

PART V

Naturalism and Alternative
Concepts

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Samuel Alexander's Space-Time God

A Naturalist Rival to Current Emergentist Theologies

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1. Introduction

Emergentist theologies agree that the universe exhibits a hierarchy of emergence that may have developed through evolution, and that there is a sense in which God has emerged or will emerge from the universe. The first emergentist theology was advanced in the early twentieth century, by the 'British emergentist' Samuel Alexander. Today, emergentist theologies are usually construed as versions of panentheism, and such systems have been advanced by Arthur Peacocke, Harold Morowitz, and Philip Clayton. Emergentist theologies are attractive for several reasons: they are considered to be more naturalist than traditional theologies, in that they are compatible with—and arguably draw on—scientific theories such as evolution; they accord with the respect that environmental ethics affords the natural world; and they intimately and actively involve God with the world.¹ This chapter argues that if we accept the emergentist theological framework, then Alexander's theology is a serious rival to existing current accounts.

The chapter proceeds as follows. Section 2 sets out Alexander's process theology, on which deity *will* emerge as the final quality—preceded by matter, life, and mind—in a temporal and logical hierarchy of emergence that is grounded in space and time. This section considers and rejects several existing readings of Alexander in the literature. For example, Alexander is sometimes taken to be a 'panentheist'. If panentheism is taken to mean that the universe is 'in' God, then this characterization is straightforwardly incorrect; in fact, Alexander holds that deity is strictly contained 'in' the universe. This view is

¹ For more on these, and other advantages, see Clayton (2004b, 73–4) and Brierley (2006, 365).

also held by the British idealist F. H. Bradley. Further, against the existing scholarship, I argue that Alexander's system is naturalist. From this secure grounding in the history of philosophy, I move to offer a partial defence of Alexander's theology.

Section 3 briefly recounts the panentheist turn in contemporary philosophy of religion, before focusing on the important work of Clayton. Clayton provides an excellent foil for Alexander: Clayton's arguments for emergentism are substantial and detailed, and he has considered Alexander's system as a possible rival to his own. With this background in place, I argue that we should prefer Alexander's theology to Clayton's. I defend Alexander from various objections made by Clayton, including the thesis that naturalism cannot explain several features of the universe; against Clayton, I argue that Alexander's system is particularly well equipped to provide naturalist explanations of the features mentioned. I then show that Clayton's theism lies open to two substantial objections—there is a tension between his use of naturalism and supernatural theism, and his system is ontologically superfluous—in a way that compares unfavourably with Alexander's. On philosophic grounds, we should prefer Alexander's theology.

Section 4 offers some final thoughts. Alexander's account of God is radical, and for many its stubborn departures from tradition will be unpalatable. Nevertheless, it is a serious attempt to mount a coherent theism from a naturalist perspective, and it should be recognized as the worthy rival that it is to contemporary emergentist theologies.

2. Alexander on God and Naturalism

2.1 *Alexander on God*

Alexander was one of the proponents of British emergentism, a movement best known for its thesis that mind emerges from body; fellow emergentists include C. Lloyd Morgan and C. D. Broad. Alexander was the first thinker to apply this process of emergence to God. In order to understand Alexander's theology, it will be helpful to give a brief overview of his metaphysics.

Alexander argues that mind or consciousness is a new quality that emerges from matter, when matter becomes complex enough. The same thing can have many qualities, whilst still remaining one thing rather than many. For example, one thing can have both the qualities of matter and mind. This explains the co-location of one's mind with one's brain: the quality of mind, consciousness, is co-located with its quality of matter, neurons (Alexander 1920, ii. 5). Arguably, Alexander's account of mind–body emergence is close to contemporary versions of non-reductive physicalism.²

² Gillet (2006a) and O'Connor and Wong (2012) argue that Alexander's emergentism is very close to some contemporary physicalisms; in contrast, McLaughlin (1992) denies that Alexander is a physicalist of any kind.

In his two-volume magnum opus *Space, Time, and Deity*, Alexander extends emergence beyond body and mind. Alexander argues that space and time are the foundation of things: space-time, or Motion, is a unity that contains all motions, events, and changes within itself. Space-time sits at the bottom of an ontological hierarchy, and as 'motions' or patterns within space-time become complex enough, further qualities emerge within it: matter, life, mind, and deity. 'Empirical things or existents are...groupings within Space-Time, that is, they are complexes of pure events or motions in various degrees of complexity... as in the course of Time new complexity of motions comes into existence, a new quality emerges' (Alexander 1920, ii. 45). Against the prima facie implausibility of Alexander's space-time ontology—for example, Clayton (2004a, 27) comments that Alexander's 'hard to stomach' space-time metaphysics have not 'improved with age'—it is worth emphasizing that Alexander's core claim, that space-time is in some sense identical with matter, is a live option in contemporary philosophy of physics and metaphysics.³

With this background in place, I turn to Alexander's philosophy of religion. Alexander claims we will only ever be convinced of the existence of God by experience, by non-traditional arguments that do not desert the scientific interpretation of things. In this context, Alexander rejects the argument from design for God's existence, which he understands as positing a designer in the face of the wonderful adaptation of living forms to their surroundings. The problem is that we now know this adaptation to be the result of selection operating on variables, and that is why the world works out so as to produce a plan: 'Who does not see that sheep were not created for man, but that man survives because he is able to live on sheep?' (Alexander 1920, ii. 343–4). As we will see, Alexander utilizes Darwinian evolution throughout his work. In place of traditional arguments for the existence of God, Alexander offers us a non-traditional theology. As with other aspects of his metaphysics, Alexander does not argue for this theology; rather, he offers us a description of the world, and argues that it fits the facts (Alexander 1921b, 422–3). In the same way that mind–body emergence 'fits the facts'—such as the co-location of mind with body—I read Alexander as claiming that the existence of God explains our religious sentiments, by attaching that portion of human experience to the world of truth (Alexander 1920, ii. 353).

On Alexander's description of the world, the next quality that will emerge from space-time—following the highest quality that we know, mind or consciousness—is deity, and this emergence will happen in the future (Alexander 1920, ii. 345). Deity does not emerge from a single human mind, nor a collection of human minds, as human minds are finite and God is infinite (Alexander 1920, ii. 350–1). Instead, Alexander argues that deity emerges from the universe as a whole:

³ For example, Schaffer (2009) has recently defended the thesis that space-time is identical with matter, and he appears to regard his position as a direct philosophical descendant of Alexander's. For further discussion of this thesis in philosophy of physics see Sklar (1977, 221) and Earman (1989, 115); in metaphysics, see Lewis (1986, 76) and Sider (2001, 110).

[Deity] is an empirical quality the next in the series which the very nature of Time compels us to postulate, though we cannot tell what it is like. But besides assuring us of the place of the divine quality in the world, speculation has also to ask wherein this quality resides. What is the being which possesses deity? ... God is the whole world as possessing the quality of deity. Of such a being the whole world is the 'body' and deity is the 'mind'. But this possessor of deity is not actual but ideal. As an actual existent, God is the infinite world with its *nisus* towards deity, or, to adapt a phrase of Leibniz, as big or in travail with deity. (Alexander 1920, ii. 352–3).

In this difficult passage, I read Alexander as distinguishing between deity and God. I will explicate what he means by both concepts.

For Alexander, 'deity' is an empirical quality that *will* emerge from the world, or the space-time system, as whole. In this passage, Alexander states that 'we cannot tell' what deity is like. This statement is grounded in Alexander's thesis that a being can only contemplate (i.e. know) the qualities sitting lower on the ontological hierarchy than itself (Alexander 1920, ii. 104). To illustrate, a human mind can contemplate life and matter but it cannot contemplate itself as a mind, nor qualities higher than mind. As such, we cannot know what deity—a quality higher than mind—will be like. We know only that it will be 'new', and 'different in kind' from mind (Alexander 1920, ii. 347–50). Alexander offers a new take on the traditional doctrine that God is unknowable.

A difficult aspect of Alexander's system is his belief that, as higher qualities are always unknown to beings of lower qualities, in a sense deity is *always* the next highest quality:

For any level of existence, deity is the next higher empirical quality. It is therefore a variable quality, and as the world grows in time, deity changes with it. On each level a new quality looms ahead, awfully, which plays to it the part of deity. For us who live upon the level of mind deity is, we can but say, deity. To creatures upon the level of life, deity is still the quality in front, but to us who come later this quality has been revealed as mind. (Alexander 1920, ii. 348)

Creatures on the level of life can forecast a mysterious higher level—that is deity to them, though we know it to be mind—but they cannot *know* the higher level. Similarly, human minds can forecast a higher level, that we call deity, but we cannot know deity. Alexander leaves open the possibility that there are many higher levels above mind; for example, Alexander (1920, ii. 104–5) discusses the possibility of angelic beings that possess a quality higher than mind yet are not God. Alexander is not explicit on whether there is a 'final' emergent quality; however, as his universe is always in progress—more on this shortly—I am inclined to believe that there is not.

By referring to the world as the 'body' of God, Alexander is drawing an analogy between the emergence of deity from space-time, and the emergence of mind from body. The same process of emergence is involved, even though the whole world is not literally body, and the quality of deity is not literally mind. 'God' comprises both the quality of deity *and* the entity that will possess that quality; it is in this sense that Alexander identifies God with the whole world possessing the quality of deity. To return to the analogy with mind–body emergence, Alexander would distinguish

between 'mind', which is an emergent empirical quality; and 'human being', which comprises both the quality of mind and the being that possesses that quality, a particular complex of space-time. However, a key difference between God-world emergence, and mind-body emergence, is that strictly speaking God does not yet exist.

In the passage above, Alexander claims that deity has not yet emerged from the world, and as such God—understood here as the 'possessor of deity'—is not yet actual. This is because Alexander's world is one of process, and it is continually growing. Indeed, the implication is that the world will be growing unto infinity, and this is one sense in which God is infinite. Although deity and the 'complete' possessor of deity does not yet exist, something does exist that Alexander also allows us to call God: the actual world with its 'nisus', or striving, toward deity. I read Alexander as holding the actual world to be the 'incomplete' possessor of deity; as the world grows, it becomes more completely the possessor of deity. As Alexander puts it later, God is 'in process' towards deity (Alexander 1920, ii. 394). It is this aspect of Alexander's account that renders Alexander's God immanent: there is a way in which God is the world.

Alexander's distinction between God and deity has a surprising consequence for the relationship between the divine and the world. In order to explain it, a short detour into Absolute idealism is required.

Alexander explicitly compares his account of God to that of the British idealist F. H. Bradley. For Bradley, the only absolutely real entity is the Absolute, a single, partless experience. However, the Absolute contains various 'appearances': things that are real to a degree. Towards the end of *Appearance and Reality*, Bradley (1893, 447–8) considers the question of God. He argues that God cannot be identified with the Absolute, because the Absolute is not a person, and 'that is not the God of religion'. Instead, Bradley allows for a personal God that is a 'finite factor' within reality, and concludes, 'God is but an aspect, and that must mean but an appearance, of the Absolute.' The influence of Bradley on Alexander is well known—Alexander frequently compares space-time to the Absolute—and Alexander accepts this part of Bradley's theology:

Deity is located only in a portion of the infinite whole of Space-Time, and therefore God... is only in respect of his body coextensive with the absolute whole of Space-Time, while his deity is empirical and belongs only to a part of the Absolute ...

Thus it is true, as absolute idealism contends, that God is (at least in respect of his deity) on the same footing as finites and if they are appearances so is he... But both God and finites are appearances only in the proper interpretation of that term, as parts of the thing to which they belong. (Alexander 1920, ii. 370–1)

It is this comparison between Bradley and Alexander's theologies that leads to a surprising result.

Alexander characterizes 'theism' as the thesis that God transcends the finite beings that make up the world, that he is an individual being distinct from them. In contrast, he characterizes 'pantheism' as the thesis that God is immanent in the universe of finite things, a pervading presence as in Spinoza. He adds that pantheism is not so much that

God is in everything, rather than everything is in God. Alexander argues that the label ‘pantheism’ cannot be applied to Absolute idealism, on the grounds that the Absolute takes the place of God, and God becomes an appearance (Alexander 1920, ii. 388–9). Similarly, while Alexander accepts that elements of his system are pantheist—namely, God is immanent in the sense that God’s body is the as-yet-incomplete world as a whole—he argues that the label ‘pantheism’ cannot truly be applied to his system because the quality of deity does not belong to the whole world as if every part of that world were permeated with deity, ‘as it must be on strict pantheism.’ Instead, Alexander argues that his system is closer to theism, on the grounds that the quality of deity is distinct from the other finites within space-time, and God’s deity is what is ‘distinctive’ of him (Alexander 1920, ii. 394). Alexander’s divergence from traditional theism and pantheism is highlighted by his rejection of God as creator:

[A]s being the whole universe God is creative, but his distinctive character of deity is not creative but created. As embracing the whole of Space-Time he is creative; because Time is the moving principle that brings out the constant redistribution in the matrix which is equivalent to the birth of finite forms. Even then it is, properly speaking, Space-Time itself which is creator and not God... God then, like all things in the universe—for Space-Time itself is not in the universe, whereas God, since his deity is a part of the universe, is in it—is in the strictest sense not a creator but a creature. (Alexander 1920, ii. 397–8)

God did not create the universe; rather, the universe will create and contain God.

With this background in place, we are now in a position to understand the surprising consequence mentioned above. Contemporary philosophy of religion has seen growing interest in the thesis known as ‘panentheism.’ Whilst the details of how best to characterize this thesis are controversial, it is broadly characterized as the view that the world is *in* God, but God is more than the world.⁴ Panentheism is contrasted with pantheism, which is frequently characterized as the view that the world *is* God. In the contemporary literature on panentheism, it is sometimes implied that Alexander and Morgan are early panentheists.⁵ This attribution is correct with regards to Morgan. In a very brief comment, in a very early paper, Morgan (1898, 501) writes of the cause of metaphysical activity in the universe: ‘[I]t is neither the product of evolution nor its precursor in time; it is that timeless omnipresent existence in and through which evolution is rendered possible.’ In Morgan’s (1923, 89) full account of deity—given in his *Emergent Evolution* and carefully contrasted with Alexander’s account—Morgan

⁴ Brierley argues that panentheism can be defined as a thesis holding the following premises: God is not separate from the cosmos, God is affected by the cosmos, and God is more than the cosmos (Brierley, 2006, 639–40). Further agreement that panentheism involves this last premise can be found in Clayton (2004b, 83), Peacocke (2004, xix), Johnston (2009, 119), and Culp (2013).

⁵ For example, when Clayton (2004a) discusses Alexander’s work as a rival to his own panentheist system, he does not suggest that Alexander’s system is not panentheist. Culp (2013) implies that Alexander should be listed as a panentheist. Other thinkers are undecided on how best to take Alexander’s account of deity. For example, in a brief comment on Alexander’s ‘implausible metaphysics’ of deity, Smart (2013) adds that it is difficult to categorize as theism or pantheism, although either way it is far from orthodox theism.

explains that this creative source of evolution is God. Morgan is a panentheist: God is beyond the universe, even though he directs it and will also emerge from it.

However, it should now be clear that, given his subsumption of both panentheism and pantheism under the label 'pantheism', and his rejection of that label to his system, Alexander cannot happily be characterized as a panentheist or a pantheist. In fact, Alexander is offering us a theology *for which there is as yet no label at all*. Alexander does not hold that God contains the universe and is not exhausted by it. Rather, the universe contains God and is not exhausted by God. As Alexander puts it in a late piece, 'I believe Bradley was right in finding God among the things of the world, and therefore not identical with the world, as Spinoza thought' (Alexander 1939, 329). This thesis is not pantheism, and it is precisely the opposite of panentheism; as such, it deserves recognition as a standalone theological position in its own right. This is especially important as the position is shared by Bradley.⁶ That said, there is one important difference between the theologies of Bradley and Alexander. For Bradley, the aspects of the Absolute are only partially real. In contrast, for Alexander, the finite motions within space-time are real in their own right (Alexander 1920, ii. 369). For Alexander, God is contained with the universe but God is a reality, not an appearance.

2.2 Alexander on naturalism

Having laid out Alexander's account of God, I will now argue that it is in line with at least one major conception of ontological naturalism.

Alexander began to recognize the similarities between his system and that of Spinoza after the publication of his Gifford lectures, and he went on to rework his metaphysics as a 'gloss' of Spinoza.⁷ Alexander particularly praises Spinoza for combining naturalism with a 'profound' sense of religion and he takes himself to be following Spinoza's example (Alexander 1927, 14). Alexander understands naturalism as follows:

I mean by naturalism not the mere habit of finding a place for man and his interests in a scheme of things which includes and starts with physical nature. That method is common to all honest philosophy. The distinctive feature of naturalism... is that the physical aspect of things is pervasive or that on one side of them they are all natural... Spinoza is a living example to show how needless is the fear that a physical world has no place for religion. (Alexander 1927, 14–15)

Whether Alexander's system is naturalist depends on how one characterizes naturalism, a notoriously difficult task.

⁶ And possibly Bishop (1998, 187), who conceives God as a 'relational being' that emerges from loving relationships. Assuming that loving relationships are contained within the universe but the universe is not exhausted by them, and emergents are co-located with their bases, Bishop would seem to accept that God is contained within the universe. Like Alexander, Bishop also considers his account of God to be 'genuinely naturalist'.

⁷ The similarities that Alexander perceived in their work were a great source of pride to him (Alexander 1921a, 79); in part, this may have been because they were both Jewish.

The characterization that Alexander gives in this passage is a kind of ‘ontological naturalism’. For Alexander, naturalism means that the physical aspect of things is pervasive; as on Alexander’s system all things are pervaded by space-time, it is naturalist by his own lights. Whilst I acknowledge that there are alternative conceptions of ontological naturalism that Alexander’s system is not compatible with,⁸ I restrict myself to discussing just Alexander’s conception, on the grounds that a very similar conception is widely used in the literature. As Papineau’s excellent (2009) article on naturalism explains, ontological naturalism is frequently understood as the thesis that reality is exhausted by nature. This is in line with Clayton’s (2004a, 164) characterization of ‘metaphysical’ naturalism, the view that there are no things, qualities or causes other than those that might be qualities of, or agents within, the natural world. As Alexander accepts that reality is exhausted by nature or the natural world, his system appears to be naturalist according to these definitions of ontological naturalism too.

I say that Alexander’s system ‘appears’ to be ontologically naturalist because it has been objected that, in fact, it is not. In order to explain this objection, I return to Alexander’s notion of *nisus*. Alexander is convinced that deity will emerge due to a *nisus* in space-time, which has already ‘borne its creatures forward’ through matter and life and mind, and will bear them forward still (Alexander 1920, ii. 346). Exactly what Alexander means by ‘*nisus*’ is unclear. A *nisus* is a kind of drive or striving, and Alexander seems to believe that the *nisus* is driving emergence towards *higher* qualities, not merely different qualities. The *nisus* provides progress, not merely process. There is no indication that Alexander takes the *nisus* to be anything other than a natural law or principle operating within his space-time universe; as we saw above, Alexander rejects entirely the thesis that the universe was designed.

In itself, there is nothing inherently non-naturalist about the notion of a *nisus*; I have previously argued that the *nisus* is best read as an evolutionary principle operating within space-time (Thomas 2013, 563). Charles Darwin (1859, 129) eloquently describes the ‘striving’ and ‘struggling’ organic beings continually undergo for life, and I have argued that Alexander conceives his *nisus* as a similar kind of striving. The problem is that Alexander’s *nisus* produces progress, not merely process. Evolutionary principles such as natural selection are not usually taken as progressive: neither Darwin nor contemporary biologists hold that natural selection is leading in any kind of direction, such as towards ‘higher’ forms. Consequently, as I have concluded previously, the workings of Alexander’s *nisus* do not appear to be in line with the biological sciences in the way that Alexander would seem to prefer (Thomas 2013, 556). The *nisus* appears to be non-naturalist. This objection to Alexander is not new. It was raised

⁸ For example, it might be argued that ontological naturalism entails not merely that one’s metaphysics are *compatible* with science but that one’s metaphysics should be restricted to theories or beings that are *acknowledged* by the sciences. Alexander’s theology may be compatible with science but it is hardly acknowledged by science.

by Alexander's contemporaries, including Broad (1921, 149), Bradley,⁹ and Morgan (1923, 14); and it can also be found in Clayton, who argues that Alexander's *nisus* appears to be purposeful, and such teleology is foreign to modern physics and biology (Clayton 2004a, 30).

On reflection, I believe that there is a reply open to Alexander that would rebuff this charge of non-naturalism. We have been assuming that the *nisus* *directs* the universe towards progress but instead we can understand the *nisus* as directionless striving that *happens* to result in progress. On this reading, Alexander's belief that the universe is progressing is disconnected from the *nisus* and supported by something else entirely: the observation of progress in the past. Alexander can be read as observing progress in the universe, and making an inductive argument from the observation of past progress to a prediction of future progress. That reading is supported by passages such as the following:

Now since Time is the principle of growth and Time is infinite, the internal development of the world, which before was described in its simplest terms as the redistribution of moments of Time among points of Space, cannot be regarded as ceasing with the emergence of those finite configurations of space-time which carry the empirical quality of mind. We have to think upon the lines already traced by experience of the emergence of higher qualities, also empirical... Time itself compels us to think of a later birth of Time. (Alexander 1920, ii. 346)

By thinking along the 'lines already traced by experience'—by thinking inductively, as scientists so often do—Alexander's thesis that the universe will produce higher qualities receives empirical justification. And this is why Alexander writes that the universe *compels* us to forecast the next emergent quality: deity (Alexander 1920, ii. 353). 'God's deity is demanded by the facts of nature' (Alexander 1939, 275). There is no need to conceive the *nisus* non-naturally, and as such Alexander's system remains ontologically naturalist.

There is of course an implicit assumption here that the qualities already produced by the universe—matter, life, mind—exhibit progress, an ascent towards perfection. This assumption is controversial. Whilst some thinkers will immediately accept that rocks, plants, and conscious minds exemplify a hierarchy of progress, other thinkers will not. Consequently, it is worth speculating as to why Alexander accepts this assumption, and I suggest that one reason lies in his account of value. Alexander is a realist about value, and he argues that values—including the highest values of beauty, goodness, and truth—are constructed by conscious minds (Alexander 1920, ii. 309). If one accepted that human minds author the highest values, then consciousness would be conceived as a higher quality than life or matter.

I end this study of Alexander's theology with a comment on a wry set of remarks from Broad. Although the primary focus of this chapter is to defend Alexander's theology as a

⁹ Bradley's objection can be found in a letter to Alexander dated 28 April 1922 (John Rylands Library, manuscript ALEX/A/1/1/33/17). Sadly, if Alexander replied, the reply has not survived.

rival to contemporary theologies, this section has also served to correct several misapprehensions of Alexander in the scholarship.¹⁰ Before moving on, I will correct one more. At the conclusion of his otherwise sympathetic and serious critique of Alexander's *Space, Time, and Deity*, Broad writes the following:

I do not quite know how seriously Prof. Alexander intends his theology to be taken. I suppose it is a point of honour with Gifford Lecturers to introduce at least the name of God somewhere into the two volumes, and we may congratulate Prof. Alexander on the ingenuity which discovered a place in his system for something to which this name might be not too ludicrously applied. . . . The vaulted roof of St. Pancras station seen at midnight has been known to evoke the religious emotion in one eminent mathematician returning to Cambridge from a dinner in town; and what the sight of St. Pancras has done for one man, the thought of the next stage in the hierarchy of qualities may do for others. (Broad 1921, 148)

Against the scepticism that Broad expresses so charmingly, I say that—as this study of his theology has shown—Alexander intends his theism to be taken very seriously indeed. Alexander's sense of religion is as profound as that which he perceives in Spinoza.

3. Alexander and Rival Emergentist Theologies

3.1 Clayton's Panentheism: A Contemporary Rival to Alexander's System

Having explored Alexander's theology, I will now show that there is good reason to prefer it to at least one of its contemporary rivals.

It has long been accepted that Alexander's philosophy of religion is related to, and may have influenced, A. N. Whitehead's theology and (through that) process theology.¹¹ However, some of the deep similarities between Alexander's theology and contemporary emergent theologies have not been widely recognized. Emergentist theologies agree that the universe exhibits a hierarchy of emergence that develops through evolution, and that there is a sense in which God has or will emerge in the universe. This 'sense' of divine emergence includes the thesis that God literally emerges from the universe, and the thesis that God non-literally emerges from the universe in a way that is analogous to other cases of emergence. Today, emergentist theologies are usually conceived as a kind of panentheism. Recent arguments in favour of emergentist theologies or panentheism include Peacocke (1993; 2001), Morowitz (2002), Robert

¹⁰ In addition to Broad (1921) and the other works already mentioned, further—albeit somewhat vintage—studies of Alexander's theology can be found in Titus (1933), McCarthy (1948), and Brettschneider (1964).

¹¹ In a letter to Alexander dated 3 September 1924, Whitehead encloses a draft of his Gifford lectures, and writes that he believes them to be 'in general agreement' with Alexander's *Space, Time, and Deity* with 'attempts at further developments' (John Rylands Library, manuscript ALEX/A/1/1/307/1). Whitehead's lectures, later published as *Process and Reality*, argue amongst other things for an immanent God that is constantly in flux with the world (Whitehead 1929, 493). For more on Alexander and Whitehead, see Lowe (1949) and Emmet (1992).

Hermann (2004), Clayton (2004a; 2004b), Niels Gregersen (2006), and Mark Johnston (2009). Of the theorists included in this list, Peacocke, Morowitz, and Clayton particularly use notions associated with the emergentist framework, including emergence, evolution, complexity, and levels. Morowitz and Clayton argue that there is a sense in which God has or will emerge as the final level in a hierarchy of emergence. Indeed, Morowitz (2002, 176) speculates that we may already be 'in the middle of' the emergence of God.

I say that, if we accept the emergentist theology framework, then Alexander's system should be preferred. There is no space here to compare Alexander's system with all of the emergentist theologies mentioned above, so I will focus on a comparison with one of the most important systems on offer today: Clayton's pantheism. As explained earlier, Clayton provides a logical choice of rival to Alexander, for Clayton's metaphysics is set out in substantial detail, and he compares his work with Alexander's at various points. The arguments given here against Clayton's theology may have force against other emergentist theologies too.

We will begin with an overview of Clayton's theology, principally expressed in his *Mind and Emergence*. Clayton argues at length for the reality of emergence, claiming that emergence provides the best way of understanding various scientific theses, including biological evolution. In arguing for emergentism against its rivals, Clayton frequently calls on naturalism. For example, whilst comparing mind-body emergentism to its rivals mind-body dualism and physicalism, Clayton writes: '[O]f the three, emergence is the naturalist position most strongly supported by a synthetic scientific perspective—that is, by the study of natural history across the various levels it has produced' (Clayton 2004a, 2). Later, Clayton faces a choice between 'strong' emergentism, which he characterizes as the thesis that emergent levels are ontologically distinct, characterized by their own laws and causal forces; and 'weak' emergentism, which he characterizes as the thesis that as new emergent patterns emerge, the fundamental causal processes remain those of physics (Clayton 2004a, 9). Once again, Clayton appeals to naturalism to make his case: 'strong emergence represents the better overall interpretation of natural history' (Clayton 2004a, 31).

With this emergentist ontology in place, Clayton asks what account we can give of it. Assuming we accept it, he offers three possibilities. The first two responses are naturalist. First, one could hold that the universe and its hierarchy of emergence is a 'brute given', a contingent reality produced naturally and accidentally. Second, one could deny that emergence is a contingent feature of the world yet still provide a purely naturalistic account of its inevitability; for example, one might argue that, in the course of biological evolution, the natural laws are constrained in such a way that life would inevitably give rise to mind. Clayton recognizes that Alexander could be read as endorsing either the first or the second option, on which the universe—by accident or some unknown law of necessity—produces various emergents including deity; this position does not imply any 'broader' metaphysical consequences, such as a creator of the universe. The third and last response is non-naturalist. One could hold that the

universe with its emergent hierarchy was created by a conscious being, who put certain laws in place and intended that the universe would arrive at something like its present outcome (Clayton 2004a, 160–2). Clayton endorses this option, as do Peacocke and Morowitz. Clayton argues that it is legitimate to endorse naturalism in some domains but not in others; I will discuss this move below.

In support of his non-naturalist theology, Clayton argues there are various features of the universe that naturalism cannot explain. He offers us a smorgasbord of such features, including the perennial question, Why is there anything at all? Clayton contends that there is something unsatisfying about explaining aspects of parts of the natural order in terms of natural causes; one also wants to know what produced the natural order as a whole. Naturalism also struggles to make sense of our moral striving. Further, many human beings claim to have had supernatural experiences, and this lends some evidential weight to non-naturalism (Clayton 2004a, 172–3). However, Clayton's central argument for non-naturalism concerns the 'fit' that we presume exists between our beliefs and the external world.

As humans we investigate the universe and reason about it. Thomas Nagel has argued in several works—including his (1986) and (2001)—that the fact humans reason successfully about the universe requires an explanation. As Nagel (1986, 74) puts it, a complete conception of our place in the world would close over itself, 'describing a world that contains a being that has precisely that conception, and explaining how the being was able to reach that conception from its starting point within the world'. Clayton builds on Nagel to make a case for theism, arguing that the success of our reasoning pushes us to ascribe a rational structure to the world, and the fact that the world has this structure is either a brute given, or it has a reason. 'But the only reason that could function at this level is that the world was made to be reasonable, that is, that it was designed to be that way by an intentional agent' (Clayton 2004a, 177–8). This intentional agent, the creator of the world, is God. Clayton summarizes his argument against metaphysical naturalism using a cost–benefit analysis (Clayton 2004a, 179). On the one hand, one can endorse either the first or second option and remain a naturalist in every domain, but that leaves various features of the universe unexplained. On the other hand, one can endorse the third option and provide explanations for the features that naturalism cannot explain, but in doing so one ventures beyond the natural world. Clayton believes that the benefits of non-naturalism outweigh the cost.

Having argued for a creator God, Clayton goes on to 'radicalise' his immanence. Clayton argues that if theism is to be more than the postulation of a divine source that has since grown mute, it must entail some sort of divine involvement in the world (Clayton 2004a, 185). In another piece, Clayton sketches this involvement in panentheist terms. In an attempt to characterize the 'in' of the panentheist thesis 'The world is in God', Clayton describes what he labels the 'panentheistic analogy'. The analogy is drawn between the body in mind–body emergence, and the world in God–world emergence. 'The world is in some sense analogous to the body of God; God is analogous to the mind which indwells the body, though God is also more than the natural

world taken as a whole.' Clayton argues that the power of the analogy lies in the fact that mental causation is more than physical causation yet still a part of the natural world; analogously, we are offered the possibility of conceiving divine actions in a way that does not break natural law (Clayton 2004b, 83–4).

Clayton's panentheist analogy is strongly reminiscent of Alexander's claim that the world is the body of God. A deeper similarity may be present here too: Clayton appears to argue that God will emerge from the universe. '[E]mergence provides the best available means, for those who take science seriously, to rethink... the immanence of God in the world' (Clayton 2004b, 87). Unlike Morowitz, Clayton is coy as to whether he believes that God has or will literally emerge from the universe, but some of his remarks are certainly suggestive.

How can God be source of all things and yet at the same time *a* thing or agent that arises in the course of the history of the cosmos? It is this conundrum that has forced many panentheists to accept a form of ultimate or theological dualism... God is, for us, the source and (we hope) ultimate culmination of this cosmos, the alpha and omega, the force or presence within which all is located...

Emergentist pantheism thus represents a superior means for thinking God's relation to the world. (Clayton 2004b, 90–1)

Clayton seems to be arguing that, while God existed before the cosmos and created it, he also has, or will, emerge from the cosmos as its culmination.

3.2 *Defending Alexander's Theology*

Let's assume that the emergentist theological framework is correct: the universe is best understood as a hierarchy of emergence, and there is a sense in which God emerges from it. Against Clayton's argument for a non-naturalist creator God, I argue for Alexander-style naturalism. The universe, including minds and deity, should be conceived as a wholly *natural* phenomenon. I will defend Alexander's account from Clayton's objections, before making some objections to Clayton's account.

In addition to the charge (already considered above) that Alexander's system is not fully naturalist, Clayton accuses Alexander of 'divinising' human beings, and 'finitising' God.¹² I will discuss each of these objections in turn. Citing Alexander's (1920, ii, 358) thesis that minds are infinite because they stand in relations to all of space-time, Clayton argues that it is 'an all-too-noble place' to which Alexander's emergentism assigns humans. 'Such a deification or divinization of humankind may have been attractive to Feuerbach, to Victorian England, or to German thinkers early in the twentieth century... [but] the twentieth was, by any account, a bad century for the so-called

¹² Clayton also gives several arguments against weak emergence, and he reads Alexander as a weak emergentist. I will not discuss these arguments for two reasons. First, Clayton does not offer them as objections to Alexander's theology, and that is my concern here. Second, Alexander may not be a weak emergentist; Gillet (2006b, 811–12) provides an extended argument for reading Alexander as a strong emergentist.

infinite goodness of Man' (Clayton 2004a, 168–9). This objection is not well aimed. In the passage that Clayton cites, Alexander is merely arguing that a single mind is 'compresent'—is present in the same universe—with every other thing that exists. '[I]n one sense our minds and all finite things are infinite . . . our minds, which are extended both in space and time . . . are in relation to all Space-Time and to all things in it' (Alexander 1920, ii. 358). This hardly divinizes humans. Even David Lewis (1986, 71–2) is committed to the thesis that, in any given universe or possible world, any given thing is related *at least* spatiotemporally to every other thing. It is unclear why Clayton makes reference to the unhappy events of the twentieth century; perhaps he is implicitly reading Alexander as claiming that minds are in some sense infinitely good.¹³ But if this is the case, Clayton does not say so, and Alexander himself makes no such claims.

Clayton's second objection against Alexander is much better aimed. Clayton objects that Alexander renders God finite. Against the view that God does not create the world, but rather the world deifies itself, Clayton quotes from Pierre Bayle's famous attack on Spinoza's pantheism, explaining that if one is a radical theist of this sort, one cannot be 'too squeamish' (Clayton 2004a, 168). Alexander is very aware that his theology is radical, and at points he seeks to reconcile it with tradition. For example, Alexander (1920, ii. 359–60) argues that there is a sense in which God is infinite: his quality of deity will occupy an infinite part of space-time, and his body is identified with the whole of space-time. On Alexander's system, there is a *sense* in which God is infinite. However, the body of Alexander's God is limited to the space-time manifold, and—as we saw above that Alexander's theology is the opposite of a pantheism—there is also very real sense in which God is *contained* within the world, as the quality of deity will only be lodged in a part of space-time. As such, Clayton is correct to say that Alexander finitizes God, and this divergence from traditional theology arguably counts against his system.

Having discussed Clayton's particular objections to Alexander, I ask how Alexander would reply to Clayton's general objections to naturalism. Let's begin with the smorgasbord. Oddly, Clayton presents these objections to naturalism as though they have never been previously considered, and ready replies aren't available; however, these objections are well known, and ready replies are available to the naturalist. Clayton asks, 'What explains the existence of the natural world?' Clayton's answer to this old theological chestnut is: God. But this prompts the old reply, 'What explains the existence of God?' The theistic answer to this further question is that God is self-grounded, and as such does not require further explanation, whereas nothing else is self-grounded. Whilst this *arguably* provides a more satisfying explanation than the naturalist who argues that the natural world is not in need of further explanation—who 'explains' it as a brute fact—this is extremely controversial, and Clayton offers no further argument. Moving on, Clayton argues that naturalism struggles to make sense of our ethical or moral striving. In

¹³ In a later piece, Clayton (2006, 24) implies that for Alexander the quality of deity will emerge from the collection of human minds; perhaps that is what leads him to claim here that Alexander is divinizing humans. However, as we saw above, that would also be an incorrect reading of Alexander.

response, Alexander could point to his *Beauty and Other Forms of Value* (1933a), a book-length naturalist account of value, which seeks to explain our striving towards the highest values in evolutionary terms. Lastly, Clayton cites the evidentiary weight of recorded supernatural experiences. Unless these experiences can be verified in some way as being supernatural, this weight means little; not so long ago, human beings could have claimed that all the evidentiary weight pointed to the earth being flat.

We will move on to Clayton's central argument against naturalism. As we have seen, Clayton makes use of the problem Nagel raises concerning the 'fit' between our reasoning activity and the world. In the face of this problem, Clayton believes that non-naturalist theism is the best response. However, many other responses are possible. For example, one could take (what might be described as) a Kantian line: the fit between our reasoning activity and the external world is explained by the fact our minds *impose* categories, aka a rational structure, on the universe. Whilst there is hardly room to discuss all possible responses to Nagel here, this Kantian reply provides a neat contrast to the reply that I will offer on Alexander's behalf. Alexander is deeply concerned with the 'categories', the pervasive features of the world that apply to all things, including identity, existence, universal, relation, parts, wholes, and number. Why are these categories pervasive? Alexander's answer is not that our minds impose the categories on the world, but rather that the world imposes the categories on us. The categories are pervasive because they are features of space-time, and as all things are pieces of space-time the categories apply to all things (Alexander 1920, ii. 186–9). With this in mind, here is an Alexander-inspired reply to Nagel.

Let's accept, with Nagel and Clayton, that the universe really has a rational structure that is open to investigation by our reasoning activity. Why is that the case? Alexander could reply that it is because we are *part* of the universe, and as parts of the universe our minds are subject to the same structural features—the same categories—as the stuff of the universe itself. This reply is especially plausible once we consider that on Alexander's account of emergence, there is just one thing that is at once a piece of space-time, and a body, and a living organism, and a mind. For any account of emergence sharing that thesis it would be bizarre if the reasoning activity of minds did *not* echo the rational structure of the universe. Against Clayton, it is indeed a brute fact that the universe has a rational structure. But there is nothing mysterious about the fact that our minds echo that rational structure: as emergents of the universe, our minds share whatever structure the universe happens to have.¹⁴ Once the mystery surrounding the 'fit' between mind and world is dissipated, Clayton's argument collapses into his earlier objection that naturalism cannot explain why there is a world at all, and that objection lacks force.

¹⁴ As Alexander writes, '[T]he real greatness and value of mind is more likely to be established on a firm and permanent basis by a method which allows to other existences than mind an equally real place ... epistemology, is nothing but a chapter, though an important one, in the wider science of metaphysics' (Alexander 1920, i. 6–7).

With the exception of the worry that Alexander finitizes God, sound replies can be made on Alexander's behalf to all of Clayton's objections. Now we will turn the tables. Two serious objections can be made against Clayton's account, and as such it compares unfavourably with Alexander's.

The first objection concerns Clayton's use of naturalism. As we saw above, Clayton relies heavily on appeals to naturalism in defence of emergence, but he later endorses a non-naturalist theology. Clayton is aware that this might seem inconsistent, and in defence of his methodology he distinguishes between the proper domain and the proper parameters of naturalism. Clayton believes that we should take seriously the methods and results of the natural sciences but he also believes that naturalism only applies to domains to which science is applicable; in the case of at least one domain, metaphysics, science is not applicable and it is consistent with his larger position to leave naturalism behind (Clayton 2004a, 169). Clayton is not a thoroughgoing naturalist because he rejects metaphysical naturalism as he defines it: the view that there are no things, qualities, or causes other than those within the natural world. Clayton is also not a naturalist according to the characterizations of ontological naturalism given above. Whilst in principle distinguishing between the domain and parameters of naturalism is a respectable move, in Clayton's case I argue this move poses a problem for his larger system.

The problem is that one of the central set pieces in Clayton's philosophic machinery is the pantheist analogy: the idea that we can understand the relationship between God and the world using mind–body emergence. But how close can this analogy possibly be, given that mind–body emergence is a natural phenomenon within the domain of science, and God is a non-natural phenomenon lying outside of science? Clayton has already pulled away from some of the implications of the pantheist analogy. For example, he is explicit that God—unlike minds and bodies—is not intrinsically spatial and is not correlated to time (Clayton 2004b, 83; 2004c, 256). Given that Clayton is also pulling the analogy apart with regards to naturalism, it is unclear exactly what *is* supposed to be analogous between mind–body and God–world emergence. In contrast, Alexander follows through on his ontological naturalism. Just as mind–body emergence is a natural phenomenon, so is the emergence of deity. Alexander also embraces the consequences of his emergentist analogy; for example, just as minds are spatiotemporal, so is deity (Alexander 1920, ii. 347).

The second objection to be made against Clayton is that it is unclear why he posits an emergent God. Once we have posited the God of traditional theism, whose existence predates that of the universe he creates, why *also* posit that God has or will emerge from the universe? The additional posit is ontologically gratuitous, and it is unclear what motive there is for making it. If one is merely concerned that God should be a real, immanent presence in the world, it would seem far simpler to posit a literally omnipresent creator God, than to posit a creator God *and* bother with all the complicated mechanics of God–world emergence. For Alexander, the world—or at least, the world with its *nisus* towards deity—is sufficient, and positing a creator God is 'superfluous' (Alexander 1933b, 131). In contrast, I argue that for Clayton, a creator God is sufficient, and positing an emergent God is superfluous.

In response to this second objection, Clayton could offer the following reply. Above, I wrote that Clayton is coy as to whether he believes God literally will emerge or has emerged from the universe. Perhaps, if pushed, Clayton would deny that God literally emerges, thereby evading this charge of superfluity. The problem with this response is that it casts the role of the pantheist analogy even deeper into shadow. We have already established that the analogy is weak in a significant regard: mind–body emergence is naturalist, while God–world emergence is not. If Clayton goes on to deny that God literally emerges from the world, then the analogy is weakened to breaking point: it is unclear how the literal emergence of mind from body is supposed to elucidate the non-literal emergence of God from world. Far from being a metaphysically robust analogy that can help us to understand divine immanence, the pantheist analogy slides into the realm of murky metaphor.

In effect, the foregoing discussion presents Clayton with a dilemma. On the one hand, he could hold that God creates, and then literally emerges from, the universe. On this view, the pantheist analogy has a clear role, but it leaves open the question *why* we should posit a creator God and God–world emergence. On the other hand, Clayton could hold that God creates the universe, and that God–world emergence is non-literal or metaphorical. While this blocks the charge of superfluity, it raises new questions over the role of the pantheist analogy, which becomes so shadowy as to be unusable. I believe this dilemma to be in the spirit of Alexander:

[God] must be transcendent indeed to men but still in the world, else there remains a gulf between him and the world which no metaphors can bridge... [and] he must not be a superfluous repetition of the world itself but a being within it which involves the whole world because it is rooted in that world.

Such a conception of God appears to me the immediate suggestion of a philosophy which regards the world as essentially in process... a world in process might create a God by the same continuing impulse by which it has already produced stones and plants and men. (Alexander 1933b, 131–2)

And the answer to the dilemma, is, of course, to endorse Alexander's emergentist theology.

4. Final Thoughts

This chapter has argued that, within the emergentist theology framework, Alexander's system should be recognized as a serious contender to contemporary accounts, and it should be preferred to at least one of its major rivals. Clayton's system lies close(r) to traditional theology than Alexander's but that does not outweigh the problems surrounding his non-naturalist—and possibly non-literal—pantheist analogy. Alexander follows through on the emergentist principles underlying his system, and he does not shy away from the consequences of the analogy he draws between the emergence of mind and the emergence of God. Further, Alexander is able to offer a naturalist explanation for divine emergence, a route not open to his rivals. For

Alexander, the universe is the vast, evolving entity space-time, a continually progressing theatre of motion that contains or will come to contain all things. It is the Bradleyian element of this view that renders it the very opposite of pantheism: deity will be contained within space-time, it is not the container itself.

I am not optimistic that Alexander's system, even with its advantages, will attract many converts; few theists are willing to endorse a theology as radical as this. It may be that, as Bayle (1826, 299) said of Spinoza, it will be said of Alexander that he asserts the most infamous, 'maddest extravagances' that can be conceived. But this by itself does not devalue the philosophic, naturalist worth of Alexander's theology.¹⁵

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