

# ***Paradise Lost* and the Dream of Other Worlds**

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## **Abstract**

The doctrine of plural worlds is an ancient concept which received a new lease on life as a result of developments in astronomy in the sixteenth century. In his epic *Paradise Lost*, John Milton repeatedly references this idea. Milton uses the concept of plural worlds in two distinct forms: at the literal level, he invokes the possibility of plural worlds within the created universe of the poem, and on a more metaphorical level, he invokes the possibility of the existence of several distinct but overlapping worlds. This paper seeks to consider how and why Milton uses this idea in the ways he does.

[**Keywords:** Milton, *Paradise Lost*, Galileo, Bruno, astronomy]

*Paradise Lost* is a poem about the fall, but in it, Milton puts a surprising amount of astronomical detail, and the Miltonic universe is worked out with painstaking precision. When Satan finally emerges from the welter of chaos he beholds heaven, and 'fast by hanging in a golden chain / This pendant world' (*PL*.II.1051-52). We tend to forget that by world here Milton does not mean the earth, or even the solar system, but rather the entire created universe. Indeed in *Paradise Lost*, 'world' is never synonymous with 'earth' (Gilbert 444). Satan, having with wandering feet and indefatigable wings arrived at his intended destination of the new world must now penetrate this world from the outside. There is a word in Gnosticism for the far-journeying stranger who comes to earth: *allogenes* he is called, the 'other-born' (Nuttall 93). Satan, thus, can be said to traverse worlds, and he traverses them not only when the word is used in the astronomical sense of a celestial body possibly capable of supporting life, but also in the more general sense of an independent, completely identifiable sphere of existence with all that pertains to it. This paper proposes to discuss the various worlds—literal and conceptual—that the arch-fiend traverses over the course of the poem.

Astronomy, as a science, had attained a paradigmatic structure way back in classical times, but was in the sixteenth and seventeenth centuries in a state of acute crisis (Kuhn 67-69). Milton lived and worked in this time of extraordinary science, and this is reflected in his poem. His universe is a completely imaginary and completely imagined construct with no direct parallel amongst the various hypotheses about the structure of the universe that were being bandied about in his day. Rather, it is a patchwork of various systems and concepts that Milton knits together as he feels will best serve his purpose. In this paper, I would like to focus on one concept in particular: the theory of the plurality of worlds. The idea is an ancient one: it had been discussed by the ancient Greeks, who appear to have believed that there is a successive or coexistent infinity of world-universes, and achieved notable importance before being rejected by Plato and vehemently denied by Aristotle. Eusebius, Hippolytus and Theodoret all condemned the doctrine, and Saint Augustine denied it in his *City of God* before placing it in his book of heresies, as did Saint Isidore of Seville in the seventh century. In 1277,

however, Stephen Tempier, Bishop of Paris, officially condemned the proposition that God (*prima causa*) is unable to create a plurality of worlds. Most discussions in the succeeding centuries focused on the question of whether it was possible for God to create more than one world, not whether more than one world had been created or existed. By the sixteenth century, the general doctrine had expanded to include a composite of Grecian and medieval beliefs. At this time it came to be closely associated with the Copernican helio-centric hypothesis (McColley, "Astronomy of 'Paradise Lost'", 238-43). To understand how and why this happened, we must turn our attention to Galileo, the only contemporary Milton saw fit to name in his poem:

From hence, no cloud, or, to obstruct his sight,  
 Star interposed, however small he sees,  
 Not unconform to other shining globes,  
 Earth and the garden of God, with cedars crowned  
 Above all hills. As when by night the glass  
 Of Galileo, less assured, observes  
 Imagined lands and regions on the moon:  
 (PL.V.257-63)

The simile likens the angel(Raphael) observing the earth to Galileo observing the moon through his telescope, but it also specifies a crucial difference between the two: Raphael is sure of the veracity of what he sees, but Galileo 'less assured' imagines 'lands and regions' on the moon. The above is the only occasion where Milton invokes Galileo by name, but it shares in common with the other allusions the reference to the telescope. Whenever Galileo is referred to in the poem he is imagined to be looking through a telescope at some celestial object: on this occasion, he is looking at the moon. What interests me at this instance is what Milton imagines him seeing on the moon—'imagined lands and regions', says Milton, and so recalls his first reference to Galileo, which came in Book I. Satan's shield, we are told,

Hung on his shoulders like the moon, whose orb  
 Through optic glass the Tuscan artist views  
 At evening from the top of Fesole,  
 Or in Valdarno, to descry new lands  
 Rivers or mountains in her spotty globe.  
 (PL.I.287-91)

There is no doubt that the unnamed astronomer here is Galileo, and the moon he is said to view is, by and large, like the moon Galileo claimed to have seen through the telescope in his *Sidereus nuncius* (*The Starry Messenger*), which was published in 1610 and which Milton may well have read. In the literary tradition, the moon was usually depicted as a perfect orb, the cosmological point at which mutability gives way to eternity. Milton invokes the perfect moon elsewhere in *Paradise Lost*, but this moon—the one Galileo is viewing through his telescope—is far from perfect. It is 'spotty', and if it reflects the earth, it answers stain for stain. My interest, however, is in the intention Milton imagines for the astronomer, who is attempting to 'descry new lands / Rivers or mountains' on the lunar surface. In *Sidereus nuncius* Galileo had described and pictured the surface of the moon as he saw it through his telescope. Though his telescope was weak by modern standards, it nevertheless allowed him a clear picture of the hills and

troughs on the surface of the moon. When making these findings public, he also noted that the moon shone because the earth reflected the light from the sun on to it (Debus 96). Coupled with the Copernican hypothesis, which had displaced the earth from the centre of the universe to being just one of the planets (literally ‘a wanderer’) while putting the sun in the middle, these pronouncements gave powerful impetus to speculations about the possibility the existence of plural worlds.

The Copernican system had come to be associated with the idea of an infinite universe because of the problem of stellar parallax. If the earth revolved around the sun annually, the argument ran, an observer on earth should experience a measurable shift in his view of any given star. However no such angular variation could be detected, which suggested one of two possibilities: either that the earth was in fact stationary; or that the universe was vastly larger than had hitherto been assumed. Acceptance of the Copernican hypothesis thus came to imply taking a stand on the size of the universe as well (Debus 84-89). Grant McColley has argued that the idea of an infinite universe is to be found in Copernicus’s *De revolutionibus orbium coelestium* (*On the Revolutions of the Heavenly Spheres*; 1543) itself, pointing out that Copernicus, after having by a combination of means (using dialectic, an accepted axiom of physics, and citing Ptolemy) established that what is infinite cannot move, stated that the sphere of the fixed stars which contains itself and all is for that reason immobile—leaving his readers to deduce from this the obvious: that the sphere of the fixed stars is therefore of an infinite, or at all events indefinite (a word he also uses), magnitude (“Copernicus”, 525-33). However, whether Copernicus so asserted the infinitude of the universe or not is of little moment, because there is no doubt that a number of well-informed, well-respected and well-read astronomical writers came to associate the idea of an infinite universe with the Copernican hypothesis. The earliest of these was Thomas Digges, who in 1576 appended to a new edition of his father Leonard’s perpetual almanac (*A Prognostication Everlasting*) his *A Perfit Description of the Celestiall Orbes, according to the most aunciente doctrine of the Pythagoreans, latelye revived by Copernicus and by Geometricall Demonstrations approved*, which was largely a loose translation of Copernicus’s *De revolutionibus*, and which presents, by diagram and by text, the infinite heavens and a finite interior concavity of the solar system (Debus 87-89). Kepler, in his *De stella nova in pede serpentarii* (*On the New Star at the Foot of Ophiucus*; 1606), objects to the idea of the ‘*fixarum infinitate*’ on the grounds that it leads to unexpected and unfortunate consequences, and blames its appearance and continuance on the axiom that what is infinite cannot be moved. He then states that Copernicus’s eighth sphere in *De revolutionibus* is infinite, saying that this came about because Aristotle demonstrated that the world was infinite through motion, and Copernicus by removing motion ended up conveying upon the eighth sphere infinitude. And in 1651, in his *Almagestum novum*, Giovanni Riccioli proposes to refute the arguments in favour of the infinite universe which he finds in the works of Copernicus and his followers (McColley, “Copernicus”, 529-30). Thus, we find the association of the Copernican heliostatic system with an infinite universe well entrenched by the time of Milton. Meanwhile, popular encyclopaedic works such as John Swan’s *Speculum mundi*, which was first published in 1635 and reprinted several times during the course of the century, kept the concept of plural world-systems alive in the popular imagination.

Giordano Bruno was the first to associate an infinite universe with the doctrine of plural worlds. Indeed, when he was burned at stake as a heretic in Rome in 1600, one of the charges leveled against him was his claims about the existence of a plurality of worlds and their eternity. Bruno had, earlier in his life, traveled to England, where he met Philip Sidney, lectured at Oxford and completed work on his treatise *De l'Infinito Universo et Mondi* (*On the Infinite Universe and Worlds*; 1584). Bruno was before Milton's time, but it is not inconceivable that the latter may have heard of him, and particularly of his demise. Bruno's association of the Copernican system with a plurality of worlds soon acquired apparent astronomical authority in the eyes at least of laymen with the publication of Galileo's *Sidereus nuncius*, where he pointed out the similarity between the earth's surface and the lunar surface as he had observed it, and also stated his belief that the earth reflected the light of the sun onto the moon. If the moon was like the earth, and if the earth, as per Galileo's statements in his booklet as well as Kepler's preface in his reprint of the same, moved through space and was a bright shining object, then it seemed to the general public that the earth was not much different from the other planets and stars after all. And if the earth was inhabited, why might not other planets be?

The literature of the age reflects these astronomical conceptions and confusions, and frequently we find the association of the heliocentric system with the doctrine of plural worlds. Sometimes the possible inhabitants of these other worlds are also imagined. Years before Bruno, Ariosto had already located a Fool's Paradise on the moon in *Orlando Furioso*. John Donne, in *Ignatius His Conclave*, suggests, after referring to Galileo's observations, that the Jesuits are the proper people to colonise the moon. In his *An Anatomie of the World: The First Anniversary* he grumbles about the 'new Philosophy' which 'calls all in doubt'(205), and links the heliocentric hypothesis with the doctrine of plural worlds while indirectly attacking it. Michael Drayton writes a satire entitled *The Man in the Moone*, while Ben Jonson in *News from the New World* attacks the telescope before following up with satiric references to the idea of life on the moon. Robert Burton in his *Anatomy of Melancholy* discusses the Copernican theory and its implications at length and in such terms that his readers may well have understood the plurality of world systems to be a part of the former hypothesis, rather than just an incidental addendum. And even Kepler writes an early science-fiction story called *Somnium*, about a voyage to the moon, in which he imagines that on the moon, earth-set looks like a mountain on fire. The idea also pops up in more specialized texts: in his *Platonick Song of the Soul* Henry More moved definitely from the simple Copernican theory to the idea of an infinite number of inhabited worlds (McColley, "Theory of Plurality", 319-325).

Milton was likely familiar with works, by John Wilkins and Alexander Ross, that defended and attacked the idea of plural worlds respectively (McColley, "Dialogue on Astronomy", 728-62). In his *The Discovery of a World in the Moone* (1638), John Wilkins argued that the moon was a body very much like the earth and that it was therefore likely to be inhabited. Speculating about the moon allows Wilkins to imagine the earth itself as it would appear from the moon. Milton's Raphael does much the same in Book VIII, when he asks Adam to imagine that the earth

To the terrestrial moon be as a star

Enlightening her by day, as she by night  
 This earth? Reciprocal, if land be there,  
 Fields and inhabitants:

(*PL.VIII.142-45*)

For Wilkins the possibility of a lunar world opens up imaginative prospects hitherto undreamed of. Raphael, immediately after postulating the possibility of lunar civilization, proceeds to discuss the idea of plural worlds:

...and other suns perhaps  
 With their attendant moons thou wilt descry  
 Communicating male and female light,  
 Which two great sexes animate the world,  
 Stored in each orb perhaps with some that live.

(*PL.VIII.148-52*)

Raphael, of course, neither confirms nor denies the existence of either lunar life or multiple worlds, and his cosmological account is ultimately an imaginative tour de force designed to show Adam that it doesn't matter what happens in other worlds. 'Dream not of other worlds' (*PL.VIII.175*), says the angel, because what matters is what happens here: 'be lowly wise: / Think only what concerns thee and thy being' (*PL.VIII.173-74*).

The principal religious objection to the idea of multiple worlds stemmed from the challenge it posed to scriptural accounts of the creation. Wilkins attempted to reconcile this difficulty by distinguishing between two senses of the word 'world', which, according to him, could mean in a general sense the whole universe, or an inferior elemental body of matter. He suggested that many worlds in the second sense might be considered to exist within one world in the first sense (Dodds 168-70). *Paradise Lost* equivocates in a similar fashion when it accommodates the idea of infinite space within the confines of what appears to be a finite Ptolemaic universe. Catholic and Protestant theologians alike disliked the idea of plural worlds, not only because of the challenge it posed to scripture, but also because it was a singularly difficult idea for them to refute. Being almighty, God could certainly have created a plurality of worlds had He wished. And since God's ways are, by definition, beyond human ken, inscrutable and unknowable, it is conceivable that God had in fact created multiple worlds. The existence of plural worlds, therefore, was a highly contentious issue, and as an idea could prove to be disturbing, or imaginatively enabling. For Wilkins, it was obviously the latter. Alexander Ross, in *The New Planet No Planet, or the Earth No Wandering Star, except in the Wandering Heads of Galileans* (1646), makes it very clear that he finds the hierarchical disruption that would inevitably proceed here on earth if one were to carry an acceptance of the multiplicity of worlds to its logical conclusions deeply disturbing (Dodds 168-70). Milton seems to find the idea of multiple worlds both fascinating and disturbing. The idea is tantalisingly invoked at various points throughout the epic, but always treated with cautious ambiguity.

Satan, having finally found a passage down to earth, without further ado flings himself down to wind with ease his oblique way

Amongst innumerable stars, that shone  
 Stars distant, but nigh hand seemed other worlds,  
 Or other worlds they seemed, or happy isles,

Like those Hesperian gardens famed of old,  
 Fortunate fields, and groves and flowery vales,  
 Thrice happy isles, but who dwelt happy there  
 He stayed not to inquire:

(*PL.III.565-71*)

Satan sails past stars which appear to be stars at a distance but which, close at hand, take on the appearance of other worlds, but he does not stay to wonder who dwells in these other worlds he passes. Presumably, Satan could have veered off to investigate one of these other worlds, but by apparently ignoring them he seems to close off the possibility of an alternate narrative sequence. If Satan had made landfall on some other world, the story on earth could have been different.

Milton's narrative problem in *Paradise Lost* is that because he has taken a narrative of events and turned it into a narrative of causes, his readers already know, before they read even a single line of the poem, what will happen in it. He must, therefore, somehow find the means to accommodate within the narrative structure of a single poem both the events leading up to an as-yet-unknown choice (Adam's) and the known consequences of that choice (the fall). Satan does not stay to look, but by invoking these other worlds Milton allows us the momentary illusion of the possibility of an alternate narrative. For the same reason, within the body of the poem, Milton works to keep several coexistent but ultimately distinct worlds --- using the word in the more general sense of a realm of existence --- in constant interaction. Satan, the great cosmographic voyager, is fittingly the character who most traverses the bounds between worlds. He starts off being a native of heaven, falls to rule in hell, then battles his way through chaos to infiltrate earth. These three spatially distinct worlds of heaven, hell and earth are among the most important, sharing a hierarchical relationship, and are in constant, if tacit, interaction with each other. God knows perfectly well what has happened, is happening, and will happen in hell and earth, and shares as much of this as he sees fit with the angels. Satan and the devils speculate about heavenly plans and the state of earth and man, before Satan sets out to see for himself. Adam and Eve are afforded tantalising glimpses of heaven and worrying hints of hell, principally by the 'divine Historian' (*PL.VIII.6-7*) Raphael, but also from their encounters variously with God, Satan, and the angelic guards. And the narrator also travels from one to the other: he speaks of his 'obscure sojourn' (*PL.III.15*) down to hell and through chaos, and of presuming 'Into the heaven of heavens' (*PL.VII.13*). At least two of the invocations are unmistakably shaded with autobiographical detail, and remind us not only that the poet is, ultimately, human and based firmly on earth, but also that though he may be writing of the time before the fall when humanity was yet sinless, he is writing in the post-lapsarian world. While heaven, hell and earth are spatially differentiated from each other, other worlds have different boundaries. The pre-lapsarian world that Adam and Eve inhabit until Book IX is qualitatively different from the post-lapsarian world that they come to know and that we (Milton and his readers) were born into. In this epic, however, it is also physically different—nature 'through all her works gave signs of woe' (*PL.IX.783*) when humanity falls; and it is not only the garden of Eden, or the flora and fauna of earth that is affected: God has the angels alter the entire structure of the created universe. Similarly, there are the worlds of male and female, which are distinct but complementary; and of angelic and diabolic, which share an antagonistic relationship.

When Raphael comes to warn Adam and Eve of their approaching trial by Satan, he uses the carrot and stick approach. Obey, keep faith, and in time, he tells Adam, your bodies may at last turn all to spirit and you may ‘winged ascend / Ethereal, as we’ (*PL.V.498-99*); but if you succumb to temptation and break union with God, then your future is death and the torments of hell. Satan’s first temptation of Eve takes a similar form: in her dream, he offers her the fruit he has tasted, asking her to partake of it also.

Taste this, and be henceforth among the gods  
Thy self a goddess, not to earth confined,  
But sometimes in the air, as we, sometimes  
Ascend to heaven, by merit thine, and see  
What life the gods live there, and such live thou.

(*PL.V.77-81*)

He holds the fruit to her mouth, she cannot ‘but taste’ (*PL.V.86*) and the next thing she knows, she’s up in the clouds with him. For all that this is an aborted, and therefore unsuccessful, temptation, it is not unimportant, for it rehearses some elements of the argument that Satan will use later in his successful temptation. Indeed, Satan throughout the poem rehearses arguments that will contribute towards his final temptation, at the heart of which is an offer to greater knowledge. One aspect of this increased knowledge—and the one that appears finally to sway Eve—is the offer of access to a different world, the world of the ‘gods’ (*PL.IX.714*).

At the heart of the epic lie the parallel worlds of the human and the divine. *Paradise Lost* is a poem premised on the assumption—theologically absolutely sound—that human existence, even before the fall, was not, and could never be, in any sense similar to God’s existence, and that thus humanity could never hope to share the divine perspective on *anything*. This is made evident in the opening invocation itself: the poem aims to ‘justify the ways of God to men’ (*PL.I.26*). The pre-condition for any such enterprise is the tacit acknowledgement that God’s ways *do* need to be justified, and acknowledging this means acknowledging that the divine perspective can never be shared by humans, and that God’s world will never be ours. It has long been recognised that the dramatic element with which Milton has the most trouble in his poem is God; it has also been acknowledged that in some ways this was perhaps inevitable. The reality of God’s situation is such that no human can be expected to understand it truly. We may intellectually comprehend it, as Milton obviously tries to, but empathy in this one case is largely beyond our ken.

Though the worlds of the human and the divine can never cross they are mediated between in the body of the poem, in the first instance by the figure of the Son who offers himself up as sacrifice to redeem humanity. Though Christ’s sojourn on earth is outside the scope of the poem it nevertheless underlies and shadows the epic, looming large over the narrative. The angels and devils also provide a conduit for human perceptions of the divine, by offering their own perspectives on God for human consideration. Raphael tells Adam of the war in heaven, revealing to him ‘secrets of another world’ (*PL.V.569*), and he does so with divine sanction. It is, I think, no accident that Satan consistently tries to tempt Eve, and only through her, Adam: Adam, after all, has held converse with God Himself, and might not believe Satan’s ‘glozing lies’ (*PL.III.93*) quite so readily as Eve, who has not had the benefit of that experience. She

has only heard His voice, possibly, or the voice of some spiritual being maybe --- she is not sure --at the time of her first awakening, and this fact renders her rather more open to accepting Satan's representation of God as 'the threatener' (*PL.IX.687*). Satan himself has journeyed to earth through the 'dark unbottomed infinite abyss' (*PL.II.405*) of chaos for the express purpose of seeing for himself 'another world' (*PL.II.347*). One of Satan's subsidiary interests in coming to earth is to see if the devils can come and live here, for the devils would like to leave hell and 'in some mild zone / Dwell not unvisited of heaven's fair light / Secure' (*PL.II.397-99*).

Satan's rebellion caused the breach in the angelic ranks that led to the rise of the devils. It should therefore come as no surprise that of all the worlds in *Paradise Lost*, the angelic and diabolic are not only in direct confrontation with each other but are also evenly matched. Though the rebel angels are susceptible to pain and the loyal angels are not, the war in heaven is basically a stalemate that ceases only when the Son intervenes. Perhaps because the breach is recent these worlds occasionally continue to overlap. Satan can still assume the innocent form of a 'stripling cherub' (*PL.III.636*) and fool the archangel Uriel who possesses 'perfect sight' (*PL.IV.577*). Raphael tells Adam that 'by doom' (*PL.VI.378*) the names of the rebel angels are 'Cancelled from heaven and sacred memory, / Nameless in dark oblivion let them dwell' (*PL.VI.379-80*), yet earlier in his narrative to Adam he has already named the unfallen Satan: 'great Lucifer' (*PL.V.760*). Angels and fallen angels alike are likened to stars in the poem, and Satan can continue to appear as a star even as he returns to hell after effecting the fall of mankind: 'At last as from a cloud his fulgent head / And shape star bright appeared' (*PL.X.449-50*). Finally, there is the case of Abdiel, the only angel to be first seduced and then repulsed by Satan, who comes closest to bridging the sundered worlds of the angelic and the diabolic but ultimately demonstrates the fact that the breach is unbridgeable. The boundary between the worlds of the angels and the devils was defined by a choice and continues to be marked by it, much as the boundary between the pre-lapsarian and post-lapsarian worlds will be. However, for the angels and devils, unlike for the humans, that pivotal decision is already in the past. Satan has already fallen when *Paradise Lost* opens, but Adam is yet to be created.

As already noted, Milton invokes the idea of other worlds -- whether physical or conceptual -- in order to solve the particular narrative challenges he faced. This is also why the epic is marked by such peculiar temporal dislocations and chronological confusions. The past, present and future are distinctly different worlds in the poem, but they regularly and frequently overlap and even merge into each other. What for Milton and his readers is the past is frequently the present for the characters in the poem and even, in some cases, their future (the events outlined by Michael in Books XI and XII). Even more disconcertingly, our future is part of the (apparent) present for God, because, as already mentioned, God's temporal vision is completely unlike ours. Keeping his readers off balance with regard to time is one way Milton can reconcile the fact that while, in the poem's terms, the pivotal choice is yet to be made and all the characters are as yet innocent of any knowledge of how things will pan out, the readers, and indeed Milton himself, now live in a world shaped by the consequences of that choice. Keeping his readers and characters off balance by having several coexistent but ultimately distinct worlds in constant interaction with each other throughout the poem is another



way to solve the same problem, because the mere possibility of a different world keeps alive the possibility of an alternative narrative. Even as we know, rationally, that there is no other story but the one we are living the outcome of, we can hope --- as perhaps Milton also fleetingly allowed himself to hope --that somewhere, somehow, things had been different. The stars that Satan flies past, which 'nigh hand' seem to be other worlds, are likened by Milton to 'those Hesperian gardens famed of old, / Fortunate fields, and groves and flowery vales, / Thrice happy isles'(PL.III.568-70): the references are all to various classical and pagan paradises, where the blessed dwell in bliss. Milton may not have meant anything by it --as Alastair Fowler observes, 'the proleptic allusion to our own Fall might sufficiently account for the passage' (177-78) -- but then again he may have meant everything by it.

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