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Search for Extraterrestrial Intelligence and the Christian Doctrine of Redemption

The history of discussion in the ancient, medieval, and modern periods of the theological implications of the possible existence of extraterrestrial beings is reviewed and related to modern scientific interests. In the contructive section of the paper it is argued that the Pauline "cosmic Christology" of Colossians 1:15–20 makes it unnecessary to postulate additional incarnations as atonements in order to conceptualize the redemption of any extraterrestial beings that might exist elsewhere in the universe. This conclusion is consistent with earlier opinions expressed by Thomas Aquinas and Thomas Chalmers, but is based on a more developed exegetical argument from biblical theology.

Key words: Extraterrestrials; Christology; incarnation; redemption.

In August of 1996 scientists at the NASA Space Center in Houston, Texas made the dramatic announcement of the discovery of what they believed to be evidence of primitive life on early Mars.[1] The martian meteorite ALH84001 recovered in Antarctica contained microscopic carbonate globules that resembled bacteria found on earth. Although many in the scientific community considered the evidence inconclusive,[2] the announcement sparked a new surge of popular and scientific interest in the search for extraterrestrial life and intelligence.

A number of recent authors have suggested that the discovery of intelligent extraterrestrial beings[3] would have momentous consequences for man's view of himself and his place in the universe. The noted philosopher and historian of science Ernan McMullin of Notre Dame University has expressed surprise that this issue has not received more attention from theologians in this century. In light of the new vistas of thought opened up by the discoveries of twentieth century astronomy, McMullin believes that '. . . a religion which is unable to find a place for

1 David S. MacKay, Everett K. Gibson, Jr., et. al., 'Search for Past Life on Mars: Possible Relic Biogenic Activity in Martian Meteorite ALH84001,' *Science* 273 (16 August 1996): 924–930.

2 Cf. Monica Grady, Ian Wright, and Colin Pillinger, 'Opening a Martian Can of Worms?' *Nature* 382 (15 August 1996): 575–576.

3 In this discussion 'extraterrestrial intelligence' will be used to refer to any *embodied*, intelligent beings other than *Homo sapiens* that might exist elsewhere in the universe. The existence of other *spiritual* intelligences referred to in the Bible (angels, demons, principalities, powers, and so forth) is assumed.

extraterrestrial persons in its view of God and the universe might find it difficult to command terrestrial assent in the days to come.'

The theological issues potentially at stake are enormous: 'Could one still take the *Christian doctrines of incarnation and redemption* [emphasis added] seriously if there were millions of developed civilizations dotted throughout the universe?', he pointedly asks. McMullin clearly sees that the possibility of extraterrestrial intelligence inevitably poses the question of the *uniqueness and finality* of the person and work of Christ and the Christian scheme of redemption revealed in the Bible. If extraterrestrial beings do exist elsewhere in the universe, and they are alienated from God, how are they related—or are they in any way related—to the 'once for all' incarnation and atoning death of Christ in the New Testament? Would Jesus Christ need to become incarnate again and die again to secure their redemption? According to McMullin, '. . . theologians have been silent on these issues, no doubt feeling that the problems of earth are more than enough to occupy them.'[4]

The issues being raised here are speculative in nature, but not entirely hypothetical. To date there have been over 100 projects related to what is now called SETI ('Search for Extraterrestrial Intelligence'), in many different countries, with sophisticated scientific instrumentation.[5] Thus far, none of these projects has found any evidence of intelligent life elsewhere in the universe.

Despite these null results of SETI projects to date, the theological issues posed are still worth exploring. Stanley Jaki, another noted historian is surely correct in claiming that the Christian theist has the intellectual freedom to look at the question of extraterrestrial intelligence as a 'truly open question.' No one has the right to prescribe to God *a priori* '. . . to create intellects everywhere or to limit his power to do so.'[6] Both possibilities would be consistent with divine omnipotence and the revealed character of God.

Irrespective of the empirical results of present and future SETI projects, the questions raised by McMullin and others are worth pursuing as theological 'thought experiments' that may yield new and fruitful perspectives on familiar biblical doctrines. The central purpose of this paper will be to argue, after reviewing some of the history of prior discussions, that the Pauline 'cosmic Christology' of *Colossians* 1:15–20 is

4 Ernan McMullin, 'Persons in the Universe,' *Zygon* 15:1 (March 1980): 69–89 at 69, 88. Actually, it is incorrect to say that 'theologians have been silent on these issues.' McMullin seems to be unaware of the evidence presented in the later studies of Steven J. Dick and Michael J. Crowe [cited below] that shows that these and related issues have been discussed by Christian theologians since the third century A.D.

5 Woodruff T. Sullivan, 'Alone in the Universe?' *Nature* 380 (21 March 1996): 211. Easterbrook, op. cit., p.25, notes that typical summaries of the results of these searches tend to read like this: ' "Searched 674 nearby stars, found nothing.' 'Searched five closest galaxies, found nothing.' 'Searched all sky, found nothing." '

6 Stanley L. Jaki, *Cosmos and Creator* (Edinburgh: Scottish Academic Press, 1980), p.125.

sufficiently expansive to encompass the redemption of any intelligent beings that could exist elsewhere in the universe.

Extraterrestrial Life: Premodern Discussions

While the term 'extraterrestrial life' originated in the twentieth century, the concept of 'other worlds' or a 'plurality of worlds' dates back to the ancient Greeks.[7] The atomist Democritus (c.460–370 B.C.) had speculated on the existence of a plurality of worlds. In the fourth century B.C. Epicurus had asserted the existence of an infinity of worlds. Based on his atomistic philosophy, Epicurus had hypothesized that the motions of an infinity of atoms would produce an unlimited number of worlds. The Roman Stoic philosopher Lucretius was also a pluralist. In his treatise *De rerum naturae* he postulated the existence of other worlds based on the idea of the uniformity of nature and a 'principle of plenitude': what is *possible* will be realized somewhere; other worlds are possible; consequently we would expect their instantiation. This 'principle of plenitude' was destined to play an influential role in speculations about other worlds and extraterrestrial life down to the present day.

Arrayed against these pluralistic conjectures was the formidable opinion of Aristotle, who in his treatise *De caelo* argued for the existence of only one world. Just as a circle can have only one centre and one circumference, so the universe must have only one centre if it is to be an ordered whole.[8]

Since the idea of a plurality of worlds was associated with the materialistic philosophies of the Greek atomists, it is not surprising that early Christian writers opposed such conjectures. Pluralism was rejected by Hippolytus of Rome (3rd century) and by Eusebius of Caesarea (c.260–c.340).[9] In book eleven of the *City of God* Augustine rejects the speculations of Epicurus in these matters.[10] The atomistic philosophies of Democritus and Epicurus were seen to be inconsistent with the biblical doctrines of creation and divine providence and as essentially atheistical in character.

During the middle ages the writings of Aristotle became more readily available in Europe through the translations of the Arabic philosophers. Scholastic theologians such as Albertus Magnus and his most famous

7 For the following references I am indebted to the fine historical studies by Steven J. Dick, *Plurality of Worlds: The Origins of the Extraterrestrial Life Debate from Democritus to Kant* (Cambridge: Cambridge University Press, 1982), and Michael J. Crowe, *The Extraterrestrial Life Debate: 1750–1900* (Cambridge: Cambridge University Press, 1986). In the context of early Greek discussions 'worlds' (*cosmoi*) referred to a system involving an earth, planets, and fixed stars; the issue of extraterrestrial *intelligent life* was rarely if ever considered.

8 Aristotle, De Caelo, I,8,277a.

9 Hippolytus, *Philosophumena*, Bk.I; Eusebius, *Praeparatio Evangelica*, xv. These references are found in Grant McColley, 'The Seventeenth-Century Doctrine of a Plurality of Worlds,' *Annals of Science 1* (1936): 385-430 at 393. McColley includes a helpful review of ancient and medieval opinion.

10 Augustine, *City of God*, XI, 5.

student, Thomas Aquinas, discussed the question of the existence of other worlds in the light of Aristotle's arguments. Albertus went even so far as to say that the issue of the plurality of worlds was 'one of the most wondrous and noble questions in Nature,' but, in agreement with Aristotle, rejected the actual existence of other *cosmoi*.[11]

In the *Summa Theologica* Aquinas considers the question, 'Whether There Is Only One World?' Appealing to the divine omnipotence, Aquinas argues that, hypothetically, God could have created many worlds as an expression of his power: 'He could create many, since His power is not limited to the creation of one world.' Nevertheless, in actuality, God has chosen to create only one world. 'The very order of things created by God shows the unity of the world,' according to Thomas. 'Whatever things come from God, have relations of order to each other . . . Hence it must be that all things should belong to one world.'[12] While Aquinas' reasoning is not transparent here, he appears to reflect something of the 'one circle . . . one centre' thinking of Aristotle. The orderly processes of nature, Aquinas believes, reflect the one God and imply that that the creation is one unified *cosmos* rather than a set of unrelated worlds.[13]

Elsewhere in the *Summa* Aquinas addresses the question, 'Whether It Was Necessary for the Restoration of the Human Race that the Word of God Should Become Incarnate?' For Aquinas this question was raised by prior scholastic debates rather than by the issue of other worlds, but, as will be seen below, this question of the *necessity of the incarnation* has considerable relevance to the issue of extraterrestrial intelligences. Aquinas concludes that the incarnation was not necessary in an absolute sense, 'For God of His omnipotent power could have restored human nature in many other ways.' [These 'other ways' are not specified.] But the incarnation was necessary in a relative sense, in that it was fitting and useful to man. The incarnation of the Son of God was necessary in this relative sense to strengthen our faith, hope, and love, and to aid our fuller participation in the divine life.[14] While he was not directly addressing the issue, it seems clear that Aquinas would have given a negative answer to the question, 'Would Christ have to become incarnate again in some other world in order to redeem a fallen race of alien beings?' God's 'omnipotent power' could restore them in 'many other ways.'

William Vorilong (died 1464), whose commentary on the *Sentences* of Peter Abelaard was frequently quoted in the middle ages, was apparently the first Christian theologian to explicitly relate the issue of 'other worlds' to the doctrines of original sin and the atonement. Vorilong is not going beyond his contemporaries when he suggests that God in his omnipotence

11 Cited in Crowe, op. cit., p.552.
12 Aquinas, *Summa Theologica*, Pt.I, Q.47, art.3; tr. Fathers of the English Dominican Province (London: R. & T. Washbourne, 1912), p.260.
13 Similar ideas appear to be at work in contemporary discussions of SETI and the origins of life, when it is commonly assumed that the laws of physics and chemistry would be the same throughout the universe.
14 Aquinas, *Summa Theologica*, Pt.III, Q.1, art.2; tr. Fathers of the English Dominican Province (London: R. & T. Washbourne, 1913), p.6.

could actually have made an infinity of worlds. Vorilong goes further, however, when he states that other beings on these worlds, if they existed, though created by God, would not share Adam's fallen nature. And, as to the question 'whether Christ by dying on this earth could redeem the inhabitants of another world,' Vorilong answered that 'he is able to do this even if the worlds were infinite, but it would not be fitting for Him to go into another world that he must die again.'[15] For Vorilong, the already-accomplished incarnation and death of Christ on earth are sufficient to provide for the redemption of any beings that might exist in other worlds.

In the sixteenth century the Lutheran reformer Phillip Melancthon reflects awareness of the issues raised by the new Copernican astronomy. In his *Initia Doctrina Physica* (1567) he asserted that if there were other worlds, Christ would not die and rise again there. Melancthon appears to believe that to accept the actual existence of a plurality of worlds would be inconsistent with the Christian doctrine of the atonement.[16]

The Modern Period: From the Enlightenment to the Twentieth Century

Subsequent to the epochal discoveries of Galileo in the seventeenth century, the Christian church was faced with the challenge of incorporating an enlarged view of the universe into its worldview and biblical interpretation. One of the critics of Christianity who was not slow to see these challenges and who attempted to use the new science for his own polemical purposes was Thomas Paine, the radical activist and pamphleteer who was involved in both the American and French revolutions. His widely read book *The Age of Reason* (1794) was one of the most vehement attacks on the Christian religion and the Bible published up to that time. In Paine's mind, the vast universe discovered by the astronomers showed how outmoded was the biblical picture in the light of modern knowledge:

> Though it is not a direct article of the Christian system, that this world is the whole of the habitable creation, yet it is so worked up . . . from what is called the Mosaic account of the Creation, the story of Eve and the apple . . . that to believe that God created a plurality of worlds, at least as numerous as what we call stars, renders the Christian system of faith at once little and ridiculous, and scatters it in the mind like feathers in the air. The two beliefs cannot be held together in the same

15 Cited by Grant McColley and H. W. Miller, 'Saint Bonaventure, Francis Mayron, William Vorilong, and the Doctrine of a Plurality of Worlds,' *Speculum* 12 (1937): 386-389 at 388.

16 McColley, 'The Seventeenth-Century Doctrine of a Plurality of Worlds,' p.413. The views of the heterodox Roman Catholic monk Giordano Bruno (1548–1600), who advocated an infinite universe containing an infinite number of worlds, are discussed in John Hedley Brooke, *Science and Religion: Some Historical Perspectives* (Cambridge: Cambridge University Press, 1991), pp.39–40; 73–74.

> mind, and he who thinks that he believes both has thought but little of either.[17]

Paine was throwing down the gauntlet to Christian believers. In his view one could believe in either an expanded universe with many worlds or the traditional biblical cosmology, but not both at the same time. Paine's challenge was to be taken up in various ways by Christian apologists in the nineteenth century.

During the 1800s a number of prominent clergymen and scientists debated the issue of life on other worlds and its theological implications. The popular pastor and preacher of the Free Church of Scotland, Thomas Chalmers, preached a series of sermons later published under the title *Astronomical Discourses* (1817). Chalmers was not sure if there were other fallen beings elsewhere in the universe. He suggested, however, that just as the effects of the Cross on earth were not diminished by time, so these effects might also extend outward in space to other planets. For all we know, Chalmers mused, 'the plan of redemption may have its influences and its bearings on those creatures of God who people other regions.'[18]

The distinguished Scottish scientist David Brewster (1781–1868) agreed with Chalmers. In his book *More Worlds than One* (1854) he saw no reason that the 'force of the atonement' should diminish with distance or not extend 'to the planetary races in the past . . . and to the planetary races in the future' (pp.149, 150).

The Scottish Presbyterian scholar William Leitch (1818–64), a graduate of Glasgow University, moved to Canada in 1860 to become the principal of Queen's College, Kingston. In his book of 1862, *God's Glory in the Heavens*, Leitch surveyed the astronomical discoveries known at the time and reflected discerningly on 'the religious questions to which they give rise' (p.v). Leitch ruled out the idea of multiple incarnations for Christ, believing that such would be inconsistent with scripture, which declares that 'He will forever bear his human nature.' He believed that scripture was also inconsistent with the idea that the atonement might extend to other races of fallen beings. Leitch seemed to be implying, in effect, that redemption was required only by earthlings (p.329).

The Twentieth Century: Scientific Discussions

Since the nineteenth century the extraterrestrial life debate has been dominated by scientists rather than by philosophers and theologians, as in earlier centuries. The current dominance of scientific categories reflects not only the general secularization of educated thought in much of the West since the Enlightenment, but a number of specific intellectual developments and scientific discoveries as well. The widespread acceptance of the Darwinian paradigm in biology, the astronomical discoveries of

17 In *The Complete Writings of Thomas Paine*, Philip S. Foner, ed. (New York: Citadel Press, 1945), pp.498, 499.

18 These references from the nineteenth-century writers are found in Michael Crowe, op. cit., pp.187, 305, and 452.

Hubble and others which dramatically enlarged the known universe, the discovery of the structure of the DNA molecule by Crick and Watson, the synthesis of pre-biotic molecules by Harold Urey and others, and the new tools of radio astronomy all contributed to a belief held by significant numbers of scientists that life exists elsewhere in the universe and that it is worthwhile to search for signs of it.[19]

Scientific opinion in this century has been highly divided on the question of the actual existence of extraterrestrial intelligence. Some physicists and astronomers (e.g., Carl Sagan, Paul Davies) are very optimistic in this regard, while most evolutionary biologists (e.g., Dobzhansky, Mayr, Gould) have been quite skeptical, believing that the emergence of intelligent life on earth was an extremely improbable event, unlikely to have been duplicated elsewhere in the universe. An 'ETI optimist' such as Davies bases his beliefs not only on the premise that the laws of physics and chemistry are uniform thoughout the universe, but also on the hypothesis that matter may have 'self-organizing' properties that make the emergence of life likely elsewhere in the cosmos.[20]

Such optimistic assessments about the likelihood of intelligent life are rejected by many biologists, astronomers, and physicists. The astronomer Brandon Carter, who coined the term 'anthropic principle,' believes that 'civilizations comparable with our own are likely to be exceedingly rare,' and the chances of being able to communicate with any alien intelligences exceedingly remote.[21] An evolutionary paleontologist such as Stephen J.

19 Recent discussion of the extraterrestrial life debate, focusing on scientific considerations, include Paul Davies, *Are We Alone?* (London: Penguin Books, 1995); Jean Heidmann, *Extraterrestrial Intelligence*, tr. Storm Dunlop (Cambridge: Cambridge University Press, 1995); Edward Regis, Jr., ed., *Extraterrestrials: Science and Alien Intelligence* (Cambridge: Cambridge University Press, 1985).

20 For Davies, see *Are We Alone?*, cited above, and also, *The Cosmic Blueprint* (London: William Heinemann, 1987). On the notion of matter as 'self-organizing,' Davies has followed the ideas of Stuart Kauffman, *The Origins of Order: Self-Organization and Selection in Evolution* (Oxford: Oxford University Press, 1993). For other writers who are optimistic concerning ETI, see I. S. Shklovskii and Carl Sagan, *Intelligent Life in the Universe* (San Francisco: Holden-Day, 1966), a co-operative book by Sagan and a Soviet astronomer; Carl Sagan, *The Cosmic Connection: an Extraterrestrial Perspective* (London: Hodder & Stoughton, 1973); Philip Morrison, John Billingham, and John Wolfe, eds., *The Search for Extraterrestrial Intelligence*: Prepared for the National Aeronautics and Space Administration (New York: Dover Publications, 1979; 1977), recommending NASA support for SETI; G. F. R. Ellis and G. B. Brundit, 'Life in the Infinite Universe,' *Quarterly Journal of the Royal Astronomical Society* 20 (1979): 37–41, arguing that an infinite, unbounded universe would make it probable that there would be infinitely many worlds [!] with intelligent beings; Francis Jackson and Patrick Moore, *Life in the Universe* (London: Routledge & Kegan Paul, 1987), cautiously suggesting that it is 'probable' that there are many other planets in the universe with 'carbon-based organisms.'

21 Brandon Carter, 'The Anthropic Principle and Its Implications for Biological Evolution,' *Philosophical Transactions of the Royal Society of London* A 310 (1983): 347-363 at 354. As it was first used, the 'anthropic principle' called attention to the fact that the emergence of intelligent life on earth (or anywhere else in the universe) was sensitively dependent on the values of certain fundamental constants of nature, such as the strength of the gravitational force, the charge on the electron, the 'strong' nuclear force, and so on. Were these values different from their present ones, life presumably would not have emerged.

Gould would deny any notion of matter's 'self-organizing' tendencies, and would see the actual evolutionary pathway leading to *Homo sapiens* as completely fortuitous and unlikely to be repeated in any other 'roll of the evolutionary dice.'[22] The astronomer Fred Hoyle has argued that the emergence of life on earth is so improbable that the first seeds of life must have been brought to earth from elsewhere in the galaxy by a meteorite or a comet.[23] The astronomers John D. Barrow and Frank Tipler examine the evidence and conclude that '. . . it is very likely that we are the only intelligent species now existing in our galaxy.'[24]

The fact that there are such great divergences of opinion within the scientific community about the likelihood of the existence of extraterrestrial intelligence suggests that in this field speculations and hypotheses are 'under-determined by the data.'[25] This paper does not attempt to resolve the scientific arguments, but proceeds as a 'thought experiment' addressing the theological issues arising.

The Twentieth Century: Theological Discussions

Compared to the nineteenth and earlier centuries, there has been relatively little theological attention given to the possible implications of intelligent life elsewhere in the universe. This is not entirely surprising, since for the last hundred years or so a great amount of the church's energies have been spent in responding to the intellectual challenges posed by the ideas of Darwin, Marx, and Freud; the historical criticism of the Bible; the growing awareness of world religions and religious pluralism; and the sociological impact of industrialization, urbanization, population growth, changing sexual mores, and two world wars. Theologians indeed have had enough problems on earth to deflect their attention from extraterrestrial concerns!

One of the exceptions to this general lack of interest in ETI is represented by the 1952 book by the Oxford mathematician E. A. Milne, *Modern Cosmology and the Christian Idea of God*. The ideas in this book were first presented as the Cadbury Lectures at the University of Birmingham in 1950. Milne does not engage in an extended analysis of the theological issues raised by modern cosmology, but he does note that some Christians

22 Stephen J. Gould, *Wonderful Life* (New York: Norton, 1989).

23 Fred Hoyle, *The Intelligent Universe* (London: Michael Joseph, 1983). Francis Crick, the co-discoverer of the structure of the DNA molecule, in his book *Life Itself: Its Origin and Nature* (London: MacDonald & Co., 1981) has put forward as an apparently serious suggestion, the 'directed panspermia' hypothesis: microorganisms were sent to earth in unmanned spaceships by a higher civilization [!]. Crick admits in suggesting this hypothesis that the evidence is thin and the chain of reasoning very tenuous, so that we must 'allow our imagination a free hand,' p.117.

24 John D. Barrow and Frank J. Tipler, *The Anthropic Cosmological Principle* (Oxford: Oxford University Press, 1986), chpt. 9, 'Argument Against the Existence of Extraterrestrial Life,' pp.576–612 at 576.

25 As Woodruff Sullivan has noted, op. cit., p. 211, 'It is indeed sobering that, after almost four decades of scientific investigation into extraterrestrial life, the field of exobiology (or bioastronomy) thrives despite its inability to demonstrate that its subject matter even exists.'

have felt a difficulty with the concept of a vast universe with a possibly infinite number of planets, especially in relation to the biblical teaching concerning the Incarnation. Was the Incarnation of which the New Testament speaks a unique event, '. . . or has it been re-enacted on each of a countless number of planets?' Milne's answer is that a Christian would '. . . recoil in horror from such a conclusion.' One could not imagine '. . . the Son of God suffering vicariously on each of a myriad of planets.'[26]

Milne asserts that the Incarnation and Atonement must be unique historical events, but does not give biblical arguments for his conclusion. He suggests that a scenario involving multiple incarnations and atonements can be avoided by supposing that our planet is unique. Then what of the possiblility of other intelligent beings on other planets that might be in need of redemption? He admits that we '. . . are in deep waters here, in a sea of great mysteries,' but suggests that the new technology of radio astronomy may provide an answer. It may be possible one day to establish radio communication with other beings in the universe, transmit the knowledge of Christian redemption to other planets, and so '. . . the re-enactment of the tragedy of the crucifixion in other planets would be unnecessary.'[27]

In his Bampton Lectures of 1956, published under the title *Christian Theology and Natural Science*, E. L. Mascall responds directly to some of the theological points made by Milne in his earlier lectures. If for Milne the crucifixion of Christ is an event of unrelieved horror, how can we tolerate the idea of God ordaining it even once, asks Mascall. On the other hand, if the horror is not unrelieved, '. . . but is changed into victory and glory, why cannot the change happen again elsewhere?'[28]

Mascall concludes somewhat tentatively that there are no conclusive theological reasons to exclude other incarnations and atonements. If the Incarnation involved no diminution in deity, why could not the Son of God, in principle, assume other created natures? For Mascall, there would seem to be no compelling reason why 'other finite rational natures should not be united to that person too.'[29] This raises the somewhat bizarre image not of the historic 'God-man,' but of a 'bionic Redeemer' who unites to his divine nature not only the nature of *Homo sapiens* but the natures of many other sentient, embodied creatures as well.

Mascall admits that the entire subject is very speculative, and that the relationship of other beings to God in creation and redemption may be so different as to not require an incarnation at all. Nevertheless, he sees considerable value in such speculations. 'Theological principles tend to become torpid for lack of exercise,' he writes, 'and there is much to be said

26 E. A. Milne, *Modern Cosmology and the Christian Idea of God* (Oxford: Clarendon Press, 1952), p. 153.
27 Ibid., pp. 153, 154.
28 E. L. Mascall, *Christian Theology and Natural Science* (London: Longmans, Green, and Co., 1956), p. 39.
29 Ibid., p. 41.

for giving them now and then a scamper in a field where the paths are few and the boundaries are undefined.'[30]

In 1958 C. S. Lewis published an article, 'Religion and Rocketry,' in which he reflected on the theological significance of the existence of intelligent life on other planets.[31] Lewis was skeptical that such beings actually existed, and even if they did, that their discovery would have much lasting impact on Christian theology. Nevertheless, Lewis was of the opinion that if there were such spiritual intelligences, and if they were fallen, it might be conceivable that God would provide for their redemption in some way other than through the incarnation and atonement provided by Christ in earthly history. He speculated that there might be a hint in Romans 8:19–23, where the Apostle Paul looks forward to the redemption of the whole creation, that the redemption of humankind might have cosmic meaning for other fallen races.[32] Lewis, however, did not relate his speculations to specific texts in the New Testament dealing with the incarnation and the atonement. He seemed to be more concerned about the practical rather than with the theoretical problems that could arise from the discovery of intelligent life elsewhere in the universe. Lewis was concerned that humans, who had such a long history of exploiting one another, might also be tempted to exploit and abuse other creatures that might exist elsewhere in the universe.[33]

A Constructive Proposal: Colossians 1:15–20 and Cosmic Redemption

Having surveyed some of the history of theological and scientific speculation on the subject of extraterrestrial intelligence, one would be inclined to agree with Mascall's judgment that the entire area is one in which the 'paths are few and the boundaries . . . undefined.' In this final section of the paper a proposal will be presented that attempts to give some of these 'paths and boundaries' greater definition by calling attention to a New Testament text that has received inadequate attention in this debate, namely, Colossians 1:15–20. It is the thesis of this proposal that the Christology of Colossians is sufficiently vast in scope to provide a basis for the redemption of fallen beings anywhere in the universe, without the need for any additional incarnations or atonements.

For the purposes of this discussion the Pauline authorship of Colossians is assumed, and no attempt is made to choose between the various reconstructions by New Testament scholars of the particular heresies that

30 Ibid., p. 45.
31 C. S. Lewis, 'Religion and Rocketry,' pp.86–95 in *Fern-Seed and Elephants and Other Essays on Christianity*. Walter Hooper, ed. London: Fontana, 1975. This essay was originally published under the title 'Will We Lose God in Outer Space' in *Christian Herald*, vol.81, April 1958.
32 Lewis, op. cit., p.90.
33 Ibid., p.92.

are reflected in the epistle.[34] The proposal being made here does not depend on any one particular position the reader might wish to adopt on matters of authorship and setting.

It is evident that in the Christological hymn of Colossians 1:15–20 redemption is cosmic in scope.[35] The fact that in the space of six verses there are seven occurrences of the words 'all', 'all things,' or 'everything' is a clear indication that the redemptive effects of the atoning death of Christ are not limited to humanity, but extend in some way to the entire created universe. The apostle stresses in the most emphatic way the absolute supremacy of Christ in every realm of space, time, and human experience. This supremacy of Christ is asserted in creation (vv.15, 16), providence (v.17), incarnation (v.19), reconciliation (v.20), resurrection (v.18b), and in the church (v.18a).

Christ is supreme over the entire created order, since he is the image (*eikon*; cf. Heb. 1:3) of the invisible God, the outward manifestation of the divine glory and nature, the 'firstborn' (*prototokos*) of all creation (v.15). As the firstborn son has preeminence in the family order, so Christ has preeminence in the order of creation. His supremacy extends not only over the visible things of the physical universe, but over the invisible order of spiritual intelligences as well. All things whatsoever—from quarks to archangels—were created by him and for him; Christ is both the efficient and the final cause of the entire created order (cf. Jn.1:3; 1 Cor.8:6).[36]

34 For discussion of the authorship, dating, and setting of Colossians the following commentaries may be consulted: Peter T. O'Brien, *Colossians Philemon* (Waco, TX: Word Books, 1982); Markus Barth and Helmut Blanke, *Colossians: A New Translation with Introduction and Commentary* [Anchor Bible Series], tr. Astrid B. Beck (New York: Doubleday, 1994); Murray J. Harris, *Colossians and Philemon* (Grand Rapids, MI: Eerdmans, 1991); Eduard Lohse, *A Commentary on the Epistles to the Colossians and to Philemon*, tr. by William J. Poehlmann and Robert J. Karris (Philadelphia: Fortress Press, 1971); J. B. Lightfoot, *Saint Paul's Epistles to the Colossians and to Philemon* (London: Macmillan and Co., 1897). Detailed discussions concerning the nature of the Colossian heresy are also found in the monographs of Thomas J. Sappington, *Revelation and Redemption at Colossae* (Sheffield, U.K.: Sheffield Academic Press, 1991) ['ascetic-mystical piety' in Jewish apocalypticism]; Richard E. DeMaris, *The Colossian Controversy: Wisdom in Dispute at Colossae* (Sheffield, U.K.: Sheffield Academic Press, 1994) [Hellenistic Jewish interpretations of Jewish tradition heavily influenced by the Greek philosophy of Middle Platonism]; Clinton E. Arnold, *The Colossian Syncretism: The Interface Between Christianity and Folk Belief at Colossae* (Tubingen: J.C.B. Morh {Paul Siebeck}, 1995) [a syncretistic combination of elements of Christianity and folk religions of Asia Minor].

35 Most New Testament scholars believe that this passage is rooted in an early Christian hymn that was taken over and modified by the apostle. For discussion of the relationship of this material to other elements of early Christian tradition, see John G. Gibbs, *Creation and Redemption: A Study in Pauline Theology* (Leiden: E.J. Brill, 1971), pp. 92–114. For helpful insights on the matter of the 'cosmic scope of redemption' in Pauline Christology, I am indebted to the articles by Gibbs, 'The Cosmic Scope of Redemption According to Paul,' *Biblica* 56 (1975): 13–29, and 'Pauline Cosmic Christology and Ecological Crisis,' *Journal of Biblical Literature* 90 (1971): 466–479.

36 Gibbs calls attention to the fact that the relating of creation and redemption in the Colossian Christological hymn is consistent with the epistolary context (cf. 1:6,21,23; 2:9f.; 3:l0) and other Pauline texts (Rom.8:21,22; 10:6f.; I Cor.1:24; II Cor.4:4; 5:19): 'Cosmic Scope of Redemption,' p.21.

Christ is preeminent in the order of divine providence (v.17). Not only did Christ create all things; in him 'all things hold together.' For the apostle Paul, the Redeemer is also the 'Sustainer and Unifier of the Universe.'[37] The laws of physics and chemistry which give order and coherence to the material creation are not autonomous principles, but are expressions of the divine will manifested in and executed through Christ. This providential sustaining action by the Son of God continues moment by moment in the present; without it, the universe would be subject to dissolution and nonbeing. Excluded here is any thought of a deistic 'watchmaker universe' created by God in the past and then abandoned to its own devices. The divine Son of God is not only transcendent in authority over the entire created order, but also present *immanently* within each moment of time and every physical process and entity.

In the Colossian hymn the supremacy of Christ is manifested in both his pre-existent and existent states.[38] In his incarnation 'all the fullness' (*pan to pleroma*, v.19) of the divine essence was embodied in the person of Christ.[39] This apostolic assertion of the unqualified deity of Jesus Christ was in later centuries to find classic creedal formulation in the Nicene (*homoousios*, 'same nature') and Chalcedonian statements ('fully God, fully man'). The complete supremacy of the Redeemer in his historical career has also been manifested in his resurrection ('firstborn from the dead,' v.18b) and subsequent exaltation to be head of the church (v.18a).

The supremacy of Christ in creation, providence, and incarnation finds it's goal and climax in his atoning death on the cross, through which God has achieved his purpose 'to reconcile all things' (*apokatallaksai ta panta*, v.20) to himself. That the impact of this reconciling death is not limited to the terrestrial world of humanity is made clear by the further reference in the verse to 'all things, whether upon the earth or in the heavens.'[40] This cosmic redemption has been achieved in principle, in an objective sense, through the one historic event of the shedding of the blood of Christ on the

37 O'Brien, *Colossians, Philemon*, p.48.

38 For a study of the pre-existence of Christ in recent scholarship, see R.G. Hamerton-Kelly, *Pre-Existence, Wisdom and the Son of Man* (Cambridge: SNTS Monograph Series 21, 1973).

39 At this point an observation could be made with respect to the reference to the incarnation by the writer of Hebrews in Heb.2:14, 'he likewise partook of the same nature.' This text could be understood as asserting not an *absolute* necessity for an incarnation to achieve redemption, but rather as emphasizing the point that because Christ and his people 'share in flesh and blood,' Christ can be a merciful and faithful high priest who can sympathize with his people, having suffered and been tempted as they: vv.17, 18.

40 The commentators are quite agreed on the cosmic scope of the reconciliation spoken of in this verse. So, for example, Lightfoot, op. cit., p.158: 'The whole uniiverse of things, material as well as spiritual, shall be restored to harmony with God'; Arnold, op. cit., p.269, 'Christ's death is the basis for this restoration of harmony throughout heaven and earth' ; Lohse, op. cit., p.59 n.202, 'the author of Col. utilizes the concept of a reconciliation which encompasses the whole of the universe.' This is consistent with the thought of Ephesians 1:10, where it is said that it is the divine purpose to bring everything in heaven and on earth into a unity in Christ. Lohse also notes, p.60 n.205, that this cosmic reconciliation of heaven and earth is quite the opposite of Gnostic concepts, for which the reconciliation of the material world with the heavenly would be unthinkable.

cross (v.20b), though the full effects of this act will not be manifested until the end of history. The 'reconciliation of all things' spoken of here probably has a broader sense which includes the 'pacification' or 'subjugation' of rebellious powers, rather than the more usual sense of the restoration of friendly relations between God and his redeemed people. Such a notion of 'pacification,' as P. T. O'Brien has noted, '. . . was not strange to those living in the Mediterranean region under Roman rule of the first century A.D.'[41]

It now remains to make some applications of this Pauline 'cosmic Christology' to the question of possibly-existent extraterrestrial beings who could be alienated from God. What can be said about their possible redemption in the light of Col.1:15–20?

It seems clear that the references to 'all things' in this passage are so comprehensive in scope as to include any extraterrestrial intelligent beings that may exist elsewhere in the universe.[42] Within the framework of the apostle's Christology, such beings would be understood as being created by the pre-existent Christ (v.16), ultimately for the purpose of manifesting his divine glory and authority (cf. v.16b); being maintained in their moment-by-moment existence by Christ (v.17); and being reconciled (or, 'pacified, subjugated') to God through the blood of Christ shed on the cross (v.20). This one, completed event on earth (the Cross) has a redemptive impact that is not limited to the human, terrestrial sphere, but which in fact extends throughout the universe, bringing back into relationship with God '*all things* on earth or . . . in heaven.'

If the question arose as to how more specifically the relationship of Christ's atoning work to the 'reconciliation' of any alienated extraterrestrials might be understood, it could be suggested that an extension of the concept of 'federal headship' in traditional Reformed covenant theology could provide such a framework. In chapter eight of the Westminster Confession of Faith (1647), for example, which speaks of 'Christ the Mediator,' it is stated that Christ in his sacrifice of himself '. . . fully satisfied the justice of his Father, and purchased . . . reconciliation . . . for all those whom the Father hath given him.' The Confession further states that the redemptive benefits of the death of Christ were not limited by time, but were '. . . communicated unto the elect, in all ages successively

41 O'Brien, *Colossians and Philemon*, p. 56. So also F.F. Bruce: With respect to the rebellious spiritual powers, '. . . reconciliation applied to them means more of what is understood as pacification, the imposing of peace, something brought about by conquest. There is thus a close association between the portrayal of Christ as Reconciler in the Christ hymn [Col.1:15–20] and the portrayal of Christ as Conqueror elsewhere [2:15] in the letter': 'Christ as Conqueror and Reconciler,' *Bibliotheca Sacra* 141 (1984): 291–302 at 293.

42 One would have to qualify the statement of Rodney Clapp in 'Extraterrestrial Intelligence and Christian Wonder,' *Christianity Today* 27:7 (1983): 10: 'The Bible concerns the human species, and we need not apologize that it addresses 'only' humans.' In the light of Col.1:15–20 it would be more accurate to say that while the biblical doctrine of reconciliation is primarily concerned with humans, it is not limited exclusively to humans.

from the beginning of the world.'[43] If the atonement can be understood as not being limited by time, it can just as readily be understood as not being limited by space or distance. Christ assumed in the incarnation a true and complete human nature that he might represent man as the covenant head of a redeemed people (Rom.5:12–21; 1 Cor.15:45–49). By extension, it could be postulated that the human nature of *Homo sapiens* could be designated by God to represent the nature of all sentient, embodied beings. God is free in his sovereignty to impute the merits of the death of Christ not only to elect *humans* but to any 'elect' beings whatsoever.[44]

The conclusion of this argument, then, is that the Pauline Christology of Col.1:15–20 makes it unnecessary to postulate additional incarnations or atonements in order to conceptualize the possible reconciliation of any alienated extraterrestrials elsewhere in the universe. The once-for-all incarnation and death of Christ on the Cross has already provided the basis for such a reconciliation (vv.19, 20). This conclusion is consistent with the earlier opinions of Aquinas, Vorilong, Chalmers, and Milne, but is based on a more developed exegetical argument from biblical theology.

Finally, it can be seen that this line of argument addresses the challenge to Christian theology posed over two centuries ago by Thomas Paine. The author of *The Age of Reason* concluded incorrectly that modern discoveries of the universe's vast dimensions made the biblical scheme of redemption outmoded and untenable. Had Paine given closer attention to the capacious Christology and cosmology of Colossians 1:15–20, he might have discovered there a cosmic redemption, an atonement by Christ in which God had chosen '. . . to reconcile to himself *all things*, whether . . . on earth . . . or in heaven, making peace through his blood, shed on the cross.' In modern cosmology, to be sure, the earth no longer occupies a central place spatially. But spiritually, in a post-Hubble universe, when that enlarged universe is viewed in the light of the Pauline 'cosmic Christology,' the place of *Homo sapiens* is if anything more central, since the picture of God's redemptive purposes is seen to be painted on a breathtakingly larger canvas.

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43 Westminster Confession of Faith (1647), Chapter Eight, paragraphs v, vi; in Philip Schaff, *The Creeds of the Evangelical Protestant Churches* (London: Hodder and Stoughton, 1877), p.621.

44 Neither this hypothesis nor the prior discussion of Col.1:20 should be construed as an argument for 'universalism' or 'universal salvation.'