

2016

Medieval Cosmology and Middle-earth: A Lewisian Walk Under Tolkienian Skies

Kristine Larsen

Central Connecticut State University, larsen@ccsu.edu

Follow this and additional works at: <http://scholar.valpo.edu/journaloftolkienresearch>

 Part of the [Astrophysics and Astronomy Commons](#)

Recommended Citation

Larsen, Kristine (2016) "Medieval Cosmology and Middle-earth: A Lewisian Walk Under Tolkienian Skies," *Journal of Tolkien Research*: Vol. 3: Iss. 1, Article 5.

Available at: <http://scholar.valpo.edu/journaloftolkienresearch/vol3/iss1/5>

This Conference Paper is brought to you for free and open access by the Library Services at ValpoScholar. It has been accepted for inclusion in Journal of Tolkien Research by an authorized administrator of ValpoScholar. For more information, please contact a ValpoScholar staff member at scholar@valpo.edu.

Medieval Cosmology and Middle-earth: A Lewisian Walk Under Tolkienian Skies

Kristine Larsen, Geological Sciences Department, Central Connecticut State University (larsen@ccsu.edu)

30 May 2016

Note: A nearly identical version of this paper was delivered at the 30th Annual International Conference on Medievalism in Pittsburgh, Pennsylvania on October 2, 2015, as part of a session on the Inklings and Medievalism.

In his collection of lectures entitled *The Discarded Image* C.S. Lewis notes of the medieval geocentric worldview “Few constructions of the imagination seem to me to have combined splendour, sobriety, and coherence in the same degree” (1967, p. 216). Indeed, Lewis found the pre-Copernican cosmology so powerful that he embraced it in his Narnia Chronicles, with the important caveat that Narnia was, unlike the medieval cosmology, a flat world. In *The Discarded Image* (and its predecessor, the 1956 lecture “Imagination and Thought in the Middle Ages”), Lewis encourages the reader to “go out on a starry night and walk about for half an hour trying to see the sky in terms of the old cosmology” (1967, p. 98). Lewis’s definition of the medieval universe is that it was not only geocentric, but “unimaginably large” (99) yet finite, perfectly spherical and well-ordered, warm and lit, filled with inhabitants and influences, and resonant with the music of the spheres. Importantly, contrary to initial appearances, one is not looking *out* into something, but rather *inward*, towards the Empyrean, or true heaven, beyond the Primum Mobile.

Like Narnia, J.R.R. Tolkien’s Middle-earth was initially flat, but was curved into a sphere during the Atlantean catastrophe that destroyed the island nation of Númenor. In the paper “Silmaril or Simulacrum? Simulations of the Heavens in Middle-earth” I concluded that “the night skies of Middle-earth are therefore geocentric in appearance, reflecting a Medieval-style cosmology” (Larsen 2010, p. 18). While the first half of that statement is irrefutable – the sun, moon, and stars *do* orbit a stationary world in Middle-earth – as I began to reflect more deeply on the second half of that statement after presenting a paper on *The Discarded Image* at the International Medieval Congress in Kalamazoo, Michigan in 2015, I found myself reconsidering this simplistic assessment. That Tolkien’s cosmology should be complex in terms of its ability to be classified is not surprising, given that Tolkien balanced ancient wonder and modern knowledge in his cosmological design. In addition, as is well known in Tolkien scholarship, during and after writing *The Lord of the Rings* Tolkien made various attempts to

more closely align his cosmology with 20th century astronomical knowledge. Fortunately for those of us who are drawn to the mythological textures of his legendarium, Tolkien never completed this “radical transformation of the astronomical myth” (as son Christopher termed it), but it is important to understand that this tension existed within Tolkien’s mind (*Morgoth’s Ring*, 1993, p. 369). Indeed, in a 1954 letter Tolkien explained “So deep was the impression made by ‘astronomy’ on me that I do not think I could deal with or imaginatively conceive a flat world, though a world of static Earth with a Sun going round it seems easier (to fancy if not to reason)” (*Letters*, 2000, p. 197). My intent in this presentation is to revisit my initial claim, and to carefully analyze whether or not Tolkien’s subcreation would, in reality, pass muster as a medieval cosmology, as defined by Lewis. So let us take a stroll under Middle-earth skies, and observe just how well the Dome of Varda matches with Lewis’s challenge. For the sake of clarity, I will reorder Lewis’s points, which are, again, that the medieval universe is geocentric, “unimaginably large” yet finite, perfectly spherical and well-ordered, warm and lit, filled with inhabitants and influences, resonant with the music of the spheres, and one in which we are looking inward, towards the greater true heaven where God resides, beyond the Primum Mobile.

1) *The universe is resonant with the music of the spheres:*

The concept of the music of the spheres (which actually predates medieval thought) is central to the creation myth of *The Silmarillion*, the “Ainulindalë.” Here we read how Ilúvatar, the Creator, charged the Ainur, the offspring of his thought, with a great theme of music, which they then sang. The perfection of this initial theme was marred by the self-serving thoughts of Melkor, who interwove discord into the harmony. Unfazed, Ilúvatar began a second theme, which was again ruined by the discord of Melkor. Finally, Ilúvatar offered, without the accompaniment of the Ainur, a third mighty theme. Afterwards, Ilúvatar then showed the Ainur a vision of their great song. The Ainur wished for it to become manifest, and Ilúvatar granted their wish, proclaiming “Ea! Let these things Be! And I will send forth into the Void the Flame Imperishable, and it shall be at the heart of the World, and the World shall Be” (Tolkien, *Silmarillion*, 2001, p. 20). However, while the world was created through music, that music is not apparent in the everyday world of Middle-earth. What we do find is that, according to *The Silmarillion*, “in water there lives yet the echo of the Music of the Ainur more than any substance else that is in this Earth” (19).

2) *The universe is filled with inhabitants and influences:*

Just as the medieval world is filled with angels and other spirits, some of the Ainur have come into the world and become the Valar, while others (it is implied) remain behind with Ilúvatar. For the most part Ilúvatar himself remains beyond the world, intervening in very specific, limited instances (such as when Aulë creates the Dwarves and the rounding of the world at the destruction of Númenor). The extent to which the Valar are allowed to influence the children of Ilúvatar – Elves and Men - is a point of debate, which speaks directly to the question of free will in Middle-earth. Three of the heavenly bodies – the sun, moon, and Morning Star (Venus) - are directly associated with inhabitants. Arien and Tilion are the Maiar, or lesser Ainur, who pilot the sun and moon respectively across the sky, while Eärendil the Half-elven, bearer of the lone surviving silaril gem, and his blessed flying ship Vingilot, are seen as the Morning Star.

3) *The cosmology is geocentric:*

It may seem strange that this even be discussed, as, has been stated earlier, Tolkien's legendarium is clearly geocentric, both metaphorically and literally. However, there are caveats that need to be made, if one reads deeper into the *History of Middle-earth* texts. Tolkien himself apparently thought more deeply about what literal geocentricity means, reflecting his mindfulness of modern astronomy, specifically concerning the existence of other worlds. In both his notes to the "Athrabeth Finrod a Andreth" (Tolkien, *Morgoth's Ring*, 1993, p. 338) and the "Myths Transformed" essays (Tolkien, *Morgoth's Ring*, 1993, p. 375), Tolkien acknowledges that other worlds may have been created by Ilúvatar, but Arda (the earth or solar system) is clearly the center of all current celestial action, as the theater upon which the battle between Melkor and the Valar is fought. Essay IIb of "Myths Transformed" says of these possible other worlds "we know nothing and cannot know, though the Valar of Arda, maybe, remember them all" (Tolkien, *Morgoth's Ring*, 1993, p. 378). Here Tolkien is saving the appearance of a geocentric world within a clearly broader (albeit unknowable) universe.

4) *The universe is perfectly spherical and well-ordered:*

The standard medieval cosmology is one based on a series of concentric spheres, with Earth at the center. In order from closest to Earth to farthest, orbit the Moon, Mercury, Venus, the Sun, Mars, Jupiter, Saturn, the stars, and finally, the Primum Mobile. God resides in the Empyrean (true heaven) beyond the Primum Mobile, and His hand sets the Primum Mobile into motion. This, in turn, sets the inner spheres spinning. While Middle-earth was initially flat, it was rounded after the destruction of Númenor and is definitely spherical in the eras reflected in *The Hobbit* and *The Lord of the Rings*. From the earliest versions of the legendarium

there existed a layered cosmology that is reminiscent of the medieval cosmology, and which becomes strictly spherical with the rounding of the world. This is explicitly described in a document called “The Ambarkanta,” the Shape of the World, a six-page handwritten manuscript whose text is published in *The Shaping of Middle-earth* along with accompanying diagrams depicting both flat and round versions of the world (1986, pgs. 242-51) and commentary by Christopher Tolkien. An earlier version of this layered cosmology, including a curious diagram that depicts the world in the shape of a large ship, can be found in *The Book of Lost Tales, Part One* (1984, p. 84). As in the case of the medieval cosmology, the layers of the world as depicted in “The Ambarkanta” divide by composition, although it is not exactly the classic fire/earth/air/water/aether structure. At the center we have the flat, later spherical, earth, with its oceans and other bodies of water. Above it lies the ordinary air, or Vista, and further out still is found Ilmen, “air that is clear and pure being pervaded by light though it gives no light” (Tolkien, *Shaping*, 1986, p. 236). During the initial time in which Valinor, the home of the Valar, was contained within the world, aka while the world is flat, there is no “ordinary air” over the Blessed Lands, but strictly Ilmen. Beyond this is the Vaiya, the “Enfolding Ocean,” which is more water-like beneath the flat earth and more air-like above the flat earth. This gives way to one of the most interesting aspects of the cosmology, the “Walls of the World. They are as ice and glass and steel, being above all imagination of the Children of Earth cold, transparent, and hard. They cannot be seen, nor can they be passed, save by the Door of Night” (Tolkien, *Shaping*, 1986, p. 235). Beyond this lies “Kúma, the Void, the Night without form or time” (Tolkien, *Shaping*, 1986, p. 237).

The heavenly bodies all have orbits around the earth, including the Morning Star, the bright stars and constellations created by Varda for the coming of the Elves, the sun, and the moon. However, the paths of the sun and moon cannot be said to be particularly well-ordered in Tolkien’s cosmology, especially that of the moon. The vessels containing the last fruit and flower of the dying Two Trees of Valinor “became lamps of heaven, outshining the ancient stars, being nearer to Arda; and she [Varda] gave them power to traverse the lower regions of Ilmen, and set them to voyage upon appointed courses above the girdle of the Earth from the West unto the East and to return” (Tolkien, *Silmarillion*, 2001, p. 99). This back and forth bouncing of the sun and moon turned out to be a less than perfect course, as Varda had to modify it in order for there to be a time of darkness for rest and to allow the stars to be seen.

The revised pathway was still not perfect because of the “waywardness of Tilion,” who was “uncertain in speed, and held not to his appointed path,” ever striving to come nearer to Arien despite the fact that it “scorched him and the island of the Moon was darkened” (Tolkien, *Silmarillion*, 2001, p. 100). This led to the phases of the moon and the occasional solar eclipse. Perfection is doomed

in the world, a world that was marred by Melkor from before its creation, through his interweaving of discord into the harmony of the Music of the Spheres. Thus the creatures of Middle-earth inhabit an imperfect world, Arda Marred. The need to explain these observable astronomical phenomenon within his Secondary World mythology draws attention to Tolkien's knowledge of and deep concern for (one might even go so far as to say obsession with) astronomical fact.

5) *The universe is unimaginably large yet finite:*

The size of Tolkien's subcreated universe is unclear, partly because it depends on what one defines as the "universe." Certainly the space within the Walls of the World is finite, but vast in size, since this is where the stars of Varda reside. *The Silmarillion* recounts that within the universe's "vast halls and spaces, and its wheeling fires, Ilúvatar chose a place for their habitation in the Deeps of Time and in the midst of innumerable stars" (2001, p. 18). Are we to assume this is meant to be the World within the Walls of the World? Beyond this, the Timeless Void extends for an unclear, perhaps indefinable, distance, being (as previously noted) "without form or time" (according to the description including within "The Ambarkanta"). Beyond this, not much more can easily be ascertained with certainty.

6) *The universe is warmed and lit:*

In a 1951 letter to Milton Waldman, Tolkien calls light "such a primeval symbol in the nature of the Universe, that it can hardly be analysed" (*Letters*, 2000, p. 148). For example, the centrality of the stars to Tolkien's legendarium is undeniable. A second generation of brighter stars and constellations was devised by Varda in order to illuminate the awakening of the Eldar, the task praised as the "greatest of all the works of the Valar since their coming into Arda" (Tolkien, *Silmarillion*, 2001, p. 48). The Firstborn "beheld first of all things" the stars of Varda, and in all ages revered her "above all the Valar" (*Ibid.*). From the Elvish greeting "a star shines on the hour of our meeting" (Tolkien, *Fellowship*, 1993, p. 90) to Frodo's observations of the Big Dipper from Bree (Tolkien, *Fellowship*, 1993, p. 187), the stars themselves are an important ancillary character in all of Tolkien's legendarium. They bring comfort, hope, a sense of constancy, and their invisibility forebodes sorrow or struggles to come. For example, Pippin uneasily noted the starless sky in the days before the Siege of Gondor (Tolkien, *Return*, 1993, p. 44).

Recall that in the Ambarkanta cosmology we read of Ilmen, the upper, pure air that is "pervaded by light though it gives no light." But the boundary of the world is defined by cold and, if not darkness, at least the absence of inherent

light. Similarly recall that the Walls of the World “are as ice and glass and steel, being above all imagination of the Children of Earth cold, transparent, and hard,” and that beyond the Wall exists the “starless voids,” also called the Timeless Void. While Eärendil sails here, it is only with the aid of his specially modified and hallowed (by the Valar) ship, Vingilot, and as we read in *The Silmarillion*, his wife Elwing does not accompany him on these journeys, “for she might not endure the cold and pathless voids” (Tolkien, *Silmarillion*, 2001, p. 250).

7) *God resides beyond the Primum Mobile in the infinite true heaven:*

In a 1954 draft to a letter to Father Robert Murray, Tolkien describes Ilúvatar as “immensely remote,” and the location of the “Halls of Ilúvatar” is apparently beyond human knowledge (*Letters*, 2000, p. 204). While the Elves (like the Valar) are bound to the earth until its eventual end, mankind is mortal. This Gift of Ilúvatar allows humans to depart from the world upon death, to a place that is not known to Elvenkind. This is certainly consistent with a heaven beyond the world (beyond the Walls of the World and the encircling Void), where the Second born children of Ilúvatar could potentially be reunited with their heavenly Father, an idea that is very consistent with Tolkien’s devout Catholicism.

8) *When we look into the sky we are looking in towards heaven rather than simply out from the earth:*

Beyond the Walls of the World there is naught but the Timeless Void, where Melkor currently resides, having been thrust there by the Valar at the end of the First Age. This suggests that the Void is not only *not* heaven, but more generally a rather unpleasant place. Again, only Eärendil sails here, with the aid of his specially modified and hallowed ship, Vingilot. The location of the realm of Ilúvatar is unknown to all but the Valar (it is presumed that they know, since Manwë, their chief, still has contact with their Father). But perhaps we can at least hand-wave such a connection to the medieval cosmology if we take a step back from Ilúvatar, to the Blessed Lands of the Valar, which were removed from the world after its rounding. It is true that before the disaster that was Númenor, one could look “in” towards the Blessed Lands, simply by looking West. While Elves could sail to Valinor (even after its removal from the world, via the mysterious Straight Road), as the ill-fated Númenóreans discovered firsthand, mortals were banned from entering, except by special dispensation, such as in the case of Frodo and, it is suggested, Gimli (Tolkien, *Return*, 1993, p. 362). Interestingly the round world Ambarkanta map (Tolkien, *Shaping*, 1968, p. 247) suggests that the Straight Road leads out past the Walls of the World, though the Door of Night and, apparently, into the Void. The concept of Blessed Lands removed beyond

the Wall does have similarities with the Empyrean of the medieval cosmology, and therefore those looking outward into the night sky might be said to be gazing in vain *inward* towards the Blessed Lands. Humans in Middle-earth are, in a sense, locked out of the house, looking in through heavily curtained windows, toward a realm that they cannot ever hope to reach.

While this analysis is certainly not complete, I hope I have demonstrated that calling Tolkien's cosmology truly "medieval" in a Lewisian sense is, perhaps, an oversimplification at best, something that should not come as a surprise to Tolkien scholars and fans, because nothing is straightforward where Tolkien's legendarium is concerned.

Works Cited:

- Larsen, Kristine. (2010) "Silmaril or Simulacrum? Simulations of the Heavens in Middle-earth." *Silver Leaves* #3, 18-23.
- Lewis, C.S. (1967) *The Discarded Image*. Cambridge: Cambridge University Press.
- Tolkien, J.R.R. (1984) *The Book of Lost Tales, Part One*, edited by Christopher Tolkien. Boston: Houghton Mifflin.
- . (1986) *The Shaping of Middle-earth*, edited by Christopher Tolkien. Boston: Houghton Mifflin.
- . (1993) *The Fellowship of the Ring*, edited by Christopher Tolkien. Boston: Houghton Mifflin.—
- . (1993) *Morgoth's Ring*, edited by Christopher Tolkien. Boston: Houghton Mifflin.
- . (1993) *The Return of the King*, edited by Christopher Tolkien. Boston: Houghton Mifflin.
- . (2000) *The Letters of J.R.R. Tolkien*, edited by Humphrey Carpenter. Boston: Houghton Mifflin.
- . (2001) *The Silmarillion*, edited by Christopher Tolkien. Boston: Houghton Mifflin.