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Beyond Ecocriticism: A Cosmocritical Reading of Ælfwine's Prayerbook

Carl Phelpstead

Abstract

Whereas previous scholarship on the early eleventh-century Anglo-Saxon compilation known as Ælfwine's Prayerbook has focused on particular kinds of material it contains, this article takes account of the full range of texts and images in the manuscript in order to understand it as a whole. To do so, the essay establishes a new theoretical framework based on a critique of ecocriticism. Bringing contemporary African environmental thinking into dialogue with Martin Heidegger's account of human dwelling and his concept of the fourfold permits a broader and more historically appropriate conception of that which is other than human. An analysis of the contents of Ælfwine's Prayerbook in terms of this framework is followed by a conclusion setting out the wider potential application of the approach developed in this essay.

The Anglo-Saxon manuscript known as Ælfwine's Prayerbook is now bound as two separate volumes: London, British Library, MSS Cotton Titus D. xxvi + xxvii. This early eleventh-century manuscript (c. 1030) contains a wide variety of texts in both Latin and Old English: calendrical materials, prayers (both personal and liturgical), prognostics, devotions, medical recipes, odd bits of miscellaneous information, and a text of Ælfric of Eynsham's *De temporibus anni*, a vernacular handbook of astronomy, computus (the calculation of the date of Easter), and natural phenomena. It is a manuscript in which the reader may pass directly from a recipe for dealing with boils to a list of decisions by a synod of bishops.[1] Two main hands alternate throughout the manuscript, with later additions by nine others.[2] Scribe A gives his name as Ælsinus in a cryptographic note (D. xxvii fol. 13v).[3] The same note reveals that the manuscript belonged to Ælfwine, Dean of Winchester, who

also names himself in a prayer (D. xxvi fol. 61v, 'me famulam tuam Ælfwine'; 'me your servant, Ælfwine') and who is mentioned at the top of an illustration of the Crucifixion (D. xxvii fol. 65v).[4] After the manuscript's production, Ælfwine became abbot of Winchester in 1031/2; he died in 1057.[5] It is unclear whether, or to what extent, Ælfwine himself selected the texts for inclusion in his book, but Roy Liuzza is justified in claiming that the manuscript 'seems to reflect the interests of its owner'.[6] At appropriate points there are three very fine full-page illustrations: one of these shows St Peter with a diminutive figure assumed to be Ælfwine himself (D. xxvi fol. 19v).

By pursuing particular interests in only some of the contents of the manuscript, previous scholars have not read Ælfwine's Prayerbook as a whole. Analysis of miscellanies as whole books has become common in book-historical research, but rather than undertake a study of that kind this essay enters into dialogue with contemporary ecocriticism in order not only to read Ælfwine's Prayerbook as a whole but also to addresses some limitations of ecocriticism as currently practised.

I.

The difficulty of doing justice to the mix of texts in MSS Cotton Titus D. xxvi + xxvii is evident already in the modern title by which the manuscript is known: Ælfwine's Prayerbook.[7] As the brief description of the contents of the manuscript above will have made clear, prayers constitute only a portion of the contents of the manuscript. The inaccuracy of the title is acknowledged even by those who continue to use it: Lásló Sándor Chardonnens, for example, points out that the contents 'are much more varied than is suggested by its cognomen, Ælfwine's *Prayerbook'*.[8] Beate Günzel decided to stick with the conventional name because 'more than half of the manuscript consists of devotional sections and series of prayers', but she recognises that the title misrepresents the full range of contents.[9] In fact, a more accurate (if also more cumbersome) title for the manuscript had been suggested by Walter de Gray Birch when he first published and discussed selections from it in 1878, concluding that the two volumes of the manuscript 'may not be inaptly styled the Religious and Scientific commonplace books of Ælfwine'.[10]

The editorial history of the manuscript mirrors the modern mismatch between name and contents. Günzel's edition of most of the contents of the manuscript was published in 1993 by the Henry Bradshaw Society, a body dedicated to 'the editing of rare liturgical texts'.[11] This excellent edition is not in fact limited to the liturgical, or even the more broadly devotional, texts in Ælfwine's book, but nor is it, quite, an edition of all the texts in the manuscript, for Günzel omits the longest single Old English text, Ælfric's *De temporibus anni* and provides instead a synopsis of the contents of that text in her introduction.[12] There are good grounds for Günzel's omission: Ælfwine's Prayerbook is only one of eight surviving manuscripts of the whole or part of Ælfric's *De temporibus anni* and that text had already been edited separately (from a better manuscript), in an Early English Text Society edition by Heinrich Henel published in 1942; there was therefore no need for Günzel to include the text, especially in a volume included in a series of liturgical texts.[13] But the result of Günzel's editorial decision is that it is not possible for a modern reader to read all of the contents of MSS Cotton Titus D xxvi + xxvii in any single book except the manuscript itself in the British Library.[14]

Günzel's editorial decision to omit *De temporibus anni* echoes her introductory description of the contents of the manuscript, where she makes a problematic distinction between sacred and secular texts:

> The two volumes contain a calendar and a computus with Easter table, two texts from St John's Gospel, three special offices, an incomplete collectar, a litany of the saints as well as a great number of private prayers. In addition there are numerous secular texts, most of them prognostications, such as lunaria and a *Somniale Danielis*.[15]

Günzel later herself unravels this distinction between sacred and secular texts when she points out that Ælfric's *De temporibus anni*, a 'scientific' account of the calendar and of natural, especially meteorological, phenomena, is 'embedded in a theological context: [it] begins with an account of the creation of the world' and it quotes throughout from Scripture and the Fathers.[16] Her attempted

distinction between sacred and secular is thus anachronistic: the authors of the texts and the compiler and owner of the manuscript would not have made this kind of distinction.

Critical interest in Ælfwine's Prayerbook has likewise tended to focus on only parts of its contents. In a chapter on 'Anglo-Saxon Prayerbooks' Barbara Raw notes that the manuscript is a 'miscellany' (like the other surviving eleventh-century prayerbook, the Galba Prayerbook in British Library, MS Cotton Nero A. ii and MS Cotton Galba A. xiv), but she otherwise concentrates on only its liturgical and devotional contents.[17] That portion of Ælfwine's book also receives extended attention, alongside the Galba Prayerbook and Wulfstan of Worcester's Portiforium (Cambridge, MS Corpus Christi College 391) but with almost no reference to the computistical and prognostic texts in the manuscript, in Kate Thomas's doctoral thesis on private prayer in Anglo-Saxon England.[18]

MSS Cotton Titus D. xxvi + xxvii have, naturally, featured prominently in the early twenty-first century renewal of interest in Anglo-Saxon prognostics, texts that indicate how to foretell the future from natural signs or dreams or with divinatory aids. Scholars of prognostics have paid some attention to their manuscript context. Chardonnens's learned edition and study of Anglo-Saxon prognostics shows that they are often preserved with computistical and calendrical texts, but he does not relate the examples in MSS Cotton Titus D. xxvi + xxvii specifically to the devotional and liturgical texts in the manuscript.[19] In a survey of Anglo-Saxon secular learning in the vernacular Stephanie Hollis observes that Ælfwine's Prayerbook is one of three manuscripts that combine substantial material on computus and prognostics with all or part of Ælfric's *De temporibus anni*, but does not explore the devotional and liturgical material also found in Ælfwine's book.[20] Roy Liuzza, on the other hand, points out that prognostics are often preserved with psalms or prayers and that we should assume that they 'operated in the same world as their companion texts […] and were regarded with something of the same respect'.[21] This is an important corrective to the modern tendency to make sharp distinctions between the different kinds of text preserved in Ælfwine's Prayerbook.

Editors and commentators on texts in Ælfwine's Prayerbook have then, with the partial exception of some prognostics scholars, put asunder what Ælfwine and his scribes joined. By focusing on only the liturgical texts *or* only the prognostics *or* only Ælfric's *De temporibus anni*, scholars have not been in a position to reflect on what the manuscript as a whole might convey. In order to develop a more comprehensive reading of the compilation, this essay develops an approach inspired by, though also seeking to transcend, ecocriticism. In the last couple of decades ecocriticism has become a prominent strand of literary studies, eventually also becoming firmly established in the study of medieval literature.[22] Ælfwine's Prayerbook may initially seem an unlikely object of ecocritical attention. Plants or animals are, for example, rarely mentioned in the manuscript: there are just a few echoes of biblical animal imagery, an account of creation in Ælfric's *De temporibus anni*, the ingredients in medical recipes, and interpretations of animals that appear in dreams. It is, in fact, precisely the apparent incongruity between manuscript and critical approach which proves productive here. There are limitations to ecocriticism which come into particularly sharp focus when one thinks about how an ecocritic might read a collection such as Ælfwine's Prayerbook; bringing the two into dialogue thus not only enables a reading of the compilation as a whole, but also inspires a more capacious and historically sensitive mode of ecocriticism which has wider potential application.

A first such limitation is ecocriticism's restriction to the sublunary world. Cheryll Glotfelty defines ecocriticism as 'the study of the relationship between literature and the physical environment', but then tellingly goes on to limit 'physical environment' to this world: 'ecocriticism takes an earth-centred approach to literary studies'.[23] Starting from Greg Garrard's more capacious and congenial definition of ecocriticism as 'the study of the relationship of the human and non-human',[24] I want here to advocate a more comprehensive reading of relationships between humans and their physical environment, one that recognises that the physical environment extends beyond earth's atmosphere and encompasses our larger cosmological context. Although such an approach

would fit within Garrard's definition of ecocriticism, in order to distinguish it clearly from ecocriticism as normally practised (in more narrowly 'earth-centred' terms) , I here adopt (and wish to promote) the term 'cosmocriticism', as explained further below.

A second limitation is one that I have recently discussed in an article about the thirteenth-century Icelandic text, *Eyrbyggja saga*.[25] Insofar as ecocriticism is concerned with the relationship between the human and the non-human, in many medieval texts this must include not only relationships between humans and the physical environment or humans and animals: it must also extend to the relationship between humans and the *super*natural non-human. The ready acceptance of the supernatural in medieval literature is a challenge to ecocritics to come to terms with the historical contingency of their common assumption that the non-human is limited to the natural. Thus, just as a peculiarly modern distinction between sacred and secular imposes anachronistic division on the varied contents of Ælfwine's Prayerbook, so modern assumptions about what constitutes the non-human limit ecocriticism's scope: a more broadly cosmological approach of the kind I will go on to develop here offers a means of escape from this limitation.[26]

While it has relatively little to say about plants, animals, or landscapes, Ælfwine's Prayerbook is a manuscript that continually relates human life to natural and cosmic phenomena more broadly: time is related to the movements of celestial bodies, lists are provided of appropriate days for (human) blood-letting, and the relationship between the moon and the tides is explained.[27] The book also reveals a world – or cosmos – saturated with meaning, as for example when rules are provided for interpreting the future from the sound of thunder (brontology).[28] This sense of relation with the cosmos is strongest in the computistical, cosmological, and prognostic texts in the manuscript, but is not wholly absent from the prayers: it is there, for example, in the imagery of light and darkness in the collects for the day hours, or when God is invoked as 'pater de celis' ('Father of heaven') in the litany of saints, or when he is recognised as 'Celi terreque conditor' ('Creator of heaven and earth') in one of the private prayers.[29] Thus the varied contents of Ælfwine's Prayerbook

impel one beyond the sublunary preoccupations of ecocriticism to recognize the ways in which texts reveal, reflect, and construct relationships between humans and the non-human that extend beyond this world to encompass comets, sun, moon, and stars.[30]

On this reading, analysis of the relation of the human to the non-human need not be restricted to this world (the *oikos* of *eco*criticism), but can, and indeed should, extend to the relationship between humans and the cosmos as a whole. I label such an approach 'cosmocriticism', employing a term that has previously been used in a different, but illuminating, context. A contemporary Cameroonian novelist (and government minister of higher education) Jacques Fame Ndongo argues that the 'lack of differentiation between human and animal, living and dead in traditional African cultures'[31] calls for a more contextually appropriate approach than that provided by western ecocriticism: he says in an interview that 'I go even beyond ecocriticism and come to "cosmocriticism"'.[32] Another Cameroonian, Godfrey B. Tangwa, writes that in traditional African cultures 'human beings tend to be more cosmically humble and therefore not only more respectful of other people but also more cautious in their attitude to plants, animals, and inanimate things, and to the various invisible forces of the world'.[33] As Alice Curry puts it, 'Such a heritage destabilises western understandings of human subjectivity by calling attention to the artificiality of the stable dichotomies between self and other, human and nonhuman on which successive instantiations of enlightenment humanism have been built'.[34] Importantly, though, for Tangwa the nonhuman includes 'various invisible forces of the world' and this especially sets what he describes as 'the African traditional outlook' apart from what he calls 'Western culture'. Tangwa also explains that in a traditional African worldview, 'the distinction between plants, animals, and inanimate things, between the sacred and the profane, matter and spirit, the communal and the individual, is a slim and flexible one'.[35]

Tangwa explains that he uses the terms 'Western' and 'African' without intending to imply 'that some differences or exceptions may not be found within what is thus bracketed'.[36] It is

important, of course, to recognise the variety within both medieval European and traditional African cultures and also to acknowledge the differences between them. Despite such differences, the term 'cosmocriticism' can nevertheless usefully be deployed in order to acknowledge that in both cultures relationships between human and non-human extend beyond the animals, plants, and landscapes with which ecocriticism is typically concerned to include also heavenly bodies and the invisible forces of the cosmos. Thus we may set alongside the observations of Ndongo and Tangwa about African culture Jennifer Neville's claim that the lack of an Old English word for 'the natural world' reflects 'the absence of the concept itself'; in Old English texts 'it is not possible to separate natural from supernatural phenomena'.[37] Helen Foxhall Forbes has similarly noted that medieval Latin *natura* 'could incorporate both the visible and invisible in creation'.[38] An approach to Anglo-Saxon (and other premodern) texts that goes 'beyond' ecocriticism to cosmocriticism may free a critic from bondage to postmedieval categories and assumptions.

Returning to Ælfwine's book, we can see that focusing on the relationship of humans to the whole of the non-human cosmos (natural and supernatural, sub- and superlunary) enables recognition of ideological unity in the variety and mixture of contents in the manuscript and so permits one to read the whole compilation in a way that previous editors and commentators have not done. As Tangwa's comments suggest, a cosmocritical approach will not make the sharp distinction between 'sacred and profane, matter and spirit' that modern Western scholars have tended to adopt (as, for example, in Günzel's description of the contents of the manuscript quoted above). Ælfwine's Prayerbook provides a rare opportunity to investigate how a known individual Anglo-Saxon's relationship to both this world and the larger cosmos was mediated (and constructed) by the texts collected in his personal book. This is not to say that 'cosmology' is a 'theme' in the manuscript or that texts were chosen for copying because they dealt with the subject of humanity's place in the cosmos. It is, however, possible to read the manuscript as an expression of how one eleventh-century Anglo-Saxon related to the visible and invisible cosmos of which he was part. In order to argue,

more specifically, that this book reveals how Ælfwine understood himself to be dwelling in the universe, I draw on a philosophical essay which has had considerable influence on the environmental movement, without, as far as I know, leading ecocritics in the direction taken here: Martin Heidegger's 'Building Dwelling Thinking' (originally published in 1951).[39] In that essay Heidegger writes that:

> human being consists in dwelling and, indeed, dwelling in the sense of the stay of mortals on the earth.
>
> But 'on the earth' already means 'under the sky.' Both of these *also* mean 'remaining before the divinities' and include a 'belonging to men's being with one another.' By a *primal* oneness the four – earth and sky, divinities and mortals – belong together in one.[40]

Heidegger goes on to declare that 'This simple oneness of the four we call *the fourfold*. Mortals *are* in the fourfold by *dwelling*'.[41] This concept of the fourfold is central to late Heidegger and to his understanding of 'the utter relationality of worldly existence'.[42] The terms are most usefully interpreted broadly: Julian Young argues, for example, that Earth 'seems to embrace the totality of things, animal, vegetable, mineral, with which we share our world'.[43] Picking up on Heidegger's statement in another essay in *Poetry, Language, Thought* that 'sky' includes 'the year's season's [...] the clemency and inclemency of the weather',[44] Young claims that it 'embraces, as well as the literal sky, that which is thought of as belonging to or coming from it'.[45] Two leading commentators on the fourfold disagree on what is meant by Heidegger's 'gods' (*die Göttlichen*, 'the godly ones'): for Young, these represent the edicts or ethos of a community, the community's 'heritage' embodied in 'heroes' who are 'more or less mythologized figures preserved in the collective memory of a culture';[46] the heroes of early Heidegger are thus rethought in a 'deeper and richer way' as the 'gods' of later Heidegger, giving 'voice to that which is most sacred to us'.[47] In this way the fourfold of earth, sky, gods, and mortals is a poetic formulation of 'the twofold of nature and culture'.[48] Andrew Mitchell rejects this interpretation, arguing that *die Göttlichen* are neither God nor the gods, but 'the

god-like ones sharing in the divine and sharing it further as messengers'.[49] In a recent book-length account of the fourfold he explains that 'By writing the divinities into the very nature of things, Heidegger is constituting things as intrinsically bearing a message. Otherwise put, things are inherently meaningful'.[50] Either way, for the purposes of this essay the inclusion of the divinities within the fourfold is an acknowledgement of whatever is beyond the physical, natural world as integral to being-in-the-world, thus creating a space for at least the possibility of the supernatural. We may think of this element of the fourfold as the transcendent: Mitchell writes that 'God is the figure of the surpassing as this has been understood across the history of metaphysics [...] Things are now inherently meaningful because things are intrinsically tied to a beyond outside them'.[51]

In the next part of this essay I will show how a late-Heideggerian understanding of human dwelling in terms of the fourfold provides the theoretical framework for a cosmocritical analysis of the contents of Ælfwine's Prayerbook. This cosmocritical orientation amounts to much more than a claim that if one adopts a broad enough perspective then everything turns out to be connected. It, firstly, offers a particular view of what constitutes 'everything', a perspective that (in contrast to the assumptions of much contemporary criticism) allows for at least the possibility of the existence of the supernatural as well as the natural. It also attends to the kinds of connection involved, not simply the fact of their existence. This is implicit in Heidegger's choice of prepositions when describing the fourfold ('on', 'under', 'before'). In addition, this approach posits that being aware of the relationality of existence makes a difference: it is not just that Ælfwine lived with others on the earth, under the sky, and before the transcendent; the texts in his Prayerbook enabled him to understand that he did so and to live accordingly.

II.

MS Cotton Titus D. xxvii, originally the first part of Ælfwine's Prayerbook, opens not with any kind of prayer, but with a text that immediately establishes the interrelationship between human beings and heavenly bodies: a lunarium for blood-letting.[52] The text simply states which of the days of a

thirty-day lunar cycle are good or bad for blood-letting; the phase of the moon is clearly thought to influence – or at least be synchronized with – human physiology. The lunarium is followed by further calendrical material (with miscellaneous other brief texts interspersed), including a month-by-month liturgical calendar and sanctorale (item 4), and verses and tables for calendrical calculations that set out the limits of the various moveable feasts and commemorations centred on Easter (items 7–9, 11, 16). There is then an incomplete diagram of the relation between the moon and the sea (item 17 cf. item 41 later in the manuscript); this is followed by further guidance on days for blood-letting, this time linked to the solar calendar, rather than the lunar cycle (item 18). Next comes information on the *saltus lunae* (item 20)[53] and the manner in which the amount of daylight each day increases and decreases throughout the year (item 21). This is followed by a series of texts relating to the calculation of the date of Easter in relation to the spring equinox and lunar calendar (items 22–26) and then several short pieces of information about other aspects of the calendar (such as leap years, the relationship between the solar and lunar calendars, the lengths of the seasons and their starting dates, the calculation of Advent, and the ways in which a year may be divided; items 27–31, 33). A prognostic text known as Pseudo-Esdras or *Revelatio Esdrae* because it is elsewhere often attributed to the prophet Ezra, gives a series of predictions for how the year's weather will turn out, depending on the day of the week on which 1 January falls (item 32).[54] After a fairly lengthy prayer of confession (item 34, the first prayer in this so-called Prayerbook) there is then a general lunarium, which describes the characteristics of each day of a thirty-day lunar month (item 35). As with the earlier lunarium for blood-letting, this presupposes some correlation between the phases of the moon and other phenomena, here including the lives of plants, animals, and human beings.

The opening thirty-five items in Ælfwine's book are thus almost all concerned with various aspects of the measurement of time, the calculation of the liturgical calendar, and the ways in which the reflection of the passage of time by the heavenly bodies, above all in the lunar cycle, correlates with sublunary phenomena such as the weather, tides, the growth of crops, and human health. The

miscellaneous texts presuppose the interrelationship of humans with both the heavenly bodies and the divine; in this way the texts give expression to a belief in the place of human beings on earth, under the sky, and open to the transcendent.

Thus far, the contents of Ælfwine's book have all been in Latin. The next text is the longest Old English text in the manuscript, Ælfric's *De temporibus anni*. Ælfric's work presents at the level of a single text some of the issues raised by the Prayerbook as a whole. One such correspondence is its misleading title, *De temporibus anni,* which is, to quote the text's most recent editor, 'not a particularly apt description of the whole content'.[55] In addition to material on time and its measurement, the text also includes other cosmological and meteorological information. Another correspondence between this text and the larger compilation of which it is part in MSS Cotton Titus D. xxvi + xxvii is the way it resists modern scholarly categorisations. As Baker points out, the mix of religious and scientific concerns in this text has presented challenges to some commentators who have found it difficult to reconcile 'Ælfric's usual relentless championing of orthodox theological teaching' with the 'simple desire to share his knowledge of what we would call natural science' in this work.[56] Baker rightly goes on to argue that Ælfric would not have recognised any tension between these aims: 'To explain to his hearers and readers about the nature of the universe was to explain to them something about the nature of God' and to teach about Creation and astronomy was to provide tools with which to calculate when to commemorate 'the events of salvation history, especially the key event of Christ's sacrifice on the cross'.[57]

Ælfric's work stands in a tradition of expository texts concerned with the relationship between time and Christian truth as embodied in the liturgical calendar. The highpoint of that tradition in the centuries before Ælfric wrote was the work of Bede, whom he describes as 'se snotera lareow' ('the learned teacher') and whose scientific writings are alluded to in Ælfric's title.[58] Ælfric offers a simplified version of some of the material Bede discusses: his more limited aim is to supply basic calendrical and cosmological information to under-educated priests who will thereby

acquire at least some grasp of the issues involved in calculating the date of Easter (and so of the liturgical commemorations dependent on it). In the larger manuscript context of Ælfwine's Prayerbook this material acquires deeper meaning from its juxtaposition with devotional materials that meditate upon the salvation history commemorated each year in the liturgical calendar.

The first part of Ælfric's *De temporibus anni* is concerned with the measurement of time and the calendrical information necessary to understand the basics of computus.[59] As it is preserved in Ælfwine's Prayerbook (where the section that appears as the opening of the text in CUL, MS Gg. 3. 28 and in modern editions comes instead at its end), Ælfric's text begins with an explanation that the first real day (there being no sun, moon, or stars on the first three 'days' of creation) was the fourth day of creation, which was also the first vernal equinox.[60] This is followed by an explanation of night, caused by the earth's shadow and experienced only on earth, not in the 'heofonlicum eðele' ('heavenly abode').[61] Ælfric notes that the moon acquires its light from the sun, describes the moon's orbit and phases and its role in solar eclipses, and explains the relationship between the phases of the moon and the date of Easter. The following section *De anno* ('On the Year') provides basic information about the sun's passage through the zodiac (with explanations of the twelve signs), the reason for leap years, and varying customs regarding the start of the year;[62] explanations are also provided of the lunar calendar and its (mis)fit with the solar, and of the four seasons. Having described the principal heavenly bodies and their role in the measuring of time, Ælfric notes that 'Seo eorðe stent on ælemiddan' ('The earth stands at the exact centre' of the cosmos).[63] Sections follow providing more detail on the equinoxes (recognising that the earth is a sphere), the bissextile day of leap years (correcting a misunderstanding of its origin), and the *saltus lunae*. The latter section ends with some observations on the relationship between the moon (and sun) and the weather and on the influence of the moon on trees and worms, and the relationship between the moon and the tides: 'Seo sæ 7 se mona geðwærlæcað him betweonan: æfre hi beoð geferan on wæstme 7 on wanunge' ('The sea and the moon are in harmony with one another; they are always together in

growing and diminishing').[64] The cosmological and calendrical part of the text concludes with a section on various stars (*De diversis stellis*): this includes an explanation of meteors, information on the names of some constellations, and an assertion about the significance of comets: 'swa oft swa hi æteowiað hi gebicniað sum ðing niwes toweard þære leode ðe hi ofer scinað' ('whenever they appear they signify something new towards the land over which they shine').[65]

This first part of Ælfric's *De temporibus anni* frames its account of cosmology and the measurement of time in theological terms: the appropriate annual commemoration of the events of salvation history is the impetus for knowledge of the principles of calendrical calculation, and an appreciation of the relationships between different parts of creation redounds to the Creator's praise. In other words, theological – even devotional – and scientific impulses are in harmony rather than at odds with each other, just as Creation itself is presented as an harmonious order. In the cosmocritical terms of Heidegger's fourfold, Ælfric's text constructs its mortal reader as living on the earth, under the sky, before the divine, and in relationship with each of those three realities.

We saw above that Heidegger's conception of the sky includes 'the clemency and inclemency of the weather', and the second part of Ælfric's *De temporibus anni* proceeds to explain a variety of meteorological phenomena: the twelve winds, rain, hail, snow, and thunder.[66] The account of winds emphasises the importance of air to animals and humans: 'on ðam fleoð fugelas, swa swa fixas swymmað on wætere. Ne mihte heora nan fleon nære seo lyft ðe hi berð. Ne man ne nyten næfð nane orðunge buton ðurh ða lyfte' ('in it birds fly, just as fish swim in water. None of them would be able to fly were it not for the air which supports them. No man or beast would be able to breathe without air').[67] A natural explanation for rainfall is provided, but for Ælfric this does not exclude divine agency: 'Renas cumað of ðære lyfte þurh Godes mihte. [. . .] Soðlice Godes miht gefadað ealle gewederu se ðe ealle ðing buton earfoðnysse gediht' ('Rainfall comes from the air through God's power. [. . .] Indeed, God's power arranges all weathers, he who disposes all things without difficulty').[68] Entirely natural explanations are given for hail, snow, and thunder, although Ælfric

also allows for a non-natural form of thunder: 'Soðlice ða þuneras þe Iohannes ne moste awritan on Apocalipsin sind gastlice to understandenne, 7 hi naht ne belimpað to þam ðunere ðe on ðissere lyfte oft egeslice brastlað' ('However, the thunder which John was not to write about in the Apocalypse is to be understood spiritually, and it is in no way related to the thunder which often roars terribly in the air').[69] Thus we see in this meteorological part of Ælfric's treatise, just as in the cosmological part, a combination of scientific and theological concerns, as well as a similar interest in the relationships between humans, the non-human natural world, and the supernatural.

As noted above, in the version preserved in Ælfwine's Prayerbook Ælfric's account of God's creation of the cosmos comes at the end, rather than the beginning, of *De temporibus anni*. The section is certainly better suited to opening the text, but coming at its end in this redaction it retrospectively reinforces the point that Ælfric understands relationships between humans, animals, plants, sun, moon, and stars in relation also to the supernatural and within a theological frame of reference. The section recounts the biblical story of Creation in six days from Genesis 1, providing an outline cosmology and affirming that everything that exists does so by God's command. The connection between sun, moon, stars, and the measurement of time is stressed, but here Ælfric also allegorizes natural phenomena, explaining that the sun signifies Christ, who gives light to the moon (representing the Church) and the stars – faithful members of the Church, 'ðe on goddre drohtnunge scinað' ('who shine in their good behaviour').[70] The text of *De temporibus anni* as preserved in Ælfwine's Prayerbook ends by quoting from the Latin version of the Prologue to John's Gospel, the very text with which, as we shall see, the manuscript as a whole comes to an end: Christ 'Erat lux uera que inluminat omnem hominem uenientem in hunc mundum' ('was the true light who illuminates everyone who comes into this world').[71]

Before we move on to consider the rest of the manuscript, it is worth noting that the inclusion of *De temporibus anni* alongside some of the prognostic texts in Ælfwine's Prayerbook creates an incongruity. On occasion in *De temporibus anni* Ælfric is concerned to correct misunderstandings

that might promote superstition or deny the freedom of human will, and here and in other works he explicitly condemns practices that are promoted in some of the anonymous material elsewhere in Ælfwine's Prayerbook, such as lunar prognostication.[72] There is, however, an undeniable influence of the moon on some sublunary events (such as the tides), so that, as Liuzza notes, when discussing lunar influence Ælfric is 'caught between science and faith: lunar influence is an accepted fact of nature, but forecasting specific events or actions based on celestial influence is a dangerous practice best avoided by any pious Christian'.[73] Ælfric's difficulty – and the resulting mixed messages that Ælfwine must have derived from his manuscript – points to the limitations of an ecocritical approach that restricts itself to the sublunary: superlunary bodies do undoubtedly influence life on earth, and human relationships to the superlunary therefore merit a place in cosmocritical thinking.

A variety of miscellaneous items in both Latin and Old English follow Ælfric's *De temporibus anni* in Ælfwine's Prayerbook. Some pieces reflect the concerns of the section of the book preceding Ælfric's text, such as the limits for moveable feast days (item 38), or the relationship between the moon and the tides (item 41 cf. item 17). However, following *De temporibus anni* devotional and liturgical elements become much more prominent in the manuscript. These include St John's account of Christ's Passion (item 43), prayers and devotions to the Cross (items 44, 46), a prayer to a Guardian angel (item 47), and 'offices' of the Trinity, Holy Cross, and Blessed Virgin Mary (items 49–51) that pre-figure the later medieval development of the offices known as the 'Little Hours'. MS Cotton Titus D. xxvii ends with a miscellaneous collection of private prayers (item 52). In this section of the Prayerbook, the focus is most obviously on the relationship between the human and the divine, man before the divinities in the terms of Heidegger's fourfold. Nevertheless, the other two co-ordinates of that fourfold, humanity's place on the earth and under the sky, are not entirely lost sight of in this part of the manuscript. The Cross is invoked as 'more splendid than all the stars' ('O crux splendidior cvnctis astris'); its construction from wood and pre-eminence above other trees is recognised; the Virgin Mary is invoked as 'Stella Maris' ('Star of the

Sea'); God is praised as creator of heaven, earth, the sea, and everything in them, visible and invisible.[74] In his description of the fourfold Heidegger writes, as we have seen, that dwelling on the earth under the sky '*also* mean[s] "remaining before the divinities" and include[s] a "belonging to men's being with one another"'.[75] The prayers in this part of Ælfwine's book not only place the reader before the divine, but also as part of a community that includes other human beings addressed in prayer: the Virgin Mary, and saints Peter, Benedict, Gregory, Augustine, Cecilia, all apostles, and all saints.[76] This is a community that transcends the division between living and dead in a way comparable to the lack of differentiation between these states that Ndongo finds in traditional African culture. The community to which the reader belongs extends also beyond the natural realm to include the angels (prayer to a Guardian Angel, item 47).

The now separate manuscript MS Cotton Titus D. xxvi originally followed D. xxvii when they were bound together. The first items in this part of the manuscript are of very miscellaneous nature, but include a note on the types of wood used to make the Cross (cypress, cedar, pine, and box; item 55), and information about lucky and unlucky days (items 56–59). A series of prognostic texts follow, including weather signs (item 60), several lunaria relating to blood-letting, the future fate of people born on each day of the lunar cycle, illnesses, and dreams on each day of the cycle (items 61, 63–65), a brontology (item 66), another text of Pseudo-Esdras (item 67), and a key to the meanings of dreams known as *Somniale Danielis* (item 68). These disparate texts are united in giving expression to a sense of cosmic interconnection: trees, weather, the moon, and thunder all relate to or influence human life.

After a short series of ejaculatory prayers (item 69) natural ingredients, such as honey, are included in a recipe for curing boils (item 70). With the exception of a charm for finding a thief (item 77), the rest of the manuscript is devoted to religious material, especially Latin prayers; these include a lengthy collectar with prayers for the commons of saints, short scriptural readings suitable for any day, and collects for the Sundays of the temporale (item 73), a series of daily prayers for sinners

(item 74), collects for the day hours (item 75), devotions on the penitential psalms (item 74), a lengthy litany of the saints (item 75), and a substantial collection of what Günzel calls 'private prayers' (item 76). The manuscript ends with the prologue to St John's Gospel (item 78). As with the devotional material earlier in the manuscript, a cosmocritical approach might note that in this part of the manuscript the reader is not only, in Heidegger's terms, 'before the divinities', but also on the earth, under the sky, and in communion with other mortals. Imagery of light and darkness permeates the collects for the day hours, reflecting the daily influence of the heavenly bodies on life. The reader's place in a community that extends beyond the living to include also the dead and beyond the natural to include the angels is given expression in the collects for commons of saints, in the invocation of numerous named individual saints in the litany of saints, in prayers for the church and the dead in the temporale, litany, and private prayers, and in references to individual saints and angels in the private prayers. In the final item in the manuscript, the Latin text of John 1:1–14, the reader is again reminded that the entire cosmos was created by God and his Word: 'Omnia per ipsum facta sunt, et sine ipso factum est nihil quod factum est' ('All things were made through him and without him was not anything made that was made').[77]

I will conclude by offering a cosmocritical reading of the illustrations in Ælfwine's Prayerbook. These illustrations act, in Catherine Karkov's words, as 'icons, the visual *foci* for the prayers they accompany'.[78] Each of the images also gives visual expression to the kinds of relationship between humans and non-human reality (whether natural or supernatural, sub- or superlunary) that are articulated in the verbal texts in the manuscript. In the image on D. xxvii fol. 75v geometric frames, as well as facial expressions, bring the different figures on the page into relation with one another. Karkov calls the illustration 'The Trinity with Mary', but Ernst H. Kantorowicz's 'The Quinity' is perhaps a more appropriate label: besides images of God the Father and God the Son pictured in human form, a dove representing the Holy Spirit, and the Virgin Mary, the central roundel also includes the Christ child in Mary's arms (so that the Second Person of the

Trinity is represented twice, perhaps in recognition of Christ's dual nature).[79] The divine is thus figured in both human and animal forms, signalling correspondences and connections between these different modes of existence. The image has a cosmological scope: the roundel containing the Quinity may represent heaven (or the heavens), with the decorative circles within the frame perhaps representing stars, while at the bottom of the image Satan is falling into a hell mouth (conceived in animal form) on either side of which the traitor Judas and heresiarch Arius languish in chains. If this illustration represents relationships between animal, human, and divine life from heaven to hell, that on D. xxvi fol. 19v crosses the divide between living and departed and brings the manuscript's owner into relation with the transcendent as mediated through the patron saint of his abbey: a diminutive monk, presumed to be Ælfwine, stands before St Peter, wielder of the keys to heaven.

Of the three full-page illustrations in Ælfwine's Prayerbook, that which most fully encapsulates a cosmocritical perspective is the illustration of the Crucifixion (D. xxvii fol. 65v – see figure 1), which prefaces a section of the manuscript containing prayers and devotions to the Cross. An ecocritic might address the presentation of the cross here as tree of life; we have seen that a brief text elsewhere in the manuscript lists the five woods used for the cross (item 55): the natural world is thus involved in salvation history. One might also note the flora at the foot of the Cross and the green colouring, especially Christ's force-field-like green outline. But for a cosmocriticism inspired by Heidegger's vision of human dwelling there is more to be said. Most obviously, perhaps, there are the images of the sun and moon and their personification (*sol* and *luna*) at the top of the page, an established convention in Anglo-Saxon crucifixion iconography.[80] In Heideggerian terms, the Crucifixion illustration in Ælfwine's Prayerbook, like the manuscript as a whole, situates humans (mortals) on the earth and under the sky. They are also in community, a new community being established at the Crucifixion as Christ entrusts his Mother and St John to one another and through his own salvific death – his sharing of human mortality – establishes the Church, a community of the redeemed that also includes Ælfwine and his scribes. Karkov has drawn attention to the way in

which the amount of writing on the page links it with the texts that precede and follow the illustration.[81] The inscription at the top of the page brings not only the book's owner, but the whole cosmos into relation with the transcendent: 'Hec crux consignet Ælfwine corpore mente. In qua suspendens tra(xit) d(eu)s omnia secum' ('This cross signs Ælfwine in body and in mind, on which the hanging God drew all things to him').[82] The characters in the illustration and the observing reader are thus united as mortals on the earth, under the sky, and open to the divine or transcendent.

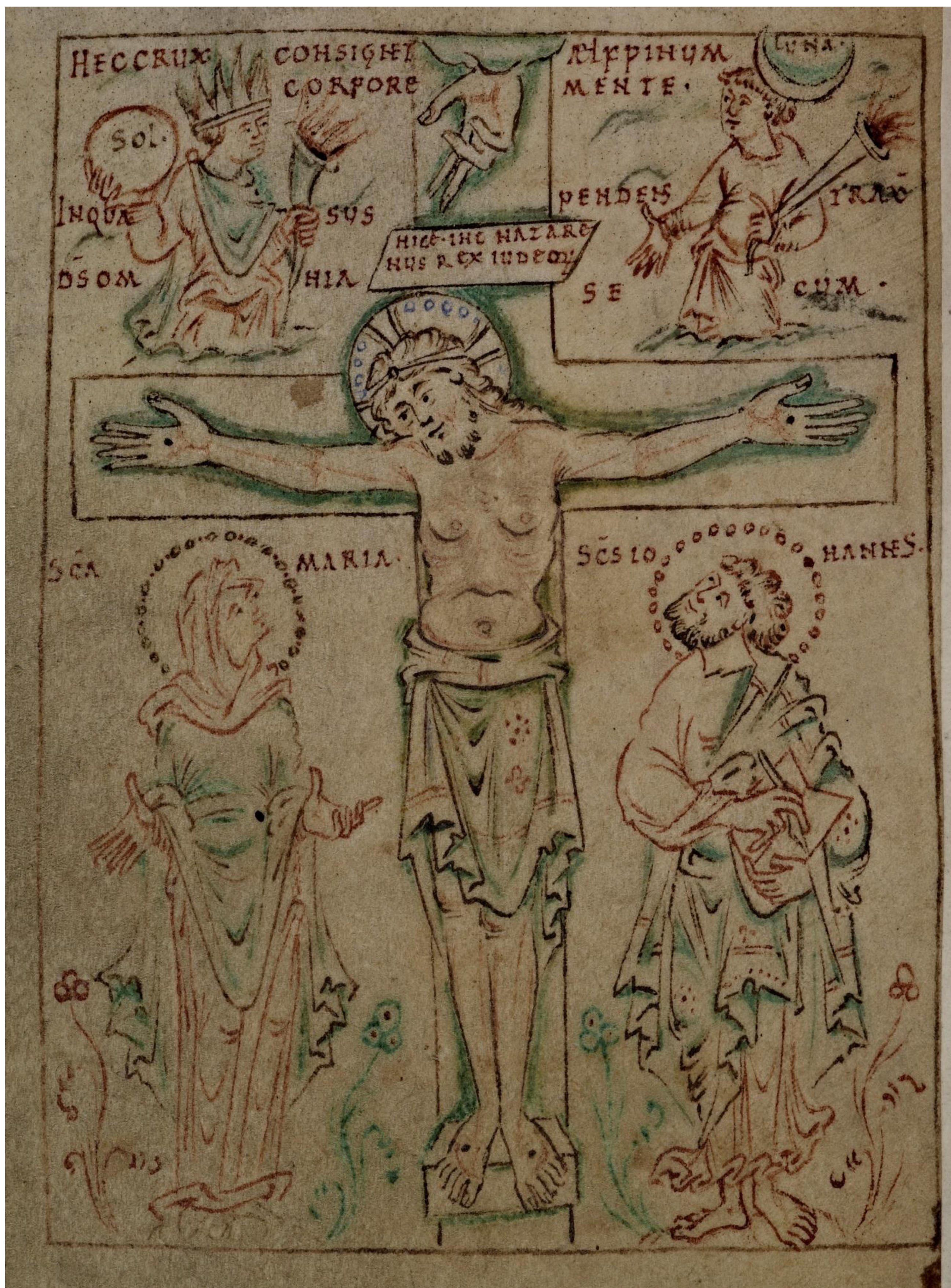
A cosmocritical approach informed by Heidegger's concept of the fourfold enables a reading of Ælfwine's Prayerbook that finds meaning and unity in the diversity of the manuscript's contents. The approach developed here has, however, rich potential for much wider application, transcending as it does some limitations of ecocriticism. Cosmocriticism is more sensitive to the historical and cultural situation of premodern texts than an ecocriticism that denies or ignores the supernatural can be. It is additionally able to look beyond the sublunary to take account also of human relationships with the superlunary. In exposing historically contingent assumptions about what counts as nature or environment that underlie ecocritical analyses, cosmocriticism has the potential to stimulate new readings of modern as well as medieval texts.

Ecocriticism recognises the importance of the imagination in understanding and negotiating relationships between humans and the rest of nature; it aspires, however, not merely to interpret texts, but to make a difference in the world by informing contemporary environmental debate and action. A cosmocriticism of the kind advocated in this essay acknowledges the possibility that part at least of the answer to our current ecological crisis may lie in acquiring a new sense of relationship with, and belonging to, not merely the sublunary natural world, but also a wider cosmic environment. If we can recover a sense of relationship with the cosmos as a whole, then some hope may be found in Julian Young's assertion that 'To be at home in a place is to care for it'.[83] An Anglo-Saxon manuscript whose varied contents represent mortals belonging to one another on the earth, under the

sky, and before the transcendent may offer an instructive model of what it can be like to dwell at one with the cosmos.

Figure 1:

Illustration of the Crucifixion in Ælfwine's Prayerbook. © British Library Board (London, British Library, Cotton Titus D. xxvii f. 65v)


HECCRUX
CORPORE
MENTE.
LUNA
SOL.
INQUA
SUS
DSOM
HIA
PENDENS
SE
CUM.
SCA MARIA
SCS IOHANNES

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[1] London, British Library, MSS Cotton Titus D. xxvi fol. 17r–v. *Ælfwine's Prayerbook (London, British Library, Cotton Titus D. xxvi + xxvii),* ed. Beate Günzel (London, 1993), 157, items 70 and 71. For a brief description of the manuscript and its origins see N. R. Ker, *Catalogue of Manuscripts Containing Anglo-Saxon* (Oxford, 1957), 264–66 (item 202); Ælfwine's Prayerbook is item 380 in Helmut Gneuss and Michael Lapidge, *Anglo-Saxon Manuscripts: A Bibliographical Handlist of Manuscripts Written or Owned in England up to 1100* (Toronto, 2014), 305–07. Ker dated the manuscript to 1023x1035, but see Günzel, *Prayerbook*, 1–2 on the likelihood that the manuscript was copied before 1031 or 1032; Gneuss and Lapidge give the date as 1023x1031 (*Handlist*, 305). The Prayerbook is now among the digitized manuscripts freely available to view on the British Library website: see http://www.bl.uk/manuscripts/FullDisplay.aspx?ref=Cotton_MS_Titus_D_XXVI and http://www.bl.uk/manuscripts/FullDisplay.aspx?ref=Cotton_MS_Titus_D_XXVII [last accessed 20 March 2018].

[2] Günzel, *Prayerbook*, 6–7.

[3] Günzel, *Prayerbook*, 109 (item 14). The scribe, who also wrote most of the New Minster *Liber vitae* that was begun soon after the start of Ælfwine's abbacy at Winchester, is probably to be identified with a priest called Ælfsige (the Old English equivalent of Ælsinus) in the *Liber vitae* (London, British Library, Stowe MS 944, fol. 21v): see Richard Gameson, 'Aelsinus' in *The Oxford Dictionary of National Biography,* www.oxforddnb.com [last accessed 20 March 2018] and Ælfsige 85 in the *Prosopography of Anglo-Saxon England (PASE)*, http://www.pase.ac.uk/ [last accessed 20 March 2018].

[4] This illustration is reproduced in figure 1 and discussed in more detail at the end of this essay. Some have thought that Ælfwine may himself have been the second main scribe; this idea is dismissed by Günzel, *Prayerbook*, 3, but nevertheless regarded as probable in Richard Gameson, *The Scribe Speaks? Colophons in Early English Manuscripts* (Cambridge, 2002), 4, 45.

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[5] The consensus identification of the Ælfwine named in the manuscript with the later abbot of Winchester assumes the identity of Ælfwine 1 and Ælfwine 46 in the *Prosopography of Anglo-Saxon England (PASE)*: see http://www.pase.ac.uk/ [last accessed 20 March 2018]

[6] Roy Liuzza, 'Anglo-Saxon Prognostics in Context: A Survey and Handlist of Manuscripts', *Anglo-Saxon England,* 30 (2001), 181–230, at 198.

[7] The British Library shelfmarks by which the manuscript is also known mislead in other ways, of course: by privileging post-medieval ownership, implying that the manuscript is two books rather than one, and by reversing the likely original order of the two parts.

[8] Lásló Sándor Chardonnens, *Anglo-Saxon Prognostics, 900–1100: Study and Texts* (Leiden, 2007), 57.

[9] Günzel, *Prayerbook*, 59. A complete list of texts and illustrations in the manuscript is provided in Catherine E. Karkov, 'Abbot Ælfwine and the Sign of the Cross' in Sarah Larratt Keefer, Karen Louise Jolly, and Catherine E. Karkov (eds), *Cross and Cruciform in the Anglo-Saxon World: Studies to Honor the Memory of Timothy Reuter* (Morgantown, 2010), 103–32, at 123–25.

[10] Walter de Gray Birch, 'On Two Anglo-Saxon Manuscripts in the British Museum', *Transactions of the Royal Society of Literature,* 2nd Series 11 (1878), 463–512, at 512.

[11] Cf. Günzel, *Prayerbook*, i.

[12] See Günzel, *Prayerbook,* 35–44. She also (again understandably) omits a lengthy biblical extract, the Passion according to St John (cf. Günzel, *Prayerbook*, 43). Birch's earlier partial edition of the Prayerbook concentrated on the religious material but gave some attention to the prognostic texts.

[13] *Ælfric's De temporibus anni*, ed. Heinrich Henel, EETS os 213 (London, 1942). A new edition appeared in 2009: *Ælfric's De temporibus anni,* ed. Martin Blake (Cambridge, 2009).

[14] For this reason, although I quote from Günzel's edition for most texts in the manuscript, I cite Blake's edition of Ælfric's *De temporibus anni*. Blake, like Henel before him, uses Cambridge, University Library, MS Gg. 3. 28 (the earliest surviving manuscript of *De temporibus anni*) as his base text, rather than BL, MS Cotton Titus D. xxvii, but his *apparatus criticus* and Appendix 4 give all textual and orthographic variants, including those in the Titus text.

[15] Günzel, *Prayerbook,* ix.

[16] Günzel, *Prayerbook,* 35.

[17] Barbara Raw, 'Anglo-Saxon Prayerbooks' in Richard Gameson (ed.), *The Cambridge History of the Book in Britain. Volume 1: c.400–1100* (Cambridge, 2012), 460–67, at 465–66. Compared with the Galba Prayerbook and four earlier prayerbooks from the late eighth/early ninth century Ælfwine's displays a greater emphasis on more liturgical prayer,

increased devotion to the Cross in place of meditation on the events of Christ's life, and a lack of Irish elements evident in the other books.

[18] Thomas's summing up of the manuscript reveals the limitations of focusing on only one kind of text: 'Ælfwine's Prayerbook therefore appears to have been a personal handbook, containing all that Ælfwine and his successors needed for finding the date of Easter, participating in liturgical worship or praying in private' (Kate Heulwen Thomas, 'The meaning, practice and context of private prayer in late Anglo-Saxon England', unpublished PhD thesis (University of York, 2011), 95; available online at <http://etheses.whiterose.ac.uk/2140/> [last accessed 20 March 2018]). Several of the texts in the manuscript would be of no use for any of those purposes; Birch's phrase – 'the Religious and Scientific commonplace books of Ælfwine' – is closer to the mark.

[19] Chardonnens, *Prognostics*.

[20] Stephanie Hollis, 'Anglo-Saxon Secular Learning in the Vernacular: An Overview' in László Sándor Chardonnens and Bryan Carella (eds), *Secular Learning in Anglo-Saxon England: Exploring the Vernacular*, Amsterdamer Beiträge zur älteren Germanistik 69 (Amsterdam, 2012), 1–43, at 27. The other two manuscripts are London, British Library, Caligula X. xv and Tiberius A. iii. The prognostics (only) from Tiberius A. iii are edited in Roy Liuzza (ed. and trans.), *Anglo-Saxon Prognostics: An Edition and Translation of Texts from London, British Library, MS Cotton Tiberius A.iii* (Cambridge, 2011), where Liuzza notes that besides computistical and prognostic texts the manuscript also includes monastic rules, confessional prayers, an Office of the Blessed Virgin Mary, a treatise on monastic sign language, and other religious texts (pp. 3–6). The manuscript is thus comparable in its mix of texts to Ælfwine's Prayerbook and the two have several individual texts in common.

[21] Liuzza, 'Prognostics in Context', 183.

[22] For a brief introduction to ecocriticism, see Greg Garrard, *Ecocriticism,* 2nd edn (London, 2011), and for a more extensive survey of the current state of the field, *idem*, ed., *The Oxford Handbook of Ecocriticism* (Oxford, 2014). Pioneering book-length ecocritical studies of medieval literature include Gillian Rudd, *Greenery: Ecocritical Readings of Late Medieval Literature* (Manchester, 2007) and Alfred Siewers, *Strange Beauty: Ecocritical Approaches to Early Medieval Literature* (New York, 2009). Heide Estes's recent *Anglo-Saxon Literary Landscapes: Ecotheory and the Environmental Imagination* (Amsterdam, 2017) is a stimulating reading of landscapes, the sea, animals, and objects in selected Old English and Anglo-Latin texts.

[23] Cheryl Glotfelty and Harold Fromm (eds), *The Ecocriticism Reader: Landmarks in Literary Ecology* (Athens, GA, 1996), xix.

[24] Garrard, *Ecocriticism*, 5.

[25] Carl Phelpstead, 'Ecocriticism and *Eyrbyggja saga*', *Leeds Studies in English*, New Series 45 (2014), 1–18.

[26] A telling comparison can be made here with the critique of object-oriented ontologies in Shannon Gayk and Robyn Malo, 'The Sacred Object', *Journal of Medieval and Early Modern Studies* 44:3 (2014), 457–67. They similarly argue that that approach proves 'unable (or unwilling) to account for the potential instrumentality and derivative power of objects within the sacred economy' and that 'While object-oriented ontologies may be useful for thinking about the post-Reformation natural world […] they nonetheless do not easily explain the holy and sacred' (461, 462).

[27] See e.g. Günzel, *Prayerbook*, 89 (item 1: Lunarium for Blood-letting); 110–11 (item 18: Critical Days for Blood-letting); 112–14 (items 21–24 on relationships between the reckoning of time and movements of celestial bodies); 122 (item 41: The Relation between the Sea and the Moon). In light of the use made of Heidegger later in this essay, a point of contact can be made here with the discussion of time in relation to the heavenly bodies in Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (New York, 2008), 465–71.

[28] Titus D. xxvi fols 9v–10v; Günzel, *Prayerbook*, 150–51, item 66. On this genre see further Roy Liuzza, 'What the Thunder Said: Anglo-Saxon Brontologies and the Problem of Sources', *Review of English Studies,* 55 (2004), 1–23.

[29] Günzel, *Prayerbook*, 158–63, 178, 196.

[30] Estes, *Anglo-Saxon Landscapes*, 13, makes very brief reference to comets and other astronomical phenomena.

[31] Curry's summary of Ndongo's reasons in Alice Curry, 'Traitorousness, Invisibility and Animism: An Ecocritical Reading of Nnedi Okorafor's West African Novels for Children', *International Research in Children's Literature,* 7 (2014), 37–47, at 43.

[32] Cécile Dolissane-Ebossè, 'Jacques Fame Ndongo: An Interview with Cécile Dolisane-Ebossè', *Research in African Literatures,* 41 (2010), 166–71, at 168. I know of no evidence that Ndongo was aware that the term *ars cosmocritica* ('cosmocritical art') had been used by Cornelius Gemma (1535–78), a professor of medicine at the University of Louvain. Gemma's account of monsters and prodigies connects metaphysical, intellectual, and natural realms by conceptualizing the world as a living being animated by a *spiritus mundi*: see Hiro Hirai, ed., *Cornelius Gemma: Cosmology, Medicine and Natural Philosophy in Renaissance Louvain* (Pisa, 2008).

[33] Godfrey B. Tangwa, 'Some African Reflections on Biomedical and Environmental Ethics' in Kwasi Wiredu (ed.) *A Companion to African Philosophy* (Oxford, 2004), 387–95, at 389.

[34] Curry, 'Traitorousness', 43.

[35] Tangwa, 'African Reflections', 389.

[36] Tangwa, 'African Reflections', 388.

[37] Jennifer Neville, *Representations of the Natural World in Old English Poetry* (Cambridge, 1999), 2.

[38] Helen Foxhall Forbes, *Heaven and Earth in Anglo-Saxon England: Theology and Society in an Age of Faith* (Farnham, 2013), 64–65. She suggests, however, that Anglo-Saxons distinguished visible from invisible rather than natural from supernatural. See also Robert Bartlett, *The Natural and the Supernatural in the Middle Ages* (Cambridge, 2008), 3–17, on the invention of the concept of the supernatural in the twelfth and thirteenth centuries.

[39] See Casey Rentmeester, *Heidegger and the Environment* (London, 2016), xiv–xviii, for a brief account of Heidegger's influence on the environmental movement, with a discussion of objections raised against using Heidegger in environmental theory (including the charge of anthropocentrism) on pp. xix–xxiv.

[40] Martin Heidegger, 'Building Dwelling Thinking' in *Poetry, Language, Thought*, trans. Albert Hofstadter (New York, 1971; repr. 2013), 143–59, at 147.

[41] Heidegger, 'Building Dwelling Thinking', 148. The German term translated 'fourfold' is *Geviert*, an unusual word denoting a square or courtyard: 'as such it is an essentially spatial notion' (Young, 'Fourfold', 373). For the meanings of the four elements of the fourfold see also Martin Heidegger, 'The Thing' in *Poetry, Language, Thought*, trans. Albert Hofstadter (New York, 1971; repr. 2013), 163–80, at 175–77. Heidegger's identification of human beings as 'mortals' echoes the emphasis put on death in his early *magnum opus*: see *Being and Time*, II.1.46–53.

[42] Andrew J. Mitchell, 'The Fourfold,' in Bret Davies (ed.), *Martin Heidegger: Key Concepts* (London, 2014), 208–18, at 208.

[43] Julian Young, 'The Fourfold', in Charles B. Guignon (ed.), *The Cambridge Companion to Heidegger*, 2nd edn (Cambridge, 2006), 373–92, at 374.

[44] Heidegger, 'The Thing', 176.

[45] Young, 'Fourfold', 374.

[46] Young, 'Fourfold', 374.

[47] Young, 'Fourfold', 375.

[48] Young, 'Fourfold', 375.

[49] Mitchell, 'Fourfold', 213–14.

[50] Andrew J. Mitchell, *The Fourfold: Reading the Late Heidegger* (Evanston, 2015), 164. Mitchell's book richly situates the concept of the fourfold in relation to Heidegger's late writings more generally and to foreshadowings of the concept in his earlier work.

[51] Mitchell, *The Fourfold*, p. 206, 210.

[52] Günzel, *Prayerbook*, 89, item 1. Henel's argument regarding the original order of the two parts of the manuscript in *De temporibus*, xx–xxi, is accepted by subsequent commentators, including Günzel. For discussion of Anglo-Saxon lunaries, editions of surviving examples, and further bibliographical information, see Chardonnens, *Prognostics*, 393–465.

[53] The *saltus lunae* ('moon's leap') is a one-day correction to the lunar calendar required every nineteen years in order to keep it in step with the solar calendar.

[54] A second version of this text appears as item 67 in the manuscript. On the history and preservation of *Revelatio Esdrae* in Anglo-Saxon manuscripts (in both Latin and the vernacular) see Marilina Cesario, 'Weather Prognostics in Anglo-Saxon England', *English Studies* 93:4 (2012), 391–426.

[55] Baker, *De temporibus anni*, 3. Baker believes the title to be authorial, though it appears in only two of the five complete and three partial manuscripts of the text (p. 3). Ælfwine's Prayerbook is one of these two, but in that manuscript the section printed in modern editions (following the earliest manuscript, Cambridge, University Library, MS Gg. 3. 28) as the opening of the text comes at its end, preceded there by the title *De temporibus anni*. Baker argues that this section, which seems much better suited to the start than the end of the text, may have circulated independently at one time, with its title being transferred to the whole text when it was added to its beginning in the exemplar of the earliest manuscript (Baker, *De temporibus anni*, 27–30).

[56] Baker, *De temporibus anni*, ix.

[57] Baker, *De temporibus anni*, ix.

[58] Baker, *De temporibus anni,* 76. For Bede's *De temporibus*, *De natura rerum* (both c. 703), and *De tempore ratione* (c. 725) see the translations with extensive editorial and introductory material in Bede, *The Reckoning of Time,* trans. Faith Wallis (Liverpool, 1988), and Bede, *On the Nature of Things and On Time,* trans. Calvin B. Kendall and Faith Wallis (Liverpool, 2010). In addition to those translations, accessible brief introductions to computus and its development in Anglo-Saxon England include: Günzel, *Prayerbook*, 16–25, Stephen C. McClusky, *Astronomies and Cultures in Early Medieval Europe* (Cambridge, 1998), 77–96, Peter S. Baker and Michael Lapidge (eds and trans.), *Byrhtferth's Enchiridion*, EETS ss 15 (Oxford, 1995), xxxiv–lii, and Nicole Guenther Discenza, 'Following in the Tracks of Bede: Science and Cosmology in the English Benedictine Reform' in *Anglo-Saxon Traces*, ed. by Jane Roberts and Leslie Webster (Tempe, 2011), pp. 67–86; see also Arno Borst, *The Ordering of Time: From the Ancient Computus to the Modern Computer*, trans. Andrew Winnard (Cambridge, 1993).

[59] Baker, *De temporibus anni*, 78–93.

[60] Baker, *De temporibus anni,* 78–81. On Anglo-Saxon calculations of the date of the vernal equinox, see ibid. 55–56, 107.

[61] Baker, *De temporibus anni,* 80–81.

[62] Ælfric, uniquely for his time, argues that the spring equinox is the correct start of the year: Baker, *De temporibus anni*, 82–83, cf. commentary on 111.

[63] Baker, *De temporibus anni*, 86–87.

[64] Baker, *De temporibus anni*, 90–91.

[65] Baker, *De temporibus anni*, 92–93.

[66] Baker, *De temporibus anni*, 92–97.

[67] Baker, *De temporibus anni,* 92–93.

[68] Baker, *De temporibus anni,* 94–95.

[69] Baker, *De temporibus anni,* 96–97.

[70] Baker, *De temporibus anni*, 78–79.

[71] Baker, *De temporibus*, 78–79 (my trans.).

[72] Baker, *De temporibus*, 90–91; cf. Baker's discussion of Ælfric's condemnation of superstitions elsewhere in his work on 43–44.

[73] Liuzza, 'Prognostics in Context', 202.

[74] Günzel, *Prayerbook*, 123, 124, 132, 133, 136–37.

[75] Heidegger, 'Building Dwelling Thinking', 147.

[76] Günzel, *Prayerbook*, item 51 and pp. 138–42.

[77] Günzel, *Prayerbook*, 197.

[78] Karkov, 'Abbot Ælfwine', 105. All three full-page illustrations are reproduced (in monochrome) in Günzel, *Prayerbook*, plates I-III, and in Karkov, 'Abbot Ælfwine', 128–30; for colour images see the digitized manuscript on the British Library website.

[79] On the theological and iconographic contexts and interpretation of this image see Ernst H. Kantorowicz, 'The Quinity of Winchester', *The Art Bulletin* 29:2 (1947), 73–85, and Judith A. Kidd, 'The Quinity of Winchester Reconsidered', *Studies in Iconography* 7–8 (1981–82), 21–33.

[80] As seen, for example, in illustrations from Arundel and Winchcombe psalters reproduced in Barbara Raw, *Anglo-Saxon Crucifixion Iconography and the Art of the Monastic Revival* (Cambridge, 1990), plates ix and x.

[81] Karkov, 'Abbot Ælfwine', 107.

[82] Transcription and translation by Karkov, 'Abbot Ælfwine', 107.

[83] Young, 'Fourfold', 378.