Archaeoastronomy in the Poetry of T.S. Eliot

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Abstract. T.S. Eliot's poem *The Hollow Men*, published in 1925, generally has been understood as a depiction of cultural and spiritual disillusionment following the First World War. Against the backdrop of a war-ravaged Europe with millions of lives lost and numerous cultural monuments destroyed, Eliot was deeply concerned about the future and preservation of humankind, and of the arts and sciences. While Modernist scholars have noted Eliot's interest in and incorporation of aspects of astronomy and physics in his poetry, this essay explores ancient Egyptian culture and archaeoastronomy as a fresh context for reading the poem.

T.S. Eliot's poem *The Hollow Men* generally has been understood as a depiction of cultural and spiritual disillusionment following the First World War. As with so many literati, as a result of the war Eliot was deeply concerned about the future preservation of the arts and sciences as well as humankind as a whole. As Robert Crawford explains, Eliot's most famous poem *The Waste Land*, published three years before *The Hollow Men*, 'has come to be read as articulating Western civilisation's sense of crisis' and as 'giving voice to a darkness deep in the human psyche' Eliot was, however, fascinated with advances in the sciences of his time including astronomy and cosmology. Yet as Katherine Ebury contends, 'scant attention has been paid to the repeated use of astronomical imagery and the otherworldly, even extraterrestrial, setting of [*The Hollow Men*].' Ebury asserts that 'Eliot's awareness of science contributed importantly to th[is] poem of cosmic and human entropy... and to the poetry written thereafter'. Phrases in the poem regarding 'a fading star' and 'dying stars' she reads as references

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¹ Robert Crawford, *Young Eliot: From St. Louis to* The Waste Land (New York: Farrer, Straus and Giroux, 2015), p. 423.

² Katherine Ebury, "'In this valley of dying stars": Eliot's Cosmology', *Journal of Modern Literature* Vol.35, no. 3 (Spring 2012): p. 146.

³ Ebury, "In this valley of dying stars": Eliot's Cosmology', p. 139.

to nineteenth century discussions of the heat death of the universe, and to Eliot's own interest in the 'connections between human death and cosmic extinction'.⁴

Indeed, astronomical references in *The Hollow Men* are crucial to understanding its broader nuances; however, this essay explores Eliot's interest in ancient Egyptian mythology and archaeoastronomy as a fresh context for analysing the poem's astronomical images and terminology, and investigates texts on ancient Egypt available to Eliot in the years prior to the poem's publication.

As a graduate student at Harvard and at Oxford universities, Eliot studied contemporary texts in anthropology, ethnology, comparative religion, and ancient languages and literature. He considered the roots of primitive rituals as the beginnings of modern civilization. As William Harmon points out, 'Eliot did a good deal more than simply and causally "keep up" with the popular anthropology of the moment. He read, reflected, remembered, and synthesized boldly' such material into his poetry.⁵

Among the anthropologists who deeply influenced Eliot's poetry was James Frazer and his multivolume work *The Golden Bough*. Eliot explained in a footnote to his poem *The Waste Land* (1922) that the poem was based in part on vegetation and fertility myths gleaned from Frazer's *The Golden Bough*. In his published 'Notes on the Waste Land', Eliot explained that he drew upon "especially the two volumes *Adonis, Attis, Osiris*. Anyone who is acquainted with these works will immediately recognise in the poem certain references to vegetation ceremonies'. Frazer's multivolume work, the third edition of which was published in 12 volumes between 1906 and 1915, included compilations of myths of corn deities, one of which was the ancient Egyptian figure of Osiris, revered as an early Egyptian king who was killed and dismembered but whose body was reassembled and brought back to life as the primary deity of the Egyptian afterlife.

The figure of Osiris presided over the Duat, the realm of the dead, to which in Egyptian mythology upon death one journeyed. There, before

⁴ Ebury, "In this valley of dying stars": Eliot's Cosmology', pp. 146, 151.

⁵ Harmon, 'T.S. Eliot, Anthropologist and Primitive.' *American Anthropologist* Vol. 78, No. 4 (December 1976): p. 800.

⁶ T.S. Eliot, 'Notes on the Waste Land', *The Poems of T.S. Eliot: Vol. 1, Collected & Uncollected Poems*, Eds. Christopher Ricks and Jim McCue (Baltimore: Johns Hopkins University Press, 2015), p. 72. Ricks and McCue report that *The Waste Land* was published with Eliot's 'Notes' in 1922 by Boni & Liveright in New York. See 'The Waste Land: Headnote' in *The Poems of T.S. Eliot, Vol. 1*, p. 547.

Osiris, one's heart was weighed against the feather of Ma'at to determine if the deceased had lived a life dedicated to truth, justice, and cosmic harmony. Ma'at was the deity of justice, balance, and right behavior toward the deities and nature; she represented truth, law, and cosmic order. To obey the principles of Ma'at was to act with kindness and justice towards others and toward nature.

In artistic renderings on tomb and temple walls and in papyri manuscripts, the figure of Osiris was consistently depicted as mummiform and holding crossed over his chest the kingly emblems of the crook and flail. Interestingly, in Part II of *The Hollow Men*, Eliot writes: 'Let me be no nearer/In death's dream kingdom/Let me also wear/Such deliberate disguises/[as] crossed staves....'⁷ Here the 'crossed staves' are suggestive of Osiris's crossed staves of flail and crook, replicated in the outer and interior coffins of Tutankhamun and in coffins and mortuary statues of other pharaohs. Identified with the constellation Orion, Osiris was presumed to represent the first mummified king.

Perhaps surprisingly, the opening stanzas of Eliot's *The Hollow Men* call to mind the ancient Egyptian practice of mummification:

We are the hollow men
We are the stuffed men
Leaning together
Headpiece filled with straw. Alas!

Our dried voices, when We whisper together Are quiet and meaningless As wind in dry grass Or rats' feet over broken glass In our dry cellar. 8

The 'dry cellar' of Part I evokes the deep, rock-cut Egyptian tombs of the Valley of the Kings, or even the serdab of Old Kingdom royal tombs that housed the Ka statue, or replica of the living person of the king or royal

⁷ T.S. Eliot, *The Hollow Men*, in *The Poems of T.S. Eliot: Vol. 1, Collected and Uncollected Poems*, Eds. Christopher Ricks and Jim McCue (Baltimore: Johns Hopkins University Press, 2015), p. 82.

⁸T.S. Eliot, The Hollow Men, in The Poems of T.S. Eliot: Vol. 1, p. 81.

person meant to receive gifts by those participating in his or her funerary cult. Actually, the term *serdab* in Arabic means 'cellar.'

Part I of the poem concludes with the following:

Those who have crossed With direct eyes, to death's other Kingdom Remember us--if at all... As the hollow men The stuffed men.¹⁰

Phrasing throughout the poem regarding 'death's other Kingdom', 'death's dream kingdom', and 'the twilight kingdom' suggest not only the major Kingdoms by which ancient Egyptian history is demarcated, but also the belief that the deceased must perilously journey through the underworld kingdom of the Duat to face Osiris and the weighing of one's heart before eventually reaching the Field of Reeds, or the Egyptian version of Elysium.¹¹

By Part III of *The Hollow Men*, the broader setting of Eliot's poem is revealed, which reads in part:

This is the dead land
This is the cactus land
Here the stone images
Are raised, here they receive
The supplication of a dead man's hand
Under the twinkle of a fading star.

This 'dead land,' or 'cactus land,' with its 'tumid river,' where 'the stone images/Are raised' to 'receive/The supplication of a dead man's hand/Under the twinkle of a fading star' seems to place the reader among ancient Egyptian temples along the Nile.¹² The 'stone images' evoke the massive

Culture and Cosmos

⁹ Eliot, The Hollow Men, in The Poems of T.S. Eliot, Vol. 1, p. 81.

¹⁰ Eliot, The Hollow Men, in The Poems of T.S. Eliot, Vol. 1, p. 81.

¹¹ Eliot, The Hollow Men, in The Poems of T.S. Eliot, Vol. 1, pp. 81, 82.

¹² Eliot, The Hollow Men, in The Poems of T.S. Eliot, Vol. 1, p. 82, 83.

stone figures of pharaohs and deities raised in Egypt millennia ago, or the artwork etched into stone pylons and carved and painted on tomb walls, such as those of Seti I or Tutankhamun's tomb. Often such artwork carved into massive stone pylons depicted the king offering gifts to Egyptian deities, hunting in marshes, triumphing in battle, or receiving gifts from suppliants.

From youth, apparently, Eliot was interested in ancient cultures. At the age of 14 or 15, Eliot attended the 1904 World's Fair in his hometown of St. Louis, Missouri. The Fair's administrative hub was located in the main hall of Washington University, which Eliot's grandfather William Greenleaf Eliot helped found and for which he served as chancellor in the late 1800s. Eliot scholar Tatsushi Narita discovered the fair pass issued to young Eliot 'by the Louisiana Purchase Exposition Company and bearing his photograph'. One highlight of the Egyptian exhibit in the Fair's Anthropology Hall was the offering chapel and false door of Kaipure, a high-ranking official whose Old Kingdom tomb was originally located north of Djoser's Step Pyramid. 14

British Egyptologists James E. Quibell and his wife Annie were instrumental in documenting and preparing the chapel, dating to 2300 BCE, for shipment from Egypt to St. Louis and assembling the chapel at the Fair. The centerpiece of Kaipure's chapel was its false door, which was the presumed meeting place of the deceased and the living. Fair visitors could walk through the chapel to view on its walls depictions of 'offerings and bearers that would provide the necessities that [Kaipure] required for his afterlife, such as wine, cosmetic items, foodstuffs, and clothing'. 15

By 1914, in his mid-twenties, Eliot moved to Oxford University to continue his graduate studies. Robert Crawford notes, 'Immediately after arriving in Oxford, [Eliot] had written to Conrad Aiken on 30 September

¹³ Roderick B. Overaa, "The Lotus Rose, Quietly": T.S. Eliot, Asia and the 1904 World's Fair in St. Louis', *South Atlantic Review* Vol. 81, no. 2 (Summer 2016): p. 153.

¹⁴ Emily Brown, 'Conservation of Kaipure's Tomb Chapel,' Penn Museum Blog, https://www.penn.museum/blog/museum/conservation-of-kaipures-tomb-chapel/, 13 Nov. 2018, [accessed 20 Aug. 2022].

¹⁵ Purchased in 1905 by the University of Pennsylvania, portions of the chapel have been on display at the Penn Museum of Archaeology and Anthropology. 'Gallery Tour: The Tomb Chapel of Kapure', https://www.penn.museum/sites/egypt/kapure.shtml, [accessed 20, Aug. 2022].

1914 of his fear of boredom there, and had used the Frazerian image of a man whose corpse had been cut into bits and who remains to see if the pieces may sprout.' Eliot's comment about the pieces of a corpse that may sprout refers to the myth of Osiris, who was viciously killed and segmented by his brother Set but whose body was reassembled by his wife Isis and eventually resurrected.

Drafts of *The Hollow Men* as we have the poem today began in 1923, or in 1924 as Ebury suggests.¹⁷ This coincided with a renewed and intense public fascination with ancient Egypt as British archaeologist Howard Carter's discovery in November 1922 of Tutankhamun's tomb intensified the already widespread popular interest in Egyptology. Allegra Fryxell explains that after the discovery of Tut's tomb, 'Britain fell under the "Tutankh-amen spell"; as a result one could purchase a wide array of Tutankhamun-themed commodities such as jewellery, hats, and cigarettes.¹⁸ Eleanor Dobson reports that 'ladies carried their cigarettes in cases decorated with scenes from the *Book of the Dead* in real gold'.¹⁹

According to Dobson, 'consumers were able to purchase fragrances contained within bottles shaped like pyramids, obelisks or sarcophagi....'; one French firm sold crystal flasks of fragrances advertised as 'blends of the veritable enchanting, penetrating scent-bases known and used since the days of Tut-ankh-Amen.'²⁰ In fact, in *The Waste Land* (1922), Eliot critiqued such Egyptomania, as Dobson points out, with his depiction of a woman, dressed as Cleopatra and seated on her vanity chair, or 'burnished throne', with 'vials of ivory and coloured glass/Unstoppered, [from which] lurked...strange synthetic perfumes,' clearly not the enticing 'scent-bases known... since the days of Tut-ankh-Amen'.²¹ Egyptomania, in this scene,

¹⁶ Robert Crawford, 'T.S. Eliot, Lawrence of Arabia, and Oxford anthropology, 1914-1915', *Journal of the Anthropological Society of Oxford* Vol. 15, no. 1 (Jan 1984), p. 50.

¹⁷ Katherine Ebury, "Between the Bang and the Whimper: Eliot and Apocalypse," in Erik Tonning, Matthew Feldman, and David Addyman eds., *Modernism, Christianity and Apocalypse*. Studies in Religion and the Arts Series. Vol. 8 (Boston: Brill, 2014), p. 100.

¹⁸ Allegra Fryxell, 'Tutankhamen, Egyptomania, and Temporal Enchantment in Interwar Britain', *Twentieth Century British History*, Vol.28, no. 4, (2017): p. 516. ¹⁹ Eleanor Dobson, *Writing the Sphinx: Literature, Culture, and Egyptology* (Edinburgh: Edinburgh University Press, 2020), p. 165.

²⁰ Dobson, Writing the Sphinx, pp. 165, qtd. in 166.

²¹ Dobson, Writing the Sphinx, p.169; see also Eliot, The Waste Land, in The Poems of T.S. Eliot, Vol. 1, p. 58.

is depicted as a crass commercialization of the ancient Egyptians' serious endeavor to live on into eternity.

There also was the British Empire Exhibition held at Wembley in 1923 and 1924, which included a full-scale facsimile of the interior of Tutankhamun's tomb as well as replica art based on the archaeological photographer Harry Burton's celebrated photos taken *in situ* of Tut's treasures and featured in *The Times* (London). Frixell reports that in its first year alone the Empire Exhibition hosted roughly 27 million visitors and averaged over 100,000 attendees daily; for the facsimile tomb at Wembley, a dozen British craftsmen designed replicas of Tutankhamun's spectacularly and seemingly modern furniture, his chariots, life-sized statues, and other artefacts, which required more than 1,000 British Pounds in gold to manufacture.²²

Appearing on the walls of Tutankhamun's actual tomb was the figure of Osiris, who was consistently depicted on tomb walls and in Egyptian papyri as having either black or green skin; the black color has been related to the black silt deposited across the lower Nile valley during the river's annual inundation, while the green color has been read as representing the resulting fresh plant growth. Interestingly, in the same year Howard Carter discovered the tomb, T.S. Eliot's friends commented on his penchant for wearing green makeup. His close colleague Virginia Woolf noted in her diary Eliot's makeup, which she presumed he used 'to make him[self] look cadaverous'.²³ In the Spring of 1922, British writer Osbert Sitwell told Virginia about a gathering at Eliot's apartment during which Sitwell "was amazed to notice on [Eliot's] cheeks a dusting of green powder--pale but distinctly green..." 24 Days later, Sitwell again met with Woolf and later privately noted: "She asked me, rather pointedly, if I had seen Tom lately, and when I said 'Yes' asked me... whether I had observed the green powder on his face--so there was corroboration!"²⁵

Another possible source for references to ancient Egypt in *The Hollow Men* was the work of British anatomist and Egyptologist Grafton Elliot

²² Fryxell, 'Tutankhamen, Egyptomania, and Temporal Enchantment in Interwar Britain', pp. 530-531; 530.

²³ Virginia Woolf, *The Diary of Virginia Woolf, Vol. Two, 1920-1924*. Anne Olivier Bell and Andrew McNeillie, eds. (New York and London: Harcourt Brace, 1978), p. 170.

²⁴ Qtd. in Bill Goldstein, *The World Broke In Two: Virginia Woolf, T.S. Eliot, D.H. Lawrence, E.M. Forster, and the Year That Changed Literature* (New York: Henry Holt, 2017), p. 106.

²⁵ Qtd. in Goldstein, *The World Broke In Two*, p. 106.

Smith, who had published detailed analyses of mummified remains from the Royal Caches in his volume The Royal Mummies (1912) and in Egyptian Mummies (1924), co-written with Warren R. Dawson just a year before Eliot published his poem. The Royal Caches were discovered in 1881 near Deir el-Bahari and in 1898 in the tomb of Amenhotep II located at Thebes. Fifty-some pharaohs, queens, and other royal family members comprised the Royal Cache of 1881. As their tombs had been robbed, the mummified individuals had been stowed in Theban Tomb 320 along with any grave goods that remained to them. Piled and crammed into passageways and tomb chambers, Rameses I, Ramses II, Amenhotep I, Thutmose II, Thutmose III, as well as queens and other royals had been gathered up by 21st dynasty priests and stashed in the cliffs surrounding Deir el-Bahari to safeguard their remains from further desecration. Several of the mummified royals were greatly damaged by plunderers, or perhaps later kings, who had stripped them of their gold and funerary amulets. Hurriedly rewrapped and re-labeled by priests, these pharaohs and others ended up in some instances in the wrong coffins and were unceremoniously stacked together. Eliot's description of 'hollow' and 'stuffed men', who are '[l]eaning together/Headpiece filled with straw', is reminiscent of the dishevelled state of the coffins and mummies discovered in these Royal

As Egyptologist Rosalie David notes: 'While [Smith] was Professor of Anatomy in the Cairo School of Medicine (1900-1909), Gaston Maspero, the Director-General of Antiquities in Egypt, invited him to examine [the] two caches of royal mummies that had been discovered at Deir el-Bahri and in the Theban Tomb of Amenhotep II (1898)'. In the texts noted above, Smith detailed the means by which the royals' bodies were prepared to best preserve the person's living likeness for thousands of years.

Smith meticulously analysed and recorded the materials used in Egyptian mummification. Particularly, in remains of the New Kingdom (1550-1070 BCE), the head, face, nostrils, limbs, and body cavities were often 'stuffed' (this is Smith's term) with linens dipped in resins, or with straw, sawdust, mud, butter, and other materials so that the body might retain a life-like appearance. The results in many cases were remarkable as in the case of Seti I, Thutmose I, Thutmose III, and Thutmose IV.

²⁶ Rosalie David, 'Sir Grafton Elliot Smith: Paleopathology and the Archaeology Survey of Nubia', *Paleopathology in Egypt and Nubia: A Century in Review*, Eds. Ryan Metcalfe, Jenifer Cockitt, and Rosalie David (Oxford: Archaeopress, 2014), p. 2.

Smith considered that the height of the art of mummification occurred between the 18th and the 21st dynasties and explained something of how such preservation was achieved:

The process of packing the body to restore its form was one of great technical difficulty.... [T]he embalmer introduced his hand and arm and passed it up through the body-cavity... to stuff the neck... with linen, mud, butter, or some other material, a plug of linen then being inserted... to retain the stuffing. The hand... was then introduced... into each thigh... and in this way stuffing was then pushed... into the whole leg, as far as the ankle.²⁷

Smith and his co-writer Warren Dawson note that, in order to create an even greater appearance of the mummified body as living, '[a]rtificial eyes were inserted under the eyelids' of the mummified bodies; 'These eyes, made of black and white stone, are the earliest instance of an attempt to represent the pupil in artificial eyes of a mummy, although in statues such eyes had been in use for many centuries'.²⁸

In stone and wood Ka statues of the dead, eyes were often made of rock crystal and other material to simulate real eyes. Smith writes:

What was needed above all to enliven [a wood or stone statue]... to animate it, were the eyes; the Egyptian artist set to work and with truly marvellous skill reproduced the appearance of living eyes.... The artist was considered to have made the statue really live; in fact, literally and actually converted it into a 'living image'....²⁹

One of the most recognizable examples of rock crystal being inserted into statuary to simulate living eyes is the celebrated bust of Nefertiti, the wife of Akhenaton, on display at the Neues Museum in Berlin.

²⁷ G. Elliot Smith, 'Egyptian Mummies', *The Journal of Egyptian Archaeology* (1914): pp. 194-195.

²⁸ G. Elliot Smith and Warren R. Dawson, *Egyptian Mummies* (London: Kegan Paul International, 1991), p. 114.

²⁹ G. Elliot Smith, *The Evolution of the Dragon* (Manchester: The University Press, 1919), pp. 52-53.

Eliot greatly admired Smith's work and invited him on several occasions to contribute articles to *The Criterion*, a literary journal Eliot founded and edited between 1922 and 1939. In a letter to his publisher Geoffrey Faber, Eliot observed that 'Smith will be one of the forces of our time'.³⁰ In *The Hollow Men*, the reference in Part I to 'those who have crossed/With direct eyes, to death's other Kingdom' brings to mind the artificial eyes inlaid in mummified bodies, and in statuary and funerary masks, such as the gold mask of Tutankhamun, which included quartz for the white portion of the eyes and obsidian for the pupils.³¹



Tutankhamun's Gold Mask. Source: Pexels.com

³⁰ T.S. Eliot, *The Letters of T.S. Eliot: Vol. 2*: 1923-1925 Eds. Valerie Eliot and Hugh Haughton (New Haven and London: Yale University Press, 2011), p. 610. ³¹ Eliot, *The Hollow Men, The Poems of T.S. Eliot, Vol. 1*, p. 81.

Sight was important to the Egyptians in the afterlife. Egyptologist Jan Assman explains that Tutankhamun's gold mask was considered to be a visualization technology to make it possible for the young king to see in the afterlife. From the Middle Kingdom forward, spells were inscribed into the burial mask, including that of Tutankhamun, that stated in part: 'You (the mask) are in front of N., he sees by means of you. You lead him to the goodly ways'.³² So important was sight in the afterlife that coffins of the Middle Kingdom included eyes painted on the exterior as a means of affording the deceased the ability to 'see' into the tomb and beyond.³³

Perhaps not surprisingly, Eliot's poem repeatedly mentions eyes and vision. Part IV of *The Hollow Men* begins:

The Eyes are not here There are no eyes here In this valley of dying stars In this hollow valley This broken jaw of our lost kingdoms.³⁴

The poem's setting in 'this hollow valley' of 'dying stars' presumably refers to the Valley of the Kings, the hillsides of which were hollowed out for the deep, rock-cut tombs of pharaohs and nobles. Indeed, repeated references throughout regarding 'dying stars,' a 'fading star', and the 'perpetual star', evoke the Egyptian decan stars and constellations, the rising and setting of which were used by ancient priests to mark the 10-day periods of the Egyptian month, as well as the hours of the night.

The star Sirius, for instance, which was identified with the deity Isis, could be referred to as a 'fading star' or 'dying star' as Sirius would not have been visible above the ancient Egyptian horizon for 70 days at a time. As astrophysicist and founder of archaeoastronomy J. Norman Lockyer

Jan Assman, *Death and Salvation in Ancient Egypt*, Translated from the German by David Lorton, (Ithaca and London: Cornell University Press, 2011), p. 108.

³³ Rogerio Sousa, Gilded Flesh: Coffins and Afterlife in Ancient Egypt, (Oxford: Oxbow Books, 2019), p. 175. Also Rune Nyord, 'Permeable Containers: Body and Cosmos in Middle Kingdom Coffins', in Ed. Rogerio Sousa, Body, Cosmos, and Eternity: New Trends of Research on Iconography and Symbolism of Ancient Egyptian Coffins (Oxford: Archaeopress, 2014), p. 42.

³⁴ Eliot, The Hollow Men in The Poetry of T.S. Eliot, Vol. 1, p. 83.

explained, Sirius's reappearance at its heliacal rising near the Summer Solstice, presaged the annual inundation of the Nile, celebrated for its fertilization of the Nile valley: 'During three thousand years of Egyptian history the beginning of the year was marked by the rising of Sirius, which... took place nearly coincidently with the rise of the Nile and the Summer Solstice'.³⁵

Eliot's seeming knowledge of significant Egyptian stars and asterisms as they related to Egyptian mythology may have been gleaned from *The Dawn of Astronomy*, published by Lockyer in 1894. In this sizable text, Lockyer detailed his own extensive survey of the orientation of ancient Egyptian pyramids, temples and tombs, as well as his investigation of inscriptions carved or painted on the walls of such monuments and found in funerary texts.³⁶ He noted that the figure of Osiris, for instance, was associated with the constellation of Orion, referred to by the Egyptians as Sah, while Sirius represented Osiris's wife and sister Isis.

Lockyer was instrumental in establishing the solar, stellar and cardinal orientations of numerous Egyptian mortuary monuments and temples and worked to identify the stars and constellations to which many in the pantheon of Egyptian deities were associated. He traveled to Egypt to map the orientation of temples, from the time they were built, to the rising of specific stars and constellations such as Sirius, Dubhe, and the constellation Ursa Major, known to the Egyptians as the bull's foreleg or Meskhetyu. As his biographer Arthur Meadows explains, Lockyer 'search[ed] though the hieroglyphic inscriptions which had been found in ancient temples, to see if any reference to astronomical orientation had been found'.³⁷ At Dendera, Lockyer confirmed the temple of Hathor was astronomically aligned to the circumpolar stars in Ursa Major and that supporting inscriptions in the temple read as follows: 'Looking to the sky at the course of the rising stars [and] recognising the [...] Bull's Thigh constellation, I establish the corners of the temple of Her Majesty'. 38 Lockyer proposed that the particular star in Ursa Major to which the temple

³⁵ J. Norman Lockyer, *The Dawn of Astronomy: A Study of Temple-Worship and Mythology of the Ancient Egyptians* (London: Cassell and Company, 1894), p. 249.

³⁶ J. Norman Lockyer, *The Dawn of Astronomy*, p. 135. Lockyer founded and was editor for decades of the journal *Nature*.

³⁷ Arthur Meadows, *Science and Controversy: A Biography of Sir Norman Lockyer*. 2nd Edition. London: Palgrave Macmillan, 2008, p. 238.

³⁸ Lockyer, *The Dawn of Astronomy*, p. 176.

was directed was Dubhe. He also argued that the temple of Isis at Dendera was oriented, when its foundations were laid, toward the rising of Sirius, the star with which Isis was associated.³⁹

Part IV of *The Hollow Men* likewise includes references to Egyptian myth and archaeoastronomy. The text reads:

In this last of meeting places
We grope together
And avoid speech
Gathered on this beach of the tumid river

Sightless, unless the eyes reappear as the perpetual star Multifoliate rose
Of death's twilight kingdom.

The hope only of empty men.⁴⁰

Eliot's 'last of meeting places' evokes the false doors of funerary chapels to which people participating in the funerary cult brought gifts of food and libation for the deceased. Moreover, the 'perpetual star' of Part IV, described as the 'hope only/Of empty men', suggests the myth that Egyptian kings would live eternally among the circumpolar stars, referred to in the Pyramid Texts as the 'Imperishable Stars' as those stars never set below the horizon.

Particularly in the Old Kingdom, it was generally believed that, upon death, the Pharaoh would live on into eternity among the circumpolar stars. Ursa Major, for instance, known in ancient Egypt as Meskhetyu, was circumpolar so that its stars never set. There, and among other constellations, the Old Kingdom kings were believed to reside in the afterlife, or actually be transformed into a star.

Eliot's knowledge regarding the importance of the 'imperishable stars' mentioned in the Pyramid Texts could have been gleaned from the works of archaeologist A. E. Wallis Budge, who from 1894 to 1924 was Keeper of the Egyptian and Assyrian Antiquities in the British Museum. Budge translated and published multiple ancient Egyptian texts and manuscripts including selections from the Pyramid Texts. Budge's *Osiris and the Egyptian Resurrection, Volume 2* (1911) included in its appendix

⁴⁰ Eliot, The Hollow Men in The Poems of T.S. Eliot, Vol. 1, p. 83.

³⁹ Lockyer, *The Dawn of Astronomy*, pp. 177, 206.

translations from the Pyramid Texts of Pepi I. There we read of the 'imperishable stars' in the following recitation: 'Therefore [Pepi I] cometh forth to heaven, he saileth over the firmament with life and serenity, he passeth over the Milky Way.... Now he appeareth in heaven among the imperishable stars.'41 Another recitation from the same text states that Pepi I is among 'the gods who are in the north of heaven'; 'They [the stars] are imperishable, he is imperishable...they cannot decay, he cannot decay'.⁴² As James Henry Breasted explained in 1912 of the circumpolar stars: 'It is especially those stars which are called "the Imperishable Ones" in which the Egyptian saw the host of the dead'.⁴³

Ancient Egyptian pyramids, tombs, temples, and myths regarding the afterlife reflected their civilization's desire to understand their purpose and place in the cosmos. Important to the narratives of Osiris was the concept of Ma'at, a concept that had seemingly sustained and stabilized ancient Egypt for millennia. Ma'at not only referred to an Egyptian deity but also to the notion that an individual life well-lived, in which one upheld the principles of justice and truth, was necessary to maintaining cosmic order. As Maulana Karenga explains, 'Maat is an interrelated order of rightness which requires and is the result of right relations with and right behavior towards the Divine, nature and other humans'. 44 Aspects of the concept of Ma'at lingers behind Eliot's own musings about the future of humankind and civilization in The Hollow Men, which famously concludes with the lines: 'This is the way the world ends/Not with a bang but a whimper'. 45 In those ancient vegetation narratives of Osiris and the Egyptian concept of Ma'at, Eliot was searching for a footing for his own culture regarding principles of justice and cosmic order in a war-decimated Europe. By the end of the poem, the narrator toggles between the longing of Egyptian dead to live among the imperishable stars as a 'perpetual star' and the Lord's

⁴¹ A.E. Wallis Budge, *Osiris and the Egyptian Resurrection: Illustrated after Drawings from Egyptian Papyri and Monuments*. Vol. 2. (London: Philip Lee Warner, 1911), p. 319.

⁴² Budge, Osiris and the Egyptian Resurrection, Vol. 2, p. 315.

⁴³ Breasted, *Development of Religion and Thought in Ancient Egypt* [1912] (New York: Harper and Row, 1959), p. 101.

⁴⁴ Maulana Karenga, *MAAT: The Moral Ideal in Ancient Egypt, A Study in Classical African Ethics* (New York: Routledge, 2004), p. 10.

⁴⁵ Eliot, The Hollow Men, in The Poems of T.S. Eliot, Vol. 1, p. 84.

Prayer doxology, which concludes with '[f]or thine is the kingdom....' Perhaps the world ending '[n]ot with a bang but a whimper' reflects the narrator's concern that civilizations inevitably fade when founding principles of justice are ignored and natural landscapes are damaged. In that case, the poem speaks to readers today as we grapple with human harms to our planet as well as failures in providing equality and justice for all peoples.