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NOTES ON CONTRIBUTORS

Leonardo Ambasciano earned his PhD in Historical Studies at the University of Turin in 2014 with a cognitive and evolutionary analysis of the ancient Roman female cult of Bona Dea. In 2016 he served as visiting lecturer at Masaryk University, Brno (Czech Republic). He is European editor of the *Journal of Cognitive Historiography*.

Ian Hesketh is senior research fellow at the Institute for Advanced Studies in the Humanities at the University of Queensland. His new book, *Victorian Jesus: J.R. Seeley, Religion, and the Cultural Significance of Anonymity*, will be published by the University of Toronto Press in September 2017.

Ernest Lucas is Vice-Principal Emeritus of Bristol Baptist College and Honorary Research Fellow in Theology and Religious Studies, University of Bristol.

Bradford McCall has a BSc in Biology (Georgia Southwestern St. University, 2000) and an MDiv. (Asbury Theological Seminary, 2005). A graduate student at Holy Apostles College and Seminary, Bradford has particular interest in teleology, causation and early modern philosophy.

Graham Nevin is the non-stipendiary curate assistant, Parishes of Armoy, Loughguile and Drumtullagh, Diocese of Connor in the north east of Ireland. He trained as a geologist, was a lecturer in Environmental Studies at the University of Ulster, and is an independent consultant in both geology and environmental management.

Lauren Traczykowski recently submitted her PhD in Global Ethics to the Department of Philosophy at the University of Birmingham, titled *The Ethics of Intervention for Natural Disaster Response*. She is interested in interdisciplinary applied ethics with a focus on disasters and emergencies. Her research and teaching integrates this focus and intersects with such topics as nonhuman animal ethics, human rights, water, and bioethics.

EDITORIAL

The beginning of this year began with some sad news when the Forum was informed of the passing of our former Chair, Kenneth Wilson. Kenneth's contribution to the academic field of science and theology, to Methodist ministry, and to the Forum is invaluable and he will be sorely missed. He served as Chair of the Forum twice, once in 1979-81 and again in 2009-12. Two tributes are included in this edition: the first is contributed by Paul Beetham and the second, written by John Hedley Brooke, was given by John in his address at Kenneth's memorial service. I am grateful to both Paul and John for providing such fitting tributes to such a distinguished intellectual thinker.

This edition features a wide range of reviews including those of books on the history of science, ethics and the cognitive science of religion. In the first review, reprinted here as an article review, Ian Hesketh discusses Michael Ruse's *Darwinism as Religion*. In this book, Ruse argues for Darwin as bringing about not only a paradigm shift in science but also in theological and metaphysical thinking. Hesketh's review is particularly helpful because it sets Ruse's most recent research in the context of his earlier contributions to the history of Darwinian evolution, and Hesketh also relates it to recent work by other scholars in the history of science. How crucial Darwin himself was to the science of evolution is open for debate. For Ruse, Darwin is of central importance but, as Hesketh shows, this is not a view shared universally among historians of science. What is particularly noteworthy and interesting about Ruse's latest book is that it utilises a study of novels and poetry to make its case.

Lauren Traczykowski contributes an original piece for this edition in reviewing Peter Singer's most recent book, *Ethics in the Real World*. This book is immense in its scope, covering ethical issues as diverse as 'rights for robots', climate change

and the genetic 'supermarket'. In her review, Traczykowski offers an astute application of Singer's approach to two of the most important issues of our own day: refugees and health-care, and she also uses Singer's ethics to make a case for the necessity of reflecting on our use of language as we face the reality of a new post-truth world.

A consideration of poetry is picked up again in Bradford McCall's review of J. David Pleins' *In Praise of Darwin*. The book is concerned with the poet George Romanes, a friend and colleague of Darwin's who wrote a 'Memorial Poem' to him after his death. McCall highlights the harmony envisaged by Romanes between Darwinism and theism, and thereby presents another example of how historical considerations can contribute to our contemporary considerations of the relationship between science and religion.

Following on from this, Graham Nevin reviews the new edited book by Celia Deane-Drummond, Sigurd Bergmann and Bronislaw Szerszynski: *Technofutures, Nature and the Sacred*, in which the authors aim to bring together technology, culture, environment and ethics. Nevin's review discusses some of the noteworthy ethical questions raised by this book, some of which are identical to those discussed in the Peter Singer volume. Nevin's review shows how our technological future is unavoidably one in which science and ethics cannot be prised apart.

Peter Harrison's *The Territories of Science and Religion* is reviewed by Ernest Lucas. In this book, Harrison offers a firm rebuttal of the 'conflict' model of science and religion. Lucas shows us how in presenting his argument, Harrison acts as a fascinating guide to various aspects of the history of biblical interpretation and natural theology, drawing important insights from this history for how we relate religion and science.

In the last review of this edition, Leonardo Ambasciano's discussion of Slone and Slyke's *The Attraction of Religion* is a

thoughtful consideration of the book's thesis that religion is attractive because it helps us to manage various adaptive problems related to reproduction. The book is an important contribution to the field of the Cognitive Science of Religion and Ambasciano's review offers a helpful summary and analysis.

A sincere thank you to those of you have recently offered to write an original review. I have had success requesting new books for review from publishers in the past so if you come across a title that isn't listed as available here, please do let me know and I will try to obtain a copy for you.

Kenneth Wilson (1937-2017).
Chair of the Forum 1979-81 and 2009-12

Obituary

Contributed by Paul Beetham. This is an edited and amended text based on an obituary published in the Methodist Recorder by Sarah Wilson

The Rev Dr Kenneth B Wilson until recently the Chair of the Science & Religion Forum, was a Methodist Minister and a distinguished philosopher and theologian. He died in January at the age of 79. He was principal of Westminster College, Oxford and authored, co-authored or edited some 11 books.

Kenneth was born in Bangor in Caernarvonshire. His parents were English but this county of birth gave Kenneth a great love of things Welsh, particularly Snowdonia, where he walked and climbed, the work of several poets, especially R. S. Thomas, and rugby. At St. John's Methodist church he was greatly influenced by the "simply marvellous" minister the Rev W. T. Tilsley and in the congregation by the Rev Dr Christopher North, until 1953 Professor of Hebrew at the University of North Wales. When Kenneth's father died suddenly when he was just 16, both provided great support.

Throughout his life, Kenneth also talked warmly of his education: of Hillgrove in Bangor, an eccentric and enlightened school led by Claude Chapman, and then Kingswood in Bath, the Methodist boarding school where the headmaster was A B Sackett, a most remarkable man.

In 1957 Kenneth went up to Trinity Hall, Cambridge, where he read history and then divinity. He had become a local preacher at 16 but it was at Cambridge that he decided to can-

didate for the Methodist ministry and, after graduating, he went to Didsbury College, Bristol for ministerial training.

Kenneth's probationer appointment was as assistant to the Rev J Neville Ward at Hinde Street Methodist church in Marylebone, which had links to the London University student Methodist Society and the Free Church chaplaincy at the Middlesex Hospital. Following this very formative experience Kenneth was ordained in 1966.

In "The Prospect of Ordination" he later wrote, "The reality of ordination lies in the requirement to puzzle, to search, to be curious; one is not on the inside, but at the perimeter; one is neither protected, nor protective, but trying to understand the impossibility of telling the whole story in a silent, empty world. And yet one has something to go on, there is not just nothing, there is one's own breathing. What is the significance of that? What does it mean?"

During the service of thanksgiving held at Kingswood School Prof John Hedley Brooke (formerly Professor of Science and Religion at Oxford University) spoke of Kenneth's continuing curiosity, of his "extraordinary range of interests" and the significance he attached to them all. Celebrating Kenneth's contribution to dialogue between science and religion he "greatly assisted in the planning of the Ian Ramsey Centre (now part of Oxford University Theology Department), intended to encourage theological engagement with the sciences, and was until recently chair of the Science & Religion Forum" – John Brooke noted also that "for Kenneth, poetry and music could be a stimulus for self-knowledge in ways that science could not".

Following ordination Kenneth returned to Kingswood first as assistant chaplain and minister in the Bath circuit, and then as chaplain. In 1973 he gave the Fernley Hartley Lecture, subsequently published as "Making Sense of It": an essay in philosophical theology in which he argued that the language

of Christian theology best enables us each to make sense of the whole of our experience.

In 1973 Kenneth became tutor in Philosophy and Ethics at Wesley College, Bristol and part-time lecturer at Bristol University. From 1980 to 1996 he was principal of Westminster College, Oxford, the Methodist College of Higher Education, training teachers and a considerable number of theology students. He was awarded an OBE for services to education. From 1996 to 2001 he was Director of Research at the Queen's Foundation, Birmingham.

Whilst he was Principal of Westminster College, Kenneth was approached by Rev Bill Gowland, a Methodist Minister and former President of the Methodist Conference, to become involved with the "Christ & The Cosmos Initiative" which ran from 1987-2004. Kenneth was an enthusiastic and effective contributor to the work of the Initiative throughout its life. For most of its history the Initiative met at Westminster College and was regarded as an internal course of the college. The books which recorded the Initiative's proceedings were jointly published by the Initiative and the College. His contribution to Christ & The Cosmos as a philosopher in many ways anticipated the direction that the subject was later to take. His deep philosophical contributions gave a richness to the attempts of scientists to tackle theology and of the attempts of theologians to engage with science.

During retirement, Kenneth was variously honorary Senior Research Fellow at the Jubilee Centre for Character and Values in the School of Education, University of Birmingham, and a Visiting Research Fellow at Canterbury, Christchurch and Chichester Universities. Among many other responsibilities, he had been a governor at Kingswood and The Leys schools, a trustee of Sarum College, Salisbury, and chairman of the Ammerdown Trust.

Throughout, Kenneth continued to teach and to write. Dr Rob Fisher recalled his experience as a student in 1984. "At one minute to nine, the door opens and 'the principal' breezes in. He has no books, no notes, no aids of any kind ... and proceeds to engage us for the next 50 minutes with an enthusiasm, an honesty and a passion which is unlike anything we have ever experienced before."

He continued, "Kenneth joyfully opened my mind to all the glorious possibilities of what we can achieve when we blend the arts, the various disciplines, literature, music and science ... But it is not only what he did; it was the way he did it ... He was a gentle teacher but intellectual honesty and integrity were always the underpinnings of everything he did. There were no easy answers; as a partner in dialogue he would stretch you, challenge you, make you commit to considering all sorts of options and possibilities. And in return he was always appreciative when you did the same."

In his tribute at the service of thanksgiving, the Rev Canon Gareth Powell (Secretary of the Methodist Conference) said: "Kenneth was a holy man, who did not make us feel inadequate, rather he enabled us to feel better about our place in the world, to see it differently ... his preaching and teaching did not draw attention to his own learning, but rather reminded us that we are partners in God's good creation, called to exploration."

Kenneth's election as Chair of The Science & Religion Forum was at face value a radical one as he followed distinguished scientists and scientist/theologians. His breadth and depth of learning however made it ideal and enabled him to make a new and enlightening contribution to the life of the Forum which he did with his customary energy and enthusiasm until prevented by ill health.

Kenneth is survived by his wife Jennifer, and three children, Sarah, Mark and Vanessa.

Memorial Address for Kenneth Wilson

John Hedley Brooke

Of his headmaster at Kingswood School, A. B. Sackett, Kenneth wrote that “there was nothing worthwhile in which he was not interested.” The same could surely be said of Kenneth himself, with his extraordinary range of interests from poetry and music to science and theology. Among the high points of his schooldays were the visits of guest speakers who fired his imagination in ways that were to have lasting influence. Prominent among them was Charles Coulson, mathematician, theoretical chemist and Methodist preacher. In 2010, inaugurating a new series of articles for the Science and Religion Forum, Kenneth chose Coulson’s Science and Christian Belief as the “book that made a difference” to his intellectual development. Coulson, he wrote, demonstrated that “any religion worth its salt, is intellectually stimulating, morally demanding, and unendingly intriguing”. One might, he added, “say the same of science”. Coincidentally, had I been asked to nominate a book that made a difference to me, I would have chosen the same one. I was struck, as Kenneth clearly was, by Coulson’s exposure of a mistake commonly made by Christian apologists who exploited what science could not yet explain to prove the existence or activity of God. This was a precarious god-of-the-gaps, vulnerable to the scientific progress that would eventually fill the lacunae.

My intellectual affinity with Kenneth’s outlook was informed by two other considerations in the field of science and religion. He believed it to be a just criticism of some scientists that they limit the range of human experience allowed to count as knowledge. For Kenneth, poetry and music could be a stimulus for self-knowledge in ways that science could not. At the same time theologians can be too

prone to pick and choose among the results of scientific enquiry to support unconsidered perspectives on religious belief. It was in this academic context of science and religion that I first met Kenneth in person. This was in Oxford on the occasion of a birthday celebration for Arthur Peacocke, biochemist and Anglican priest, who had launched the Ian Ramsey Centre to encourage theological engagement with the sciences. Kenneth had greatly assisted the planning of the centre, which was eventually incorporated into the Theology Faculty. Rosemary Peacocke, Arthur's widow, has written to say that Kenneth was an "enormous support for Arthur [in] developing the Ian Ramsey Centre." He was Chairman during the planning stages and in its early years. She adds that Arthur greatly respected not only Kenneth's clear mind but also his tenacity in executing difficult decisions.

The continuing success of the IRC testifies to the manner in which institutional innovation can have a rich and cumulative legacy. The Centre to which Kenneth contributed so much has expanded to include employment for young scholars, regular international conferences, and outreach to other countries, notably to Latin America where conferences have recently been held in Mexico, Ecuador and Brazil. The Principal of my Oxford College, Ralph Waller, refers to another cumulative legacy when he says that Kenneth was a "great encourager of younger academics" and that he will always be grateful for the encouragement, help and friendship he received from him. Poignantly Ralph recalls an occasion when Kenneth was driving a group including himself to a funeral in Bath. "He is the only man I know, says Ralph, "who could drive along the M4 in torrential rain, and well in excess of the speed limit, while discussing the great issues of life and death, totally unaware that the rest of us were hanging on for grim death, and not quite sure if we were going to our own funerals". Kenneth's role as an exemplary mentor to young academics

has been stressed by many others, including Neil Messer, now Professor of Theology at the University of Winchester.

My own admiration grew in the context of the Science and Religion Forum, of which Kenneth was a loyal member and, until quite recently, Chairman. The Forum exists to bring the fruits of academic research to a non-specialist audience, a mission with which he had evident sympathy. His predecessor as Chairman, Neil Spurway, recalls that Kenneth “seemed to understand both sides of so many arguments, and indeed the motives, the driving forces, behind [them].” His “calm, gentle style of intervention (in a lovely mellifluous voice) won my great envy.” In her tribute to her father, Sarah refers to countless conversations that started with “have you seen this book?” I think that beautifully captures Kenneth’s zest to communicate insights that he had found edifying and infectious. I rarely came away from a conversation without a note of some new book, which, without his prompt, I would have missed. Above all – and I was always humbled by this – one never sensed that Kenneth’s interest in the relations between science and religion was merely academic. It is easy for it to become so. But without sacrificing intellectual rigour, Kenneth was always thinking of the moral framework within which such a study should be framed. There was always the deeper question: how may academic research catalyse educational reform and generate greater compassion?

When news of Kenneth’s death reached my colleagues in the Forum, it elicited a reaction of deep sadness and warm appreciation. Tributes were paid to his kind, gentle manner and complete lack of arrogance, to his graciousness and wisdom, to his infallibly courteous and constructive leadership, and, when chairing meetings, to his great knack of putting his finger on the key issue. I was delighted to learn that the Forum is to dedicate the proceedings of last year’s conference to his memory. In the book’s title there is the

question mark that I think Kenneth would have liked: Are There Limits to Science?

This takes me back to where I began, to the enduring influence of a book by Charles Coulson on two incipient scholars. Kenneth's critical mind did not allow him to accept Coulson's position in its entirety. In his 2010 essay for the Forum, he expressed doubts whether the reasonableness of belief in a personal God could be demonstrated in the manner Coulson had suggested. Yet Kenneth unswervingly believed that Christian theology provided the best intellectual and spiritual framework within which a human life could be fulfilled. In his last book, as he explored the theological roots of Christian gratitude, he included in the scope of that gratitude a joy in the wonder of creation – a sensibility so often expressed by the founders of modern science. Of our place in a universe amazingly receptive to scientific enquiry he wrote: “we are uniquely that dimension of creation that is free to recognise what is worthy of our gratitude and the person or persons to whom it is proper to be grateful”. Kenneth was a highly valued friend for whose example I, among many, am deeply grateful.

REVIEW ARTICLE

Michael Ruse, *Darwinism as Religion: What Literature Tells us about Evolution*. Oxford: Oxford University Press, 2017, pp. 310, \$34.95 Pbk, ISBN 978-0190241025

REVIEWED BY IAN HESKETH

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<http://ndpr.nd.edu/news/darwinism-as-religion-what-literature-tells-us-about-evolution/>

Michael Ruse is a well-known authority in the history and philosophy of evolution, particularly that of Darwinism. While he is by training and self-identification a philosopher, his particular mode of philosophy is decidedly historical in the sense that his arguments are typically developed out of an engagement with historical evidence and narrative. His first book, *The Darwinian Revolution* (1979), is a wonderful example of his historical-philosophical method at work as he situated the sudden rise of Darwinian evolution within the particular social, cultural, and philosophical contexts of Victorian Britain. In *Monad to Man* (1996), Ruse extended his history of evolution into the twentieth century while exploring the centrality of progressivism in evolutionary thought, thereby highlighting some of the metaphysical issues that were essential to the popularization of evolution, and which were eventually suppressed by a professionalizing biology in the second half of the twentieth century. Darwin, of course, is the dominant figure in this book as well, with Ruse arguing that, in contrast to many modern assumptions about Darwinian evolution, progress was an important aspect of Darwin's whole scheme of evolution by natural selection. While several other of Ruse's books

could be mentioned in this context, I think it is fruitful to think of his new book as continuing, deepening, and extending an argument about the central Darwinian nature of evolution that runs throughout these two earlier works. And, in its own way, it is equally important as these two now classic studies.

Before getting into the details, it is worth mentioning that Ruse's general thesis about the "Darwinian" revolution tends to run afoul of recent historiographical approaches to the subject. Part of the issue is that in recent years historians of science have sought to downplay the role of scientific heroes like Darwin in favor of lesser-known figures whose work was apparently more influential than previously thought. Bernard Lightman, for instance, has shown that many of the most popular writers of evolution in the Victorian period were motivated by and engaged with evolutionary theories produced not by Darwin but rather by Lamarck, by the anonymous author of the *Vestiges of the Natural History of Creation* (1844), or by Herbert Spencer.¹ And Lightman's work is complementary to the very anti-Rusean thesis put forward by Peter Bowler, who argues that Darwin's particular theory of evolution by natural selection was never really embraced by the vast majority of evolutionists, who preferred the more teleological and progressive theories produced by one or more of Darwin's competitors. It is better to think of the nineteenth and early twentieth centuries, Bowler argues, as defined by a "non-Darwinian Revolution," referring to the wide-acceptance of what he designates "developmental" theories of evolution at

¹ Bernard Lightman, *Victorian Popularizers of Science: Designing Nature for New Audiences* (University of Chicago Press, 2007); Lightman, "Darwin and the Popularization of Evolution," *Notes and Records of the Royal Society of London* 64:1 (2010): 5-24; and Lightman (ed.), *Global Spencerism: The Communication and Appropriation of a British Evolutionist* (Brill, 2015).

the expense of the specifically Darwinian.² In his more recent, counterfactual study, Bowler makes the bold claim that had Darwin died on his famous Beagle voyage, the science of evolution would have developed more or less as it did, if not quicker and much less contentiously.³

Understandably the author of the *Darwinian Revolution* is not a fan of the "non-Darwinian Revolution" (56, 67-68).⁴ And Ruse's *Darwinism as Religion* can therefore be read as a challenge to this recent turn in the historiography of evolution as well as a defense of his own earlier studies. This is apparent from the book's opening pages, where Ruse states: "I shall argue that Darwin is a key figure in my story and thus, in this respect, there was absolutely, totally, and completely a 'Darwinian Revolution'" (x). But what sets this book apart from Ruse's previous studies of Darwinian evolution is that the evidence mobilized in defense of his thesis comes not from the writings, theories, and views of scientists, but from literature. As is announced in the subtitle, this is a book about what literature tells us about evolution. And by literature Ruse primarily means Anglophone novels and poetry, ranging from eighteenth-century figures such as Alexander Pope, Erasmus Darwin, and William Godwin, through to nineteenth-century writers such as George Eliot, Elizabeth Gaskell, Alfred Tennyson, and Emily Dickinson, and on to more recent authors such as William Golding, Ian McEwan, and Marilynne Robinson.

² Peter Bowler, *The Non-Darwinian Revolution: Reinterpreting a Historical Myth* (Johns Hopkins University, 1988).

³ Peter Bowler, *Darwin Deleted: Imagining a World without Darwin* (University of Chicago Press, 2013).

⁴ See also Piers Hale, "Rejecting the Myth of the Non-Darwinian Revolution," *Victorian Review* 41:1 (Fall 2015), for a critique of the "non-Darwinian" concept.

These are just a few of the writers discussed in what is an incredibly wide-ranging analysis that foregrounds Ruse's uncanny ability to find relevant evolutionary meanings in seemingly innocuous passages of literature.

The conceptual apparatus is largely borrowed from *Monad to Man*, in which Ruse tracked the development of Darwinian evolution from a pseudoscience to a popular science to a professional science. The vast majority of the book, however, focuses on Darwinism as popular science, that is to say from the publishing of Darwin's *Origin of Species* in 1859 to the early twentieth century. What Ruse shows is that during this period many, many authors from a variety of religious and political perspectives, "wrestled" (a favorite metaphor of his) with the implications of Darwinian evolution because it necessarily undermined the stable world that had been made coherent and unambiguous by Christianity. It is in the realm of such literature, argues Ruse, that one gets at the extent to which evolution had permeated the popular imagination while gaining insight into the transformative impact Darwin had on human self-understanding.

So after establishing the singular contribution Darwin made to the development of evolution, Ruse explores the influence of that contribution on literature in chapters devoted to the respective themes of God, origins, humans, race and class, morality, sex, sin and redemption, and the future. By thoroughly naturalizing human origins, Darwin undermined the stability of meaning that had been provided by Christianity in all of these realms of thought. For the writer Thomas Hardy, for instance, an evolutionary perspective meant that humans were not God's favored creation, and therefore under His care and protection, but the mere products of nature, and therefore entirely under the subjection of its whims. This issue is explored in *Tess of the D'Urbervilles* (1892), which is about a woman, the title character, who is fundamentally a good person, although

this does not save her from being imprisoned and then executed. Tess's moral intentions, therefore, are entirely divorced from her ultimate fate. For Ruse, this is one prominent interpretation of Darwinism, namely that, "We are in a world of chance, of fate, where humans—no matter their stunning beauty, their moral purity—count for naught" (127). There is indeed a bleakness in Hardy's Darwinian universe. But, as Ruse argues, this was not necessarily the only way to live in Darwin's world.

The novelist Charles Kingsley, for one, found Darwinian evolution complementary to his Christian socialism. His popular *Water Babies* (1863) was a children's story about Tom, a chimney sweep who drowns and turns into a "water baby." Despite this degeneration, Tom again becomes human as he "slowly matures morally, learning to do things he does not like because they are the right thing to do" (90). Under Ruse's reading, therefore, *The Water Babies* is an evolutionary tale that is embedded in a larger narrative of Christian redemption. For Kingsley, Darwinian evolution could accommodate a moral scheme derived from Christianity, which helps explain why he was such an enthusiastic proponent of evolution.

Hardy and Kingsley represent opposite ends of a wide spectrum that includes a whole host of diverse responses to Darwinian evolution, from those advocating some sort of transcendental evolutionism such as Emily Dickinson to the deeply ambivalent "despair in the face of Godless nothingness" that was typical of Joseph Conrad (136). Darwin, Ruse argues, quite simply "changed our world," and this was the case "for those who agreed with him fully, for those who agreed with him but partially, and for those who rejected his thinking in various ways" (x). In other words, there was no escaping the Darwinian revolution for anyone, for proponents or critics alike who had to wrestle with the world that Darwin created.

If the vast literary responses to Darwinism convince Ruse of his original thesis about the pervasive nature of the Darwinian revolution, and therefore undermine any notion of a non-Darwinian revolution, he also wants to go beyond his original thesis, and this gets at the main title of the book. His foray into literature makes him realize that the Darwinian was not just a scientific revolution but also a revolution in how people understood themselves in relation to the world and the larger universe. It was therefore also a "religious revolution" as evolution, rather than Christianity, was now looked to in order to answer fundamental metaphysical questions, such as the meaning of life or the nature of God (281; see also 82). That Darwinism became a secular religion by ultimately replacing Christianity is a compelling and provocative claim. Moreover, Ruse uses the comparison of Darwinism to Christianity to great effect, particularly when he explains that the diversity of Darwinism was not unlike the variations that one finds within the realm of Christianity itself (see 87, 219 n. 7).

This book, then, effectively seeks to establish "Darwinism" as representative of a paradigm shift in worldview that occurs during the second half of the nineteenth century and the beginning of the twentieth century. Critics of this claim will no doubt argue that the evidence Ruse has mobilized in favor of this shift—in the novels and poetry of the time—leaves more room for interpretation than Ruse seems willing to acknowledge. Moreover, the quick pacing does not always lend itself to a careful analysis of the material, as Ruse clearly does not want to get bogged down by laboring a particular point or theme. An example of this occurs early on in a discussion of William Godwin's novel *Things as They Are; or, The Adventures of Caleb Williams* (1794), an analysis that is rather suddenly halted by the sentence "Enough!" (7). I read this as a humorous warning to readers that they should not expect extended summaries of plots or intricate deep readings of excerpted

prose. But, as an authority no less than Dame Gillian Beer, author of *Darwin's Plots*,⁵ points out on the back cover, this is not an academic book of literary criticism. What it is, rather, is "an intensely personal reading of deep questions that have preoccupied writers, and people at large, over the last hundred and fifty years." Indeed, Ruse's book is an absolute joy to read and to ponder. It is a witty and, at times, polemical work that pursues a provocative and thought-provoking thesis that is by definition almost impossible to prove. To put it another way, it is a book that could have been written only by Michael Ruse. And that is indeed a good thing.

⁵ Gillian Beer, *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot, and Nineteenth-Century Fiction* (Cambridge University Press, 1983).

REVIEWS

Peter Singer, *Ethics in the Real World: 82 Brief Essays on Things That Matter*. Princeton: Princeton University Press, 2016, pp. 376, £22.95 Hbk, ISBN 978-0691172477.

REVIEWED BY LAUREN TRACZYKOWSKI

As expected, in *Ethics in the Real World: 82 Brief Essays on Things That Matter*, Peter Singer provides an ethical analysis of the world in his consistently accessible, interesting, and evocative own-brand of prose. The book is divided into 11 headings under which Singer has grouped 5-10 articles re-printed from his previous publications. The beauty of this book is that it gathers his work—his summary, analysis and criticism of emerging/current global problems—in one place for the budding activist or armchair ethicist to access. Accordingly, this book should be read by any person who considers ethical living to be of any value so as to prepare themselves for the “challenges of a rapidly changing world” (37).

Just as ethics “makes a vital contribution to the most urgent debates that we have” (35), so does Singer’s analysis. Through simple and relatable thought experiments, Singer simplifies complex utilitarian arguments for general consumption. So as to make the most of this collection I recommend working through to pick out your own thematic links across sections and constructing your own ‘cheat sheet’ of ethical arguments in response to your own urgent or personal issues. In general, I find it difficult to disagree with Singer on any of the big issues – happiness, health, sex and politics. We, as a society, come short of addressing past shortcomings and, in the words of Ghandi, of being the change we want to see in the world. Singer is so convincing in his argumentation that there is no question as to why he was named the third most influential

thinker in the world by Swiss think tank, GDI. Indeed, even where I disagree with some of Singer's conclusions and his normative theoretical position, there is no doubt of his brilliance and ability to speak to the masses about relevant issues.

All of this being said, this book is simply a collection of Singer's work. It does not evoke what Orwell would call "spontaneous feelings" of praise or contempt. Most mainstream applied ethicists will probably have already read and internalised Singer's view on a range of "Things That Matter" as the sub-title suggests. Hence there is no new thesis to analyse or to commend the work to broad, academic-level consumption.

Instead, this book is, as I suggested above, a cheat sheet for approaching ethical issues of the day. Poignantly, I read this book against the background of President Donald Trump's inauguration and his first 100 days in office. This new government has (knowingly or unknowingly) created a call to arms for ethicists and activists to respond to a rapidly changing world. Reading *Ethics in the Real World* during early 2017 was as applicable as it would have been when each of Singer's original articles was written. The articles contained in this book were therefore timely and I used them to make sense of the current world situation.

I will here apply Singer's ethical guidance to the current political situation with focus on three themes to show that his analysis and articles are applicable in any political situation. This, I would think, is the goal of this book: to provide guidance on how we should view the world and how we should act.

Suffering: In 2015, Serbia and Hungary built fences to keep migrants out (250). In 2016, there was discussion of building walls to keep migrants from traveling from Calais to England. In 2017, it is a wall between the US and Mexico which makes headlines. Even with some people helping, global refugee

numbers continue to climb. The political unrest, greed, and disasters (natural or man-made) which bring about suffering and, in turn, cause migration do not seem to be diminishing.

Singer argues that our global 'readiness to help' those outside our own social circles (maybe even nonhumans) is not a black and white issue and instead exists along a spectrum (20). For those farther from 'ready' than others, Singer establishes a logical and poignant call to action which provides some hope that we can move along the spectrum toward less global suffering. Instead of feeling weighed down by suffering, Singer makes it possible for us to act, even if through small steps.

For example, Singer suggests that, "[A]ffluent countries have a responsibility to take refugees and many of them can and should accept more than they do" (251). Further, and importantly, he admits that even increased action, responsibility and financial support for refugees are unlikely to address the root problems of mass migration. However, instead of assuming that throwing money at one aspect of the refugee crisis will simply solve the problem he explains how financial support is a practical, workable solution which provides a dimension of hope and compassion to our policies (252). Thankfully, as this is ethics for the real world and not the ideal world (112), Singer encourages us to find solutions (like the ones he suggests for the global refugee situation) that work now. Thus we can contribute now, even if our actions don't solve the root problem.

Healthcare: In "The Many Crises of Health Care" (114-117) Singer rightly points out the amount of money American health care wastes through systems aimed at rewarding expensive treatments. Expensive technologies which aim at prolonging life, not curing illness, are used more readily so that insurance companies will be able to continue to charge high premiums. This disincentivizes the development and use of newer, more efficient technologies.

The accumulation of money as an end in itself (192) is something Singer also criticizes more broadly. Acquiring money should be a means to an end, a way of ensuring that we can meet our human goals. However, we have lost track of what that goal is: a flourishing life. If we did focus on flourishing lives as the ultimate goal than we would be more likely to support public policy which ensures “people have time to relax with friends, and pleasant places to do it” (201). Indeed, it is the people and experiences that make our lives worth living, not the amount of money we make.

Applying Singer’s analysis of American healthcare from his 2007 article “The High Cost of Feeling Low” (199), one can see how this misspending plays out in the real world. Some American health insurance policies do not cover treatment or care for mental illnesses. This lack of support will have a huge impact one’s ability to pursue a flourishing life. I suspect that those in need of mental health support are less likely to be able to pay the high premiums and thus any care covered is seen as a drain on insurance resources. Hence Singer makes the case over several separate and brief articles that money spent on greedy endeavours diverts it from those policies which will help us establish truly flourishing lives. In light of the repeal of the Affordable Care Act in the first weeks of the Trump Administration there is an urgent need to once again look at American healthcare and consider how we are (not) supporting flourishing lives. Thus Singer’s book continues to be a timely guidebook for the real ethical issues of our time.

Language: Finally, the third theme discussed herein pertains to Singer’s suggested ethical approach to the use of language in political situations. In the introduction of this book Singer explains his approach to ethics. He says that ethics is not a matter of taste or preference (xi). So as to be read and absorbed by a broader audience Singer says that moral judgments are not “purely subjective” (xi). Instead, morality is ob-

jective and is best served, according to Singer, by discussing it broadly (55). For example, concentrating on the language used to explain what really happens to a turkey before it reaches our Thanksgiving tables (55) and engaging in debate about how we define what it means to be a 'person' (64) will help change societal views on nonhumans as meat products.

Indeed, language is a powerful tool which Singer both explains the utility of and thoroughly utilises himself. In "The Cow Who..." (66-69) Singer draws our attention to the use of pronouns and the shift this signifies in our understanding of animals as property to animals as rights holders. This same linguistic analysis can be and has been applied to Trump's presidential speeches. Terms like 'illegal aliens' or 'illegals' undermine the inherent value of human immigrants. Through the work of activists it is now broadly understood that 'no human being is illegal'. Despite the movement's ability to bring politicians into the light during the 2016 presidential campaign, Trump continues to use the term. Thus the use of language continues to be important. Hence it is important for us to continue to apply Singer's explanation of language once again. For "whatever cannot be said clearly is probably not being thought clearly either" (x). We must therefore improve our language so as to improve the ethics we use when approaching the issues of the real world.

In conclusion, those of us who will read and engage with the arguments made in *Ethics in the Real World*, are thus empowered to counter the un-reasoning of mainstream politicians. As Singer suggests, we must "use our ability to reason" (xii) and channel our "yuck" reactions (xii) to help us survive in this "post-truth" era of four or eight years. I suggest that this book, so neatly organized around eleven topics and easy to read become a guide book for action. With its integration of current events into short articles in non-academic prose (x), Singer makes his arguments accessible and useful and reminds

us that some people will do the right thing (20). Ultimately, *Ethics in the Real World* is Singer's challenge to us: consider the type of advice we can apply in our current global dynamic and work harder to apply those lessons to the pursuit of a more ethical world.

REVIEWS REPRODUCED FROM ELSEWHERE

J. David Pleins, *In Praise of Darwin: George Romanes and the Evolution of a Darwinian Believer* (New York and London: Bloosbury, 2014), xvii + 397 Pps., \$34.95. ISBN: 9781623565947

REVIEWED BY BRADFORD MCCALL

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J. David Pleins is Professor of Religious Studies at Santa Clara University, USA. He is the author of *The Evolving God* (2013), *When the Great Abyss Opened: Classic and Contemporary Readings of Noah's Flood* (2003), and served as an associate editor for Doubleday's *The Anchor Bible Dictionary*, 6 volumes (1992). George John Romanes, close friend and colleague of Darwin, remains a misunderstood figure in the history of evolutionary science. Although his scientific contributions have been valued, his religious journey has been both neglected and misjudged. Typically, only some of the work on theism he did at the very end of his life is acknowledged and even then his wife is usually blamed for doctoring the record with her pieties. His extensive poetry writing, much of it religious, has never been explored and his "Memorial Poem" to Darwin has been completely overlooked. The recent discovery of the original typescript of the poem, lost for more than a century and found only in 1999 at an auction, is reprinted fully in this book for the first time, and it allows us to enter the mind of a major Darwinian as we watch him struggle to positively put faith and science together.

The impression of most people is that to be a Darwinian is to likewise be a religious skeptic. To this day, many who are Darwinians contend that belief in Darwinian mechanisms of

evolution undermine religious thought. Romanes, however, thought differently: he had positive thoughts on the relationship between religion and science. The typescript of Romanes' "Memorial Poem" herein included contains a number of handwritten poems along with a series of experimental poems that never made it into the version of the "Memorial Poem" that he printed for family and friends. The "Memorial Poem" is a unique and expansive work that grapples with the loss of his close friend and teacher, Darwin, struggles with the paradoxes of Darwin's fame, probes the meaning of Darwin's truth, and tackles the thorny problem of evil. To date, no scholar has asked how Romanes came to write this massive poetic tribute to Darwin, nor has anyone taken stock of the enduring theological insights that this "Memorial Poem" to Darwin contains. Plein rectifies this glaring omission in scholarship.

The book under review is divided into seven chapters. It begins with a brief look at Romanes' early life and career by Pleins, a time of initially positive religiosity that ended in philosophical skepticism. The next five chapters unpack the major segments and themes contained within the "Memorial Poem" to Darwin. Chapter 2 begins the poem proper, with meditations on the tolling of the funeral bell, Romanes' anguish, and the character of Darwin's name. The third chapter depicts Romanes' grief over the loss of his hero and dear friend. Chapter 4 explores the paradox of Darwin's fame as well as the eternal truth discerned within his name. Next, chapter 5 accompanies Romanes on a pilgrimage to Down House, where he sought to reconnect with his memories of Darwin, his fallen mentor. The sixth chapter grapples with the problem of evil, which according to Romanes is the greatest challenge to faith. The concluding chapter follows Romanes' trajectory after his "Memorial Poem" to Darwin, the years in

which his philosophy of monism matured, and during which his mature thoughts upon theism were formulated.

In sum, in this “Memorial Poem” to Darwin, we find in the figure of George John Romanes a seeker who crafted a new vision of God – a vision that sought to remain true to science while also being faithful to and honest about religion. This “Memorial Poem” to Darwin by Romanes challenges and alters our view of how Darwinians can remain true to their science and embrace religious belief simultaneously. This pathway to a new vision for theism, ironically, is through Darwinism, and not against it.

Celia Deane-Drummond, Sigurd Bergmann and Bronislaw Szerszynski (eds.) *Technofutures, Nature and the Sacred: Transdisciplinary Perspectives*. Farnham, Surrey: Ashgate, 2015. pp. 306, £65 Hbk, ISBN 978-1472444103.

REVIEWED BY GRAHAM NEVIN

Reproduced with the permission of the author and editor from *Science and Christian Belief* (2016) 28:2, pp. 129-130.

We live in a complex multi-dimensional world of technology, culture, environment and considerations of ethics and responsibility and many have examined the two-dimensional spaces in which these interact. The authors of this volume attempt to create a synthesis of all these dimensions, which is by no means an easy task. But then, they do not pretend that the questions they address are either easy or unimportant. Perhaps we would all like to know “who decides what technology can and cannot be used for” and what would give them the right to speak and what framework do we have in which to make decisions about using technology, particularly when, at the

time, it seems to be beneficial. We may not find an answer in this book, but at least we can begin to understand why we must ask – and continue to ask – the questions. Are such questions theological issues, are they matters of faith? Not satisfied simply to accuse engineers of “playing God”, this book, by exploring the breadth of philosophical and theological thinking from classical to modern, places the question of how, when and where we use technology firmly in the realm of theology.

This is not an easy book to read and it may be tempting to give up after the introduction, if not the title. Perseverance is required and will eventually be rewarded, although not by a fulfilled understanding but rather by a stimulating and uncomfortable challenge to both thought and action. While, on the whole, the authors do ground the discussion in a spiritual context, it is not an overtly Christian one and readers from other traditions would not find themselves uncomfortable with this book.

Each chapter is the work of a leading specialist (introduced in a comprehensive biography) and for those whose experience lies in a different sphere, some of them can be demanding. In the first section which attempts to establish a theoretical framework, the reader may find that even on familiar ground the boundaries can be pushed uncomfortably far and once on unfamiliar territory the temptation to give up is compelling, especially where the flow of the text is constantly and unnecessarily interrupted by parenthesised German or Greek words and phrases. Tellingly, we are advised ‘To philosophically educated readers it is easy to see ...’ (26): to others, it may not be, and it is only to be hoped that at least the conclusions of the argument are clear.

Part two (‘Religious Narratives’) proves to be a lot easier to read, with chapter five, exploring the thoughts of the scientists involved in the development of the atomic bomb, compelling and thought provoking reading. However, it is not just nuclear

scientists who are forced to ask why do we do what we do: chapter six might just stop in their tracks many readers content with the widely understood concept of the human stewardship of creation, which 'some argue is an adaptable and elusive concept subject to contrasting interpretations, with a biblical basis that has been questioned' (106). The ensuing discussion provides satisfying food for thought.

If the reader is, at this stage, unsure as to where this book is going, perhaps chapter seven may give a clearer direction. Although the language may be unfamiliar and difficult, the world which it explores is depressingly familiar: an unequal and unjust world 'defined and managed through the fetishisation of money and commodities [in which] value is attributed to lifeless money, things and machines' and 'local, historical and individual identities are destroyed' (132). This reader at least is left with the agonised cry of why, if past philosophers understood what was happening, did we still allow it to happen? And perhaps more importantly, is there any way out? It is with some relief that the chapter concludes by pursuing a rather unexpected route pointing towards the possibility (or perhaps for the Christian, the eventual certainty) that there is.

Part three, Practices, a series of reflective essays developed around issues ranging in scale from village to global, could well stand on its own; references to what has gone before are certainly there but not over emphasised. Chapter nine, with the unappealing title of 'Reinventing Homemaking', alone makes this book worth reading: although it begins with a feeling of justifiable pessimism about the state of the world's environment and economy, it goes on to offer a refreshing, well-argued and unexpected cause for optimism. Whether or not this is a realistic optimism is left for others to judge.

This is clearly an academic book and, through extensive footnotes and a comprehensive 35 page bibliography, provides a sound basis for further study. The ideas explored in this

book are important for the future and need to be considered by decision makers, both technological and political. For that reason it deserves to be widely read, but I suspect that the difficulty of much of the language will mean it will not be.

Peter Harrison, *The Territories of Science and Religion*. Chicago and London: The University of Chicago Press, 2015, pp. 300, £21.00 Hbk, ISBN 978-0-226-18448-7.

REVIEWED BY ERNEST LUCAS

Reproduced with permission from the author and editor from *Science and Christian Belief* 2016, 28(1), pp. 40-1.

Administrators in the university in the USA in which I worked in the early 1970s would often 'correct' what seemed to them an obvious typo in documents I sent them which said that I had a BA degree in Chemistry from Oxford University. They were mystified by my explanation that when chemistry began to be taught in Oxford in the nineteenth century it was part of natural philosophy and so of course it merited an arts degree. A few years later I obtained another BA from Oxford - in theology. This Oxonian anachronism is pertinent to the main thrust of this book by the Professor of the History of Science and Director of the Centre for the History of European Discourses at the University of Queensland. He argues that if we rigidly apply our modern categories of 'religion' and 'science' to the past we inevitably arrive at a distorted picture of their historical relationship. His book is a fresh undermining of the still-popular 'conflict myth' view of the relationship between science and religion which traces the rise of the modern use of these categories. It is a fascinating and somewhat complex

story which is lucidly told. A review can touch on only a few points.

In the Middle Ages, as evidenced by Aquinas, religion was a human virtue or habit, concerned with inner acts of devotion and prayer, not a set of beliefs and practices. *Scientia* referred to a habit of mind or intellectual virtue which could be developed by practice, not a body of systematic knowledge about the world. What historians of science usually see as the closest medieval analogue to modern science, 'natural philosophy', included topics such as God and the soul and excluded mathematics and natural history. As an integral part of philosophy it was also concerned with pursuing a 'good' life. It therefore always had moral and religious ends in mind. Christian critique of pagan philosophy is often seen as evidence of a bias against 'science'. In fact much of it was directed at astrology, divination, the worship of deified heroes and belief in the divinity of the celestial bodies - at what is now seen as 'superstition'. As medieval Christianity emptied the universe of divine beings it replaced them by divine meanings. Every creature was seen as designed to manifest some divine truth. Nature, like the Bible, was 'God's book'. Through the use of allegorical interpretation, a method already applied to Scripture, they gave intimations of the Trinity, bore witness to Christ's work of redemption and were the source of specific moral lessons.

Reservations about the abuses of the allegorical method were voiced before the Reformation. Both Luther and Calvin rejected its application to Scripture, prioritising instead the 'historical' or 'literal' meaning of the text. This affected its wider use. Francis Bacon proposed a new non-allegorical way of reading the 'book of nature'. In his view it manifested the 'power and skill' of its Creator but not his 'image'. He replaced allegorical 'deduction' with the 'inductive' approach of observation and experiment. Following Bacon, natural philosophy

still had religious significance but by the eighteenth century it simply provided a limited amount of evidence from which some basic truths about God could be inferred, as by Newton in his *Principia*. Natural Philosophy also continued to be concerned with pursuit of a 'good' life, but the 'good' concerned came to be seen as not so much the 'good of the soul', as the material betterment of humankind.

Another significant result of the Reformation was the Peace of Augsburg (1555), a settlement between the Catholic Holy Roman Emperor Charles V and an alliance of Lutheran princes. It specified two 'religions' based on the idea that religious differences could be given objective expression, as in the twenty-eight articles of the Augsburg Confession. By the second half of the seventeenth century a number of influential English Protestant thinkers, for example Stillingfleet and Locke, presented faith and belief in terms of giving assent to propositions.

In the first half of the nineteenth century there was still a fundamental conviction that there was a unity of theological and physical truth. In this 'natural theology' played an integrating role, as seen in the *Bridgewater Treatises* (1833-36). However, seen as an 'inductive science' the idea of 'natural theology' reinforced the understanding and definition of 'religion' in terms of belief in propositions. It was the second half of the nineteenth century that saw the reconstruction of 'science' around the principle of a common method for studying the physical world to gain knowledge about it and a common identity of its practitioners, the emerging professional 'scientists'. This drawing of boundaries around 'science' and 'religion' with a focus on each as bodies of knowledge expressed in propositions raised the question of the relationship between them in a new way. This was the period which produced the 'conflict myth' as some scientists set out to validate their particular view of reality and reinforce the boundaries of science

to establish its independence and authority. This myth was linked with another one, the myth of 'historical progress' which took various forms in the late nineteenth century — such as J. G. Frazer's scheme in which humanity progresses from magic, through religion, to science. Reading history through the lenses of these myths distorts it.

Harrison provides a wealth of interesting material to support his understanding of the development of the understanding of 'religion' and 'science' and their relationship from antiquity to today. No doubt other historians will assess it and challenge him at some points. However, his overall thesis seems sound: that our current understandings of these categories are relatively recent constructs and it is unhelpful to project them into the past as is commonly done. This is not a matter of purely historical interest. As he indicates in his closing sentences, there are implications for today. He suggests that advocates of a constructive dialogue between science and religion may unwittingly perpetuate conflict because, 'Often they concede the cultural authority of the sciences, the propositional nature of religion, and the idea of a neutral, rational space in which dialogue can take place. As we have seen, each of these developments is relatively recent. But the history of their emergence, along with the past from which they came, offers some intriguing intimations of how things might have been, and might yet be, rather different' (198). There is a lot to think about there!

D. Jason Slone and James A. Van Slyke, *The Attraction of Religion: A New Evolutionary Psychology of Religion*. London and New York: Bloomsbury, 2015, pp. 252, £27.99 Pbk, ISBN 9781350005280.

REVIEWED BY LEONARDO AMBASCIANO

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In the conclusions of *The Oxford Handbook of Sexual Conflict in Humans*, Gregory Gorelik and book co-editor Todd K. Shackelford remarked that, “instances of religious manipulation and hypocrisy may exemplify the deceptive use of ideology to further one’s reproductive success at the expense of one’s fellow group members”. Thus, they “encourage[d] biologists and population geneticists to produce a scientific account of cultural norms, values, beliefs, rituals, and institutions, if they wish to understand the manipulative and cooperative dynamics inherent within human culture” (Gorelik and Shackelford 2012, 343).

The Attraction of Religion, the latest addition to the Bloomsbury book series *Scientific Studies of Religion: Inquiry and Explanation*, edited by Luther H. Martin, William W. McCorkle, and Donald Wiebe, extends the collaborative call to scholars involved in the cognitive and evolutionary sciences of religion (henceforth, CSR and ESR). Subtitled *A New Evolutionary Psychology of Religion* and edited by D. Jason Slone and James A. Van Slyke, the book theoretically builds on a previous article by co-editor Slone (2008), and explores the pivotal role of sexual selection theory within religious contexts.

As the two editors underscore in the introduction, the specific hypothesis examined by the volume as a whole is that “re-

ligion is widespread because it is attractive to people, and it is attractive to people because it helps to manage the suite of adaptive problems related to reproduction via the costly signaling of strategic information useful for attracting, acquiring, and retaining mates, ensuring paternity certainty, preventing mate defection and infidelity, encouraging parental investment, and more" (3; unspecified parenthetical referencing is from Slone and Van Slyke's *The Attraction of Religion*). In particular, sexual selection theory predicts that costly or glaringly useless phenotypic traits are selected because they act as "signals of strategic information", insofar as they reliably enhance someone's fitness (2). Each chapter of the volume focuses on a precise case study.

In the first contribution, Van Slyke seeks to determine the incidence of differential mating strategies among adolescents and adults, and their relevance for religious abstinence education programs in the U.S.A. As the author states, "religion may act as a causal variable in human cognition and behavior as it activates a suite of preferences and biases associated with long-term mating strategies" (27).

Joseph Bulbulia, John H. Shaver, Lara M. Greaves, Richard Sosis, and Chris G. Sibley examine the relationship between social-network reputation, sexual signaling on fidelity, fertility rates, and church attendance in New Zealand via a series of social-psychological measures and statistical models. Correlations between variables are carefully described, yet causal direction is still open to debate.

Michael Blume contends that religion evolved for supportive cooperative breeding, while using present demographic data to buttress an epistemically unwarranted prehistoric narrative of female primordial religiosity akin to Bachofen's *Mutterrecht* (1861). Throughout the chapter, the author fails to grasp that female self-reflective acceptance of social roles

might mirror the dominants' coercive perspective (e.g., 69; cf. Bourdieu 2002).

Jason Weeden starts from the U.S. National Longitudinal Surveys of Youth, begun in 1997, to investigate the steady decline in religious attendance and the sexual mores of the Millennial Generation against the backdrop of parental control, underscoring that implicit knowledge of religious attendance as a social tool is determinant in lifestyle patterns. Both neuro-endocrinological features and social-technological history of pregnancy-prevention tools, aspects here overlooked, might help in developing the subject further.

Craig T. Palmer and Ryan O. Begley review the epistemological and trans-generational background of the costly signaling theory and find it flawed. Thus, they advance a descendant-leaving hypothesis which assesses the transmission of beliefs on the basis of "parent-offspring conflict and the parental manipulation explanation of altruism" (102), and includes the religious recourse to ancestors' traditions as a multi-generational re-enforcement of costly acts.

Yael Sela, Todd Shackelford, and James R. Liddle deliver a most poignant contribution on the religious exacerbation of intra- and intersexual violence as a way to promote androcentric control and to support institutionalized patriarchal power. Religious beliefs promoting violent behaviours are described and analyzed (e.g., male/female genital mutilations, honor killing, child abuse and/or maltreatment, filicide, ban on certain sexual behaviors, supernatural sexual rewards, etc.). The evolutionary roots of such sexually-mediated religious violence are also proposed (i.e., as a tradeoff between sexual selection, parental investment, mate-retention behaviors, etc.).

Matthew Martinez and Pierre Liénard focus on public manifestations of religiously motivated self-inflicted pain. They discuss previous evolutionary hypotheses for extensive cooperation (kin selection, reciprocal altruism, tit for tat) as

well as for costly signaling in human cultures (handicap principle, credibility enhancing displays, and deliberate self-harm). The authors posit that, all else being equal, deliberate self-harm might explain the attraction of such rites for the “lowest, poorer young males” (140) involved in the harsh competition for the ranking of social agents. The explanation appears to be supported by a comparative search through 281 cultures recorded in the Human Relation Area Files database which highlights the socio-political background of similar religious practices.

Panagiotis Mitkidis and Gabriel Levy bash the ultimate explanation of religion as a booster of prosocial commitment (165). Inspired by Pascal Boyer’s economic insight on religion as a brand (Boyer 2001, 275-277), and by the fact that morality evolutionarily precedes religion (see, for instance, de Waal 2013), they deliver a clever rebuttal arguing that religion has parasitized the idea of morality: “religion is the brand platform, the idea of morality is the product; religion markets the idea of morality” (163). However, this kind of advertising is false because “religion is not the only institution that primes people into prosocial tendencies” (167). The authors locate the successful moral rebranding of religion in the Axial age (167).

David Bell expounds the supposedly positive effects of religion in promoting long-term commitment in paternal care and parental investment while boosting paternity confidence. Specific collective religious rituals can be described as a neuroplastic way to trigger (epigenetic) “feedback loop(s)”, whose endocrinological effects on pair-bonding and paternal care may be subjected to sexual selection (186). Yet, a shortage of examples and a misplaced focus on a re-imagined Paleolithic religion to explain religious commitment as a reliable signal of paternal behavior, diminish the overall impact of the chapter.

The last contribution by Andrew Mahoney deals with the evolutionary roots of acquiring and accumulating extremely

complex and weird knowledge about non-existent, invisible, supernatural forces and/or agents. Building on Harvey Whitehouse's modes of religiosity theory, the author concludes that theology is a cultural technology with no biological utility but which represents an important tool to help solve cooperation dilemmas in densely populated settlements. As such, theology exerts both a costly signaling function and an attractive epistemological adornment. By doing this, the author takes a stand against the handicap principle which excludes verbal language from the reliable vehicles of signaling (see Zahavi and Zahavi, 1997).

The *Attraction of Religion* daringly succeeds in presenting a scientific framework that will serve as a secure starting point and a useful reference for future, in-depth inquiries. However, while most chapters deliver thoughtful analyses and critical surveys of the subject matter, the vivid shortcomings of relatively few chapters highlight the fact that the volume as a whole constitutes also a missed opportunity to advance the unification of sex and gender studies, historiography, and CSR/ESR. Notwithstanding some potentially groundbreaking essays included in Slone and Van Slyke's book, much remains to be done in order to thoroughly revise intertwined and fallacious assumptions like presentism, Eurocentric conceptualization of religion and sexual mores, and prosocial religious bias.

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David Hutchings and Tom McLeish, *Let There Be Science: Why God loves Science and Science needs God*. Lion Books, 2017.

Petri Luomanen, Anne Birgitta Pessi and Ilkka Pyysiäinen (eds.) *Christianity and the Roots of Morality*. Brill, 2017.

Gregory R. Peterson, James A. Van Slyke, Michael L. Spezio and Kevin S. Reimer, *Habits in Mind*. Brill, 2017.

Simon Oliver, *Creation: A Guide for the Perplexed*. T&T Clark, 2017

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