

Are There Limits to Science?

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Edited by

Gillian Straine

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Are There Limits to Science?

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Edited by Gillian Straine

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Dedicated to the Memory of

Dr. Kenneth Wilson

(1937-2017)

Former Chair of this Forum.

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THE SCIENCE AND RELIGION FORUM

Growing out of informal discussions which began in 1972, around the key figure of The Revd. Dr. Arthur Peacocke, the Science and Religion Forum was formally inaugurated in 1975. Its stated purpose was “to enable and encourage further discussions of the issues which arise in the interaction between scientific understanding and religious thought”. These issues, together with the social and ethical decisions demanded by scientific and technological advances, have remained the subject of the Forum’s meetings since that date.

In 2005 the Forum merged with the Christ and the Cosmos Initiative. This had been founded by The Revd. Bill Gowland, a past President of the Methodist Conference, with the intention of bringing the latest knowledge of scientific thinking within the orbit of the enquiring layperson.

Thus enlarged, the Forum is open to all, of any personal faith or none, who are concerned to relate established scientific knowledge and methodology to religious faith and theological reflection. Implementing its broad objectives, it seeks:

- 1) to encourage scientists with limited knowledge of religion, and religious people with limited knowledge of science, to recognise and appreciate the contributions of both disciplines to human understanding of life in the world;
- 2) to provide an interface between academics active in science-religion work, and public communicators – notably teachers, clerics, and those training future members of these professions.

At every point, the Forum strives to extend recognition that science and religion, properly understood, are not antagonists, but complementary in the quest for truth.

The Forum holds a regular annual conference, plus occasional smaller *ad hoc* meetings, and publishes a twice-yearly journal, *Reviews in Science and Religion*. Since 2008 it has also published edited proceedings of its annual conferences, under the series title *Conversations in Science and Religion*.

At the date of publication, the Forum's President is Prof John Hedley Brooke (Oxford) and its Chairman Revd Dr Michael Fuller (Edinburgh).

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The conference on which this book is based was organised by The Revd. Dr. Mark Harris and Mrs. Hilary Martin. The SRF forum conferences are a unique blend of high academe and non-specialist engagement, and as such get into the heart of the field, asking important questions about the meaning and implications of our key topic. Thanks must go to both Mark and Hilary for their work in creating this distinctive event, and to the whole committee for sustaining our organisation, particularly The Revd. Dr. Michael Fuller who chairs with insight and vision.

I would like to give sincere thanks to Daniel Rodger for his work as sub-editor of this text, and thanks also to Victoria Carruthers at Cambridge Scholars Publishing for enabling this book.

Gillian Straine

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Berry Billingsley and Mehdi Nassaji work together on the LASAR (Learning about Science and Religion) project - now based at the Faculty of Education at Canterbury Christ Church University. Most recently LASAR has begun to investigate and discuss Epistemic Insight - where Epistemic Insight is 'knowledge about knowledge' and particularly knowledge about how disciplines interact and their strengths and limitations in real world and multidisciplinary arenas. For more information, please see www.lasarcentre.com and www.epistemicinsight.com.

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Philip Chapman is a Methodist Minister. He attended lectures from Paul Feyerabend at Bristol in 1956-7. They sparked an interest in philosophy of science. In them, Karl Popper's doctrine of falsifiability as a criterion for scientific propositions featured prominently. In 1963, he met Karl Barth at a book launch near Paris. Towards the end of 40 years of pastoral work in several countries, he began the study of Barth at Leeds under Jacqui Stewart. In 2014, his work culminated in a PhD. featuring both Barth and Darwin, under the supervision of Neil Messer at Winchester.

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Mark Harris, the Forum's Conference Secretary, is Senior Lecturer in Science and Religion at Edinburgh and runs the MSc and PhD programmes in that field. A former physicist, he is interested in the complex and subtle relationship between physics and religious belief, and is working on a long-standing project on the question of scientific and theological views of physical reality and the laws of nature. He is the author of *The Nature of Creation: Examining the Bible and Science* (Acumen 2013).

INTRODUCTION

Since its establishment over 40 years ago, the Science and Religion Forum has brought together people who grasp the importance of this subject. Whether academic or non-specialist, lay or ordained, theist or atheist, all are united in a common pursuit: to ask questions and listen to each other as we explore this vital area of thought.

In 2015 the Science and Religion Forum marked its fortieth anniversary by considering the history of our field and surveying what might lie ahead. Critiquing its current position, several speakers pointed to an ambivalence about how the study of science and religion is considered both inside and outside the academy. There was some frustration that the work of the Forum in particular, and the field of science and religion in general, were not more widely recognised. Attempts were made to diagnose the reasons for this situation and where new work might promote positive change. But it was not all loss and despair; in a wide ranging event, a rallying cry was heard to carry on the work, and to explore new areas of engagement for the continued promotion and elevation of our interest area.

The following year, at the Woodbrooke conference centre in Birmingham, the Science and Religion Forum made a response to this invitation, and began to survey the boundaries of our subject. A wise first move, the aim of the conference was to build up confidence about the journey ahead and to determine the way in which new grounds for exploration could be uncovered.

Therefore *limits* were explored in this conference, and subsequently this book: how far can the conversation about science and religion go? Is it science or religion which determines the boundary? What has happened at these limit areas in the past? How does the evolution of science change the conversation?

By necessity, this book deals in philosophy – what do we know, how do we know it, and how do we talk about it? But fascinatingly, these chapters are not a collection of dusty arguments over semantics. For these limit areas of knowledge are not the dwelling place of rarefied ideas, but rather they are bustling and noisy places of discussion and engagement. The limit areas, the boundaries between science and religion, are personal and urgent; it is where we ask important questions, like how do we know what we know? Can we make a distinction between the physical and the

mental? And, the chief question for the whole field, what is the relationship between Creator and the creation?

The discussion that emerges is captivating, and demands not only engagement of the mind, but choice about our own response – a book focused on the limits of science does not itself limit us or the field, but rather demands that we ask what this means for us? Where do we put the limits in our own self-understanding, and in our relationship with the whole of Creation, seen and unseen.

Part One

The first section of this book contains chapters from the invited speakers to the conference. Fiona Ellis in her carefully argued and insightful paper takes us into a key limit area – the involvement of God in naturalism. Citing a distortion that leads to the regency of science in setting the tone of the conversation, her expansive naturalism offers an enlarged view of nature which opens a philosophically robust space for God, and for human experience to be included in epistemology. Cautioning against a “dazzlement with science”, encouragement is given to come to these limit areas with “dimensions of experience which elude science”, and to do so with confidence. Ending with a contemplative note, she suggests that a limit area is enhanced by seeing God in all things, a view which leads to better answers about how we should ascertain reality.

In the following chapter, Mikael Leidenhag takes another look at theological naturalism and offers a critique of the naturalistic foundations of Ellis’ theology, suggesting a look in a different direction would not be so risky for metaphysics. Openmindedness and resistance to scientism are not enough, Leidenhag argues, in an expansive naturalism where the real problem is in defining physical and mental causality. He pinpoints the problem for the field in achieving a harmonisation without reductionism, and establishing an adequate theistic naturalism which includes value. His solution – a holistic, integrative dualism.

Sarah Lane Ritchie makes an important contributing to this book in chapter three by taking us into the question of the casual joint, one of the defining limit areas of the science and religion field. She critiques the Divine Action Project as misframing the limit area which has looked for spaces in which God might act. A recent “theological turn” in the study of the causal joint has emerged that, on first reading, gives theology and metaphysics the chance to set the tone of the conversation. Lane explores whether this “turn” has potential for describing the causal joint, and finds that limit questions remain despite the potential for God involvement. But

our eyes are drawn to a key theme: the one who sets the limits of the conversation, holds the power.

Donovan Schaefer's beautifully crafted chapter introduces into the book a new angle on our attempts to assess the limits of science: the impact of the emotions on science. In his fascinating piece, he critiques a self-perception of science as being able "to produce truths that are uncontaminated by the murk of emotion", by looking at first at David Hume and William James before moving into contemporary affect theory to reveal science as instead guided by a "intransigent tissue of emotional priorities, micro-threads that lace cognition into a structure wave of information and inspiration". He significantly opens up the horizon and leads us into new grounds and limit places.

In the following and final chapter in part one, Neil Messer highlights another new and incredibly important limit area: the case of the human brain. Neuroscience, evolution and cognitive science are often seen as firm boundary markers in understanding religion and moral decision making. Typically, science holds the monopoly on the conversation which leads to an ethic precluding theistic accounts. Investigating this area, Messer observes that there might be confusion over scientific epistemology that, when sorted, can allow other matrices of relationship. He leads us through various interpretations of science and religion dialogue in a series of typologies to understand what it means to be human, balancing theology and evolution, cognitive and neuroscientific accounts. His struggle to honestly present a worked example, showing how science can act as a commentary to real life examples, invites the reader into the conversation, and thus takes the limit areas out of the ivory tower and into real life.

Part Two

This section of the book contains some of the short paper sessions created following an open invitation to conference delegates. The range and depth of the articles broadens the discussion in useful, vital ways and, following the ethos of the Science and Religion Forum, gains valuable perspectives from all who are interested.

Part two opens with an invitation from Nathan Aviezer to take a step back and consider the historical ground that lies underneath all the science and religion conversation. His article surveys what has changed over the years in science, beginning at the start of the 20th century, when there was calm and confidence about the power of science to explain all natural phenomena. His chapter reminds us usefully that science changes, and today's limits may have a different interpretation in years to come. The

unknowns remain, and the degree to which the unknowns become knowns is not predictable – this is both a note of caution and an invitation to participation.

In chapter seven, we delve more deeply into the historical roots of the science, in a chapter written by the Chair of the Science and Religion Forum, Michael Fuller. Exploring the historical limit to science, an area much misunderstood in the popular imagination, he presents “The Case of Thales’ Ox”. Looking at ancient sources and expertly showing the caution required in historical investigation, he nonetheless presents at the limits of historical veracity an early man of science and religion.

As the previous chapter showed, to explore present day limit areas, we must survey the ground on which we trend. Therefore, we remain with history in chapter eight, wherein Peter Jordan also debunks the conflict myth, seeing integration of naturalistic and theological knowledge this time in seventeenth century England. He presents the work of John Spencer who held together a commitment to natural philosophy and a faith in God, interestingly suggesting that the former can be used to construct good theology. While never suggesting that this was an easy task, Jordan’s chapter shows that historical study can lead to enlarged horizons, challenging the dominance of scientism, today and in the historical view.

Chapter nine returns us to the contemporary naturalism scene. In this chapter, Emmanuel Narzey critiques the limits which are imposed on both science and religion through the types of questions they ask. In a discussion involving both the scientific method, and the types of naturalism possible, he postulated that questions of meaning and value cannot be ignored by science. This is an important limit area for the field, especially around theories of the mind.

The theologian Karl Barth is the subject of chapter ten, which explores Barth’s theological idea that science and theology have nothing to say to one another. Philip Chapman contends that Barth’s writing suggests that it is not possible or permissible to use science and what science says about the world, to make any type of theological discovery. Science is limited by definition, and theology is determined by revelation alone. It is a description of the limit area for the science and religion dialogue that is worth taking note of, and which many find appealing. Science, Chapman concludes, should be modest in its limits, and religion should be certain in its origins though humble too in its self-perception.

The final paper in Part 2 is by Berry Billingsley and Mehdi Nassaji and presents research they have conducted with teenagers around robotics. The education of the next generation should be of concern to anyone interested in science and religion. Young people are relentlessly subject to the myth

of conflict between science and religion, which involves not only poor history but inadequate theology. In this chapter, the authors show how the study of robotics led to metaphysical questions about existence, causality, the scientific method and theory of mind. It is an important project, and one that exposes young people to the power and the limits of science, and what this means in their own lives.

Part Three

The Science and Religion Forum is open to all, and values congeniality, conversation and openness. As such there is room for very different conversations to happen and be challenged in a friendly environment.

Chapter twelve contains an interesting thought experiment in a key new area: transhumanism and human enhancement. This is a field generating a great deal of interest, with some confidently predicting the imminent arrival of machines with capabilities far exceeding those of humans. What religious responses might be made to such imaginary scenarios? Ashford's contribution offers one imaginative response.

Neil Spurway, a former editor of this book and chair of the Forum, spoke after the conference dinner. His words are captured in chapter thirteen but are more than just post-meal entertainment. They contain a distillation of not only a life spent working at the limits of science and religion, but a considered reflection on that life by a man with a poet's eye for truth. He reminds us that people who work at these frontiers of thought, show us fragility, truth and depth, knowledge gained the hard way that can transcend the physicality that they seek to understand.

In many of the chapters of this book, the roles of human experience, emotion, brain studies, theories of mind and consciousness, appear at the limit areas of science and religion. And so fittingly, at the end of his reflections summing up the conference found in chapter fourteen, Mark Harris, announced the subject for next year's conference: Neuroscience, mental health and religion. Indeed, mental health is increasingly seen as a key area in healthcare, a vital area of research, and of concern to those involved in ministry. Similarly, the study of the mind is one of the most controversial areas of science, and a contentious area of science and religion conversations.

As a leader in the field and conference secretary to the Science and Religion Forum, Harris' reflections on the conference highlights that at the limits of science and religion we find an invitation to engage: Our conference may have been about limits, but it was in no sense limited. I commend this book to its readers and highlight the invitation that it offers

to engage at the limits of science and religion, a proposition which is ultimately an exploration of our humanity.

PART ONE

CHAPTER ONE

GOD, NATURALISM, AND THE LIMITS OF SCIENCE

FIONA ELLIS

1. Introduction

The question of whether there are limits to science can be variously interpreted, and I shall begin by distinguishing the different things that could be at issue in this context, my eventual aim being to challenge an approach which suggests that science is unlimited in its scope in the sense that it is 'the measure of all things, of what is that it is, and of what is not that it is not' (Sellars 1963). The words come from Wilfrid Sellars, they sum up the position which has come to be known as scientific naturalism (or just plain "naturalism" or, more pejoratively, "scientistic naturalism"), and this form of naturalism has been described as the main programmatic orientation of contemporary Anglo-American philosophy.¹ So a lot hangs on the question of how this position is to be understood and assessed. I shall argue that there are good reasons for resisting it, and that there is an alternative, more liberal, conception of naturalism which grants us the right to impose explanatory limits upon science whilst respecting the significance of its findings. This is expansive naturalism, it has been articulated and defended by philosophers like John McDowell, David Wiggins, and James Griffin, and it raises the question of what it really means to be a naturalist. I have argued elsewhere that expansive naturalism can be further expanded in the direction of God, and hence, that the naturalist can be a theist. The position is contentious, it challenges the received philosophical wisdom in various respects, and it has important implications for how we think about the science versus religion debate. In

¹ This statement was prepared for a workshop on naturalism by Joseph Margolis and Mark Gottlieb, and it is cited by Bernstein 1995, p.58

what follows I want to give a sense of my overall strategy, fend off some objections, and make explicit the implications for how we think about the limits of science and its bearing upon the science versus religion debate.

2. The limits of science: some clarifications

When we talk of the limits of science one option is to take the relevant limits in an epistemological sense. Science is limited in this respect, for it is practised by scientists, and scientists, being human like the rest of us, are susceptible to ignorance and error. This is a perfectly general point about *our* epistemological limitations, and there is nothing as yet to suggest that science is better or worse off in this respect than any other mode of investigating reality. The idea that science *per se* is to be distinguished epistemologically from other modes of investigating reality is a familiar enough thought, one idea being that it carries some kind of epistemological advantage. There is an insight in this response—consider the explanatory and predictive power of modern science and contrast it with the pre-scientific superstitions and speculations which predominated before its rise. However, the point about ignorance and error must be accommodated, and we need to be clear in any case about what kind of science is at issue here. Presumably, the focus is Modern science, but science is not any one thing, and there is a question about its limits in this ontological sense. We can note also that even if there are good reasons for privileging science (or a particular kind of science) over some other modes of investigating reality, it does not follow that it is the *only* way of investigating reality, nor that it is superior to all other modes of investigation, nor that it is guaranteed to supply the understanding we seek.

According to an extreme version of scientific naturalism, we should all be reductive materialists or reductive naturalists. This position can be variously interpreted, but D.M. Armstrong's, "the natural world contains nothing but the entities recognised by physics" (Armstrong 1980, 156) suggests that the aforementioned measure of reality belongs exclusively to physics. The implication here is that physics determines what there is—as far as the natural world is concerned at least, although the typical naturalist will deny that there is anything beyond it. I shall return to this point below. For the moment, we can note that there is disagreement about the prevalence of reductive materialism², and that its authority has been

² Thomas Nagel claims that 'among the scientists and philosophers who do express views about the natural order as a whole, reductive materialism is widely assumed

justifiably contested. After all, the fact that physics deals with the ultimate constituents of nature does nothing to show that everything is reducible to those constituents, and it is difficult to see what could lend credence to such a vision. We can note that this objection to reductive naturalism is pitched at the level of philosophy rather than physics, or, more generally, science, this in itself exemplifying a clear enough sense in which science has its limits. It is limited in this context by philosophy, philosophy being that which poses a challenge to its more fundamentalist leanings. It is worth noting finally that these extravagant claims about the scope of physics sit rather awkwardly with a theme which is central to the naturalist's "philosophy", namely, the desire to deliver us from the suspect entities of transcendent metaphysics and religion to a rather less mysterious earth. It has a "bias towards the unpuzzling" in this respect, as James Griffin has put it.³ Why is this a problem for physics? Well, if physicists are anything to go by there is nothing so mysterious as the constituents of reality.

The reductive materialist takes the measure of nature to be physics. A more moderate naturalism defines this measure with reference to a broader conception of science (Why just physics? How on earth could that explain everything? And what reason could be given for insisting upon this restriction?), and an even more moderate position challenges the assumption that the offending restriction can be lifted only in terms which are themselves restricted by science (Why just science? How on earth could that explain everything? And what reason could be given for insisting upon this restriction?). It is in the context of giving expression to these latter complaints that we find John McDowell recommending that we "discourag(e) this dazzlement by science" which leads us to suppose that "genuine truth is restricted to what can be validated by their methods" (McDowell 2002, 295).

McDowell is one of several recent philosophers who have sought to defend a more liberal or "expansive" form of naturalism. The position is opposed to scientism but it is not opposed to science, and the expansive naturalist gives due weight to its epistemological significance. What he denies, however, is that science is the only legitimate way of investigating reality, insisting to the contrary that there are dimensions of reality for which a purely scientific account is inadequate, and philosophical questions

to be the only serious possibility', (Nagel 2012, 13). Dupré disagrees, but grants that the reductive spirit of this picture continues to animate philosophical thought (Dupré 2004, 46-47).

³ See Marcus Du Sautoy's (2016) for a spelling out of science's epistemological limitations.

to be raised about what we should be saying in this context. The moral dimension of reality is an important case in point for the typical expansive naturalist, but we might talk equally of love, beauty, meaning, and all of the other things for which a purely scientific account seems inadequate. The point is well summed up in a review of Marcus Du Sautoy's recent book *What We Cannot Know: Explorations at the Edge of Knowledge* (Du Sautoy is the Simonyi Professor for the Public Understanding of Science at Oxford). The reviewer is Jonathan Rée, and having made the point that Du Sautoy seeks to map some of the limits or “edges” of science, complains that an implicit scientism lurks in his approach. Hence:

He fails to recognise that vast swathes of human knowledge are concerned with human meaning and interpretation rather than scientific fact and explanation: with beauty, for instance, or with history, poetry and memory, or love, ageing and mortality, or what words can and cannot express. He assures us in passing that judgements of beauty arise from dopamine rushes controlled by our genes, but if we disagree about whether something is beautiful we ought really to have a discussion about how it looks rather than trying to compare our dopamine levels. And if we want to investigate the significance and viability of religious belief, we might be well advised to start from the ambiguities of human experience rather than following Du Sautoy in appealing to the latest results of scientific research.⁴

The expansive naturalist agrees that we need to go beyond scientific fact and explanation if we are to come to a proper understanding of goodness, love, and beauty. However, he is uninterested in the significance and viability of religious belief, agreeing with the typical scientific naturalist that the natural world leaves no room for God. I have said already that I part company with him in this respect. I want now to give a sense of my position, taking my cue from Rée's suggestion that we “start from the ambiguities of human experience”. It should go without saying that the considerations I rehearse in this context are pitched at the level of philosophy (the limits of science again), although there will be a question of where this leaves the relation between philosophy and theology.

3. Expansive naturalism and God

The expansive naturalist imposes limits upon science by denying that it has a monopoly on explanation and reality. However, he agrees with the scientific naturalist that we can explain what needs to be explained without

⁴*The Guardian*, Saturday 2 July 2016.

introducing a second, supernatural, realm, taking the postulation of such a realm to introduce the metaphysical and epistemological difficulties a naturalistic standpoint is intended to avoid. As one philosopher sums it up, “[t]here is no room for any supernatural in naturalism...naturalism finds itself in thoroughgoing opposition to all forms of thought which assert the existence of a supernatural or transcendental Realm of Being and makes knowledge of that realm of fundamental importance to human living” (Krikorian 1944). Talk of a transcendental or supernatural realm of being calls to mind a theistic framework, and I have noted already that the typical naturalist stands opposed to theism. However, supernaturalism is said to get a grip in other contexts too, when, for example, we seek to comprehend the things for which a scientific account seems inadequate—love, beauty, goodness and so forth. James Griffin responds as follows, his focus being the more general question of value: “[v]alues do not need any world except the ordinary world around us—mainly the world of humans and animals and happenings in their lives. An other-worldly realm of values just produces unnecessary problems about what it could possibly be and how we could learn about it” (Griffin 1996, 43-44). He quickly adds that to defend his preferred position “one does not have to adopt a reductive form of naturalism”.

The expansive naturalist seeks to vindicate the idea that *this* world—the world of humans and animals and happenings in their lives—is value-involving. He grants with the scientific naturalist that an other-worldly realm of values can make no sense of our evaluative practices (and more generally, all of those things which are “of fundamental importance to human living”), and agrees also that its postulation is unnecessary. (The objection here is that such a realm can shed no light upon the values we respond to when, for example, we see the generosity of an act, or respond to a loving encounter. Or to put it another way, an “other-worldly” realm of values floats free of our evaluative practices.) He insists, however, that this value-involving world—the only world there is—cannot be wholly comprehended in scientific terms, and that a proper understanding of our evaluative practices must take us beyond such a standpoint. So the limits of nature must be expanded beyond scientific parameters. It is worth noting finally that once this move is made, then the motive for supernaturalism is lost. After all, supernaturalism is motivated by the thought that the relevant items cannot be contained within the natural world, and they cannot be so contained if scientific naturalism is true. If this is so, then it looks as if the real culprit in this debate is the scientific naturalist, for if what I have said is correct, then his position *invites* supernaturalism rather than being its nemesis. At least this is so if

supernaturalism involves postulating a world in addition to this world, and in such a way that the two worlds cannot be intelligibly related. The scientific naturalist's response to this is that we commit to supernaturalism the moment we exceed the limits of scientific naturalism, but this is because he interprets naturalism in a narrow, scientific, sense, taking "supernaturalism" to be the logical complement of "naturalism" in this narrow sense. So expansive naturalism is eo ipso a form of supernaturalism if we accept his terms of debate. I have suggested that we should not.

The expansive naturalist operates with a conception of nature which is rich enough to accommodate value, but he has no interest in accommodating God, and we are to suppose that such a move would involve a retreat back towards the suspect supernaturalism his position is designed to avoid. The assumptions here are that there is no sense to be made of the idea that the natural world is God-involving as well as value-involving, and that God can be brought into the equation only with the postulation of a supernatural realm in addition to nature, where nature, we have been told, is the only world there is.

According to my position these assumptions must be questioned. That is to say, I hold that there is sense to be made of the idea that the natural world is God-involving, and that we must reject the assumption that a theistic framework involves the postulation of a second, supernatural, realm. The idea that the natural world is God-involving will be familiar to anyone who takes God to stand in the most intimate connection with all things, i.e. it will be familiar to those who are situated within the Judeo-Christian tradition, although this is not to deny that the nature of this intimate connection raises deep and perhaps irresolvable theological issues. It is, after all, God we are talking about, and God surely has title to be even more mysterious than the most intractable particle of physics. As for rejecting the idea that God inhabits some second, supernatural, realm, well theologians and philosophers have long emphasised that this is picture thinking at best, that it undermines God's infinitude (Hegel), and that it makes of Him a mere "being amongst beings" rather than being, as Rahner puts it "the most radical, the most original, and in a certain sense the most self-evident reality" (Rahner 1978, 63).

The idea that God is the most self-evident reality has an air of paradox to it, and it would certainly be denied by the typical naturalist. However, it is really just another way of making the point that He stands in the most intimate connection with things, although this is not to deny that the position can be disputed, as it must be given that there can be no demonstration of God's existence. It is fundamental to this picture that there is a distinction between God and the things with which He is

intimately connected, this being the reason for denying that God is to be identified with anything within or beyond the world (which would make him a mere “member of the household of all reality” as Rahner puts it). So the idea that nature is God-involving does not mean that God is reducible to nature, and this anti-reductive point is one reason for thinking that talk of a supernatural Realm of Being is not entirely misplaced, provided that we do not take it literally.

The typical expansive naturalist can make no sense of these thoughts. That is to say, he denies that the natural world could be God-involving, and offers a conception of value which makes no reference to God. To put it another way, he assumes that the introduction of God could only ever amount to suspect supernaturalism. But what if his objections are premised upon a faulty understanding of God, and what if they are on a level with the scientific naturalist's objection to expansive naturalism (remember that the scientific naturalist thinks that anything beyond scientific naturalism involves the postulation of a second, supernatural, realm, and hence, that expansive naturalism is a form of supernaturalism)? The expansive naturalist could try to block this parallel by objecting that the two cases are completely different – God introduces a suspect supernaturalism in the way that value does not. Yet this response simply begs the question against the possibility of an alternative framework – one which challenges the assumption that God must be viewed in these pejorative terms and hence, that nature must exclude Him. We might note that the secular expansive naturalist has every reason for taking this possibility seriously given his desire to raise anew the question of the limits of nature, and to challenge a prevalent way of drawing them.

4. Ambiguities of human experience

This is all very well, but I have said little about what it means to describe nature in God-involving terms, other than to say what it is not and to hint that I shall be taking my cue from Rée's suggestion that we begin from the ambiguities of human experience rather than the latest scientific research. This was my approach in *God, Value, and Nature* (Ellis 2014), my strategy there being to further narrow the gap between secular and theistic expansive naturalism by focusing upon the case of moral experience and making a case for the claim that we encounter God in this context. My protagonist was Emmanuel Levinas—a significant figure in the dialectic given his insistence that being moral is the *only* way of relating authentically to God. As he puts it, “to know God is to know what is to be done” (Levinas 1990, 17), and “there can