In the Moon Gleaming

MARTIN BEECH

Roverandom was submitted by J.R.R. Tolkien to Allen & Unwin publishers in 1937 as a possible text to follow *The Hobbit*. Very different in context and form, *Roverandom* is not a part of Tolkien's legendarium – rather, it is a tale from the *perilous realm* – and indeed, while Rayner Unwin found the story, 'well written and amusing' (*Roverandom*, p. xv) publication was not proceeded with at that time. The story was eventually published by HarperCollins in 1998, some 73 years after its first holiday-time telling in 1925.

Inspired by the actual loss, by his son Michael, of a favourite toy during a seaside holiday (Roverandom, p. ix), the story centres upon the antics of a small dog, called Rover (later Roverandom), who was bewitched by a wizard to take on a diminished size. The hound, thus shrunken, then becomes embroiled in a mix of adventures, on the Moon and in the sea, while all the time hoping to encounter the wizard, 'old Artaxerxes' again, so that his original size might be restored (Roverandom, p. 14). The adventures of Rover begin with a flight to the Moon upon the back of a seagull who flies over the very edge of the Earth (Roverandom, p. 20). To a modern reader, however, the Moon depicted, once Rover arrives, is far from a familiar place. This essay wishes to explore the reasons why the images jar (just a little – if allowed) even though they have a consistency steeped in ancient mythology. In particular, the topography of the lunar landscape described in Roverandom is inconsistent with actual astronomical observations, and likewise the dynamics of lunar rotation and internal structure are incorrectly portrayed. In addition to examining Tolkien's depiction of the Moon and the journey thereto, an explanation is sought for the idea behind the Man in the Moon having a companion dog.

Indeed, there is no strong folklore narrative to support such a companionship, but several books, known to be in Tolkien's library, could arguably have provided the seed idea for the invention of a lunar canine. A study of Oronzo Cilli's recent catalogue of Tolkien's library reveals that from a total of 2599 titles, only one is arguably a science book¹ – this is Ellison Hawks' Starry Heavens published in 1933. The inclusion of Hawks' text in Tolkien's library is perhaps not surprising – if not this text then some other astronomy tome would be expected, as the behaviour of the Moon, the motion of the planets, and the arrangement of the stars are important to many storylines in the legendarium. Ellison Hawks is less read today, but he was well-known in the early to mid-20th century as a populariser of science, writing many books for a younger audience.² Indeed, Hawks published five books on astronomy: the first of these was Stars Shown to the Children (published in 1910); this was followed by Astronomy (1913), The Boys' Book of Astronomy (1914), The Romance and Reality of Astronomy (1922) and finally, The Starry Heavens (1933). The first four of these astronomy books may well have been known to Tolkien, through a school or local library. Hawks' last astronomy book, however, was published

at a time when Tolkien was well-established as the Rawlinson and Bosworth Professor of Anglo-Saxon at Oxford, and just prior to the publication of *The Hobbit*. Much of the text for *The Starry Heavens* is extracted from the more extensive *The Boys Book of Astronomy*, which describes the Moon as it was known to astronomers circa 1915 to 1930.

In the preface to his *The Boys' Book of Astronomy* (1914), Hawks comments that the popular view of science is that it is a 'dull and wearying succession of figures', and that, 'they [the young audience] imagine astronomers to be slippered and doddering old men, with long grey beards, who potter about with weird-looking instruments' (Hawks, p. xiv). The latter may still be true, but it has a distinct resonance with the textual descriptions of the surly wizard Artaxerxes, and indeed, with the description of the Man in the Moon: 'an old man with a long silvery beard' (Roverandom, p. 22). As to the Moon itself, finding shapes within the mottled markings across its disk is akin to a cultural Rorschach test, with different cultures and different generations each finding their own distinctive figures. The Moon in popular culture is often depicted with a broad, beaming-face, either male or female, but such depictions are not anchored in actual lunar topography or colouration. On more traditional grounds, however, the First Nations people of north America perceive a rabbit in the Moon's dark maria, while the Pueblo people of New Mexico see the fertility deity Kokopelli. Chinese tradition depicts a rabbit and a frog amongst the shadings on the Moon, and Chinese tradition also tells of Change, a female deity who lives in the Moon. Since the late 19th century popular astronomy texts have commonly described the profile of a lady's face within the Moon's shadings, with coiffured hair (depicted by Mare Serenitatis and Mare Tranquillitatis) and a pendant, composed of the distinctively rayed-crater Tycho, upon her throat. Additionally, and not to be missed from the list of lunar pareidolia, is the obscure case of seeing a dog in the Moon. The term obscure is used in this case because the only written account that I have ever found describing such a dog is that in the books by Hawks. In The Starry Heavens, Hawks writes that there is,

a delightful representation of one of those curious-looking dogs, a French poodle. The poodle's head and body are formed by the Lady's hair (this is the lady pareidolia just described); his front legs may be seen quite clearly – he is sitting on his haunches – and also his tail, complete even to the little pom-pom on the end! (Hawks, p. 29)

(Technically, the *pom-pom* is located in Mare Crisium, and the body is formed by Mare Tranquillitatis, the right foreleg is delineated by Mare Nubium and the head by Mare Serenitatis, with its haunches being set in Mare Fecunditatis). There is no strong literary (rhyming or mythical) tradition for there being a dog in the Moon, and it is tempting to ask if Tolkien introduced Rover, the Man in the Moon's 'little white dog', in part through a reading of the astronomy texts by Hawks. The answer to this question is most likely no, since, as discussed next, a stronger case can be made for a more downto-Earth explanation.

A Moon-lore tradition not discussed by Hawks but which would have been well-known to Tolkien is that concerning the estranged Man in the Moon; and this is a much more ancient and very different Man to the one that we see in popular culture today. Indeed, the original Man in the Moon is largely composed of the same lunar maria that make up the poodle described by Hawks (just viewed differently). This crepuscular man, however, was cast there long ago. Indeed, he is envisioned as carrying a bundle of wooden staves upon his shoulders - his banishment to the Moon being attributed to Moses, no less, as a punishment for his sin of gathering fuel on a Sunday (Harley, p. 21). Not fully tied to his lunar exile, however, the anonymous child's nursery rhyme informs us that, 'The Man in the Moon came down too soon / and asked his way to Norwich / He went by the South and burnt his mouth / when eating cold plum porridge' (Harley, p. 6). Acclaimed illustrator Leonard Leslie Brooke produced a drawing of the Man in the Moon's return to Earth for Andrew Lang's 1897 The Nursery Rhyme Book – a book that Tolkien owned and knew well (Cilli, p. 152). Intriguingly, in the drawing by Brooke (see Figure 1) there are two small dogs - one accompanying the Man in the Moon, the other seated between two children - are these, one is tempted to ask again, the prototypes for Rover and Roverandom? Here, the answer could well be yes, but there is no definitive proof to support such a claim.

Beyond the nursery rhyme, however, there are the bawdier traditions that the Man in the Moon is a great imbiber of claret (it is not just the tides that he raises), an inveterate smoker, and even a poet (Harley, p. 12). Indeed, it is Frodo that reminds us, as he sings that 'ridiculous song' by Bilbo, at the Prancing Pony in Bree,³ 'There is an inn, a merry old inn / beneath an old grey hill, / And there they brew a beer so brown / That the Man in the Moon himself came down / One night to drink his fill' (FR, I, ix). This trait of excess is further reinforced by the Man in the Moon's overindulgence of chocolates during a trip to the North Pole in 1926, and in an overindulgence of plum pudding and brandy in 1927 (Father Christmas). Tolkien describes his Man in the Moon as having, 'a workshop down in the cellars' where magic spells are brewed, and he reveals that the Man has, 'an enormously long telescope' that is capable of imaging people on the Earth, along with all the creatures that inhabit the illuminated lunar hemisphere (Roverandom, p. 37, 22). This telescopic ability has a direct, but in a reverse sense, resonance with the Great Moon-Hoax perpetrated by Richard Adams Locke in the pages of *The Sun* newspaper (published in New York) during the summer of 1835. This hoax, described in the form of dispatches and fictitious journal references, followed the discovery of intelligent lunar life (in the form of a man-bat creature: Vespertilio Homo) by famed astronomer Sir John Herschel from his observatory in South Africa.

This image of a strange, magical, semi-scientific figure has additional resonance with Lewis Carroll's Professor Mein Herr. In Carroll's case, the Professor described in *Sylvie and Bruno* (first published in 1889) – and a book known to be in Tolkien's library (Cilli, p. 41) – is the personification of the Man in the Moon. Indeed, in a letter to Allen and Unwin on 31 August 1937, Tolkien described Carroll's Professor as being, 'the best character' (*Letters*, p. 22).

By flying to the Moon on the back of a seagull, Rover continues the long-played theme of fantasy flights to the lunar realm. Lucian in his Voyage to the Moon (A True Story – composed in the 2nd Century A.D.) has the hapless crew of a sailing vessel carried to the Moon in just seven days by a stupendous whirlwind (Nicolson, p. 15). Once upon the Moon the sailors meet Endymion (the shepherd who fell in love with Diana) now risen to be King of the Hippogygi. Lucian explains that the Hippogygi, angling to do battle with Phaëton, the Sun King, are in the process of heading out to colonise the Morning Star (that is, planet Venus). The Hippogygi travel upon vast, three-headed vultures, and a battle ground, made from the webs of giant spiders, has been prepared for the clashing armies. The war did not go well for Endymion (Harmon, pp. 261-273). Some fifteen hundred years further on in time, in 1638, we find adventurer Domingo Gonsales being carried to the Moon, in a stately twelve days, aboard a kite-like machine powered by wild swans. Indeed, it was long held in folk belief that migratory birds, especially swallows and cuckoos, spent the cold northern winter months sheltering upon the Moon.⁴ Gonsales discovers a lush utopian world in the Moon, populated by 28-foot tall giants and ruled over by The Great Irdonozur. The Lunars, Gonzales informs us, have magical stones with wonderful heat, light, and colouremitting properties, and that they exchange weakling lunar children with babies snatched from Earth. Not to be outimagined, however, the mathematician Johannes Kepler, in his Somnium (published posthumously in 1634) has his hero whisked to the Moon by daemons in a mere four hours. The Moon described by Kepler is inhabited by nomadic, serpent-like creatures. Cyrano de Bergerac (in his 1657 The Other World) transported himself to the Moon in a flying machine powered by sky-rockets; a similar such, but much larger, device being applied by the members of the Baltimore Gun Club, in Jules Verne's From the Earth to the Moon (1865). In the latter case, a giant cannon hurls the doomed⁵ crew of astronauts to the Moon at a pace no better, in fact, than Gonsales' gansas. In *The First Men in the Moon* (1900), H.G. Wells whisked his lunar explorers to the Moon through the application of gravity-defying Cavorite paint, there to encounter an underground world inhabited by insects, enormous mooncalves and tall Selenites. Hawks, in his The Boys Book of Astronomy, indicates that, 'an express train, travelling day and night, would make the journey in about six months' (Hawks, p. 71). Mew, the seagull who carried Rover to the Moon, was clearly working overtime, however, being clocked by the Man in the Moon at, 'a thousand

miles a minute' (*Roverandom*, p. 22). At this super-charged speed, the journey to the Moon would take just four hours – the same time as Kepler's noxious daemons. In terms of purely imagined transportation and associated travel times, Tolkien uses an inherently natural and non-technological mechanism (a seagull), but invokes a truly fantastic (even breath-taking) speed of motion to complete the journey to the Moon. Additionally, in describing a living eco-system of strange lunar plants, insects, birds and exotic beasts, Tolkien is working within a long tradition of imagined lunar exploration and fauna.

The Moon Rover finds conveys a strange landscape to our contemporary eye: 'a new white world shining like snow, with wide open spaces of pale blue and green, where the tall pointed mountains threw their long shadows far across the floor' (Roverandom, p. 22). The Moon's mountains are neither particularly tall, nor are they strikingly pointed, but this image is in keeping with early 20th century depictions of the Moon's surface. Indeed, the moonscape illustrations that Tolkien produced for the text, in addition to his written depictions of Artaxerxes and the Man in the Moon, have a strong similarity to the characters and backdrops appearing in Georges Méliès 1902 film Le Voyage dans la Lune. Oddly, however, there is no specific mention of craters - the most dominant and characteristic lunar feature – in Roverandom. In a clash of geometries and physics, Tolkien describes a flat Earth, but a spherical Moon, and he also allows the Man in the Moon and Roverandom to pass through the Moon's interior in order to explore its dark side. Lewis Carroll has Professor Mein Herr introduce the idea of gravity trains in Sylvie and Bruno, but Tolkien resorts to ancient physics in his narrative (Beech, p. 119). As Roverandom approaches the centre of the Moon he begins to slow down⁶ and needs a set of wings to fly the rest of the way to the surface, 'like flying up, up, through a big chimney' (Roverandom, p. 39). In reality, as Professor Mein Herr correctly explains, if you jump into a tunnel cut through the Moon (or the Earth) then you will fall right through the centre, where in fact a maximum speed is achieved, and thereafter fly all the way up the remaining half of the tunnel at a gradually slowing rate (Beech, p. 23). Such a journey through a Moon-tunnel is, in fact, described by science-fiction writer Hugo Gernsback⁷ in his The Scientific Adventures of Baron Munchausen (Beech, p. 241; Gernsback, p. 80). Indeed, the good Baron was earlier cast through an Earth-tunnel by an enraged Vulcan - a journey that took him from the throat of Mt. Etna to a watery emergence in the south Pacific seas. Rudolph Raspe's *The* Adventures of Baron Munchausen (in a 1915 publication) is known to be part of Tolkien's library (Cilli, p. 239). Indeed, between Raspe, and Carroll, and from Dante's Inferno written in the 14th century to Jules Verne's writings in the mid-19th century, Tolkien, in his Moon-tunnel narrative, is tapping into and drawing inspiration from a large body of literature relating to subterranean exploration (Beech, p. 77). Tolkien's Moon has an atmosphere which enabled clouds, snow, and flight with wings, and this was still (just about) a viable

scientific possibility in terms of known lunar properties in 1925. Indeed, astronomers intermittently reported seeing shooting stars in a supposed lunar atmosphere8 well into the 1950s. The Moon in *Roverandom* is also inhabited by sheep, birds, 'glass-beetles', 'shadow-bats' and 'fifty-seven varieties of spiders' (p. 27). This idea of extra-terrestrial life has a long philosophical heritage, and it was often stated in 18th and 19th century astronomy texts that all of the planets (including the Sun) were inhabited. Hawks correctly describes the Moon as a 'dead world', but literary history has long-held that the Moon is inhabited by *Selenites* of one monstrous form or another (Nicolson, p. 237).

The Moon in Roverandom, while being spherical, is incorrectly described as not spinning - the Light and Dark hemispheres never apparently changing their illumination characteristics. This is in contrast to most tales of lunar exploration in which the periodic variation between the warm and illuminated phase is contrasted against that of the dark and frigid phase. Given, however, the strange orbital geometry described - the Moon being able to pass under the flat Earth – this physical inconsistency is a jarring, but acceptable literary device. Eclipses are attributed to a 'Great White dragon, and this idea has historical resonance. Indeed, a lurking dragon, eating the Moon at the times of an eclipse, is still embodied within the name for the time interval between successive passages of the Moon through its orbital nodal point (the Moon's required location if an eclipse is to be seen) – this being the Draconic month. One of the adventures of Rover and Roverandom involved being chased by the white dragon, and they were only saved by The Man in the Moon uncorking from the depths of his cellar, 'a dark, black spell that looked like jellified tar and honey' (Roverandom, p. 35). The dragon was so put-out by this spell that we are informed, 'the next eclipse was a failure'.

Scull and Hammond argue that Tolkien's interest in re-working and reviving the tale of *Roverandom* may have been sparked by missing the lunar eclipse, due to clouds, that occurred on 8 December 1927 (Roverandom, xiii). This eclipse-washout was reported in *The Father Christmas Letters* for that year, and partially blamed upon The Man in the Moon's overindulgence of plum-pudding and brandy. This particular eclipse, however, was not as such a failure. It certainly happened, even if missed because of clouds. As a possible alternative explanation, one may note that there was a relatively rare (there have been just eight such events in the past hundred years) total penumbral lunar eclipse on 19 December 1926, and such an eclipse is more readily describable as being a failure, because the Moon's brightness hardly changes as it only passes through the Earth's partial shadow. The timeframe of this latter eclipse fits the same Christmas holiday period highlighted by Scull and Hammond when Tolkien would have had time to work on non-academic projects. While the penumbral eclipse of December 1926 was well advertised in astronomical journals, it seems unlikely that Tolkien, as a non-astronomer, would have been fully aware of the event. Indeed, the eclipse of

8 December 1927 is mentioned in the *Times* newspaper, while that of 19 December 1926 is not. Linking, however, developments in Tolkien's writing of *Roverandom* to a specific astronomical event is particularly interesting and is a point worthy of further research.

Tolkien's Moon in *Roverandom* is familiar and yet, to the modern eye, odd. This latter point, of course, is not really important since Tolkien is using, as well as adapting, a diverse set of mythical and historical sources to craft an engaging tale. The Moon in *Roverandom* is not the real Moon, but it is a fully believable Moon that works superbly within the context of the story – it is a full and glorious Moon plucked from the deep-well that is the human imagination, interlaced, to give it form and place, with a smattering of astronomical and literary mythology.

Notes

- Three other texts loosely qualify as being science related: (i) Sundials: incised 1 dials or mass-clocks, by A. R. Robert, (ii) Science is a sacred cow, by A. Standon, and (iii) Mendip - Cheddar, its gorge and caves, by H. E. Balch. The first of these books, published in 1926, is a scholarly text on medieval church sundials, while the second, published in 1950, criticised the unquestioning public faith in scientists, teachers of science, and scientific institutions. Indeed, Standon, a chemist by training, charges scientists with having overly 'inflated egos' whose words and works are given far too much attention. The text by Balch was first published in 1935, and describes the history and archaeology of the limestone caves in Cheddar gorge. Tolkien first visited Cheddar, with his wife Edith, in 1916, and noted in a letter to P. Rorke S.J. in 1971 that the caves had provided inspiration for the Caverns of Helm's Deep (Letters, p. 321). There are a good number of science-fiction books listed by Oronzo Cilli in Tolkien's library, including works by H.G. Wells, Olaf Stapleton, Frank Herbert, and David Lindsav.
- 2 https://shasurvey.files.wordpress.com/2016/01/ellison-hawks-biography.pdf (accessed February 2020).
- 3 Tolkien wrote the first version of this poem in 1915 and saw it published (greatly modified) in 1923. As Tom Shippey argues in his masterful *The Road to Middle Earth*, Tolkien, in the original version of his poem was looking to resurrect or recreate a more ancient poem, that actually made sense, but is now (and long past) largely lost and fragmented.
- Francis Godwin: The Man in the Moone, or a discourse of a voyage thither (1638). The exchange of lunar and terrestrial children, as described in Godwin's text, has a parallel with the narrative developed in Roverandom, where it is explained that terrestrial children can be carried to the Moon in their dreams. Also published in 1638 was the remarkable book by John Wilkins' (Wadham College, Oxford) The Discovery of a World in the Moon - a world, that in this case, is attained by the construction of a 'flying chariot'. That birds migrate to the Moon during the northern winter months was addressed in some detail by Charles Morton, an associate of Wilkins at Wadham College, in his Compendium Physicae, first published in 1687. Reasoning from limited observations and Holy Scripture, Morton argued that migratory birds, 'do go into and remain in one of the celestial bodies; and that must be the Moon, which is most likely, because nearest'. Morton further calculated that, in the absence of gravity and travelling at an impressive 125 miles per hour, a migratory bird would take some sixty days to reach the Moon, and as many days to come back to Earth. See also, T. P. Harrison, Birds in the Moon, Isis, 45 (1954) pp. 323-330.
- 5 The spaceship and crew were left, at the end of the novel, in orbit, 'to move around the Moon until the end of time'. Their rescue, as such, only coming about with the publications of Verne's second lunar exploration book, *Around the Moon*, published in 1870. Verne has his three trapped astronauts discuss the possibility of lunar life, but, breaking with tradition, they conclude that the Moon is barren and lifeless.
- 6 That an object falling down a tunnel cut through the Earth must stop at the Earth's centre is a remnant from Aristotle's dictate of final causes. The tendency of all earthly matter, Aristotle argued, is to fall to the centre of the universe, and this centre coincided with the centre of the Earth.

- 7 This book is the compilation of the story as published, between May 1915 to February 1917, within the pages of *The Electrical Experimenter* magazine. Gernsback is perhaps best-known today as the Hugo behind the annual Hugo Awards for best science fiction and fantasy writing.
- 8 The apparent detection of lunar meteors, and the early study of a supposed lunar atmosphere are discussed in M. Beech and D. W. Hughes, Seeing the impossible: meteors in the Moon. *Journal of Astronomical History and Heritage*, 3.1(2000), 13-22.

Works Cited

- Beech, Martin, Going Underground The history and science of falling through the Earth (Singapore: World Scientific Publishing, 2019)
- Cilli, Oronzo, *Tolkien's Library: an annotated checklist* (Edinburgh: Luna Press Publishing, 2019)
- Gernsback, Hugo, *The Scientific Adventures of Baron Munchausen* (Burlington: Apogee Books, 2010)
- Harmon, Austin Morris, A True Story, by Lucian of Samosata (New York: G.P. Putnam, 1913)
- Harley, Timothy, *Moon Lore* (London: Swan Sonnenschein, Le Bas and Lowrey 1885)
- Hawks, Ellison, The Starry Heavens (London: Thomas, Nelson and Sons Ltd, 1933)
- Hawks, Ellison, The Boys' Book of Astronomy (London: Grant Richards Ltd, 1914)
- Nicolson, Marjorie Hope, Voyages to the Moon (New York: Macmillan and Company, 1960)
- Tolkien, J.R.R., *Roverandom*, Ed. by Christina Scull and Wayne Hammond (Boston: Houghton Mifflin Harcourt, 1998)
- Tolkien, J.R.R., *The Fellowship of the Ring* (Boston: Houghton Mifflin Harcourt, 1994)
- Tolkien, J.R.R., *The Letters of J.R.R. Tolkien*, Ed. by Humphrey Carpenter (London: George Allen & Unwin, 1981)
- Tolkien, J.R.R., *The Father Christmas Letters*, Ed. by Baillie Tolkien (Boston: Houghton Mifflin Harcourt, 1976)