Reviews

Mariusz Tabaczek
Divine Action and Emergence – An Alternative to Panentheism
Notre Dame: University of Notre Dame Press, 2021. 360pp. hb. £62. ISBN 978-0268108731

Mariusz Tabaczek, OP, a Polish Dominican friar and one of the most dynamic Thomist thinkers today to engage the world of science and theology, offers in this lengthy volume an original read of Thomas Aquinas' ideas of divine action in relation to contemporary theories of emergence. This is the second volume of a two-part study, which started with his previous *Emergence. Towards a New Metaphysics and Philosophy of Science* (Notre Dame, IN: University of Notre Dame Press, 2019). In that work, Tabaczek presented a very detailed narrative of the current *status quaestionis* of theories of powers metaphysics as well as emergence and downwards causation, mapping Aristotle's theory of causation with these recent developments in analytic metaphysics. This first volume is extremely valuable, informative, and moves forwards the contemporary metaphysical discussion.

In this second book, Tabaczek takes much of the metaphysical tools he had previously developed and puts them to work: first, he assesses the metaphysics of emergent panentheism as an explanation of divine presence and action in the created universe, particularly as it is present in the thought of Arthur Peacocke, Philip Clayton, and Niels Henrik Gregersen. Second, he proposes a classical view on how God is present and acts in the world, in the way that Thomas Aquinas would describe it. In doing so, Tabaczek offers a wonderful piece of scholarship, with a magnificent resource to primary and secondary literature, and a novel approach to a much-debated topic.

The structure of the volume is quite straightforward: two distinct parts, one on emergence and the other on divine action, with two and three chapters respectively. The first part is somewhat of a summary of the earlier book. Its first chapter is devoted to offering some examples of different order of emergent phenomena and downward causation in contemporary science (particularly the biological sciences) and to assessing different philosophical interpretations of such emergent phenomena: ontological emergence, epistemological emergence, and Terrence Deacon's dynamical depth model, with which Tabaczek will converse throughout the volume, particularly by the end of the book. The second chapter offers an Aristotelian account of emergence via the classical notions of material and formal causality. Following on the virtues of his previous work, Tabaczek's actively engages with contemporary accounts of causation in terms of dispositionalism and power ontology, avoiding an ahistorical read of Aristotelian philosophy (too often found in some proposals coming from Catholic quarters).

The second part of the volume studies the theological implications of the proposal of the first part, which, as a recapitulation of the first volume, I wonder whether it could have been shorter, and so the reader would have gone straight into the discussion of divine action. I don't want to suggest that the first part was not necessary for the argument presented in this volume, but at times, it appears to go into too much detail on the metaphysical discussion of downward causation and emergence. In any case, it solidly prepares the ground for the central argument of the book, namely,

the assessment of panentheism in face of Thomistic metaphysical thought. The first of the three chapters in the second part starts with a historical overview of panentheism, analysing nineteenth and twentieth century thinkers (ranging from German idealists such as Fiche, Krause, Schelling, and Hegel, through Whitehead, to Barbour, Davies, Clayton, and Polkinghorne) and focusing on Peacocke's emergent panentheism. The following chapter is where things start to get more interesting, as the author presents here some shortcomings of theological accounts of panentheism, aiming, again, mostly at Peacocke's version of it. In particular, Tabaczek argues that Peacocke's panentheism lacks a solid account of the 'causal joint' problem: how does God act in the universe through an ontological interface via a flow of information but without any transfer of matter and energy? Ultimately, in good Thomistic fashion, Tabaczek charges Peacocke with treating God as a univocal cause, *i.e.*, as another cause among causes. Another well-argued charge is that, even if for Peacocke there is a flow of information from God to creatures without any transfer of energy or matter, creatures cannot act in such way. So, it would seem that, in Peacocke's panentheistic theism, there is no way in which creatures can transfer information to God, and hence there is no causal influence from creatures to God.

The final chapter brings us to Tabaczek's assertion that the philosophy and theology of Thomas Aquinas can be of use in offering the most plausible interpretation of emergent phenomena, downward causation, and divine presence and action in the world. This final chapter is very well argued and presented, though I felt that the basic statement could have been proposed earlier in the volume. In the end, this chapter is what most readers will want to read when getting this volume in their hands! After a careful presentation of the classical Thomist doctrine of divine action, the chapter moves on to analysing how a classical account of emergence can work with this Thomist version of divine action. The main argument being that, if, as the Thomists teach, God is the very source of the being of everything that is, then any downward or emergent phenomena should also be regarded as an expression of that divine act of creation and utterly dependent upon it. The chapter ends by highlighting the advantages of the Thomist account of divine action over Peacocke's emergent panentheism, the most important being that, by assuming the doctrine of the relation between primary (divine) and secondary (created) causation, Thomists avoid the 'ontological interface' problem that Peacocke has, as well as avoiding any univocal predication of divine and created causation.

Overall, *Divine Action and Emergence* is an exciting volume, which, with its original proposal, advances the field of science and theology, and in particular the debates concerning divine action in the world, into unexplored new grounds.

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William L. Hathaway and Mark A. Yarhouse

The Integration of Psychology and Christianity: A Domain-Based Approach

Downers Grove: InterVarsity Press Academic, 2021. 180 pp. pb. £20.50. ISBN 978-0-8308-4183-7

During recent decades, there has been much work done towards the integration of psychology-related disciplines with the Christian faith worldview and due consideration of applications for patient care. William L. Hathaway and Mark A.

Yarhouse, both experienced clinical psychologists have, through a biblically faithful and consistent approach, provided a scholarly overview of clear progress that has already been made. It is a solid, comprehensive, yet quite dense introductory book that, for those keen to be informed and updated, requires very good concentration to trawl through. The authors highlight work yet to be done in this area; and they propose a strategic organising framework for next steps.

Sub-divided into seven chapters, the authors consider 1) the very idea of integration (an inherent hope to unify), 2) psychological science: Christian truth and method (tools providentially made available to us by our Creator for studying the full reality, objective and subjective, of the human condition), 3) worldview integration (an attempt to reposition psychology with a cognitive frame that is coherently embedded within Christian thought and premised on Christian assumptions. A commitment, a fundamental orientation of the heart, about the basic constitution of reality that provides the foundation on which we live - NB chapter 3 is an analysis of rather than apologetics for it), 4) theoretical integration (the conceptual snapshots of our world that emerge from such a view), 5) applied integration (application of theories clinically and non-clinically including the distinctive approaches, data collection and practice habits that emerge specifically in the context of applied work), 6) role integration (consideration of accountability to role expectations and societally granted privilege in the context of a psychological vocational calling simultaneously faithful to the Christian identity, with a clear recommendation not to proselytise in mental health work) and 7) personal integration (psychologists' self-awareness of their own characteristics and own developed spirituality, particularly on a heart level and in a Spirit-filled way, with personal cultivation of the fruits of the Spirit).

I have always been keen on a whole person approach to medicine. How we navigate this as professionals is clearly very important. I was particularly fascinated in chapter 4 by the distinction made between 'implicit' and 'explicit' integration. As someone with a burden for practicing in both a wise and compassionate way and, as the book puts it, with the aim of integration towards 'renewal, and restoration of wholeness', 'bringing blessing to suffering humans', whilst maintaining professional resilience and responsibility as well as integrity before God; I was naturally attracted to this title. In the end parts of it helped me to reflect upon my own clinical practice and I am glad to have read it – the perseverance and effort put in did prove sufficiently worthwhile to warrant the time.

The authors ask important questions for professionals to contemplate including 'Do we really want our trainees being taught to be ethical in their professions by disconnecting their professional training and roles from their deepest centres of moral motivation?' whilst also acknowledging that sufficient self - awareness of one's own worldview relative to others' can help to avoid systematic biases. 'Worldview repositioners typically believe there is something incomplete or biased in a psychologically related field that operates on non-Christian starting points, whereas perspectualists believe that different ways of looking at things are valid at the same time'. They raise the phenomenon of 'Phoresis - the kind of skilled ethical know-how that enabled those who possessed it to find creative and effective resolutions for moral dilemmas that may seem insurmountable to others'; a prospect that might perhaps be potentially achievable through harvesting the wealth of effectively integrating faith with psychology; with the aspiration in chapter 7 for the 'sanctifying cultivation of those disciplines as forces for healing and holiness in every domain of

the lives they impact'. There is however realism interspersed with the optimism as the authors do acknowledge that 'The professional landscape is peppered with members who have idiosyncratic and underdeveloped ways of integrating their spiritual lives with their professions'.

This book did overall add to and enhance my understanding of this field and interestingly it did seek to consider the relevance of denominational richness and variability of Christian churches providing a few comparative tables that helped clarify differences of emphasis, implying that integration by psychologists might seek to embrace some breadth. Whilst I read this book diligently from cover to cover it required me to persevere in reading through the first few chapters before I really started to enjoy doing so and by then I felt that the more clinically orientated applications could start to be mined and gleaned despite these not shining through in quite as accessible a way as I would personally have liked from what could really have been a more easy concise read of the most pertinent principles. The extensive, advanced vocabulary chosen could have been simplified for wider accessibility (clearly this book is just not intended for a wide readership) and at times I felt an urge to pick up a dictionary a bit too frequently for comfort! To be fair an extensive glossary is provided.

The inspirational statement in chapter 2 that we study psychological science 'to think God's thoughts after him' was a beautiful compliment to psychology; this and a later assertion that 'God's truth is truth about the way things really are' revealed something tangibly powerful of what motivates these two professor authors to do what they do and to write well.

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Martin J. Hodson and Margot R. Hodson

A Christian Guide to Environmental Issues, 2nd Edition

Abingdon: The Bible Reading Fellowship. 220 pp. pb. £9.99. ISBN 9781800390058

I first read Martin and Margot's books while in a youth hostel in Tasmania. Not exactly or even close to being a youth at the time, their writing helped to shape my thoughts on how to integrate Christian faith and conservation. The strength of their work is a deep theological reflection rooted both in practice and academic rigour combined with a commitment to and skill at summarizing and communicating the latest peer-review science and conservation policy. This is the second edition of A Christian Guide to Environmental Issues, which they have fully updated and revised to respond hopefully to our current conservation crises.

Many Christians are more environmentally aware and active in recent times. There are now over 4000 Eco churches in the UK, for example. Yet if you were to ask the average person in the pew about the environment, they would likely struggle to articulate how their faith is relevant to it. Margot and Martin argue that the environment is central to the Christian faith, not peripheral to it. This book also provides a helpful correction to the overwhelming focus, when there is one, of the Christian community on one environmental issue – climate change. Martin and Margot show clearly that there are many threats that while often augmented by climate change, are not currently addressed by most agencies, churches, or individuals and which would not be reduced could we solve our climate issues immediately.

This is an excellent resource for those who want to better understand both the

science and the theology surrounding environmental issues. The book could be approached as a relatively quick read to gain insight into major environmental topics such as biodiversity, climate change, water, energy, soil, and food. Each chapter starts with helpful stories to contextualise and put a personal flavour to the issues from Spain or Portugal where much of this book was written during a sabbatical, giving a common thread throughout. The science is detailed enough and referenced so it can be followed up with more study, but clear and concise enough for a lay person to understand. A Biblical reflection follows which provides insights into key passages that apply to the topic.

I will also use this as a resource book when called upon to speak on or address topics covered in the book. A focused bibliography of key creation care books is given in the back. Key websites are listed with summaries, indexes of topics and bible verses increase its utility. A short bible study allows the reader to reflect and develop their own thoughts – with bible study leader's notes for small groups. Additionally, Martin and Margot produced a series of videos that accompany this book as a series of 10 study sessions or easily cut down to fit a Lent course (https://thebigchurchread.co.uk/a-christian-guide-to-environmental-issues-2/).

The chapter on soil serves as a good example of the value and diversity of this book – not the least that there are so few creation care books that even address soil as an issue. The chapter starts with a personal story from Martin reflecting on his teaching on soils in Oxford. This proceeds to a helpful discourse of what soil is, then adds a global perspective on threats such as erosion, compaction and pollution. An outside perspective is written by a colleague along with another personal story from Martin's and Margot's sabbatical in Spain. Margot then provides a reflection on the biblical themes of exile and return and of course, the parable of the sower and the soils. A Rocha UK head of Conservation, Andy Lester, comments on their Partner in Action Programme and Margot and Martin reflect on their experience at one of these partners, Hilfield Friary, showing how the topic of soil is being addressed on the ground with respect to creation care. Each chapter has an eco-tip for the reader to implement – this one focused on gardening and soil as you would expect. A bible study with discussion questions takes readers to Isaiah and Luke and then helpful references are given to pursue deeper knowledge of soils. This chapter caused me to think about the soil in my own garden here in Florida and specifically, how the way I treat it impacts the ecology of this area and my own spiritual life as I interact with it through gardening activities.

Each chapter is likewise diverse. This book is necessarily a summary and thus can't go into a deep treatment of each topic. The bouncing around of different voices, locations, and switching between faith and science topics might not be palatable for some. The format is set up so that a small group could use it for discussion with or without the accompanying videos. It is a useful resource for church leaders who want to speak on these issues. This is an important book to continue the hopeful conversation of how we can love God and neighbour (including our non-human neighbours) through caring for God's world.

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Scott A. Midson (Editor)

Love, Technology and Theology.

London, UK : T&T Clark, 2020. 178 pp. hb. £85. ISBN 978-0-5676-8994-8

This book is a collection of essays, which resulted from a joint project in the Lincoln Theological Institute in Manchester, UK during 2016-19. There are eight contributors, including the editor, from various theological, scientific and medical institutions in the UK and the USA. A new dimension has emerged for theological investigation as the intelligence of machines increases and they are quickly turning from tools and objects to use and cherish, into mediators with some form of personhood. The project aims at analysing how this modern technology affects the wellbeing of people in terms of their relationship of love.

This kind of analysis naturally depends very much on the way we define and understand love and technologies. The authors are trying to revisit and redefine these notions in order to accommodate the new realities of human relationships. The work of Anders Nygren *Agape and Eros* (1930), has been chosen as an anchor in Chapter 1 (Scott Midson) although the notion of *'agape'* type of love in it is opposed to 'self-love' and *'eros'*, which can be seen by some as controversial. It is strange that even though the editor is now a liberal arts scholar, C.S. Lewis's book *The Four Loves* is completely overlooked. In the following essays the authors base their notion of love on various sources: the ancient philosophers like Plato and Aristotle, evolutionary anthropology, broad professional codes of practice, and so on. Some authors even introduce their own definitions (Thomas J. Oord). Still the essence of love from a Biblical perspective is somehow missed: we love because He first loved us and 'Christ crucified' is our primary source of love and theological revelation.

The evolution of technology and its impact on human society has been investigated from various angles, but mainly from the fact that it is now turning from a neutral subject to a commodity with its own teleological ends. For example, the use of pharmaceuticals is not considered just as means for healing and alleviating human suffering, but also as something that can be used for 'moral enhancements' as if science and pharmacology could create a moral code for good behaviour (Ronald Cole-Turner). This is quite controversial. Most people would agree that psychedelics for example can be used in psychiatric treatment to achieve the necessary stable psychological status. However, while this may be a precondition for behavioural improvement many would argue that it cannot be used directly for 'moral enhancement'. An important point needs to be made here. Technology and science can analyse how a drug affects individual's brain, short or long term. They can investigate the resulting behaviour, according to a given moral system, but they should not create the moral system itself. They investigate the material world as is through experiments and testing and for that reason are morally neutral – so can be used for good and for bad. Intrinsically they cannot create the moral system itself. Christian theologians see personal change as transformation of character, which is open to God's healing power through relations to others.

Another angle from which technology is analysed in the book is the use of artificial intelligence (AI). While the discussions of digital companions like chat-bots and sex-bots (Robert Song) are focusing on whether they can be granted a form of personhood or remain purely tools providing human pleasure, care-robots in healthcare are examined more systematically (Amy Michelle DeBaets). The 'mechanised' medicine is classified in several groups, including information and expert systems, companions and caregivers,

robotic surgeons and so on, which then are considered as a way of solving the crisis of care giving in the western world. The value of the author's analysis here is acknowledged by the affirmation that the human role in healthcare will never be rendered void by AI. Even though in the future physicians may no longer be required to carry a lot of knowledge and know all the answers, they will always be needed in understanding the patient's human values and goals in their life and care when taking decisions about their wellbeing or interacting with them.

The work is intended as a theological investigation without heavy Bible quotations. However, for no reason the discussion remains mainly in the secular realm where God is understood as a concept in the human mind and not as a real transforming power whose wisdom we seek. Because of the disparate sources of the basic definitions, from which the study is conducted in this project, in the end it is difficult to distil integrated guidelines for technology, society and law as a whole. Yet the broader perspective of this book is valuable in developing various other coherent ethical arguments about love and technology and about the current views in professional ethics, as well as to discussing the problems with a broader, even nontheistic audience. It can open doors for future work in the field.

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Jacob Shatzer

Transhumanism and the Image of God: Today's Technology and the Future of Christian Discipleship

Downers Grove: InterVarsity Press, 2019. 182 pp. pb. £16.99. ISBN-13: 978-0-8308-5250-5

In *Transhumanism and the Image of God*, Jacob Shatzer offers a Christian appraisal of modern technology and the transhumanist values enshrined in some of its applications. The author starts from elementary grounds—the definition of technology and the ethical characteristics of the same; he then introduces transhumanism, comments on its core tenets, and examines their popular manifestations in modern life; he ends with practical advice—hence the future of Christian discipleship. Shatzer's probable audience is Christian parents, educators, and church leaders who are concerned of the impacts of emerging technology and are seeking the proper language for critical engagement (or disengagement). This book is an excellent and concise introduction to the relevant topics, and the author provides resources for further investigation.

I characterize Shatzer's project as a more sophisticated version of the familiar assessment of technology: the thing itself is a good—or at least an unavoidable fact of modern life which can be the means towards a variety of ends—the problem lies with its excess or abuse. This overall stance is established through the author's treatment of the recent semantic shift of 'technology' to mean digital gadgets and systems (15). Although Shatzer's fuller analysis includes biomedical and socio-political techniques, it clearly highlights digital communication techniques. Why should these warrant our concern? In brief: they are ubiquitous—with unprecedented speed and ease of access; they are addictive—possibly more so than many addictive substances; they promote transhumanism—as 'liturgies

of control' (21-25). Here, Shazter establishes a strong case by examining both the claims of the transhumanists and various technical applications already in use. Clearly, we are not at the wholesale evolution of the human species yet, but digital techniques can 'disciple' or 'form' us towards accepting transhumanist visions (66, 105).

On this view, the evil of technology is found in degree but not in kind. There is a problem common to critiques of this type: if digital techniques (or other techniques problematized by the critic) are laden with values contrary to the teachings of Christ, what can Christians do in this life where the said application has become a necessity for most? Are we to join agrarian communities and/or monastic houses? Shatzer dismisses this prospect as he wisely recognizes the limits of solutions of abstinence, or 'technological escapism' (108, 177). Similar dangers, after all, dwell within many other technical applications as 'innocent' as writing and time keeping. Instead, Shatzer augments the classical approach by considering the ideological dimension; transhumanism—not so much the immediate psychological impacts of virtual reality—constitutes the real problem. He recognizes the need for resistance and appeals to counter-narratives as better solutions: 'Christian themes and practices' as 'a more powerful liturgy' (135).

Shatzer is on the right track when invoking the divine image. Unfortunately—perhaps a necessary drawback of such a concise account—I have doubts as to whether his is an adequate answer. By 'the image of God' in the title, I had expected a book devoted to theological anthropology. However, the author does not offer any sustained exposition of the image of God—either the doctrine concerning creation and human nature in Christian theology, or the relevant biblical passages and their interpretations. Regarding 'what it means to be human', there are numerous appeals to themes such as the cultural mandate (37, 53, 65), the incarnation (120), and the fall (122). But compared to the efforts devoted to transhumanism, these appeals are rather brief. Apart from various appraisals of technology, the two primary Christian sources (Smith and Conyers) discuss secular vs. Christian liturgies (25) and control vs. vocation (29).

The author assumes that the readers already know what 'the image of God' means and focuses on transhumanism. This may not be a safe assumption. Different Christians may have rather different views on the elements of Christian discipleship highlighted, such as communion and the church (153-155). This aside, the unbalanced treatment raises doubt over whether the discussion is truly *framed* by these theological insights (12). As a whole, 'the image of God' seems to function as a stand-in for a list of Christian values, whereas transhumanism functions as a stand-in for a list of secular values at odds with the former. Such an approach fails if, for instance, there is great proximity between transhumanism and the image of God: perhaps transhumanism is at its heart a deeply religious movement sharing many elements with Christianity; in that case further reiteration of Christian ideas no longer aids our engagement with technology. Thus, Shazter's account is appreciated but incomplete. I look forward to a second book.

Drawing on his previous training in diverse disciplines at several institutions, Pu Ji (Preston) aims to transform the discourse of science and religion into a ministry of the church and establish it as an integral part of the science education of new generations of Christians.

Fern Elsdon-Baker and Bernard Lightman (eds.)

Identity in a Secular Age: Science, Religion and Public Perceptions

Pittsburgh: University of Pittsburgh Press, 2020. 312 pp. hb. £39.00, ISBN: 9780822946281

Something wonderous is happening in the field of science and religion studies. People are turning up. By this, I don't mean that scholars are crowding in, although the discipline does seem to be in particularly rude health today. Rather, I mean that scholars are paying ever more attention to how actual, real, living human beings navigate this ancient and complex terrain.

The study of science and religion is quite naturally drawn to the world of ideas, where theories and doctrines and hypotheses and dogmas intermingle. But that is not how many (most?) people engage with the debate. For them, science and religion is less about quantum theory or gene-centred evolution, and more to do with medical ethics, or education policy, or technological progress, or climate change. Their opinions of science and religion still span the spectrum – from complete incompatibility at one end to complete compatibility at the other – but they do so for less abstract and more personal reasons.

This is an increasingly rich seam of research, as illustrated by Elaine Howard Ecklund and John Evans in the US (both contributors to this book) and, in the UK, by the recent research project conducted by Theos and The Faraday Institute, and by the work of Fern Elsdon-Baker, Professor of Science, Knowledge and Belief in Society at the University of Birmingham who, with the distinguished historian Bernie Lightman, is co-editor of this collection of essays.

The volume is the result of Elsdon-Baker's *Science and Religion: Exploring the Spectrum* project and comprises twelve essays that explore how 'social and cultural factors have driven, and are currently driving, the narrative in the public domain that there is a necessary clash between religious belief and acceptance of evolutionary science.' (xiii) That people *perceive* there to be a clash is beyond doubt. That some people feel that clash *personally* and viscerally is also the case (though rather less common than we think). But *why* there is such perception, or such feeling, is rather more complex and interesting. The idea that this is simply a blunt square-off between hard-nosed scientists and cloth-headed believers works better as polemic than sociology. The true reasons for such conflict, whether perceived or real, invariably incorporate issues of cultural and social identity.

Elsdon-Baker and Lightman explain this tilt from an epistemic approach to a more existential one in their introduction, highlighting the context of our greater awareness (thanks to Peter Harrison, another contributor) of the inherently contestable nature of the key terms. Science and religion have always been sprawling, polyvalent categories, and recognising that they are still will help broaden and deepen our understanding of public attitudes to both.

The essays themselves are all of a high quality (unusually so for a diverse collection) and cover a wide range of topics. We start with publishers and periodicals in Victorian Britain and Canada, move through the oral histories of a science journalist, BBC programme maker and philosopher (in chapter 5), and end with the potential for future conflict in chapter 12. In between, Elsdon-Baker and Jonathan Hill write thoughtful essays on the challenges of public opinion polling and of reading the resulting data, Alexander Hall looks at evolution on the small screen in Britain, Carissa Sharp and

Carola Leicht explore how both science *and* religion perform a social identity function for people, and Amy Unsworth offers a particularly good essay on what science has to do with secularisation, threading the needle between old-school sociology which thought the answer was everything and more recent scholars who like to think it is nothing at all. Her argument, that scientific knowledge does not simply diffuse passively through societies but is spread actively, sometimes by people who *do* have a secularising agenda, is perceptive and, I think right.

This is rich and varied volume and, on the surface, it may seem rather miscellaneous. But the controlling theme of identity does manage to unify the disparate essays. In particular, the key idea that this conflict (perceived or real) isn't all from the religion side but that science in general, and evolution in particular, can serve as a combative identity marker for those who want to find antagonism in the relationship, may be unfamiliar but is intuitively right. 'Endorsement of evolution might play an important role in the expression of atheistic identities' (37), Elson-Baker remarks early on, and is echoed by Unsworth a hundred pages later. 'Although there is no correlation between formal scientific education and atheist belief, atheist identity is highly likely to be constructed around the notion of perceived conflict between science and religion.' (142)

'*Might* play a… role', 'is highly *likely*': contributors are careful with their words, reluctant to overclaim, and highly alert to the need for more research. They make a strong case that the evidence points to the fact that 'conflict between science and religion is in large part a product of projection rather than the reality of the public's lived experience.' (204) However, they also recognise that their work 'has rather gratifyingly raised far more questions than it has answered' (207) and that the field is open for more research.

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Brian Borgman

Jonathan Edwards on Genesis: Hermeneutics, Homiletics and Theology

Eugene: OR: Wipf & Stock, 2021. xvii + 120 pp. pb. £14.00. ISBN 978-1-6667-0577-5.

Jonathan Edwards (1703-1758) was a Calvinist Congregational Minister in the British American Colonies. He became minister of a church in Northampton, Massachusetts in 1727 and was there when a revival took place in 1733-35. Reports about this, one written by Edwards himself, excited interest not only in the colonies but in Britain. It was followed in 1740-42 by the 'Great Awakening' in the colonies which followed the preaching there by George Whitfield. Edwards became a renowned preacher and writer. His books, some published posthumously, continued to be widely read on both sides of the Atlantic for several decades after his death but interest in them waned in the second half of the nineteenth century. In the last fifty years or so there has been a 'renaissance' of interest in Edwards' writings. This has been aided by the Jonathan Edwards Centre at Yale University which has published new editions of his books and has collected and made available previously unpublished work. Some scholars now regard him as one of America's most important and original philosophical theologians.

This book looks at Edwards' use of the book of Genesis in his preaching and writing. It seeks to show how he interpreted Scripture, how he used it in his preaching and makes a special study of his theological understanding of the image of God. After briefly outlining Edwards' historical, philosophical and theological

context Borgman devotes two chapters to a detailed study of how he interpreted Genesis. Edwards did not write a commentary on the book, nor did he preach any extended series of sermons on it. Borgman therefore studies his surviving sermons based on texts from Genesis. He divides these into two groups, those preached in 1727-35 and those preached after the 'revival' in 1736-39. The most striking feature of his exegetical method is the frequent use of typology. Edwards assumes the historicity of the people and events recorded in Genesis but sees them either as 'types' of Christ or of (un) believers in his era. The Christological typology is the more common, with people or events seen to prefigure the person and work of Christ. The early Protestant Reformers had been scathing critics of the allegorical interpretation of Scripture that became common in the Medieval Church because they saw it as a way of reading whatever the interpreter wanted to out of the text. In theory, typology is more controlled in finding correspondences between the 'type' and what it (pre-)figures. However, there is considerable room for subjectivity in this method, as is seen in Edwards' use of the stone which Jacob used as pillow as a type of Christ in a sermon on Gen. 28:12. In some sermons Edwards does not use typology but simply uses the character in Genesis as an example of a good or bad model for Christian living. Most of the sermons relate to a particular pastoral situation. Some in the 1736-39 group show a sense of disappointment, even frustration, at the short-lived effect of the revival on people's attitudes and behaviour.

The final third of the book looks at what Borgman sees as a neglected aspect of Edwards' theology, his understanding of the image of God in humans. Edwards seems to have preached only one sermon on Gen. 1:27 but there are 112 references to the image of God in humans in his extant writings, though some are only made in passing. He came to see the image as having two parts, the 'natural image' which is the reason, understanding and will, and the 'spiritual image' which is holiness and morality. In his view only the spiritual image was lost when Adam and Eve sinned. The fact that the natural image remains in fallen humans is what separates them from other creatures and is the reason for treating all humans with dignity and respect. However, loss of the spiritual image means that the natural image comes under the sway of the Devil and evil so that humans can behave in bestial ways. An important aspect of Edwards' understanding of the work of the Holy Spirit in conversion and regeneration is the restoration of the spiritual image in humans. This understanding of the image is related to his understanding of God as Triune. The Son is the expression of God's word and wisdom, his reason. The Holy Spirit is the expression of God's holy and moral actions.

Borgman notes that Edwards' understanding of the image has no precursor in the earlier Puritan scholars whose works he used, nor does it have any clear parallels among his Puritan contemporaries. Most surprising for someone so steeped in the Bible is the fact that he makes no attempt to understand the concept in its context in Genesis nor does he make any lexical or philological study of the Hebrew words for 'image' and 'likeness' in Gen. 1:26-28. Borgman concludes that he has been deeply influenced by the moral philosophy of the Enlightenment thinkers Samuel Clarke and Nicolas Malebranche, though he has sought to integrate their ideas into the Reformed theological tradition. In doing this, however, he presents an understanding of the image of God in humans that lacks any solid basis in the biblical text.

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Malcolm A. Jeeves

Why science and faith belong together: stories of mutual enrichment

Eugene, OR: Cascade Book 2021. 296 pp. pb. £26. ISBN 9781725286191

Malcolm Jeeves is an eminent Emeritus Professor of Psychology, a pioneer in cognitive psychology, neuropsychology, and evolutionary psychology, and a Christian. He begins this book with some emails from a student expressing doubts and questions about the soul, the afterlife and the validity of moral beliefs in the light of science. Jeeves notes the impression of many, especially young people, that the Church is not addressing questions of science and faith helpfully, and that it is hard for pastors to know enough science to engage. He proceeds to argue that our view of God tends to be too small; a God only of the gaps in scientific explanations or a divine magician, interrupting nature to grant our wishes. There are many views of life competing for our attention and there is much evidence that we mould our idea of God to fit the preoccupations of our contemporary society. The challenge today, as it was in the past, is to be faithful to the biblical revelation of God and not make up gods that merely fulfil our own immediate desires.

In the next section, Jeeves notes that, contrary to widespread belief, Christianity has often promoted scientific progress rather than opposed it. When we address the origins and nature of humanity, we should note that many scientific disciplines shed light on the emergence of consciousness, language and moral behaviour. The multiplicity of disciplines and opinions can enlarge our appreciation of how profound and involved such questions are.

Jeeves then turns to biblical perspectives, emphasising that God is the creator of all that exists, not just of gaps in natural causation. There are differing views about the Biblical and historical Adam. The Christian hope is in bodily resurrection rather than the immortality of the soul. Scientifically, there is good evidence that our mental abilities depend on our brain; brain damage is accompanied by changes in emotions, personality and moral character. Biblical scholars have been moving away from a dualistic anthropology of distinct body and soul to a unified view of the human person. Jeeves draws on understandings of the image of God that see it as a calling to a special role of governance in the world, rather than some unique characteristic or ability of humans with no evolutionary precursors in animals. In discussing miracles, Jeeves emphasises that God sustains all of creation and reveals his power and nature through it. We experience wonder, awe and significance, not only in God's special acts, but in the whole created order. Biblical miracles are more concerned with the impression they make on people than their underlying causes. Jeeves draws on the work of scientist Colin Humphreys and biblical scholar John Walton to argue that events like the plagues in Exodus or the sun standing still in Joshua do not require interruptions in the natural order when understood in their natural and cultural context. When it comes to healings, in contrast to inflated claims of supernatural cures, the New Testament sees healing as an integral part of the Church's mission to the needy. Biblical faith involves experience, belief, and action in dynamic interaction through a life of discipleship. Scientific perspectives suggest that faith is embedded in physical, cultural and social environments and show health benefits associated with it. In the last section, Jeeves offers some theological reflections, suggesting that we need to keep a proper balance between the scriptural themes of God's sovereign

power and his divine self-emptying, epitomised in Christ's humbling and limiting of himself to enter into creation.

This is a substantial book, tackling central issues of science and faith with insight and compassion. Jeeves cites and has collaborated with various leading contributors to the science-faith dialogue familiar to readers of this journal but does not expect specialist knowledge. Occasionally, I wondered if the argument of the book was as clear as it might be. For example, though I could see his general approach to the doubts and questions of the student, I wasn't sure exactly what he would say in response. I was also concerned that he sometimes does not note, let alone answer, objections to the theological views he commends. For example, if he rejects body-soul dualism, shouldn't Jeeves discuss New Testament texts distinguishing the death of the body from the death of the soul (e.g. Matt. 10:28) and apparently referring to an intermediate state before final resurrection (e.g. Php. 1:22-4)? However, there is a useful summary with questions for group discussion in an appendix, showing that Jeeves intends this book to advance both understanding and further discussion of how science and faith belong together.

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Joel L. Parkyn

Exotheology: Theological Explorations of Intelligent Extraterrestrial Life

Eugene, OR: Pickwick Publications, 2021.
329 pp. £29.00. ISBN: 978-1-7252-9148-5

Would the detection of extraterrestrial life change our theories of salvation? Joel Parkyn tackles this cosmic question in his new book. I recommend it for specialists in astrotheology for its strong, if idiosyncratic, defence of salvation beyond Earth. Parkyn identifies his context as a Roman Catholic theologian in the tradition of Thomas Aquinas working to integrate cutting edge astrobiology science – as I believe Thomas would wish. Parkyn surveys modern theological literature on the question, presents a clear typology, and defends his position – varied economies of salvation for multiple worlds. A general audience may find the work more difficult for several reasons. Parkyn writes in a technical manner. His treatment of the science and history is inconsistent. And, there are surprising gaps in the theological coverage.

The question of extraterrestrial salvation cannot be separated from questions of extra-Catholic and extra-Christian salvation on Earth. What is the state of souls who died before Christ or beyond the reach of Christendom historically? Does God act in other religions, and must non-Christians be converted to be saved? Such questions have profound ethical implications, more so in an age of deep reflection on identity and oppression.

The book begins by surveying contemporary astrobiology – the scientific study of the origin, extent, and future of life in the universe. The ever-expanding list of planets beyond our solar system provides ample reason to take seriously the possibility of life arising beyond Earth. Astronomers have catalogued roughly five thousand with perhaps one hundred resembling Earth in size and temperature. Parkyn shares highlights of recent astrobiology in setting up his argument. Occasional factual errors should give readers pause. For example, he mistakes potassium (K) for phosphorus (P) in the list of fundamental elements in Earth biology (18) and reports life at 140˚C (22) when the record is 122˚C. For a generic introduction to theology and astrobiology, I recommend Olli-Pekka Vainio's *Cosmology in Theological Perspective* (Baker, 2018) or Adam Pryor's *Living with Tiny Aliens* (Fordham, 2020).

Parkyn focuses more narrowly on extraterrestrial intelligence and Christian soteriology. Here his work is more reliable. He summarizes the history of the 'plurality of worlds' debate among theologians, drawing on the extensive treatment by Michael Crowe (e.g., *The Extraterrestrial Life Debate,* Notre Dame, 2008) and Steven Dick (e.g., *Life on Other Worlds*, Cambridge, 1998). Parkyn provides a good summary with many interesting examples but, with Dick and many historians of astronomy, his view of historical theories is heavily influenced by modernity. The most egregious example appears in the oft repeated myth of science decentring humanity. Numerous authors have shown that the medieval Christian worldview was not anthropocentric. Notable examples include Arthur Lovejoy (*The Great Chain of Being,* Harvard, 2001) and C.S. Lewis (*The Discarded Image,* HarperOne, 2013). Though pervasive in astronomy and history of science, this narrative is somewhat surprising in a theological text.

Parkyn's most valuable contribution may be his typology of four approaches to extraterrestrial salvation. The *exclusive* approach suggests a single salvation event, wherein Jesus' incarnation, passion, and resurrection effect the salvation of Earthly humans (and the cosmos) but no other intelligent species – either because they do not exist, need not be saved, or cannot be saved. The *inclusive* approach suggests Jesus saved the cosmos including non-human intelligent aliens. The *multiple* approach suggests that Christ was incarnate as Jesus, but also incarnated on other planets as other species, commonly called the 'little green Jesus' approach. Finally, the *varied* approach suggests a variety of economies of salvation, one each for each intelligent species. Some economies may involve incarnations, but Parkyn opens the door to incarnations of the Father and Spirit as well as entirely different mechanisms for salvation.

Parkyn defends the varied approach, and I am sympathetic to his arguments, based on God's omnipotence and creativity. He weighs numerous means of grace discussed throughout the bible, paying special attention to those that suggest cosmic salvation along the lines of the inclusive approach (e.g., Col. 1:15-20). In the end, I remain in the *inclusive* camp, but I find his arguments worthy of engagement as we think through the implications of extraterrestrial life. I found the book particularly worthwhile in its summary of historical questions, defence of the *varied* approach, creative reflection on possible economies of salvation, and the importance of particularity for the question. Most influential for me was discussion of discernment and the practical questions that must arise when, and if, we encounter intelligent aliens. What rules will we use to judge the relative merits of their beliefs and the compatibility of their worldview with Christian theology. This book can be a valuable provocation for important discussions about salvation.

Theologically, several problems should be raised here. Parkyn's discussion of multiple 'economies of salvation' would have been improved by comparison with the extensive literatures on the scandal of particularity, dispensationalism, and covenant theology, all of which are sensitive to issues of colonialism, supersessionism, and antisemitism. Overall, the book leaned heavily on a progressive narrative of reliable human growth in moral and technological competence. This stood out throughout but appears most clearly in the discussion of 'primitive' and 'advanced' religion (224-229). The characterization of animist, totemic, ancestral, and 'pagan' religions as primitive is both sociologically inaccurate and socially dangerous. This progressive narrative has been roundly criticized by modern

Catholic theologians from Paul VI's *Populorum Progressio* (1967) to Francis' *Laudato Si'* (2015) as well as scholars of the history of science; see Mary Midgley's *Science as Salvation* (Routledge, 1992) and David Noble's *Religion of Technology* (Penguin, 1999).

I love the question of extraterrestrial salvation because it brings us face to face with our own assumptions about humanity and personhood. As a theologian, I am unwilling to cede those definitions to biology. Similarly, as a biologist, I am unwilling to cede them to the theologians. The bounds of life and of intelligence will always be a matter for science-engaged theology. The search for alien life brings us face to face with our own contingency, embodiment, location on Earth, and relationship to other species. Augustine and Aquinas would not have defined humans biologically as *Homo sapiens* (an eighteenth-century category). Rather, they call all mortal rational animals 'human,' regardless of physical form (See Lucas Mix's *Life Concepts from Aristotle to Darwin,* Palgrave, 2018). I think our beliefs about salvation are robust. They will survive contact with aliens. We have a duty, however, to think critically about astrobiology and what it can tell us about ourselves and our hopes for the future. I am grateful to Joel Parkyn for pushing this discussion forward.

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James Davison Hunter and Paul Nedelisky

Science and the Good: The Tragic Quest for the Foundations of Morality

New Haven, CT: Yale University Press 2018. 289 pp. pb. £14.99. IBSN 978-1-5326-5517-3

'Can science be the foundation of morality?'

This book provides an engaging account of attempts, both present and past, to answer this question. Hunter and Nedelisky think that despite the claims of many prominent thinkers past and present, science is thoroughly incapable of providing a moral foundation to society and is unable to resolve deep moral disagreement. They argue their case through tracing a four-hundred year journey of this quest for an exhaustive moral science, revealing how enthusiasm for this quest has developed with a variety of new scientific advances. The journey is engaging, thoroughly researched and easy to follow without a deep background in science or philosophy.

Hunter and Nedelisky begin their telling of this journey by providing the background of scholastic thought in medieval Europe, and how early scientists like Bacon overturned the previous consensus of scholasticism. With the enthusiasm generated by Newton's work early 'modern natural lawyers' (38) such as Hugo Grotius (1583-1645) sought to develop the first naturalistic account of morality – a 'science of morality'. Thinkers such as Hobbes (1588-1679) and John Locke (1632-1704) led to the "Enlightenment optimism" of the 18th and 19th centuries, when optimism in 'the power of human reason to systematically comprehend the natural world and serve as an authoritative guide to the practical realities of human affairs' (49) was very high.

However, this rhetoric was 'always more inflated than reality could justify',

and 'propagandists were more common than intellectuals' (46). Alongside the optimism of Adam Smith (1723-1790), Jeremy Bentham (1748-1832) and John Stuart Mill (1806-1873), there was one 'longstanding anxiety about moral scepticism' (49). This scepticism was famously expressed in the thought of David Hume (1711-1776), and his contention that one cannot derive 'an ought from an is' (53). Many further sceptics emerged in the late 19th and early 20th centuries, the most prominent being G. E. Moore (1873-1958), who argued in 1903 that ethical theories based in nature committed the 'Naturalistic Fallacy' (70). This fallacy states that goodness could not be taken to mean 'pleasure' or 'highly evolved' since this commits the fallacy of redefining goodness – and since the question 'is it good to be highly evolved?' is a meaningful one, 'good' must have a different meaning to these other qualities, even if they are correlated. Moore's objection 'was a major intellectual factor discouraging philosophical pursuit of evolutionary accounts of ethics for the next seventy years' (71).

In the second half of the book Hunter and Nedelisky shift focus to the 'new moral scientists', including Patricia Churchland, Joshua Greene and Sam Harris, who all articulate a confidence in the role of science in providing questions and a basis for morality. The authors provide a scathing criticism of how sciences such as evolutionary psychology, social psychology and neuroscience have 'provided no clear empirical support for any moral theory' (117). They add that the advocates of new moral science exhibit 'a notable tendency to overreach' (119) in their claims of how science tells us how to live, and that the 'best recent science' has 'given us nothing remotely close to an empirical foundation for morality' (139).

Worse still in fact, are the logical implications of what some new moral scientists claim. Psychologists like Joshua Greene talk about morality 'as if it were what most people assume morality to be' (186). By merely seeking to maximize 'what people happen to value' rather than 'what is intrinsically valuable' (187), they implicitly affirm that there is no objective binding morality, beyond the arbitrary standards we set ourselves. They conclude that the 'new moral science inevitably leads to moral nihilism' (191).

What is the solution? The early moral scientists such as Grotius, Locke, Hume and Mill attempted to ground morality in 'Right Reason' (212), since religion had significantly failed in providing a unifying morality for humanity. The authors argue convincingly that science has failed too. They rather humbly conclude that there is no real way to reconcile the problem of different approaches and opinions to morality in our modern world. The only way forward is to 'find a common moral understanding *through* our particularities–through our differences–and not in spite of them' (213). This ultimately means returning to the sources – 'history, literature, poetry, philosophy, sociology, and the world's great religious traditions' (215), seeking to 'make our differences intelligible to one another' (214), and deepening 'the quality of our public discourse' (214). A grand hope indeed, and the authors don't seem entirely convinced of its possibility or efficacy, but at least a place to start.

A point worth noting here – Hunter and Nedelisky are secular philosophers and seem rather dismissive of religion. Whilst it may be true that religious differences prevent religion as a binding moral standard, this does not preclude the possibility that if God exists, then faith and the contents of a religious tradition would provide a sure ground for moral truth. Modern voices such as Jordan Peterson and Bret Weinstein make efforts to return to religious traditions to seek

a basis for morality, and of course many religions are alive and well. Commenting on this would be off-topic for the book, but it should be noted that in their tirade against the claims of science and sidelining of religion, the authors themselves don't have any easy answers.

Science and the Good is written in an engaging, accessible style, assuming little prior knowledge. The historical context is well-researched and clearly argued. Since the writers take a consistent argument throughout the book, argue historically and not always in order, the book often feels repetitive. However, the style is clear and book sufficiently short that this repetition doesn't detract from an engaging reading experience.

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Elaine Howard Ecklund and David R. Johnson

Varieties of Atheism in Science

Oxford: Oxford University Press, 2021. 216 pp. hb. £16.99. ISBN 978-0197539163

For over more than a decade, Elaine Howard Ecklund and her collaborators have carried out social-scientific studies of people's attitudes towards the relationships between science and religion. This book follows on from, and significantly adds to, their earlier books such as *Science vs. Religion: What Scientists Really Think* (2010), *Religion vs. Science: What Religious People Really Think* (2017), and *Secularity and Science: What Scientists Around the World Really Think About Religion* (2019).

Many people have an intuitive idea of what atheist scientists probably think about science and religion. Ecklund and Johnson, though, have done the serious footwork of going and asking hundreds of atheist scientists (physicists and biologists in the US and UK) what they actually think. This book can therefore provide a broad view of the issues, complete with quotes, statistics, and citations to back up its claims. Some of the conclusions drawn undermine standard stereotypes, some show that stereotypes are indeed based in reality, and some add nuance to the stereotypes. Do you, for example, suspect that most atheist scientists struggle to find a basis for morality, or meaning, or religion? Then you would be (respectively) wrong (137 ff.), right (120 ff.), and a lot less right than you might expect (Chapters 4, 5).

The book provides a taxonomy of three types of atheist scientists: modernist atheists, who do not believe in God and do not embrace religion or spirituality; culturally religious atheists, who do not believe in God but engage with organised religion; and spiritual atheists, who do not believe in God but are interested in the spiritual. Having outlined (in Chapter 2) the various routes by which people tend to come to atheism, the book unpacks the views of the three different types of atheist it identifies, dedicating one chapter to each (Chapters 3, 4, 5). Chapter 6 looks at what atheist scientists think of science: its demarcation, methods, limitations, and promises. Chapter 7 is given over to atheist scientists' views on meaning and morality. Chapter 8 concludes the book with an appeal to religious communities for greater understanding of – and engagement with – atheist scientists. The text has extensive endnotes, which permit the authors to provide additional comments, connections to the wider literature, and details of specific survey participants, without breaking up the flow of reading. An appendix provides methodological details of how the data were gathered.

An area in which the book clearly excels is that it provides hard data. For all the times you have suspected that atheist

scientists hold a particular attitude, but you could not cite chapter and verse, this book should become your go-to source, along with the associated journal articles which have arisen from the research on which the book is based. The sub-division of atheists into modernist, culturally religious, and spiritual – and providing thoughtful and nuanced shadings on each of those categories – will also help move discussions beyond cartoon views of Dawkins-as-archetype. As such, the book is well worth reading by anyone interested in what real people think about science and religion. Moreover, it readily deserves a place in required reading lists of, for example, undergraduate science-and-religion courses.

In shining a spotlight on atheistic engagement with science and religion, the book has the feel of someone who has turned over a rock and is pointing to all the cool things that scurry out. Turning over the rock is an important task, but in itself it cannot do justice to the wealth of interesting things that are thereby uncovered. At times the book can be frustrating: pointing out something which could be unpacked in a chapter of its own, only to move on (scant sentences later) to the next idea. To fault the book for not giving thorough treatment to all the issues it touches, though, would be to miss the point: the work is closer to the first word on the topic, than the last word. Still, by way of review, I shall mention two gaps (among many) to which the book calls attention. Perhaps the book will provide a provocation with which future work can engage.

As sociologists, the authors try to balance presenting their subjects' opinions as they are and critiquing those opinions. The book provides significantly more weight to the former, resulting in extensive passages uncritically reporting how atheist scientists view an issue (for example, several pages on scientist's expounding on their own open-mindedness and intellectual humility) followed by a brief disclaimer (in this case, two sentences starting, 'But sociologists of science have questioned whether scientists are as open minded as they publicly profess.' 102). The book almost cries out for a parallel volume helping the reader to critically place the scientists' thinking in the context of the philosophy and sociology of science and religion.

The book (in line with the wider literature) suffers under the terminology that has arisen in the West. At times the authors use words like 'atheist', 'non-believing', and 'secular' synonymously (e.g. 6), all basically meaning 'irreligious'. Against this, and while noting that people in the US tend to be religious 'in all senses of the term – belief, affiliation, and practice,' (62) the authors recognise that there are other ways to slice things. There are people who do not hold religious beliefs but who participate in religious activities, or people who hold religious beliefs but do not believe in God. Still, having wrestled with such nuance, the authors sometimes fall back to using 'religion' and 'atheism' as antonyms (e.g. 137). This muddies the water that they have worked so hard to clarify. I suspect that care is needed with such terminology when working out, for example, what one should understand by the over-representation of Buddhists in the sample of culturally religious atheists (who engage with religious practices but do not believe in God) (63). As the discussion develops in future, particularly looking at science and religion in non-Western contexts, the community will need to develop its terminology, and its thinking, carefully and critically.

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R.J. (Sam) Berry with Laura S. Meitzner Yoder

John Stott on Creation Care

London: Inter-Varsity Press, 2021. 344 pp.
Hb £19.99. ISBN 978-1-78974-364-7
eBk. £12.99. ISBN 978-1-78974-365-4

John Stott, who died in 2011, was one of the foremost evangelical writers, preachers, and theologians of recent times. In 2013 Sam Berry, a long-time friend of Stott's and a geneticist and a leading ecologist, began to compile Stott's writings on creation and creation care. He died in 2018, and Laura Meitzner Yoder, of Wheaton College, USA, finalised the work for publication.

Stott was first and foremost a Bible student and expositor and was unusual in that he was unafraid to change his mind, if necessary, as his thinking developed. Berry writes: 'Stott's approach turns the common approach to caring for the environment on its head: it begins with God, not human misdemeanours. Creation care matters because (quoting Stott) "God intends... our care of the creation to reflect our love for the creator"' (10). Stott came to appreciate increasingly the importance of creation care in Christian witness and testimony, and this book describes his journey.

Repeatedly Stott commented that Christians have a good doctrine of redemption but tend to have a weaker doctrine of creation (146). Yet both are prominent subjects in Scripture, and (for example) he expounded Psalms 103 and 104, which are parallel psalms, drawing out the significance of redemption and creation respectively. '[W]e need a thoughtful wondering praise of God the creator. God is said in this psalm [Psalm 104] to rejoice in his works, so his people ought to rejoice in them also' (31). He then went on: 'And I don't hesitate to say that every Christian ought to be interested in natural history, [it] doesn't matter what branch of natural history you take up...'. He himself was a keen and knowledgeable birdwatcher, shown vividly in his book 'The Birds Our Teachers'. He spent a month making a memorable visit to the Galapagos and describes (53-64) what he considered to be the proper roles of science and Scripture. He abhorred dualism, i.e. the (false) distinction between the spiritual and the material, which he attributed to the Fall, and which he suggested may have held back a biblical understanding of creation and the role of science. The present-day mistrust of science in some church circles could be the result.

Stott had a major role in several important Christian conferences, including the World Congress on Evangelism in Berlin (1966), the National Evangelical Anglican Congress in Keele (1967), the World Council of Churches Assembly in Uppsala (1968), and perhaps most significantly the International Congress on World Evangelization in Lausanne in 1974, at which the Lausanne Covenant was drafted. A major development in Stott's thinking was prompted through his involvement in the 1966 Congress in Berlin. It concerned his understanding of the Great Commission ('Go into all the world and proclaim...': Mk.16:15) which had traditionally been taken to refer to preaching and teaching. However, the equivalent text in John's gospel (Jn. 20:21) reads 'As the Father has sent me, even so I am sending you' i.e. the totality of Jesus's ministry is to be the model of ours. This needs to be taken along with the Great Commandment ('Love your neighbour as yourself': Rom.13:9). So, as Stott pointed out (in a paper for the Lausanne Covenant, 1974), 'the results of evangelism include... *responsible service in the world*' (emphasis his) (70). This has had a major impact on world mission.

Stott was also noted for advocating 'double listening', i.e. listening not just to Scripture but also to what is going

on in the world and subjecting it to biblical scrutiny. This led, among many other things, to a greater awareness of problems of poverty and deprivation in the two-thirds world, and how environmental degradation was playing a major part in this. This increased his awareness and concern for the need for creation care and the responsible use of resources. He adopted and exemplified a simple personal lifestyle. At the Third Lausanne Congress (2010) in Cape Town, the Cape Town Commitment was issued, which included the phrase 'Creation care is a gospel issue within the Lordship of Christ.' Implementation of this is still a work in progress and is vital if the church is to help avert the worst effects of global warming.

As well as extensive quotations from Stott's own writing, the book contains comments and extensive quotations from others, notably Chris Wright, putting Stott's contributions into a modern context. References to other sources are given, but sometimes care is needed to work out who is quoting whom.

While the book's title is certainly accurate, arguably it doesn't bring out the full significance and potential importance of this book. Stott's approach to life and ministry, where he was always learning and seeking to obey Scripture's teaching, would be a fine example and encouragement to everyone who is engaged in mission or biblical teaching anywhere and at any level.

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Michael Welker

In God's Image: An Anthropology of the Spirit

Grand Rapids, MI: William B. Eerdmans, 2021. 155 pp. £29.00. ISBN: 978-0-8028-7874-8

Michael Welker's *In God's Image: An Anthology of the Spirit* attempts to construct an account and defence of the claim that human beings are made in the image of God, a claim that is almost rendered preposterous by the fact that humans are finite and prone to self-destructive and violent tendencies (3-4). Developed from his 2019/2020 Gifford Lectures, a lectureship that is intended to prioritize the use of natural theology so as to advance the 'true knowledge of God' without explicitly referring or appealing to special revelation, Welker develops a 'spirit-anthropology' in order to articulate 'how human beings in their natural, social, and cultural existence can be understood as the image of God' (3).

Building on the foundations of Hegel's early writings to develop a realistic theology of Spirit, Welker proposes that spirit is both active in human minds and 'in a multitude of historical and cultural environments' (43). Key to Welker's project is the implementation of a 'multimodal and multipolar' framework which helps elucidate the nature and functions of the powers of human and divine spirit. This approach seeks to emphasize the plethora of mediums (multimodal) and the multiple centres of action (multipolar) through which we might understand the cooperative activities between the divine Spirit and the human spirit. For Welker, this multimodal and multipolar approach offers the advantage of yielding new insights and avoiding the reductionistic tendency to reduce 'the spirit and its effects . . . to simple [bipolar] relationships,' e.g., the relationship between God and the person or the relationship between two human beings (25). In the remaining chapters, Welker proceeds to

explore how this multi-modal, spirit-anthropology is realized in the pursuits and advancements of justice, truth, freedom, and peace.

However, Welker's proposal is not without its problems. First among these is a sort of conceptual slippage. Welker oscillates between speaking of human beings as 'being made in the image of God' (64, 111), being progressively 'shaped in the image of God' (130), and having the image as their ultimate destiny (131). But how do these ideas relate? Is the image a present status or a future *telos*? Welker seems to suggest that it is both, but it is unclear how these concepts cohere. Additionally, one is left wondering the degree to which Christ's unparalleled status as '*the* image of the invisible God' (cf. Col. 1:15) informs our understanding of the nature of the human spirit and the manner in which it relates to the divine. Granted, part of Welker's reticence to engage Christology may lie in the methodological boundaries of the Gifford Lectures and its emphasis on natural theology. Still, if Jesus Christ *just is* the image of the invisible God and the epistemological grounds for understanding the human being, does this not require a kind of prioritization of revelation in order to understand it rightly?

Furthermore, Welker's description of the *imago Dei* as something that is progressively realized through action seems to preclude its predication to the disabled and infirm. This is a problem that besets many 'functional' approaches to the image insofar as it is difficult to ascertain how someone with, say, severe cognitive impairment meaningfully exercises dominion over creation. Although Welker distances himself from a strictly functional understanding of the image, the force of his focus is still on the ways in which either humans actualize the image in various pursuits or the manner in which the divine spirit realizes the image through human action. In so doing, Welker still ends up portraying the image as a something human beings continually pursues through commitments to peace, justice, freedom and truth. But it is unclear to me what implications this holds for the severely disabled. One is left wondering in what significant ways someone with advanced dementia or Parkinson's is able to pursue peace, justice, truth, and freedom. And if they cannot, does this mean that they are incapable of being shaped into this image or arriving at this destiny? If so, this is problematic. An obvious solution would be to predicate the image of the human community as a whole, that is, insofar as we together pursue these ideals, humanity collectively grows into the image of God. But this just seems to fall into the Hegelian trap that Welker desperately wishes to avoid, granting the one (humanity as a collective) a kind of totalitarian priority over the particularity of the many (21).

These concerns are not insignificant. However, quibbles aside, Welker's project is a stimulating treatise and defence of the Christian claim that human beings are image bearers of God. Although concise and brief, it is a demanding read. Yet insofar as Welker challenges us to think of the human subject as it is situated within concrete, social and historical realities, it is a work well worth our time and attention.

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Ned Wisnefske

Could God Fail? The Fate of the Universe and the Faith of Christians

Eugene: Cascade Books. 117 pp. pb. £15.
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Wisnefske, a Lutheran theologian, asks whether God's creational purpose could fail, and answers with a resounding 'Yes!'

For him, such failure ensues if *either* the fate of the universe predicted by physics happens (heat death or 'big crunch'), *or* humans destroy the Earth, e.g., through anthropogenic global warming. Wisnefske argues that such divine failure is a real possibility because there is a darkness that opposes God's original and continuing effort to bring order out of disorder. In Genesis 1, God controlled – but did not vanquish – a primeval darkness in the natural realm to bring order and fecundity. At Jesus' crucifixion, darkness sought to disorder the moral realm, but was defeated – in this instance – by Jesus' resurrection. In neither case was victory certain beforehand, nor are future victories guaranteed. The darkness that God controlled but did not vanquish to create the universe may yet destroy it (heat death/big crunch). Similarly, the darkness that sought to destroy Jesus was not for ever 'defeated by his resurrection … [but] still threatens life on Earth, and may one day extinguish it' (100) if we give it free rein and continue to engage in self destructive activities. For Wisnefske, the possibility that God could fail should incentivise Christians to work with God in the continuing struggle against darkness.

In the natural realm, it is possible for 'God's work … [to continue] through us … to alter the natural forms upon which [life] is based' because, compared to biblical authors, 'we can now intervene in and alter the matter and processes from which human life emerged' (51). If we succeed, then perhaps our descendants could flourish somewhere else in the universe long after the dying sun has incinerated the Earth. In the moral realm, the early church demonstrated how love can triumph over darkness; we should follow their example.

The first disciples were incentivised to conquer darkness by love because they believed Jesus bodily resurrected. However, Wisnefske is suspicious of belief in bodily resurrection into life in a new creation because it saps Christians of moral resolve to fight darkness in the natural and moral realms in *this* creation, and this creation is all that we've got. We should jettison such outmoded belief and, instead, be incentivised by knowing that divine failure is a real possibility, so that we will strive to work with God in the continual subduing of darkness. If in the end, darkness still prevails, it would still have been worth it, because love is intrinsically worthwhile. In any case, we will have done our bit.

Wisnefske's call to action is welcome in a world facing global warming and a renewed threat of nuclear destruction. However, his manner of doing so is unconvincing, especially his facile rejection of biblical new creation theology. *Contra* Wisnefske, I do not think that this theology arose out of the biblical authors' feeling of helplessness in the face of natural and moral darkness. The exact reverse may be true. As Dr Frankenstein's monster says in Mary Shelley's novel, 'Increase of knowledge only discovered to me more clearly what a wretched outcast I was.' Knowledge can breed vulnerability.

More importantly, the new creation does not disincentivise action here and now. Of course, we do not know what it will be like, but we get clues from its 'first fruit' (1 Cor. 15:20), the resurrected Christ. After the first Easter, the disciples called him 'Lord' or 'teacher' (Mary's 'Rabboni!', John 20:16), just as they habitually did before (John 13:13). This is continuity; but there is also radical *dis*continuity. Recognition was often slow (e.g., Luke 24:13-35), and Christ passed through locked doors (John 20:19). Consistent with this, John of Patmos describes a 'new (*kainos*) Jerusalem'. The Greek *kainos* means new in kind ('Edison's new gramophone' when no one had ever recorded voices) rather than *neos*, new in time ('buying a new television'

today). The new Jerusalem is unlike any previous city, so that words fail ('the city is pure gold, clear as glass', Rev. 21:18). This is *dis*continuity. However, there is enough continuity to be recognisable as a new *Jerusalem*. Same, and yet different.

Recall how C. S. Lewis describes the 'night fall' of old Narnia in *The Last Battle*, when Aslan 'wrapped up' the domain that the children had grown to know and love. (Incidentally, Lewis would have approved of Wisnefske taking the force of darkness with ontological seriousness). As the children went 'further in' and 'further up' to the new Narnia, they felt a sense of *déjà vu*. Then,

'[s]uddenly Farsight the Eagle spread his wings, soared … into the air, circled round and then alighted … "Kings and Queens … we have all been blind. … I have seen it all … Narnia is not dead. This is Narnia." "But how can it be?" said Peter … "Yes," said Eustace. "And we saw it all destroyed …" "And it's all so different," said Lucy.'

The Lord Digory explained, 'All of the old Narnia that mattered … have been drawn in the real Narnia through the Door.' One does not have to share Lewis' Neoplatonism (the new Narnia is 'real', the old was a 'shadow') to applaud his imaginative articulation of 'the same, and yet different'.

Digory has no doubt read Revelation: '[p]eople will bring into [the new Jerusalem] the glory and the honour of the nations' (Rev. 21:26); i.e., all that which is true, honourable and beautiful from *this* creation will find its place in the new. Otherwise, if even an iota of goodness is lost, then the force of darkness, Satan, would have indeed defeated God. Moreover, recall that John saw 'a Lamb standing as if it had been slaughtered' (Rev. 5:6). So, quite apart from the warning that 'nothing unclean will enter it, nor anyone who practices abomination or falsehood' (Rev. 21:27), sin will leave eternal marks in the new Jerusalem. If all of that is not incentive enough for moral engagement in *this* creation, I don't know what is!

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Ernest M. Conradie

Secular Discourse on Sin in the Anthropocene

Lanham, MD: Lexington Books, 2020. 255 pp. hb. £81.00. ISBN 978-1793635075

I approached this book with anticipation as its title brings together two issues that I have thought about as a climate scientist and as a Christian. First, the disputed question of whether or not we are living in the so-called Anthropocene epoch (more on that later). Second, the question of whether sin is even recognised as a reality in contemporary western culture.

Conradie has written extensively on environmental issues from a theological perspective. In this book he states that his focus is on an appropriate diagnosis of what has gone wrong in (and with) the Anthropocene (18) – here he is really speaking about anthropogenic global warming (climate change). His two 'toolkits' for the diagnosis are: first, a Christian vocabulary on sin (35); and second, the theological critique of apartheid (39). Note that Conradie is a professor at the University of the Western Cape in South Africa, and so familiar with apartheid and its consequences. He seeks to apply these 'toolkits' to secular discourse on the Anthropocene (41).

The term Anthropocene is derived

from two Greek words: *anthropos* meaning human; and *kainos* meaning new. It was proposed as a new geological epoch due to the planetary impact of humanity that will remain visible in the geological layers over millions of years (1). As Conradie notes in his first chapter Anthropocene is a disputed term both in the natural sciences and in the humanities, and that it is no longer possible to have a rigid separation between the disciplines when studying humanity's impact on the Earth (5). Global warming is as much a socio-economic-political problem as a physical-biogeochemical one (as witnessed by the IPCC reports for policy makers). There are many problems with the term Anthropocene, not least that it is anthropocentric, whereas the Earth system involves flora and fauna as well as humans. It is also unclear what date to assign to the start of the Anthropocene, with the "cleanest" definition being the 16th July 1945 – the date of the first nuclear bomb test (4) that would leave a signature in the geological record – but that bears little relationship to the onset of anthropogenic global warming.

Having laid the groundwork by discussing the term Anthropocene and the need for a theological contribution in chapters 1 and 2, the next 6 chapters (3 to 8) apply the six categories derived from the critique of apartheid (unsustainable habits of the heart, structural violence, distortive ideologies, quasi-soteriologies, idolatry, heresy) to the Anthropocene. Conradie notes that the category of heresy is really one that strictly critiques only those within the Christian faith and does not apply to secular discourse (193). He applies it to the prosperity gospel (199-201). The book finishes with a short chapter entitled "An Apocalyptic Theological Postscript."

Conradie covers a lot of ground in this book with numerous quotes from other authors, both secular and Christian, and provides a multitude of footnotes and references. This makes reading the book quite hard work. A number of salient points struck me when reading the book such as the intransigence of the dealing with the problem of global warming without recognising its cultural, ethical and spiritual dimensions (58). He notes that, 'It is as odd as it is remarkable that the religious depth of the problem is also recognised by secular critics' (7). He has a useful discussion of the use of the term 'wicked problem' as applied to climate change (85-94), noting that is has no moral connotation, with wicked 'meaning difficult to resolve' rather than 'evil' (86) and concludes that this terminology is not that helpful. I also found the discussion of geo-engineering as a source of salvation (quasi-soteriology) with regard to climate change quite helpful (154-163), having looked at geo-engineering both from a professional and from a Christian perspective myself. The critique of consumerism as idolatry (172-179) is also pertinent as consumerism is driving our need for energy, and hence CO_2 emissions, and so global warming. Conradie also notes the emergence in the Anthropocene of a new idolatry 'the "God Species" (Mark Lynas), also called "*Homo Deus*" (Yuval Harari)' where we think that we can exercise God-like power through modern science (182). The Christian vocabulary of sin definitely contributes to these observations.

Despite these positive points, my main criticism is that the book is long on diagnosis but short on how we should respond as Christians – to be fair Conradie does say that the focus is on diagnosis (18). In the final chapter there are four very short sections on 'Telling the Christian Story', 'Discerning the Signs of the Time', 'What, then, does the Future hold?' and 'What is God up to?' I would have liked these to have been 'fleshed out' and the book to end with more on hope from a Christian / theological perspective,

which does feature, but not in any depth, in this theological postscript.

At £81 the book is expensive, and the ending of the book exemplifies the problem with it from my perspective. In the final paragraph (226) Conradie has a reference to n.97 (232) which states 'In the years to come I hope to address this question more fully through a series of twelve edited volumes entitled *An Earthed Faith: Telling the Story amid the Anthropocene*.' Having read this book and feeling not much wiser as to how to tell the Christian story in the Anthropocene, I remain to be convinced that reading a further twelve (probably equally expensive) volumes will enlighten me much further.

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Donald Wacome

The Material Image: Reconciling Modern Science and Christian Faith

Lexington Books, 2020, 180 pp. hb. £92.
ISBN 978-0-8308-4183-7

Everything is naturalistic except what isn't.

Philosophical assumptions, including problematic ones, can become entangled with certain scientific positions as a matter of course. Thus, a common strategy at the interface of science and faith starts with an attempt to separate the empirical wheat from the metaphysical tares. Often popular writers will present some area of science as indicating or justifying a naturalistic or materialistic position, for instance, when in fact the science can be shown to be consistent with a broader range of worldviews. We can accept quantum indeterminacy, for instance, but refrain from concluding that it would require any God to be ignorant of the future. Likewise, we can accept the lack of teleology in the evolutionary process but allow for design or goal-oriented creation at a level beyond observable mechanisms. This can be seen as an expansive strategy—clearing a comfortable philosophical space around the science for our theism and its corollaries to reside.

Imagine, however, the opposite approach: a minimalist strategy that does not make an issue out of anything but what is absolutely necessary for a barebones theism. This approach will largely ignore the distinctions between scientific conclusions and the popularly associated assumptions; it yields generously to all of them, until Ockham's razor cuts dangerously close to home. This is the approach that Donald Wacome, Professor of Philosophy at Northwestern College in Iowa, takes in *The Material Image.* Thus, for Dr. Wacome, if physics and biology say that the future is unknowable, then it is unknowable for everyone everywhere, including any possible entity to be known as God. If the causal chains discovered by neuroscience work perfectly well without invoking the mind, then the human mind doesn't really exist. If functional analysis explains the evolution of morality and religion, then it debunks them, undermining the lofty significance they manifest in our experience. In general, any human faculty or tendency that can be explained with reference to naturally selected benefit, cannot be considered a feature that indicates or reflects any divine fashioning. These arguments are familiar; what is unfamiliar is that they are cited *with approval* in a book whose subtitle is *Reconciling Science and Christian Faith*.

The book begins with an unabashed support of naturalism and materialism, and the offering of due warnings that much of what follows will seem heretical

or antitheistic. But the author assures us, God still exists in this schema, and in the end all will be well. Then comes a skilful and systematic exposition, with one chapter devoted to each of eight topics: knowledge, miracles, origins, mind, freedom, morality, religion, and resurrection. After the Wacome treatment, the transcendent dimensions of some of these are more or less obliterated (and the features thus rendered 'superficial', in the author's terminology), such as mind, morality, and religion; whereas others remain intact in their traditional conceptions or nearly so, such as freedom and resurrection.

The notion of human freedom motivates the author's entire enterprise. If God's desire for a genuine reciprocal relationship with a created being is to be taken seriously, then, according to Wacome, we humans cannot be designed, in any sense, at any level. Any degree of design, especially of our psychological nature, would load the deck in favour of our forming a relationship with God, thus compromising our ability to be voluntary about it. So, although God can be said to have created us—indirectly and generically, along with everything else that exists—God did not design us or foresee humanity in particular. Still, God created enough worlds to be confident that somebody would come along, in this galaxy or another, or even in another universe, who would evolve the ability to have a relationship with Him (though Wacome would not use this male pronoun). God set a very large number of balls rolling billions of years ago, and then sat back to watch a panoply of dramas unfold whose specific outcomes were as unknown to Him as they would be to us.

The same author who writes like an iconoclastic Daniel Dennett or Patricia Churchland in the chapter on mind, wielding the cudgel of naturalism against our folk views, becomes nearly medieval or scholastic in tone in the resurrection chapter, musing on the possible ways in which our bodies will be re-created in the next life. This brings up a central paradox or ambivalence in the book. Wacome believes in a God that is not physical and is outside of the natural order. He endorses a strong view of freedom from natural causes to the extent that we can have a fully voluntary (not determined) relationship with that God. He believes that miracles and the resurrection are God's supernatural interventions for which no science can provide us access or explanation. The problem with calling oneself a scientific naturalist or a materialist while holding such views is that those labels in their commonly held meanings do not admit of such exceptions—in fact the terms were invented precisely to rule out those exceptions. A scientific naturalist does not just apply that philosophy to evolved *Homo sapiens*, but to the Red Sea of Moses' time, to lepers, to Jesus, to death, to the scope of reality itself. To the scientific naturalist there is no valid reason to accept the existence of a supernatural God. Wacome's view, on the other hand, is that as long as the natural world and our species and its traits are explained by science, we can still call ourselves scientific naturalists, even if there is a supernatural God, and even if there are divine actions whose causes are outside of nature though their effects are within it. The problem with the semantics of this take is that there is no 'outside of nature' for a scientific naturalist, by definition. Nothing-buttery is inherent in the meaning of terms like materialism and physicalism and naturalism. Otherwise, these terms would reduce to the trite observation that everything that is natural is natural and everything that isn't isn't.

Moving beyond the semantic issue, which could easily be fixed with a Find & Replace command, the more important question is whether *The Material Image* represents a consistent and feasible picture of the world, whatever labels we

apply to the position. Certainly, when it comes to the science, Wacome is well-informed and can represent complex results of evolutionary and cognitive science in an accessible and concise manner. However, he accepts not only the scientific conclusions, but certain eliminative philosophical positions that (usually atheistic) thinkers build on top of them, as well as certain supernaturalistic theological views that (usually theistic) thinkers build on top of them. The challenge will be to navigate the criticism from both sides. Scientific naturalists in the traditional sense will see *The Material Image* as not going far enough in that titular vein—they will say we must get rid of radical freedom, resurrection, and the supernatural God. Believing in these things is assuredly not "living within our epistemological means", as Wacome urges us to do. Many theistic evolutionists, on the other hand, will consider the god described in this book as too small, temporally bound, and inactive in creation to be God.

One question is how *The Material Image* sits with the Bible. The Bible does not figure very heavily in the argumentation in this book, except at a few points: for instance, demonstrations that the Judeo-Christian God is not enamoured of our natural religion, and on the topic of resurrection. Some of its quasi-naturalizations are interestingly consistent with a Biblical view. God accommodates his divine purposes to our contingent natures, taking advantage of natural forms of our faculties of morality and religion and easing us into something better. However, Romans 1-2 represents our consciences as having been designed by God, which deviates from Wacome's representation of our moral sense as unforeseen and unforeseeable. In general, *The Material Image*'s almost deistic non-design conception of creation and providence is questionable in its consistency with the God of the Bible. To many Christians, eliminating God's foresightful design of the universe and of humans (and any other specific being) gives too much , away and would seem to force a radical revision of passages that indicate God's direct shaping of the cosmos and everything in it in real time (e.g., Job 12:7-10, Ps 139:13-16, Is 64:8, Eph 2:10, Col 1:16). Wacome views design as micromanagement—butting in and being "too involved" in our natures and actions. But this might be the wrong way to look at design. If God is as thorough an agent as the Bible appears to say He is, then any time a lion takes down a prey and every time rain falls or a flower blooms, God is active, and not just from all eternity and generally, but specifically in each moment and place. With respect to the ravens, sparrows, grass, and flowers in the gospels, for instance, God *cares for them*; and although no doubt the God of *The Material Image* did not specifically design them, that view does not seem as consistent with the Biblical message as the traditional alternative. The provision of food and clothing and shelter is nothing if not design. It is nonsensical under Wacome's schema to ask why God created birds that eat certain sorts of things or make certain sounds; but for the Biblical writers, for the Psalmists for instance, the question does not seem nonsensical at all, whether or not we have the answer. The developmental story of knitting in the womb in Psalm 139 shows that God's activity and natural mechanisms can coexist, and so they must be operating at different levels (unless we are to say that the Psalmist is now wrong or just metaphorical). For Wacome, on the other hand, the levels of explanation are flattened, such that natural explanations rule out supernatural ones and vice versa. The evolutionary process on this view leaves no place for God doing any provisioning of beasts or knitting humans in the womb.

With respect to the design of humans in particular, Wacome is concerned that

our freedom to enter into a relationship with God is compromised because God's design of human nature would entail the fixation of characteristics. This is not the only option open to us, however, and seems an oversimplification in light of modern evolutionary behavioural science. In this light we can instead see design of humans as devising the dynamic means of incorporating inheritance both genetic and social, environmental influences, and trains of individual creative thought, into an integrated will that can operate surprisingly as an agent. With this agency we can take measures to modify beliefs, take measures to change character, take measures to go towards or away from God and the purpose of our lives. If this sort of human agency exists, it is probably the most surprising thing ever to have evolved on this planet, although primatology and behavioural ecology show us that it is not without remarkably suggestive precursors. But if such agency exists, it also removes the necessity to eliminate God's providential action for the sake of sufficient voluntariness in our acceptance of the divine call.

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