, I argued, God could be said to be suffering *as* creation in as much as he is constitutively present in all things as divine ideas/wills, energies or Person. It is closely related to Gregersen's idea of Deep Incarnation, though is not dependent on there being a physical communion of all things with the physical body of Jesus of

Nazareth, thereby avoiding problems that have been pointed out with Gregersen's scheme.

On the basis of all these findings, I invite the reader to accept that there is indeed much truth in the notion of the 'evolutionary *logoi*' when Maximus is read in the light of biological evolution.

6.2 Emerging themes and applications

Whether or not my provisional harmonisation of the *logoi* with evolution was persuasive, and whether or not my subsequent efforts to resolve its more dissonant notes were successful, the study as a whole has encountered a number of themes that would seem to be distinctives of Maximus' theology of creation, and which are worth emphasising for their own sake. These are: the role of formal causality; the importance of particulars; the immanent working of providence; and the evolutionary nature of the *logoi*. In what follows I will outline how these themes have emerged, why they are important, and how they might lead to further research and practical application.

6.2.1 Formal causation

The prestige and success of the natural sciences and their preoccupation with efficient causation has marginalised explanations that are made in terms of the other Aristotelian causes. The final cause in particular is often seen as the *bête noir* of science, prematurely curtailing investigation, it is claimed, by attributing causes to inherent, occult powers and dispositions.[552] When reductionism runs amok and explanation is given in ever more lower-level terms, it is easier for science to think in terms of passive particles responding to external laws and fields rather than internal tendencies or innate patterns and forms. Theology can sometimes respond to this by attempting to rehabilitate the pre-modern notion of final causation, especially in

[552] Mayr, "The idea of teleology," 117-35; Michael Ruse, "Evolutionary biology and the question of teleology," *Studies in History and Philosophy of Biological and Biomedical Sciences* 58 (2016): 100-06.

view of the fact that science itself can sometimes smuggle in teleological terminology without realising the irony in doing so.[553] Unfortunately, too much emphasis on final causation can have its own problems. As we saw from Jordan Daniel Wood's reading of Maximus, an understanding of the end of creation as the only true creation can imply that this middle age of creation history that we currently occupy is somehow not real, not true, or not good. It can potentially lead to a demeaning of life as we now know it in favour of a superior life in the age to come. Taken to an extreme it can demotivate attempts to make sense of our current world and encourage passivity or quietism. Any sense of opting out of our current age would of course be morally problematic in view of the global injustices that we are enjoined to address, but it would also have the effect of obsoleting science-engaged theology in the sense that nothing that science could understand of the world could ever be seen to be of lasting importance. We would do well, therefore, in correcting the excesses of scientistic reductionism not to go to the other extreme of embracing a religious ('religionistic'?) holism in which all that counts is the final end in which God is all in all. If my analysis of Maximus is correct, we should recognise that creation is an intrinsically evolutionary entity, and that time and its moving products are themselves as much a part of a good creation as are its static beginnings and ends. In fact, to be created is almost by definition to be forever moving, and even the world's so-called end is, according to Maximus, an 'ever-moving repose' rather than a permanent stasis.[554] 'Middles' are as essential, and as sacred, as beginnings and ends. As I have repeatedly stressed in this study, God is as much invested in transitional and ephemeral states as he is in completed states. Formal causality, therefore, is the *via media* between efficient beginnings and final ends, both of which, if stressed alone, eviscerate creation leaving it devoid of any donated form, with the result that creation becomes merely the product of a powerful source returning to its causal origin whilst in itself being nothing. By recovering a due regard for formal causation, the heart of creation can be restored; its intrinsic giftedness can be recognised as well as its origin and its

[553] For example, see: Simon Oliver, "Teleology revived? Cooperation and the ends of nature," *Studies in Christian Ethics* 26, no. 2 (2013): 159-60.
[554] Mitralexis, *Ever-moving repose: a contemporary reading of Maximus the Confessor's theory of time*.

destiny. Creation from nothing (*ex nihilo*), if overly stressed, means creation is nothing, whereas creation from God (*ex Deo*), gives creation meaning on its entire journey from beginning to end. The *Logos* is not just the Alpha and the Omega, but all the letters in between!

6.2.2 Particularity

Particularity may not seem an obvious theme to extract from Maximus' *logoi* cosmology, but it does play an important role in separating Maximus from a slavish adherence to Platonism. Contrary to a Platonic vision in which the sensible realm participates in the intelligible realm, with Maximus, everything—barring human freedom—is a product of God's realised intentions, without diminution, right down to the apparently 'accidental.' There are *logoi* for everything. We saw how this fitted in to an immanent realism inherited from his Cappadocian forefathers in which universals do exist but only to the extent that the individuals harbouring them also exist. Individuals are therefore important to Maximus.[555] The unique differentiae of individuals and particulars, far from being an inferior residue after the abstraction of universals, are also products of divine intention (idea and will). Nothing, it seems, escapes divine predetermination in keeping with God's perfect knowledge of what he wants to make and his ability to implement precisely that knowledge into a finite mode of existence. It also means that any hierarchical arrangement of the cosmos (e.g. that generated by evolutionary descent with modification) does not result in a graduated metaphysics of being in which those most proximate to God are more real and actual and those most distal more unreal and more potential.[556] Rather, everything is equally and radically distant from God by virtue of its *tropos huparxeōs*, but everything is also equally and exhaustively determined and indwelt God by virtue of its *logos tēs ousias*. Maximus' thoroughgoing action of the *logoi* has the effect of balancing divine exemplarism with divine voluntarism. It is not just the order, beauty,

[555] Blowers notes that 'Maximus' overall cosmology dignifies particularity in relation to universality of being, and not only with respect to humans but also to the nonrational creation.' Blowers, "Unfinished creative business: Maximus the Confessor, evolutionary theodicy, and human stewardship in creation," 181.

[556] The particularity of Maximus' *logoi* therefore avoids the Reformed complaint that participatory Thomistic metaphysics results in a demeaning of creation. See: Jaeger, *What the heavens declare: science in the light of creation*, 66.

stability and unity of the cosmos that attests to the divine by participating in divine excellencies. The disordered, unattractive, ephemeral and diverse aspects of creation also point to God, but a God who is a person with free will, rather than a spontaneous emitter of participating otherness.

As we have seen, not all would agree with this reading of Maximus, and it may be the case that I am taking advantage of Maximus' silence on the question of non-human tropic change. But until someone breaks that silence by bringing to my attention evidence to the contrary, it seems to me that Maximus' emphasis on the all-pervasiveness of the *logoi* is not to be dismissed. That being the case, the implication for evolution is quite significant. Like all contingencies, the contingency of evolution is rooted in details: the details of the environment that allow some individuals to flourish and others to perish; the details of the genetic mutations and recombinations that lead to one progeny variant being born and not another. Divine purposeful actions can begin as naturalistic random accidents since the two are not in competition with each other but coincident with each other. In the fullness of time, these accidental variants and contingent environmental conditions go on to produce new species and cannot therefore be neglected by God without his needing to make interventional corrections later on. The *logoi* of particulars, species and genera (not to mention all their interactions) ensures, in Maximus' framework, that no such intervention is needed, but that all corners of evolutionary ontology are fully spoken for; spoken, that is, literally through the Word. The theme of particularity reinforces the previous theme of divine formal causation by clarifying—in case there were any doubt—that all aspects of the evolutionary process should be regarded as good: no creatures are waste products and no creatures are left behind.[557] Maximus should not therefore be recruited into defending arguments that privilege evolutionary optima or evolutionary convergence, as if the peaks of adaptive landscapes are the only forms that are *Logos*-defined.[558]

[557] Blowers, "Unfinished creative business: Maximus the Confessor, evolutionary theodicy, and human stewardship in creation," 179.
[558] *Contra* Kojonen: E.V.R. Kojonen, *The compatibility of evolution and design* (Cham, Switzerland: Palgrave Macmillan, 2021), 212.

A current practical application of Maximus' attention to particularity can be found in the critical response it can offer to a recent attempt to salvage the biological design argument in evolution. In his book, *The compatibility of evolution and design*, Rope Kojonen argues that evolution is dependent on a number of finely-tuned preconditions without which it would not be able to traverse the vast multi-dimensional design space to locate adaptive optima.[559] Although functional forms are very rare, recent research has found that many of them are located sufficiently close to each other in design space that they can be found by random searching within a reasonable timescale. The arrangement of the environment, it is claimed, has been pre-fixed by an intelligent designer to allow evolution to occur, the implication being that 'design' is to be discerned in the built-in constraints of the environment that channel evolving populations to limited outcomes, rather than in the contingency by which those outcomes are eventually achieved. It is a somewhat Platonic vision in which ideal forms have been set up in advance into which mouldable raw material (i.e. 'random' genetic variation) must eventually *con*form.[560] According to this logic, the well-structured, and the finely-tuned are seen as more suggestive of divine intentionality than the divergent, heterogeneous and aleatoric.

In my view, however, such design logic is problematic for the implications it has for God's relation to the world, and the implications it has for transitional and unsuccessful creatures. For God, it implies that his intentions for the world do not include those outcomes of evolution that fall short of the pre-set optima, because he is not micro-managing the detail of how populations evolve from A to B, but only setting the A and the B in the first place; and this is problematic because it puts God

[559] Kojonen, *The compatibility of evolution and design*. See also responses to his work arising from a symposium, summarised in: Zachary Ardern, "The contentious compatibility of evolution and design: introduction to the book symposium," *Zygon: Journal of Religion and Science* 57, no. 4 (2022): 1019-23.

[560] The moulding of organisms to their environment has been likened to water filling a rocky basin to form a lake. The basin impresses its form on the water, with the water being merely a passive receiver of form. In an analogous way, the environment that an adapted organism occupies gives some its information content to the organism in the form of its genotype and phenotype. It is a powerful analogy but neglects the fact that organisms are not infinitely malleable like water but are angular and intractable. Many do not fit the shape of the rocky basin and remain poorly adapted. But these are nonetheless creatures, and I argue, are still designed by God. See: Stephen J. Freeland, "The evolutionary origins of genetic information," *Perspectives on science and Christian faith* 63, no. 4 (2011): 246-7.

into competition with the details of evolutionary change which he is not directly controlling—a subtle form of deism. For transitional creatures—that is to say, creatures not occupying the adaptive optima—it implies that they are not fully intended or amount to imperfect designs. Thus, an ancestral population of proto-birds having only rudimentary wings could be said to be only half way to realising God's ideal design, and an individual within that population that leaves no progeny would be effectively irrelevant to God's eventual design intentions. The net result is a demeaning of creatures that do not fulfil their archetypal ideals: phylogenetic intermediates become mere instruments to a greater goal; and phylogenetic cul-de-sacs can be considered discarded failures. Not that Kojonen draws these conclusions, but they would seem to be the unspoken sequalae that arise from a selective attribution of divine design.

But, regardless of what I think about Kojonen's attempt to resuscitate the biological design argument, the real relevance of his book for this study is that it does not align well with Maximus' *logoi* doctrine, in which the *logoi* (and thus the *Logos*) specify not just species or types, but every individual, every particular, every accident, and every relation that has ever existed and ever will exist.[561] Since the *logoi* are divine wills and intentions, there can be no evolutionary event too erratic and no evolutionary outcome too disordered that is not as much fully intended as those that are directional and ordered. It is therefore a surprise to find Kojonen, in the closing pages of his book, referring to Christopher Southgate's appropriation of Maximus in which he compares the *logoi* to peaks on the fitness landscape. As I have argued, the *logoi* are not so much the peaks on the landscape but all the points occupying the landscape, whether they lie close to the peaks or not. Of all the church fathers that could be chosen to lend credence to Kojonen's view of evolutionary design, Maximus is probably the least suitable owing to his holistic and non-discriminatory view of divine design via the *Logos*.

[561] If we are to salvage a design argument from evolution, it would be better in my view, to claim divine intentionality for all levels and moments in the process, invoking perhaps the 'personal explanation' for design that I touched upon in §4.3 whereby a mixture of directedness and spontaneity of process and outcome might be the more fitting hallmarks of a personal designer.

6.2.3 Immanent providence

The third theme—and one which comes out very clearly in Maximus—is the strong emphasis on immanence. God is always present, accompanying populations through their evolution, just as much as he accompanies individuals through their development (and in the case of humans, through their sanctification). If what has previously been said about the *logoi*'s exhaustive specification of all levels of the world has the flavour of determinism, the immanence of God serves to temper or nuance that determinism. God's constant personal presence ensures that we are not talking about a remote God who sets things running (as in deism) and neither are we imagining an external, monarchical God who is issuing commands from a distance (as in some Western theism).[562] We avoid, on the one hand, the anxiety over a divine providence rooted in God's will (as efficient cause) and, on the other hand, the reckless hubris of a providence rooted in God's end (as final cause).[563] Rather, we can enjoy God's intimate presence in the here and now. The *Logos*, via the *logoi*, is effectively 'running the show' from the inside. The author (the *Logos*) is the actors (the *logoi*), and the author/actors work together to achieve a harmonious cosmos in which providence amounts to an autopoietic stabilisation of mutually-related and implicated players. There is no external script to work from, for the actors are themselves the script, speaking each other into existence as the drama unfolds. There are no unimportant roles and no inconsequential scenes in this drama. The climax of the play is not just at the temporal end of the production, but every moment in its performance. Every character is its own denouement, because every character is also, ultimately, the author, whose consummate artistry shines forth from every stanza, phrase, and syllable.[564] How great are God's ideas, wills, energies and Person when seen in this way, through Maximus' eyes, as being all-pervasive in the world and in evolution!

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[562] e.g. Aquinas' picture of an archer firing an arrow to illustrate God's purposeful action. (*ST* I.103.a1, ad obj 1.)

[563] Christine Helmer, "Providence: a deflationary mandate," in *Divine action and providence*, ed. Oliver D. Crisp and Fred Sanders (Grand Rapids, MI: Zondervan Academic, 2019), 74-95.

[564] 'For Maximus, Christ the *Logos* authors the "script," as it were, both of creation and of biblical revelation (sacred history), and his eschatological endeavor is that of the lead character in an unfolding drama that began in his premeditation of the *logoi* of all things and will end in his full self-disclosure in all things.' Blowers, "From nonbeing to eternal well-being: creation ex nihilo in the cosmology and soteriology of Maximus the Confessor," 185.

A strong view of immanence might be particularly germane for theological responses to our current environmental crisis. The evolutionary *logoi* should energise our efforts to help rescue our planet from its anthropogenic decline because now we can see the seriousness of destroying not just what belongs to God but that which in endued with God. Secular society is in a quandary. Not wanting to rely on utilitarian or anthropocentric arguments, nor wanting to appeal to spirituality or transcendence, it struggles to give adequate ethical justification for species conservation or animal welfare for their own sake.[565] Theological society is also perplexed. Not wanting to form allegiance with anything that might look 'new agey' or pagan, it must rest content to share in practical action with its unbelieving neighbours rather than join in any philosophical solidarity. In fact, the secular sceptical might be inclined to say, not without some justification, that a Christian worldview militates against finding *any* common ground as to the intrinsic value and dignity of non-human beings.

Now there are many theological responses that could be given to address that suspicion, but one that this study could supply concerns the sacredness of all *logoi*-endowed creatures, no matter where they lie on the evolutionary tree of life. Not that we destroy God when we destroy nature of course, but we reject his ideas, we contravene his will, we despoil his works (or energies), and we affront his person—all immanent as the *logoi*. Environmental vandalism is therefore a direct assault on God, rather than just an attack on God's property. Perhaps the evolutionary *logoi* can raise the theological stakes from simply claiming that the whole world belongs to God (in the externalist, monarchical sense) to claiming that the whole world *is* God (in the panentheistic sense). It is not a new idea,[566] but approaching the question from the perspective of the *logoi* might lend it greater theological respectability. Suitable qualifications will need to be made, but we do not want to die the death of a thousand qualifications. If Jesus affirmed the shocking statement 'I said you are

[565] See, for example, the efforts of a secular nature writer to try to describe the transcendent in nature without invoking the spiritual: Michael McCarthy, *The moth snowstorm. Nature and Joy.* (London: John Murray, 2015).

[566] See, for example: Daniel Munteanu, "Cosmic liturgy: the theological dignity of creation as a basis of an Orthodox ecotheology," *International Journal of Public Theology* 4 (2010): 342. Luca Valera and Gabriel Vidal, "Pantheism, panentheism, and ecosophy: getting back to Spinoza?," *Zygon: Journal of Religion and Science* 57, no. 3 (2022): 545-63.

gods'[567] then could we not also be provocative in laying bare our supreme motivation for environmental activism in claiming 'the world is divine'? As Philip Clayton has pointed out, 'Arguably, there is no stronger motivation for valuing and preserving the environment than the affirmation that each organism has its own distinct reality and agency, while at the same time inherent in each is the infinite value of the one overarching and all-encompassing One.'[568] We would, after all, only be following in the long tradition of the sacramentality of the world.[569] Maximus would surely have agreed that

> Earth's crammed with heaven
> And every common bush afire with God;
> But only he who sees takes off his shoes,
> The rest sit round and pluck blackberries.[570]

Perhaps with sufficient modern day biological education he would also have agreed that evolutionary change is likewise 'crammed' and 'afire.'

6.2.4 Evolutionary logoi

And finally, the most striking theme to emerge from this study must surely be the *original* evolutionary nature of the *logoi*. In seeking to establish how well the *logoi* accord with the facts of Darwinism, we have seen that far from needing to follow the lead of biological evolution, the *logoi* have actually set the agenda in the first place. We are not so much looking at the *logoi* through the lens of evolution but looking at evolution through the lens of the *logoi*. Despite all the confusing and distracting disvalues of biological evolution, the gift of God in creation was always, according to the Confessor's '*logoi* logic,' dynamic and evolutionary. Maximus got there before Darwin in realising that all creatures move outwards from the *Logos* in an unfolding fashion, but unlike Darwin, he did not interpret the unfolding to mean a god-less

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[567] John 10:34
[568] Clayton, "Panentheisms East and West," 191.
[569] Alexander Schmemann, *The world as sacrament* (London: Darton Longman & Todd Ltd., 1966); Patrick Sherry, "The sacramentality of things," *New Blackfriars* 89 (2008): 575-90. See also recent ecological application of sacramentality and re-enchantment in the edited volume: John Chryssavgis and Bruce V. Foltz, eds., *Towards an evology of transfiguration: Orthodox Christian perspectives on environment, nature, and creation* (New York: Fordham University Press, 2013).
[570] Elizabeth Barrett Browning, "Aurora Leigh," in *The Oxford book of English mystical verse*, ed. D.H.S. Nicholson and A.H.E. Lee (Berkeley, CA: Apocryphile Press, 2012), 150.

autonomy. In fact, quite the opposite. We can infer from Maximus' understanding of the *logoi* that God himself is *living out* the process of evolution in all its twists and turns, in all its messiness, in all its bodged attempts, and in all its resulting inventiveness. It seems that evolution was always God's 'Plan A,' though not as modern science had expected. The tree of life has its roots and its efflorescence situated outside our spatiotemporal universe, corresponding to the *logoi* of being and the *logoi* of eternal well-being; arboreal extremities that lie beyond the realm of the natural sciences. Only the middle branching section—the region of the *logoi* of well-being—is open to scientific and theological enquiry, but this must be made cautiously and contemplatively. If we allow our theology and spiritual practice to be led too much by the science of this intermediate realm, we will be left with a procrustean tree of life deprived of source and end, and an impoverished vision of the *Logos* that defines, feeds and nourishes it. This is because creation's true nature and the *Logos*' true presence is partly attenuated and partly veiled in our current reality. It is attenuated, because the *Logos*' full presence is to be seen only in his complete journey from being to eternal well-being, which is visible only with the eyes of faith. It is veiled, because even the bit we *can* observe as scientists and natural theologians has been over-grafted with dermal accretions that were ever in place from the very beginning. As Maximus knew only too well, the solution to discerning the *Logos* correctly was spiritual ascesis and contemplative *theoria*. This study has perhaps helped clarify why such practices are needed, and why God appears hidden and difficult to find. A Maximian theology of evolution has helped us to see that, apart from any noetic incapacitation due to our own sin, there are cosmological and ontological reasons for the *deus absconditus* that lie in the fleeting evolutionary nature of the *logoi* and their occlusion by garments of skin.

How might this evolutionary view of the *logoi* have any wider relevance to theology and the world? One possibility is for theology to reclaim the high ground and extoll the notion of a divinely ordained evolution grounded in Trinitarian procession and manifested in the ever-moving unity-in-distinction of the universe. Theology can start to speak boldly of an ever-present primordial evolution, transcending the polemics of creationism and scientism; 'a universal alkali' that can neutralise the acerbic pronouncements of atheist philosophers intent on

weaponizing Darwin.[571] The evolutionary *logoi* can help Christendom realise that evolution has, all along, been its ally and not its foe, of which we need have nothing to fear but in which we have much to rejoice.

[571] Referring, of course, to Daniel Dennett's 'universal acid.' Daniel C. Dennett, *Darwin's dangerous idea: evolution and the meanings of life* (London: Penguin Books, 1995), Ch.3.

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