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Is the truth out there? Creatures, cosmos and new creation (Part two)

Anthony N. S. Lane

Tony Lane is Professor of Historical Theology at London School of Theology and a former editor of the Evangelical Quarterly.

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4. A threat to Christian faith?

As educated twenty-first-century Christians we hear two stories.¹ The Bible tells a story that is centred upon the earth, that gives no indication that the earth or the heavens are very old and gives us no reason to suspect that the universe is all that vast. Cosmology tells us of an unimaginably vast universe of a breathtaking age and of an earth that is to all intents and purposes invisible.² If we treat the Bible as a scientific textbook we are in trouble, but its purpose and aims are very different from those of science.³ So does it actually matter, for Christian faith, that the universe is considerably older and larger than once was imagined? And would it matter if we proved the existence (or, indeed, the absence) of extraterrestrial intelligence?⁴

a. The age of the universe

The age of the universe is, of course, contested by those who argue for six-day creation and a young universe. This issue is related to debates about evolution, which is not our topic for tonight. Suffice it to say that most Christians do not see the need to question the scientific account and do not see Genesis 1 as necessarily teaching that creation took place over six twenty-four hour days.

There is a further implication of the age of the universe, one that by contrast receives very little attention.⁵ The universe is vastly older than one would suppose just from reading the Bible. What implications might this have for the tim-

1 The idea of two stories comes from Maurice Wiles, 'Does Christology Rest on a Mistake?' in S. W. Sykes and J. P. Clayton (eds.), *Christ, Faith and History* (Cambridge: CUP, 1972), 3-12, though unlike him I do not regard the biblical story as mythological.

2 See at n. 6, below.

3 See, on this, section 2, in Part one of this article.

4 See Lewis, *Problem of Pain*, 1, for the idea that the age and size of the universe, together with the *absence* of ETI, constitutes an argument against Christianity.

5 On the scarcity of the literature on the relation between science and eschatology, see Daniel Saudek, 'Science and Eschatology in the Open Universe,' *Science & Christian Belief* 23 (2011), 133-57, which I have only seen since this lecture. See also John Turl, 'All Things New,' *Science & Christian Belief* 19 (2007), 139-60.

ing of the Second Coming? Should we be thinking of the return of Christ as taking place in billions of years' time? We shall return to this later.

b. The size of the universe

We inhabit a small planet which goes round a minor star near the edge of one of the hundred-plus billion galaxies. 'In terms of the standard metrics – be they the number of galaxies or the size of the visible universe – even "insignificant" is too proud a boast: for all intents and purposes we are invisible.'⁶ There appears to be no reason for thinking of the human race or the planet that we inhabit as being especially important or significant. There is a clash between the geocentric and anthropocentric perspective of traditional theology and the perspective of modern cosmology, which suggests that humanity and its planet are almost infinitely insignificant. Karl Rahner rightly observes that while there is no question here of a formal contradiction between science and theology, there is the existential issue of feeling lost in the immensity of the universe.⁷ In the light of this, *why* might we matter to God? We will return to this question.

The American Richard Feynman, joint winner of the Nobel Prize in Physics in 1965, clearly thought that the size of the universe cast doubts on the Christian faith. In an interview he famously stated:

It doesn't seem to me that this fantastically marvelous universe, this tremendous range of time and space and different kinds of animals, and all the different planets, and all these atoms with all their motions, and so on, all this complicated thing can merely be a stage so that God can watch human beings struggle for good and evil – which is the view that religion has. The stage is too big for the drama.⁸

Yet, as C. S. Lewis frequently observed, Ptolemy had already observed in the second century that the earth is infinitesimally small compared to the distance to the stars.⁹ Unbelievers have used the magnitude of the universe as an argument against Christianity without explaining how large we would expect the universe to be if it were true, and why.¹⁰ Lewis confesses to being unable to understand how 'what we know (and have known since the days of Ptolemy) about the size of the universe affects the credibility of this doctrine [of the incarnation and the cross] one way or another'.¹¹

This is not completely fair. We have gone from being at the centre of a large

6 Morris, 'Does Biology Have an Eschatology?', 159.

7 Karl Rahner, 'Natural Science and Reasonable Faith' in *Theological Investigations*, vol. 21 (London: Darton, Longman & Todd, 1988), 48-51.

8 In a 1959 TV interview (James Gleick, *Genius: Richard Feynman and Modern Physics* [London: Little, Brown & Co., 1992], 372).

9 Ptolemy, *Almagest* 1:6, where he offers proofs for the claim that earth has 'the ratio of a point to its distance from the sphere of the so-called fixed stars'; C. S. Lewis, *Miracles* (London: Collins [Fontana], 1960), 53; 'Dogma and the Universe,' 39; 'Christian Apologetics' in *God in the Dock* (Grand Rapids: Eerdmans, 1970), 99.

10 Lewis, *Miracles*, 53-54; 'Dogma and the Universe,' 39-40.

11 Lewis, *Miracles*, 55.

universe to being at the periphery of an unimaginably vast universe. On the other hand, Feynman's statement that the stage is too big for the drama assumes that our drama is the only show in town. Indeed, 'if it is just us [in the universe], it seems like an awful waste of space'¹² – but who says that it is just us, that God has created no other intelligent life? Even if he has not, it appears that a universe with less matter in it would not have been able to give birth to galaxies or stars, and so not to ourselves.¹³ So the truth might be 'It is just us, but it needed an awful lot of time and space to make us.'

C. S. Lewis pointed to two beneficial implications of the size of the universe. The vastness of the universe points us to the infinity of God.¹⁴ When Solomon prayed, 'heaven and the highest heaven cannot contain you' (1 Ki 8:27) this meant much more than he could have realised. The size and emptiness of the universe are grounds for awe because they symbolise the greatness of God.¹⁵ As the Psalmist put it:

When I look at your heavens, the work of your fingers,
the moon and the stars, which you have set in place,
what is man that you are mindful of him,
and the son of man that you care for him? (Ps 8:3-4)

This is not the same as stating that the whole purpose of the universe is to inspire us with awe.¹⁶ That would be self-defeating as rather than point to God's greatness it would serve to reinforce the self-centredness of an anthropocentric view of the universe, where everything is arranged just for our benefit.

Should there be extraterrestrial intelligence, then the vast distances involved have the function of quarantining the earth.¹⁷ Europeans have over the centuries encountered less advanced and weaker civilisations and our track record has not been good. We have exploited them at best, exterminated them at worst. The size of the universe serves to protect ET from us. Conversely, if ET was stronger than us the roles might be reversed, a concern recently echoed by Stephen Hawking: 'It would be very risky to attempt to communicate with an alien civilization. If

12 From the film *Contact*.

13 McGrath, *A Fine-Tuned Universe*, 119.

14 Lewis, 'Dogma and the Universe,' 41-42. Pascal famously commented that 'The eternal silence of these infinite spaces fills me with dread' (*Pensées*, tr. A. J. Krailsheimer [Harmondsworth: Penguin, 1966], 95).

15 Lewis, *Problem of Pain*, 141.

16 Lewis, 'Dogma and the Universe,' 42.

17 C. S. Lewis, 'The Seeing Eye' in *Christian Reflections* (London: Geoffrey Bles, 1967), 173. Also, C. S. Lewis, 'Religion and Rocketry' in *The World's Last Night and Other Essays* (New York and London: Harcourt Brace Jovanovich, 1960), 89-91. C. S. Lewis's earlier science fiction envisaged contact, with an older civilisation on Mars and with the nascent and as yet unfallen intelligent life on Venus: *Out of the Silent Planet* (Oxford: John Lane, 1938); *Perelandra* (London: John Lane, 1943) – later published as *Voyage to Venus* (London: Pan Books, 1953). Interestingly, Carl Sagan also came up with the idea that the distances serve to quarantine us (Thomas F. O'Meara, 'Christian Theology and Extraterrestrial Intelligent Life,' *Theological Studies* 60 [1999], 27).

aliens decided to visit us then the outcome might be similar to when Europeans arrived in the Americas. That did not turn out well for the Native Americans'.¹⁸ Like the Borg, ET might inform us that 'Resistance is futile.'

c. *Extraterrestrial intelligence?*

Would the discovery of ETI pose a problem for Christian faith? Some maintain that it would and this is illustrated by a recent science fiction comedy film called *Paul*. Graeme and Clive are two English sci-fi geeks who are on holiday in America, visiting the UFO heartland. On their travels they meet a real-life alien, Paul, and give him a lift. They then come across a Fundamentalist woman, Ruth, who is shocked to meet Paul. She insists that he must be a demon because 'There is only one world, our world, the world that our God the Father created.' Paul reassures her that 'my existence only disproves traditional notions of the Abraham Judaic-Christian God, as well as all one-world theologies.' Eventually Ruth is persuaded and declares that she is liberated. There is no heaven or hell, no right or wrong and no sin. This means that she is now free to swear, drink and fornicate, the first of which she embarks upon with gusto.

Paul is clearly meant to be comedy, but it reflects a view that is widely held amongst agnostics and atheists: that the discovery of ETI would pose a serious problem for believers.¹⁹ There are Christians for whom that is true. Some Fundamentalists argue that because the Bible does not mention ETI, it cannot exist. They see the interest in UFOs as a demonic plot.²⁰ Such an extreme view is not representative of Christians in general. A few years ago Ted Peters conducted an 'ETI Religious Crisis Survey', with over 1300 responses worldwide from a variety of religious traditions.²¹ The overwhelming majority of Roman Catholic, 'Main-line Protestant' and Evangelical respondents saw no threat to their faith from ETI. By contrast 70% of the non-religious respondents thought that it *would* cause a crisis for the world's religions.²² The message is clear. Unbelievers think

18 On the *Today* programme (6 January 2012) (http://news.bbc.co.uk/today/hi/today/newsid_9672000/9672233.stm).

19 E.g. Davies, *Eerie Silence*, 188: 'The discovery of *any* sign that we are not alone in the universe could prove deeply problematic for the main organized religions.' He argued similarly in his earlier *Are We Alone? Philosophical Implications of the Discovery of Extraterrestrial Life* (Harmondsworth: Penguin, 1995). For that argument, and a response, see Wilkinson, *Alone in the Universe?*, ch. 8.

20 Ted Peters, *Science, Theology, and Ethics* (Aldershot: Ashgate, 2003), 129-31. By contrast, according to one blog, Billy Graham once stated, 'From my studies of the Scriptures, I can find nothing that would change our faith in the Gospel if we discover life on other planets. See http://voyager-chronicles.blogspot.com/2011_06_01_archive.html for this and seven other quotations from Billy Graham on ETI.'

21 Ted Peters and Julie Louise Froehlig, 'Peters ETI Religious Crisis Survey' (2008) <http://www.counterbalance.org/etsurv/fullr-frame.html>. For a summary report of this, Ted Peters, 'The Implications of the Discovery of Extra-Terrestrial Life for Religion,' *Philosophical Transactions of the Royal Society: A* 369 (1936) (13:2:2011), 645-47.

22 While very few saw a threat to their own faith, rather more, including 22% of RC respondents, thought that it might create a problem for their tradition.

that ETI would cause a problem for religious faith; believers overwhelmingly see no problem.²³ One Evangelical respondent commented, 'I don't think they are out there. But if they are, that's cool.' Another said, 'I believe that the eschatological claim that "every knee will bow" to Jesus as God applies to extraterrestrial intelligent beings (even if they don't have knees)! What about the likelihood that within the next generation we will learn of one or more extraterrestrial civilisations? Interestingly, of the groups surveyed by Peters, Evangelicals are the least optimistic with 63% considering the discovery of ET unlikely, compared to 44% of all respondents. On this question there is almost no variation between the religious in general and the non-religious.²⁴

What does the Bible have to say about ETI? There is nothing in Scripture that either affirms or denies the existence of life upon other worlds. Christian revelation states nothing of what God has done elsewhere in the universe.²⁵ What it emphatically does not state is that we are the only intelligent spiritual life created by God.²⁶ Both Testaments affirm the existence of angels, as does the Christian tradition. Those who are scandalised at the thought that we might not be the exclusive objects of God's affection have forgotten about the spirit world.²⁷ I am reminded of an account that I once heard on the radio. A woman described how at the age of three, having been put to bed, she looked out of the window and saw her mother playing croquet with friends. She was deeply shocked as it had never previously occurred to her that her mother had any purpose in life other than caring for her. That is how some Christians view God.

Some have supposed that the prospect of ETI confronts believers with a new challenge. They are ignorant of history.²⁸ Some of the ancient Greeks believed in ETI, but Plato and Aristotle opposed it and these were the two Greek philosophers who most influenced early and medieval theology. In 1277, however, the bishop of Paris condemned a number of doctrines which he thought restricted God's omnipotence, among them the proposition that God could not create 'many worlds'. Encouraged by this verdict, there was serious debate on the issue

23 Others have reached a similar conclusion. See Dick, 'Cosmotheology: Theological Implications of the New Universe,' 198.

24 Precise figures are given in Appendix 3 of the report.

25 Lewis, 'Christian Apologetics,' 100.

26 C. S. Lewis points out that if we discovered extraterrestrial life we would need to discern whether it was indeed rational and spiritual, rather than merely animal ('Religion and Rocketry,' 85-86).

27 A point made by Rahner, 'Natural Science and Reasonable Faith,' 51, among others.

28 For this paragraph, see especially Michael J. Crowe, 'A History of the Extraterrestrial Life Debate,' *Zygon* 32 (1997), 147-62. This draws especially on Michael J. Crowe, *The Extraterrestrial Life Debate 1750-1900: The Idea of a Plurality of Worlds from Kant to Lowell* (Cambridge: CUP, 1986); Steven J. Dick, *Plurality of Worlds: The Origins of the Extraterrestrial Life Debate from Democritus to Kant* (Cambridge: CUP, 1982); idem, *Biological Universe*.

in the fourteenth century, though as a purely hypothetical exercise.²⁹ Astronomical advances in the seventeenth century pointed to the real possibility of ETI and ever since many theologians have embraced the prospect. Colin Russell argues that this openness sprang from the belief in God's freedom and ability to create life where he will and that the universe exists for God's glory rather than our benefit.³⁰ So Christian theology has been preparing for the discovery of ETI for at least four, if not seven, hundred years.³¹

Christianity is not tied to an anthropocentric view of the universe. Jennifer Wiseman, director of the Dialogue of Science, Ethics and Religion for the American Association of the Advancement of Science, commented that, 'If God is the author of life on countless other worlds, it increases our sense of wonder and appreciation.'³²

The sceptic Thomas Paine, in his famous *The Age of Reason* (1793), argued passionately that the existence of ETI disproved Christianity – 'he who thinks that he believes in both has thought but little of either.' He regarded it as proven that there are millions of inhabited worlds in the universe.

From whence, then, could arise the solitary and strange conceit that the Almighty, who had millions of worlds equally dependent on his protection, should quit the care of all the rest, and come to die in our world, because, they say, one man and one woman had eaten an apple? And, on the other hand, are we to suppose that every world in the boundless creation had an Eve, an apple, a serpent, and a redeemer? In this case, the person who is irreverently called the Son of God, and sometimes God himself, would have nothing else to do than to travel from world to world, in an endless succession of deaths, with scarcely a momentary interval of life.³³

Paine's claim that ETI disproves Christianity was hotly disputed.³⁴ We shall return later to the issue of multiple falls and multiple incarnations.

While many like Paine have supposed that the existence of ETI undermines Christianity, Paul Davies argues that the opposite is also true.³⁵ If the chances of

29 In 1440 Nicholas of Cusa came out in support of ETI. In 1600 Giordano Bruni was burnt at the stake by the Roman Catholic Church for many heresies, including his belief in an infinite number of inhabited worlds.

30 Colin Russell, *Cross-currents: Interactions between Science and Faith* (Leicester: IVP, 1985), 52.

31 In 2008, Father Gabriel Funes, the Pope's chief astronomer and director of the Vatican Observatory, declared that 'intelligent beings created by God could exist in outer space' (<http://news.bbc.co.uk/1/hi/7399661.stm>; <http://www.catholicnews.com/data/stories/cns/0802629.htm>).

32 <http://www.patheos.com/Resources/Additional-Resources/Jesus-Christ-Extraterrestrial-Curtis-Chang-Jennifer-Wiseman--06-29-2011.html>.

33 <http://hwarmstrong.com/age-of-reason-05.htm>. A similar argument is put forward by Davies, *Eerie Silence*, 188-89.

34 Crowe, 'A History of the Extraterrestrial Life Debate,' 153.

35 C. S. Lewis frequently observed that both the absence and the abundance of life in the universe are used as arguments against Christianity: 'Dogma and the Universe,'

life emerging are so remote that we are unique, if our universe is so unfriendly to life that we are freak accidents, this points to a bleak atheism. By contrast, an inherently biofriendly universe where the emergence of life is inevitable points to the design of a creator.³⁶ It is only in such an environment that we can feel 'at home in the universe',³⁷ while the idea that we are unique fills us with a 'cosmic loneliness'.³⁸

Whether there is room for ETI in people's present theology is not the only issue. Jill Tarter, the Director of the Center for SETI Research in California, argues that encountering ETI would be fatal for existing terrestrial religion because the extraterrestrials would have outgrown religion.³⁹ By making this claim she is not speaking as a scientist but expressing her [negative] religious beliefs. One might as validly predict that encounter with a worshipping ETI community would spell the demise of atheism. Paul Davies argues similarly to Tarter⁴⁰ and, responding to him, Rob Cook rightly warns that 'we simply cannot predict what we will find out about the religious life of aliens if we ever do contact them.'⁴¹

5. Implications for theology

We shall now consider the implications for theology of modern cosmology, focusing especially on the issue of ETI. This area of study has been called Exotheology or Astrotheology.⁴²

a. Implications for the doctrine of creation

The size of the universe and the prospect of ETI raise certain issues for the doctrine of creation.

First, given that the Bible tells a geocentric and anthropocentric story, could it be that Yahweh is the God of our solar system or our galaxy alone?⁴³ Definitely not, for a variety of reasons. Not just earth but the heavens declare God's glory (Ps 19:1). Yahweh was the God of Israel, but his sovereignty over all the earth and all nations was proclaimed in the Old Testament. The same argument applies to

40; 'Religion and Rocketry,' 83-84; 'Seeing Eye,' 174. Cf. *Problem of Pain*, 1.

36 Davies, 'Biological Determinism, Information Theory and the Origin of Life,' 25-27.

37 Davies, 'Biological Determinism, Information Theory and the Origin of Life,' 26.

38 Wilkinson, *Alone in the Universe?*, 140-41.

39 Jill C. Tarter, 'SETI and the Religions of the Universe' in S. J. Dick (ed.), *Many Worlds: The New Universe, Extraterrestrial Life, and the Theological Implications* (Philadelphia & London: Templeton Foundation Press, 2000), 143-49.

40 Davies, *Eerie Silence*, 189.

41 'Would the Discovery of Alien Life Prove Theologically Embarrassing? A Response to Paul Davies', *EQ* 84:2 (2012) 139-54, citing 152. Cf. Wilkinson, *Alone in the Universe?* 127-28.

42 Peters, *Science, Theology, and Ethics*, 121-36: 'Exotheology: Speculations on Extraterrestrial Life'.

43 A view rejected by Giuseppe Tanzella-Nitti, 'Extraterrestrial Life' (<http://www.disf.org/en/Voci/65.asp>).

the other galaxies.⁴⁴ If Yahweh was the creator and Lord of our galaxy alone, he would be like the Demiurge, the junior creator deity proclaimed by the Gnostics in the early centuries. For an orthodox Christian the only possible answer is that God is the creator of the whole universe.

Secondly, it is argued that the size of the universe undermines our significance. 'Science, and especially cosmology and evolution, reveal our true place: one without privilege or status, unshackled by either ultimate meaning or direction. We might as well go shopping.'⁴⁵ If our significance is measured in terms of space or time, we are indeed nothing. Against this, Brian Cox argues that we are significant because we are the cosmos made conscious. Our true significance, he claims, lies in our ability and desire to understand and explore the universe.⁴⁶ I am not sure that this argument works for an atheist, but it is related to the Christian idea that our significance lies in the fact that we are created in the image of God, that God loves us and desires to enter into a relationship with us and that he gave his only Son to die for our sins.⁴⁷ It is Aristotelianism, not Christianity, that attributes our significance to physical location.⁴⁸

If our significance is tied to our being made in God's image, what about ETI? If there are many forms of intelligent and spiritual life throughout the universe, is it only ourselves that partake of God's image? While Genesis states that 'God created man in his own image' (1:27), Scripture nowhere claims that this is unique to us.⁴⁹ We have already noted the existence of angels and these are understood by Scripture (Ps 8:5; Heb 2:7) and tradition as being superior to humans. Indeed, John was tempted to worship the angel that brought revelation to him (Rev 19:10, 22:8). Our significance is based upon our creation in God's image, not upon any claim to exclusivity. We may never discover whether ETI exists, but either way we have no grounds for exalting ourselves as the sole object of God's love. The Christian faith makes positive claims about God's love for us, supremely in giving us his Son; it makes no negative claims that he loves us alone or that the creation is purely for us.⁵⁰

b. Implications for the doctrine of the fall

If extraterrestrial intelligence exists, is it also fallen? Will ET come to us as a 'celestial saviour' or as an 'alien enemy'?⁵¹ These are known as the 'millennial' and

44 Peters, 'The Implications of the Discovery of Extra-Terrestrial Life for Religion,' 647-48.

45 Morris, 'Does Biology Have an Eschatology?', 160.

46 TV series *Wonders of the Universe*, closing words of 1st programme. Similar ideas were expressed in the 1970s by Steven Weinberg, as cited by John Jefferson Davis, *The Frontiers of Science and Faith* (Downers Grover: InterVarsity Press, 2002), 164.

47 Lewis, *Miracles*, 56; Wilkinson, *Alone in the Universe?* 124.

48 Russell, *Cross-currents*, 49-50.

49 O'Meara, 'Christian Theology and Extraterrestrial Intelligent Life,' 30, suggests that ETI is also made in God's image.

50 Lewis, *Miracles*, 55.

51 Peters, 'The Implications of the Discovery of Extra-Terrestrial Life for Religion,' 649-51.

the 'catastrophic' models.⁵² Films about extraterrestrials mostly portray them as hostile, probably because it makes for better drama. Some extraterrestrials are highly dangerous and scary, without being particularly intelligent, as in the series *Alien*, *Aliens*, *Alien 3* and *Alien Resurrection*. This model gives a new meaning to Psalm 144:11 (NASB): 'Rescue me and deliver me out of the hand of aliens!' Examples of the rarer millennial model would be *The Day the Earth Stood Still* and *Contact*.

In Christian terms, is ET also a sinner? The Christian doctrine of the Fall states that humanity was created good but turned away from God and sinned. This was not inevitable but was the fruit of human free will.⁵³ In other words, it might not have happened. It would follow, therefore, that ET may or may not have sinned. C. S. Lewis, and John Polkinghorne concur in this view.⁵⁴

There is a further implication of this for theodicy. Christian doctrine affirms that God created humanity with the possibility of sinning or not sinning. In creating free beings God necessarily took the risk that they might make the wrong choice. Putting it crudely, God made what turned out to be an unlucky gamble.⁵⁵ The existence of ETI *could* put this in an entirely different perspective. Suppose that there are a million instances of ETI and we are the only ones that have gone astray. In that case God's gamble would have worked out well. This is, of course, purely speculative, but it does point to the fact that the final assessment of a free will theodicy relies on information from the whole universe, not just from planet earth.⁵⁶

52 Albert A. Harrison, 'Fear, Pandemonium, Equanimity and Delight: Human Responses to Extra-terrestrial Life,' *Philosophical Transactions of the Royal Society: A* 369 (1936) (13:2:2011), 660-61.

53 Even Calvin held this (*Institutes* 1:15:8). For a different angle, see Ernan McMullin, 'Life and Intelligence Far from Earth: Formulating Theological Issues' in S. J. Dick (ed.), *Many Worlds: The New Universe, Extraterrestrial Life, and the Theological Implications* (Philadelphia & London: Templeton Foundation Press, 2000), 167-69.

54 Lewis, 'Religion and Rocketry,' 86-87; 'Seeing Eye,' 174-75; *Miracles* 56; John Polkinghorne, *Reason and Reality: The Relationship between Science and Theology* (London: SPCK, 1991), 100-01.

55 The situation is different for Calvin, who held that while Adam fell of his own free will, this choice was predestined by God. Augustine, by contrast, held that God foreknew Adam's sin, but did not predestine it.

56 Leibniz suggested something similar. Crowe, *Extraterrestrial Life Debate 1750-1900*, 28-29, paraphrases his position as 'This is the worst possible world (planet) in the best possible universe.' Alvin Plantinga, *The Nature of Necessity* (Oxford: OUP, 1974), 164-95, propounds a free will theodicy on the basis that 'it is possible that God could not have created a universe containing moral good ... without one containing moral evil' (167; cf. 184). It is possible that all significantly free creatures suffer from 'transworld depravity', which means that they would perform some morally wrong actions on any world that God might create (184-89). Were this hypothetical situation to be true, it would follow that any ETI would also have sinned. He argues similarly in *God, Freedom and Evil* (London: George Allen & Unwin, 1975), 29-55.

c. Implications for the doctrine of redemption

Thomas Paine regarded the certain (as he saw it) existence of ETI as a challenge not to the existence of God (in which he believed) but to the Christian doctrines of the incarnation and the cross (which, as a deist, he rejected). Many today regard this as the key issue posed by ETI. There are at least five possibilities here.⁵⁷

1. ET might be innocent and unfallen, not in need of salvation. Such a race would not need to have heard about the incarnation and the cross of Christ. Suppose Christ's Incarnation is unique in universe. It might be because we are in fact the only intelligent life in the universe. Or it might be because we are the only fallen race out of a myriad of ETI species. C. S. Lewis suggests that if earth has been 'specially sought' by God, the parable of the lost sheep could be taken to indicate that it is not because we are the most important but because we are the one lost sheep that has strayed.⁵⁸ This may indeed be the case, but we also need to consider the possibility that we are not the only fallen species in the universe. What then? There are a variety of options.

2. C. S. Lewis suggests one option that is not often considered: that a fallen race of ETI might have fallen so far as to be devoid of all goodness and incurable – as Christian theology has traditionally believed about demons.⁵⁹ This suggestion has not generally commended itself.

3. Some have argued that the incarnation and the cross suffice for the salvation not just of humanity but of ETI as well. This idea is quite popular, not least because it enables one to maintain both the uniqueness of the work of Christ and the salvation of ETI, contrary to Paine's claim. In 1950 the Christian mathematician E. A. Milne proposed it in a passing comment which has come to be widely quoted. He affirms the uniqueness of the incarnation:

God's most notable intervention in the actual historical process, according to the Christian outlook, was the Incarnation. Was this a unique event, or has it been re-enacted on each of a countless number of planets? The Christian would recoil in horror from such a conclusion. We cannot imag-

57 Lewis, 'Seeing Eye,' 174-76, outlines a number. On this issue, see also McMullin, 'Life and Intelligence Far from Earth,' 172-73; Wilkinson, *Alone in the Universe?*, 128-35; Dick, *Biological Universe*, 517-22; *Life on Other Worlds*, 247-50; Peters, *Science, Theology, and Ethics*, 127-29.

58 Lewis, *Miracles*, 126; 'Dogma and the Universe,' 42-43; Christian Apologetics,' 100. For the idea that the human race might be the odd ones out in the universe, 'a local pocket of evil', see Lewis, *Problem of Pain*, 50-52. Cf. 'Religion and Rocketry,' 87.

59 Lewis, 'Seeing Eye,' 175-76 [1963]. On the last point, he takes a different view in 'Dogma and the Universe,' 43 [1943], where he argues that the existence of a fallen but unredeemed species would conflict with the doctrine of the Incarnation. In *Miracles*, 55-56 [1947], he again sees a problem with the existence of an unredeemed race. While this is not what we would anticipate from the love of God, he is right in 1963 to recognise that the existence of demons means that this possibility cannot be excluded.

ine the Son of God suffering vicariously on each of a myriad of planets. The Christian would avoid this conclusion by the definite supposition that our planet is in fact unique.

If that is so, what about the salvation of fallen extraterrestrials? He suggests that knowledge of the unique incarnation could be shared round the galaxy by radio.⁶⁰ Milne was by no means the first to suggest that the work of Christ on earth is effective for ETI, having been anticipated in the fifteenth century by the theologian William Vorilong and in the seventeenth century by Henry More, though neither of these proposed the use of the radio!⁶¹

The same view is taken by some today, including José Gabriel Funes, the Pope's chief astronomer and director of the Vatican Observatory.⁶² Some have sought a biblical basis for it. Romans 8:19-23 is one passage that is proposed, where Paul speaks of the creation being unwillingly subjected to futility and awaiting liberation from its bondage to decay.⁶³ I have consulted a range of commentaries and the consensus appears to be that this refers to the subhuman creation, excluding angels. It is unlikely that Paul was looking beyond earth.⁶⁴ Also, if ET has sinned then, unlike the subhuman creation, it would have its own willing choice to blame for the consequences. More recently, John Jefferson Davis, who teaches at Gordon Conwell Theological Seminary, has also defended this view on the basis of the language of cosmic redemption found in Colossians 1:15-20.⁶⁵ It is noteworthy, however, that this cosmic language has not persuaded commentators that Paul is teaching that Christ's death is effective for demons.⁶⁶ If the cosmic language doesn't include the non-human spiritual beings of which Paul was aware, why should it include others of which he was unaware?

There is a major problem with this view. When the doctrine of the Incarnation was developed in the early centuries, there was rightly an emphasis on the full humanity of Christ. It was only by truly becoming one of us that he could save

60 E. A. Milne, *Modern Cosmology and the Christian Idea of God* (Oxford: OUP, 1952), 153-54. Milne died in 1950, shortly after writing this.

61 Crowe, *Extraterrestrial Life Debate 1750-1900*, 8-9, 16-17; O'Meara, 'Christian Theology and Extraterrestrial Intelligent Life,' 13-15; Dick, *Plurality of Worlds*, 42-43, 88; G. McColley & H. W. Miller, 'Saint Bonaventure, Francis Mayron, William Vorilong, and the Doctrine of a Plurality of Worlds,' *Speculum* 12 (1937), 387-88.

62 <http://www.catholicnews.com/data/stories/cns/0802629.htm>. Also by Giuseppe Tanzella-Nitti, 'Extraterrestrial Life' (<http://www.disf.org/en/Voci/65.asp>). Another papal astronomer, Guy Consolmagno, declared his willingness to baptise an alien, if they asked (<http://www.guardian.co.uk/science/2010/sep/17/pope-astronomer-baptise-aliens>).

63 Lewis, 'Religion and Rocketry,' 87-88; Wolfhart Pannenberg, *Systematic Theology*, vol. 2 (Edinburgh: T & T Clark, 1994), 73-76. It might then be our task to share the gospel with ET (Lewis, 'Seeing Eye,' 175).

64 Cranfield, Dunn, Fitzmyer, Hendriksen, Jewett, Moo, Schreiner, Stott. Stott is the only one to consider our question.

65 Davis, *The Frontiers of Science and Faith*, ch. 9, esp. pp. 152-56.

66 Dunn, MacDonald, O'Brien, Wilson.

us.⁶⁷ ‘That which He has not assumed He has not healed.’⁶⁸ If there is any validity in this argument, it would exclude the idea of the cross being effective for ET. In response to the idea that Christ died for ET, O’Meara biting comments that ‘it is superficial and arrogant to assert that the Christian or Jewish revelation of a wisdom plan for salvation history on earth is about other creatures.’ He adds, ‘The Logos, the second person of the divine Trinity, indeed has a universal domination, but Jesus, Messiah and Savior, has a relationship to terrestrials existing within one history of sin and grace.’⁶⁹

4. If the work of Christ does not cover ET, does this mean that there have been or will be multiple incarnations and passions in different parts of the universe, the view which Thomas Paine ridiculed? This was famously expressed a century ago by the Roman Catholic Alice Meynell in her poem ‘Christ in the Universe’:

But, in the eternities
 Doubtless we shall compare together, hear
 A million alien gospels, in what guise
 He trod the Pleiades, the Lyre, the Bear.
 Oh, be prepared, my soul!
 To read the inconceivable, to scan
 The million forms of God those stars unroll
 When, in our turn, we show to them a Man.⁷⁰

Other expressions of this belief in poetic form include the following verse from Larry Norman’s 1973 worship song ‘U.F.O.’:

And if there’s life on other planets,
 then I’m sure that He must know,
 And He’s been there once already,
 And has died to save their souls.
 He’s an unidentified flying object,
 you will see him in the air,
 He’s an unidentified flying object,
 you will drop your hands and stare,
 He’s an unidentified flying object,
 coming back to take you home,
 He’s an unidentified flying object,
 He will roll away your stone.⁷¹

67 E. L. Mascall, *Christian Theology and Natural Science* (London: Longmans, Green & Co., 1956), 37-39.

68 Gregory of Nazianzen, *Epistle* 101 to Cleodonus (NPNF 7:440).

69 O’Meara, ‘Christian Theology and Extraterrestrial Intelligent Life,’ 20.

70 <http://www.bartleby.com/236/265.html>.

71 <http://www.delusionresistance.org/christian/larry/larry11.html>. Also, Sydney Carter’s ‘Every Star Shall Sing a Carol’ (<http://www.musicanet.org/robokopp/english/evrystar.htm>).

Eric Mascall, responding to Milne's proposal, notes that there are no *theological* grounds for denying that the Word may have become flesh in more than one form. He based this on the orthodox assumption that the incarnation involves no abandonment of the Word's divine 'activity and attributes'.⁷² John Polkinghorne has affirmed his belief that if 'little green men ... need saving, then God will take little green flesh.'⁷³ Roman Catholic authors have also given their approval to the idea.⁷⁴ Interestingly, in the sixteenth century the Reformer Philipp Melanchthon argued *against* the existence of ETI on the grounds that Christ could not die and rise again more than once.⁷⁵

I see no objection in principle to the idea of multiple incarnations, though why should we assume God would do the *same* thing for every fallen species? It reflects an anthropocentric approach comparable to the inability to conceive that ETI might not be humanoid.

5. Finally, it is possible that ETI may be saved not by the death of Christ as a human being, not by another incarnation, but by some quite different means. C. S. Lewis regarded this as preferable to the idea of multiple incarnations.⁷⁶ Their fallenness may be different from ours. *We* may not be able to imagine any alternative way of salvation, but that does not mean that God has none.⁷⁷ In *Voyage to Venus* he speculates that a Fall on that planet would lead not to a second Calvary, since nothing is repeated, but to 'some act of even more appalling love, some glory of yet deeper humility'.⁷⁸

So which of these possibilities is true? We do not even know whether ETI exists, or whether it has fallen if it does exist, so it is arrogant to think that we can know how God might save them. The suggestion that Christ's work on planet earth is efficacious for all intelligent life throughout the universe strikes me as failing to see that the anthropocentric and geocentric perspective of the Christian revelation is an accommodation to the needs of earth-bound humans. Beyond this, it is best to maintain a cautious agnosticism. Christian revelation is

72 Mascall, *Christian Theology and Natural Science*, 40-42. Rahner, 'Natural Science and Reasonable Faith,' 51, concurs with this judgement.

73 As quoted in *The Observer* (11 August 1996), cited by Wilkinson, *Alone in the Universe?* 135. Paul Tillich, *Systematic Theology*, vol. 2 (London: James Nisbet, 1957) 110-11, affirms that 'Incarnation is unique for the special group in which it happens, but it is not unique in the sense that other singular incarnations for other unique worlds are excluded.'

74 Such as Kenneth Delano, *Many Worlds, One God* (1977); Dick, *Biological Universe*, 520-22; ___ *Life on Other Worlds*, 250; O'Meara, 'Christian Theology and Extraterrestrial Intelligent Life,' 28.

75 Melanchthon, *Initia doctrinae physicae* (1550) fol. 43 (CR 13:221). Cf. Dick, *Plurality of Worlds*, 88-89.

76 Lewis, *Miracles*, 128;

77 Lewis, 'Religion and Rocketry,' 87; 'Seeing Eye,' 175.

78 *Voyage to Venus*, 135-36.

silent concerning what God may or may not have done elsewhere in the universe.⁷⁹

*d. Implications for eschatology*⁸⁰

The age of the universe poses a question for eschatology. From reading the Bible alone one would form the impression that the universe is only a few thousand years old. Similarly one gets the impression that the end of the universe is not too far in the future. Given that the age of the universe is so much greater than one might have expected, should we also be thinking of the return of Christ as taking place in billions of years' time? This would make the Intermediate State feel more like eternity. Owen Gingrich refers to 'the unresolved incongruity between the timescales of cosmic eschatology versus human eschatology'⁸¹

Scripture speaks of the parousia leading to a new earth and new heaven (Rev 21:1) or heavens (Isa 65:17, 66:22; 2 Pet 3:13). Science, by contrast, predicts that in a few billion years the expanding sun will have engulfed the earth, having long since rendered it uninhabitable. It speaks of the universe as a whole running down in some 10,000 trillion, trillion, trillion, trillion, trillion, trillion, trillion, trillion years (i.e. 10^{100} years). This is very different from the biblical picture, apart from Peter's prophecy that 'the heavens will be set on fire and dissolved, and the heavenly bodies will melt as they burn' (2 Pet 3:13). That is not a problem. First-century and twenty-first-century science alike state that dead men do not rise. As Christians we believe that Christ rose not because of scientific laws but because of the power of God. Likewise, we believe in the parousia not because science predicts it but because of the promise of God, anticipated in the resurrection of Christ.⁸²

So far so good, but *when* will this happen? That is not an invitation to Harold Camping to have another go but a more general question.⁸³ If the earth is to be engulfed in a few billion years, presumably the parousia must be before then. Or might it be much sooner – like later this year? What has this to do with tonight's

79 Lewis, 'Christian Apologetics,' 100. For the limits of our knowledge, and indeed our power to comprehend, see 'Dogma and the Universe,' 43.

80 I will not be considering the 'secular eschatologies' of scientists who present a vision of the future based on science alone. On these, see Davis, *The Frontiers of Science and Faith*, ch. 10.

81 Owen Gingrich, 'Cosmic Eschatology versus Human Eschatology' in George F. R. Ellis (ed.), *The Far-Future Universe: Eschatology from a Cosmic Perspective* (Philadelphia and London: Templeton Foundation Press, 2002), 227. Jürgen Moltmann makes a similar point in 'Cosmos and Theosis: Eschatological Perspectives on the Future of the Universe' in *ibid.*, 252, as does Robert John Russell, 'Eschatology and Physical Cosmology' in *ibid.*, 267, 275.

82 Russell, 'Eschatology and Physical Cosmology,' 289-92, notes that the scientific prediction is based on the *philosophical* assumption that the future will be 'just like' the past, while Christian eschatology affirms that God will do a new thing.

83 In fact Camping has now acknowledged his error: <http://www.familyradio.com/announcement2.html>.

topic? What is promised is not just a new earth but new heavens. Does this mean a renewal of the entire universe, all hundred billion galaxies? If so, a date that suits planet earth might come at a totally inappropriate point for ETI on other planets.

Given such questions, some have given up on eschatology. Simon Morris concludes that, 'the immense scales of the universe and the plenitude of the biosphere seem, therefore, to make the idea of an eschatology simply risible.'⁸⁴ Less despairingly, Karl Rahner rightly points to the need to 'integrate the history of salvation into the history of the cosmos' – not to follow one of these alone.⁸⁵ Our future destiny is not to be disembodied souls in a heavenly realm but re-embodied beings on a new earth. Simply to speak of salvation as outside the created universe and to leave the fate of the universe to the scientists is Gnosticism. Here, as elsewhere, we need a conversation between theology and science.

When we are promised a new heaven or heavens, to what does this refer? Likewise, when Paul states that the whole creation is groaning in anticipation of the future freedom of the glory of the children of God (Rom 8:19-23), to what does 'the whole creation' refer? Putting it differently, what is the scope of this new creation? Does it include galaxies so far away that their light cannot reach us? Could it be our galaxy only? Or could it refer to the solar system only? It is likely that Paul was thinking of planet earth, not of distant stars.⁸⁶ Extending the meaning more widely is highly speculative.⁸⁷ We need to remind ourselves that Scripture is addressed to human beings on planet earth and that its purpose is not to tell us what God may (or may not) be doing elsewhere in his universe. John Polkinghorne wrestles with the meaning of the new creation and insists that the new heaven and earth must include the whole universe.⁸⁸ I have no doubt that God's saving purposes extend to the whole universe and do not wish to argue that part of the universe will be discarded. But does God need to redeem all parts of the universe at the same time? Must it all happen when Christ returns to planet earth? Is it possible that the biblical Eschaton might relate to our solar system only?

In answering this question, two factors come into play. It is more likely that the scope of the new creation is the whole universe if we are indeed the sole intelligent life; if the universe is teeming with intelligent life it is less likely that the redemption of humanity will affect a distant galaxy.⁸⁹ Again, the answer depends to some extent on how 'new' one expects the new creation to be. It has some continuity with the present creation – our bodies are raised, and the 'glory and honour of the nations' will be brought into the New Jerusalem (Rev 21:26) – but

84 Morris, 'Does Biology Have an Eschatology?', 160.

85 Rahner, 'Natural Science and Reasonable Faith,' 52-55.

86 See above, n. 64.

87 Lewis, 'Religion and Rocketry,' 88, suggests this as a possibility.

88 Polkinghorne, *Reason and Reality*, 101-104.

89 Wilkinson, *Alone in the Universe?*, 134-35, is of a contrary view.

it will be radically new.⁹⁰ Here, even more than elsewhere, we need humility. Luther was exaggerating when he stated that, ‘we know as little about eternal life as children in the womb of their mother know about the journey that awaits them’⁹¹ – but only slightly exaggerating.

Conclusion

What have we discovered? We live in exciting times. The universe is an amazing place. There is every chance we may be sharing it with other intelligent beings, but a rather smaller chance that we will ever find evidence of their existence, let alone make contact with them.

None of this threatens the truth of the Christian faith. We have nothing to fear from the findings of modern cosmology. Having said that, they do present us with challenges. What is the status of ETI? Christians have been considering this for hundreds of years. The chances are that we will not be called to answer the question, but it does not hurt to be prepared. The other main challenge concerns the nature of the parousia. Probably the safest prediction is that when it happens it will be very different from what *anyone* is expecting. In the meantime we do well to heed the words of the angels to the apostles after Jesus’ ascension (Acts 1:11). We should not spend too much time gazing into heaven but get on with the work which has been entrusted to us here and now. As Luther allegedly stated, ‘if I knew that the world would perish tomorrow, I would still plant an apple tree today.’⁹²

Abstract

Part 2

The age and size of the universe pose no threat to Christian faith. There is nothing in Scripture to affirm or deny that there is life on other worlds and Christian theology has been considering this issue since the fourteenth century. Human significance is based upon our creation in God’s image, not on our physical location in the universe or on our uniqueness. If extraterrestrial intelligence exists, it may or may not be fallen. Should such a fall have taken place, we cannot be dogmatic about how God might save such fallen creatures, but it is unlikely that Christ’s death on earth would apply to them. While God’s saving purposes extend to the whole universe, we cannot assume that it will effect all galaxies at the same time. The parousia and the ensuing ‘new earth and new heavens’ may relate to our corner of the universe only.

90 For elements of continuity and discontinuity, see Russell, ‘Eschatology and Physical Cosmology,’ 299-300.

91 In his Table Talk: WATi 3:276 (#3339) (June-September 1533).

92 On the history of this saying, see Martin Schloemann, *Luthers Apfelbäumchen? Ein Kapitel deutscher Mentalitätsgeschichte seit dem Zweiten Weltkrieg* (Göttingen: Vandenhoeck & Ruprecht, 1994).