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Cesario, M. (2024). Reading the skies in the Peterborough Chronicle. *Culture and Cosmos*, 27(1), 27-41.
http://chrome-extension://efaidnbmninnipocajpcgiclfindmkaj/https://www.cultureandcosmos.org/pdfs/27/27_Cesario_Reading_Skies.pdf

Published in:
Culture and Cosmos

Document Version:
Peer reviewed version

Queen's University Belfast - Research Portal:
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Readings the Skies in the *Peterborough Chronicle*

Abstract:

This paper argues that natural phenomena in the twelfth-century *Peterborough Chronicle* are not only employed as *topoi*, with the purpose of maintaining narrative links with the earlier versions of the *Chronicle*, but are indicative of a renewed interest in computus and natural science in post-Benedictine Reform Anglo-Saxon England, in which winds, storms, earthquakes and other natural phenomena were given a framework of investigation that may have led to their increasing role in historiographical sources.

The *Anglo-Saxon Chronicle(s)*

Originally composed during the reign of King Alfred the Great (871-899), the text commonly known as the *Anglo-Saxon Chronicle* is a key source for the political history of the Anglo-Saxons. Arranged in annual instalments, its value resides first and foremost in its attempt to provide a comprehensive survey of the most important events experienced by the English, by sea and land, from their arrival in England up to the year 1154, in their own vernacular language. The seven surviving copies and one fragment, known by letters of the alphabet (A-H), ranging from the ninth to the twelfth century, and originating from the Alfredian ‘common stock’ (annals up to c. 891CE) subsequently developed their own individual features to the extent that they became separate compositions.¹ The compilers’ personal interests, through various intermediate stages, created numerous opportunities for a given manuscript to be copied, transmitted and modified according to what was significant to the place where and the audience for whom they transcribed the material. The sustained additions, alterations and continuations throughout the centuries by different writers, working at different monastic centres across England, make the textual transmission history of the *Anglo-Saxon Chronicle* an extremely challenging one, to the extent that most scholars tend to agree that there is no such a thing as a single Chronicle.²

¹ The seven versions are Cambridge, Corpus Christi College, 173, cited as MSA or the *Parker Chronicle*; London, British Library, Cotton Tiberius A. vi, cited as MSB; London, British Library, Cotton Tiberius B. i, cited as MSC; London, British Library Cotton Tiberius B. iv, cited as MSD; Oxford, Bodleian, Laud Misc. 636, cited as MSE, and London, British Library, Cotton Domitian viii, cited as MSF. The fragment is in London, British Library, Cotton Domitian A. ix (MSH), which was damaged in a fire at Ashburnham House in 1731.

² For a detailed study of the relationship between the surviving versions, see Dorothy Whitelock, *The Anglo-Saxon Chronicle*, rev. ed. (London: Eyre and Spottiswoode, 1961); John Earle and Charles Plummer, eds., *Two of the Saxon Chronicles Parallel*, 2nd ed. (Oxford: Clarendon Press, 1952); Simon Keynes, ‘Manuscripts of the Anglo-Saxon Chronicle’, *The Cambridge History of the Book in Britain*, vol. 1: c. 400–1100, ed. Richard Gameson (Cambridge: Cambridge University Press, 2011). For a study of the individual versions of the chronicle, see *The Anglo-Saxon Chronicle: A Collaborative Edition*, vol. 3 MSA, ed. Janet M. Bately (Cambridge: D.S. Brewer, 1986); *The Anglo-Saxon Chronicle: A Collaborative Edition*, vol. 4 MSB, ed. Simon Taylor (Cambridge: D.S. Brewer, 1983); *The Anglo-Saxon Chronicle: A Collaborative Edition*, vol. 5, MSC, ed. Katherine O’Brien O’Keefe (Cambridge: D.S. Brewer, 2001); *The Anglo-Saxon Chronicle: A Collaborative Edition*, vol. 6, MSD, ed. G. P. Cubbin (Cambridge: D.S. Brewer, 1996), *The Anglo-Saxon Chronicle: A Collaborative Edition*, vol. 7, MSE, ed. Susan Irvine (Cambridge: D.S. Brewer, 2004) and *The Anglo-Saxon Chronicle: A*

For the purpose of this study, I shall focus on the twelfth-century version contained in Oxford, Bodleian, MS Laud Misc. 636, known as *The Peterborough Chronicle* or the E-Text, which in my view shows a remarkable interest in astronomical and meteorological matters. Comets, solar and lunar eclipses, falling stars, red crosses, and other natural occurrences regularly feature in all versions of the *Anglo-Saxon Chronicle* as portending momentous events for each year, including deaths of bishops or kings, famines, battles, heresies, attacks on monastic centres, and so forth. It is undeniable that the association of unusual phenomena with memorable events in the natural world allowed major political incidents to be fixed more firmly in the historical record and become indelible part of social memory.³ With regard to the E-Text, Malasree Home explains the frequent mentions of famine, crop failure and natural disasters as *topoi* that ‘serve to contextualise, intensify or nuance the interpolated narrative’.⁴ If the juxtaposition of natural disasters as portents with significant historical moments is indeed tightly woven into the fabric of the E-Text, it is also worth noting that descriptions of astronomical phenomena and weather conditions in the *Peterborough* text become way more frequent, lengthier and detailed than in any other version of the *Chronicle*.⁵ I shall argue then that natural phenomena in the E-text are not only employed as *topoi*, with the purpose of maintaining narrative links with the earlier versions of the *Chronicle*, as argued by Home, but are also indicative of a renewed interest in computus and natural science in post-Benedictine Reform Anglo-Saxon England, in which winds, storms, earthquakes and other natural phenomena were given a framework of investigation that may have led to their increasing role in historiographical sources, such as the *Peterborough Chronicle*.⁶

The E-Text and Peterborough Abbey

It may be useful at this point to provide a brief description of the textual transmission and context of production of the *Peterborough Chronicle*. The E-Text, preserved in Oxford, Bodleian, MS Laud Misc. 636, is a copy of an older exemplar which was compiled at Peterborough around the year 1121 in an effort to revamp the library supplies after the great fire of 1116. It is the longest and only extant version of the *Chronicle* that extends into the twelfth century with annals spanning up to the year 1154.⁷ The attribution to Peterborough as its place of origin can be confidently inferred by the numerous additions throughout the text about Peterborough affairs. One of the interpolations added by the main scribe at the end of the annal for 1116 alludes to the devastation caused by the fire on Friday, 4 August in which both the monastery and most of the town at Peterborough (Old English name *Medeshamstede*)

Collaborative Edition, vol. 8 MSF, ed. Peter Baker (Cambridge: D.S. Brewer, 2000). See also Nicholas Brooks, ‘Why is the *Anglo-Saxon Chronicle* about Kings?’ *Anglo-Saxon England* 39 (2010): pp. 43-70.

³ See Thomas A. Bredehoft, ‘History and Memory in the *Anglo-Saxon Chronicle*’, *Readings in Medieval Texts*, ed. Elaine Treharne and David Johnson (Oxford: Oxford University Press, 2005), pp. 109-121.

⁴ Malasree Home, *The Peterborough Version of the Anglo-Saxon Chronicle: Rewriting Post Conquest History* (Woodbridge: Suffolk, 2015), p. 65.

⁵ See list of phenomena on pp. 5-6 of this paper.

⁶ For a study of the role of the wind in the *Anglo-Saxon Chronicle*, see Marilina Cesario, ‘Romancing the Wind: The Role of Gales in the *Anglo-Saxon Chronicle*’, *Germanic Philology*, No. 5 (2014): pp. 1-27.

⁷ There is a break in annal 1126, probably due to the fire.

were burnt except the chapterhouse and the dormitory.⁸

As for the archetype of the E-text, it has long been recognised that for the earlier annals, E is related to versions D (Worcester or York mid- or later 1040s) and F (Christ Church, Canterbury, end of the eleventh or beginning of the twelfth century) of the *Chronicle*. In view of the numerous innovations which appear in D and E, and which are missing from A, B, and C, it is now accepted that ‘DE descend therefore from a second and later edition of the Alfredian original with a strong interest in northern affairs’,⁹ as illustrated in Symeon of Durham’s *Historia regum*. The centre of production of the so-called ‘northern annals’, as represented in DE, cannot however be placed with certainty in the north of England.¹⁰ This independent source common to D and E, which ‘is now represented most faithfully by E’,¹¹ devotes considerable attention to astronomy. Celestial phenomena that appear in the entries of D and E up to 890 but are missing from A, B, and C include the years 729 (‘twegen cometan’), 744 (‘steorran foran swyþe scotienda’), 793 (‘fyrenne dracan’), 795 (‘seo mona apistrod’), 800 (‘se mona apistrad’), 802 (‘apeostrade se mona’), and 806 (‘sona apistrode’). The annals for 793, 795, and 806, which are about Northumbria, are missing entirely from A, B, and C, whereas in 744, 800, and 802 the astronomical material has subsequently been added to the Alfredian original.¹² The incidence of astronomical observations in the ‘northern annals’ is hardly surprising given that Northumbria was an important centre of learning with a predominant interest in the subjects of computistics and astronomy. The most eminent scholar from Northumbria is without a doubt the Venerable Bede, the eighth-century author of two major scientific compositions: *De temporum ratione* and *De natura rerum*.¹³ Following Bede’s death, the cathedral school of York acquired great prestige and reputation outside England, thanks to a curriculum introduced by Alcuin that put strong emphasis on the study of cosmology, computus, and astronomy. We can get a glimpse of Alcuin’s reverential attitude towards Bede’s scientific achievements in one of his epistles in response to Charlemagne’s query about the erratic course of the planets, in which the York scholar addresses Bede as the greatest investigator (*Bede magister*) on the nature of things.¹⁴

The close agreement between D and E continues until 1031, after which for a long time each manuscript has a separate history. Annals 1043-1063 in the E-text contain references to St Augustine’s Canterbury, those from 1064 to 1080 incorporate northern material, whilst annals 1081-1121 seem to display a southern origin. It has long been recognised that the scribe of the E-text was relying on an exemplar which already contained annals up to 1121, mostly likely produced in Canterbury, a scriptorium with strong links with both Peterborough and Worcester. It is apparent that the E-text is a complex miscellany incorporating material from different sources

⁸ All texts from the *Peterborough Chronicle* are taken from Irvine, *MSE*. For a recent edition and translation of the *Peterborough Chronicle*, see *The Peterborough Chronicle*, ed. and trans. Bernard J. Muir and Nicholas A. Sparks, 2 vols. (Wimbleton: Anthem Press, 2023). All translations are mine unless otherwise stated.

⁹ Irvine, *MSE*, pp. lvii–lviii.

¹⁰ Cubbin, *MSD*, pp. xix–xx.

¹¹ Irvine, *MSE*, p. lvii.

¹² The scribe of MSF is responsible for the twelfth-century additions to MSA.

¹³ See Faith Wallis, ‘Bede and Science’, *The Cambridge Companion to Bede*, ed. Scott Degregorio, (Cambridge: Cambridge University Press, 2010), pp. 99-126.

¹⁴ ‘*Alcuini epistolae*’, *Epistolae Karolini Aevi*, e vol. 2, d. Ernst Dümmler, *Rerum Germanicarum Medii Aevi* (Berlin: Weidmann, 1892), p. 42.

and versions of the *Chronicle* produced at different scriptoria. We have no way of knowing with certainty how and in what form the Peterborough compiler accessed those sources. In light of the diversity of the material present in E and the level of ‘cross-contamination with other versions of the Chronicle’,¹⁵ Muir and Sparks believe that it is plausible that there was already a copy at Peterborough before the fire.

What we do know is that the E-Text was copied by two scribes at different times. The main scribe or Hand 1 was solely responsible for writing continuously the first eighty folios of the manuscript containing annals up to 1131. During the copying process the same scribe supplemented his exemplar by adding thirty-eight entries in Latin and twenty new passages in Old English of different length, known as ‘Interpolations,’ dealing with events related to Peterborough, customarily added at the end of the annal, but occasionally inserted on the margin of the folio. The change in ink and writing style for annals 1122-1131 (‘First Continuation’), attributed to the same scribal hand, suggests that those annals were written up contemporaneously in six blocks, presumably as the events occurred. A second hand took over around the year 1155 and added retrospectively, in a single stretch, annals 1132-1154, known as the ‘Second Continuation’, where the events are no longer presented in annual instalments.¹⁶

The second part of this paper will look at astronomical occurrences in the E-Text in connection with the *Peterborough Computus* and other computistical anthologies from the same period, produced at Peterborough Abbey and in the neighboring monastic centres of Ramsey and Thorney Abbey. It will suggest that the main scribe of the E-Text was well versed in astronomical and computistical learning and that he incorporated his scientific knowledge into the chronicle.

Astronomy and Computistical learning in the *Peterborough Chronicle*

The complex historical transmission, alongside the energetic editorial activity, conscious textual reshaping and authorial interventions by the main scribe, make the E-Text a fascinating example of intertextuality where knowledge of old books (*de us bec secgað*)¹⁷ and respect of traditional learning interlocks with the scribe’s personal interests and contemporary concerns. Of particular importance for us here is the Peterborough scribe’s attitude towards natural phenomena, which as I shall argue, reflects a personal interest in and knowledge of astronomy as part of a wider intellectual network which encouraged the proliferation of computistical materials (Easter tables, treatises on natural science) and weather prognostics,¹⁸ which reached England from Fleury during the Benedictine Reform.¹⁹ Peterborough Abbey, in

¹⁵ Muir and Sparks, *The Peterborough Chronicle*, p. 4.

¹⁶ For discussions of the paleographical features of the manuscript, see Dorothy Whitelock, *The Peterborough Chronicle* (Copenhagen: Rosenkilde and Bagger, 1954), pp.13-35; Neil R. Ker, *Catalogue of Manuscripts Containing Anglo-Saxon* (Oxford: The Clarendon Press, 1957), pp. 424-426; and Cecily Clark, *The Peterborough Chronicle 1070-1154* (Oxford: Oxford University Press, 1958), pp. xi-xxi. See also Susan Irvine, ‘The Production of the Peterborough Chronicle’, *Reading the Anglo-Saxon Chronicle*, ed. Alice Jorgensen (Turnhout: Brepols, 2010), pp. 49-66.

¹⁷ For the year 1009 the scribe refers to ‘what the books tell us’ (*de us bec secgað*).

¹⁸ See Marilina Cesario, ‘Weather Prognostics in Anglo-Saxon England’, *English Studies* 93, no. 4 (2012): pp. 391-426.

¹⁹ See Marco Mostert, *The Library of Fleury: A Provisional List of MSS* (Hilversum: Verloren Publishers, 1989) and *The Political Theology of Abbo of Fleury: A Study of the Ideas about Society and Law of the Tenth-Century Monastic Reform* (Hilversum: Verloren Publishers 1987).

particular, as I shall discuss later, played a pivotal role in the dissemination and transmission of scientific material towards the end of the eleventh and the beginning of the twelfth centuries.²⁰ Bede's scientific works acquired in fact renewed popularity in late Anglo-Saxon England, both Ælfric and Byrhtferth worked extensively with Bede's *De temporum ratione* and *De natura rerum* which continued to be used in teaching.²¹

As mentioned at the onset of this article, natural phenomena occupy a predominant role in the E-Text, especially in the eleventh and twelfth century entries of the Chronicle, as the list below demonstrates:

Year 538: Solar eclipse 'sunne aþiestrode' (all versions), **Year 540:** Solar eclipse 'sunne aþiestrode' (all versions); **Year 664:** Solar eclipse and pestilence 'sunne aðestrode 7 micel mancwealm' (missing in MSD).²² **Year 671:** Great mortality of birds 'mycele fugal well' (all versions); **Year 678:** 'Cometa' (all versions);²³ **Year 679** Divine Fire 'godcundum fyre'; **Year 729:** Two comets 'twegen cometan' (also in MSS D,F);²⁴ **Year 733:** Solar Eclipse 'sunne aðestrode' (all versions);²⁵ **Year 734:** Lunar eclipse (all versions)²⁶; **Year 744:** Meteors Showers 'steorran foran swyðe scotienda' (also in MS D); **Year 761:** Harsh winter 'myccla winter';²⁷ **Year 774:** Red cross in the sky 'Cristes mel on heofenum';²⁸ **Year 789:** Heavenly light 'heofenlic leoht' (also in MS D);²⁹ **Year 793:** Fiery dragons 'fyrenne dracan' (also in MSS D,F);³⁰ **Year 794:** Stormy weather 'oferweder' (also in MS D); **Year 795:** Lunar eclipse 'mona aðistrod' (also in MSS D,F); **Year 800:** Lunar eclipse 'se mona

²⁰ Karsten Friis-Jensen and James M. W. Willoughby, *Corpus of British Medieval Library Catalogues: Peterborough Abbey* (London: British Library Publishing Division 2001).

²¹ See Nicola Guenther Discenza, 'Following in the Tracks of Bede: Science and Cosmology in the English Benedictine Reform', *Anglo-Saxon Traces*, ed. Jane Roberts and Leslie Webster (Arizona: State University of New York, 2011), pp. 67-86 and Joshua A. Westgard, 'Bede and the Continent in the Carolingian Age and Beyond', *The Cambridge Companion to Bede*, ed. Scott Degregorio (Cambridge: Cambridge University Press, 2010), pp. 201-215.

²² Following Bede's account in the *Historia ecclesiastica gentis anglorum* [henceforth *HE*], MSE gives 3 May as the day of the eclipse instead of 1 May. See D. Justin Schove, *Chronology of Eclipses and Comets AD 1-1000* (Woodbridge: Boydell, 1984). Texts and translations of the *HE* are taken from *Bede's Ecclesiastical History of the English People*, eds. Bertram Colgrave and R. A. B. Mynors (Oxford: Oxford University Press, 1999).

²³ MSE also adds that the comet appeared in August, and shone every morning for three months, like a sunbeam (*on Auguste 7 scan .iii. monðas ælce morgen swilce sunnebeam*). In MSF the comet is reported for the year 677.

²⁴ MSS ABC mention only one comet (*cometa*), whilst MSS DEF reports *twegen cometan*, undoubtedly drawing from Bede's *HE*, v. 22, pp. 556-8. This is generally called Bede's comet. See Kenneth Harrison, 'The Beginning of the Year in England c. 500-900', *Anglo-Saxon England*, 2 (1973): pp. 51-70; at p. 67.

²⁵ MSF adds that: *totus orbis solis quasi nigerrimo et horrendo scuto* 'all the circle of the sun became like a black shield' (See Bede's *HE*).

²⁶ *Se mona swilce he wære mid blode begotten* (the moon looked as it were suffused with blood).

²⁷ Year 762 in MSC and 761 in MSS ADF.

²⁸ MSS CDEFG report the phenomenon in the year 774, whilst MSA does it in 773.

For a reading of the red cross as a Supernova, see R. A. Lovett, 'Supernova Could Have Caused Mysterious Crucifix in the Sky in A.D. 774', *Nature Magazine* June 27, 2012. <https://www.scientificamerican.com/article/supernova-red-crucifix-sky-774ad/>

²⁹ The heavenly light was probably an aurora maximum which was visible between 786 and 788.

³⁰ For a study of the astronomical occurrences in the 793 annal, see Marilina Cesario, 'Fyrenne Dracan in the Anglo-Saxon Chronicle', *Textiles, Text, Intertext: Essays in Honour of Gale R. Owen-Crocker* eds. Maren Clegg Hyer and Jill Frederick (Woodbridge: Boydell and Brewer, 2016), pp. 153-170.

aðistrad’ (also in MSS D,F); ³¹ **Year 802:** Lunar eclipse ‘aðeostrade se mona’ (also in MSS D,F); **Year 806:** Lunar eclipse ‘aðeostrade se mona’ (also in MSS D,F);³² **Year 827:** Lunar eclipse ‘aðeostrade se mona’ (all versions); **Year 879:** Lunar eclipse ‘aþiastrode sio sunne’ (all versions)³³; **Year 975:** Comet and Famine ‘cometa se steorra 7 mycel hungor’ (also in MSS D,F);³⁴ **Year 986:** Cattle-Murrain ‘myccla yrfcwalm’ (also in MSS C,D); **Year 995:** Comet ‘cometa se steorra’ (also in MSS C,D,F); **Year 1005:** Great famine ‘myccla hungor’ (also in MSS C,D); **Year 1009:** Great Wind ‘mycel wind’ (also in MSS C,D); **Year 1014:** Great Flood ‘mycel sæflod’ (also in MSS C,D); **Year 1032:** Wild-fire ‘wyldefyr’ (also in MS F); **Year 1041:** Distressing year, storms, death of cattle ‘hefig time on manegum þingum’ (also in MS F); **Year 1043:** Famine ‘swyðe mycel hungor’; **Year 1054:** Pestilence among cattle ‘mycel orfcwealm’; **Year 1082:** Great famine ‘mycel hungor’;³⁵ **Year 1085:** Severe year for cattle, bad weather, plague ‘swiðe hefelic gear 7 swiðe swincfull 7 sorhfull gear’;³⁶ **Year 1086:** Famine ‘hungor’; **Year 1089:** Earthquake ‘eorðstyrunge’; **Year 1095:** Falling stars ‘mænifealdlice steorran of heofenan feollan’ and unseasonable weather; **Year 1096:** Severe famine ‘hefigtyme hunger’; **Year 1097:** Comet and bad weather; **Year 1098:** Pool of blood ‘an mere blod weoll’ and Northern Lights ‘byrnende heofon’; **Year 1099:** Great tide ‘swiðe sæflod’; **Year 1100:** Blood from the earth ‘tune blod weallan of eorþan’; **Year 1103:** Blood from the earth ‘blod of eorðan’ and severe winds ‘mycel wind’; **Year 1104:** Sun Halo; **Year 1105:** Ruin of crops [due to bad weather?]; **Year 1106:** Comet ‘uncuðra steorra’ and two moons ‘twegen monan’; **Year 1107:** Lunar eclipse; **Year 1109:** Thunderstorms ‘fela þunra’; **Year 1110:** Comet and several astronomical phenomena; **Year 1111:** Long Winter ‘lang winter 7 hefigtyme’ and pestilence among cattle; **Year 1112:** Productive year and plague; **Year 1114:** Comet ‘selcuð steorra mid langan leoman’, ebbtide ‘mycel ebba’ and winds ‘mycele swiðe windas’; **Year 1115:** Severe winter/frost ‘strang winter mid snawe 7 mid forste’; **Year 1116:** Bad winter; **Year 1117:** Bad weather, lunar Eclipse, aurora borealis earthquake; **Year 1118:** Thunders and strong winds; **Year 1119:** Earthquake ‘eorþstyrung’; **Year 1121:** Lunar eclipse ‘mona aþyastrode’ and strong wind ‘swyðe mycel wind’; **Year 1122:** Aurora borealis, earthquake ‘micel eorðdyne’ and violent wind ‘swiðe mycel wind’; **Year 1124:** Bad crops; **Year 1125:** Many floods ‘micel flod’; **Year 1127:** Black Huntsmen;³⁷ **Year 1129:** Earthquake; **Year 1131:** Aurora borealis ‘bærnende fir’; **Year 1135:** Solar eclipse ‘aþestrede þe sunne’; **Year 1140:** Solar eclipse ‘aþestrede þe sunne’.

Anglo-Saxon chroniclers were more familiar with certain types of phenomena, such as solar and lunar eclipses and comets, which are described in Bede’s *De natura rerum* and Ælfric’s *De temporibus anni*, and the knowledge of which reaches back to classical encyclopaedic works, chiefly Pliny’s *Historia naturalis* and Isidore’s *De*

³¹ 801 in MSF.

³² MSF adds that ‘the sign of the cross was revealed in the moon, on a Wednesday at dawn. And again in this year on 30 August a wonderful circle was revealed around the sun’ (*signum cruces mirabili modo in luna apparuit feria .v. aurora incipiente, hoc modo. Eodem anno, .iii. kalendas Septembris, luna xii., die dominica, hora .iiii., corona mirabilis in circuitu solis apparuit*).

³³ Year 880 in MSS ABC. The eclipse reported in 879 is probably that of 29 October 878, the wrong year can be the result of a scribal error. See Schove, *Chronology of Eclipses*, p. 200.

³⁴ The account is in alliterative verse in MSS ABC.

³⁵ MSE is the only version that includes annals from 1080 onwards.

³⁶ The year 1095 has been copied twice by mistake.

³⁷ MSE reports that black and loathsome hunters were seen with their black hounds riding on black horses and black goats in the deer-park in the town of Peterborough.

natura rerum and the *Etymologiae*. *Sunne aþiastrode* from Latin *solis obscurari* ‘the sun grew dark’ and *mona aþistrad* ‘the moon grew dark’ are used to refer to solar and lunar eclipses, instead of Latin *eclipsis*, as employed by Bede in his *Historia ecclesiastica*. Latin *cometa* is used to describe what they perceived as comets, and *steorran scotienda* for shooting stars or meteors. Thus, it seems that there was at least an attempt to rely on a more conventional terminology, limited as it was, to refer to the best-known astronomical phenomena. Unsurprisingly, most descriptions of possible northern lights tend to emphasise the fieriness of the sky by using an array of expressions which help to convey that idea: ‘torches’, ‘beams’, ‘bloody rain’, ‘fiery flashes’, and ‘fiery dragons’.³⁸

Apart from the standard references to solar, lunar eclipses and comets, the eleventh and twelfth-century versions of the *Chronicle* (DEF) devote greater attention to meteorological occurrences. In the E-Text in particular, notices of *mycele swiðe windas* (many great winds), *mycel sæflod* (great flood), *hefig time on manegum þingum* (distressing year for many things), *eorðstyrung* (earthquakes), *mycel ebba* (great ebbtide), *yfel winter* (bad winter), *strang winter mid snawe 7 mid forste* (long snowy and frosty winter), etc. become more conspicuous. As I noted elsewhere, it is curious that references to winds are entirely absent from the Alfredian ‘common stock’ (first reference appears in the annal for the year 1009).³⁹ There surely must have been strong winds in the ninth and tenth centuries in Britain which caused great damage, as we know from Medieval Irish chronicles, particularly the *Annals of Clonmacnoise* and the *Chronicum Scotorum*⁴⁰ in which the wind is regularly mentioned as a destructive force. So, why is the wind not mentioned in the earlier annals? But most importantly, what prompted the Peterborough chronicler’s sudden interest in recording the wind?

Barbara Obrist in her fascinating study of wind diagrams in the Middle Ages observes that it ‘was only in the Carolingian period that wind diagrams were elaborated as part of a specific way of schematizing cosmological ideas. Their elaboration, which included combinations with other cosmological domains and phenomena, was stimulated by ancient material newly available’.⁴¹ Winds were an essential part of the cosmos and therefore worthy of investigation, as demonstrated by a plethora of texts and diagrams on the direction and/or names of winds, originating on the Continent, which were afterwards copied and transmitted in Late Anglo-Saxon England.⁴² The so-called *Peterborough Computus*, produced soon after 1122, is a beautiful example of an astronomical and compustical collection, containing annals, Bede’s and Isidore’s scientific treatises, prognostic texts, parts of Byrhtferth’s computus, and a variety of wind diagrams.⁴³ Produced at the Peterborough scriptorium, as indicated by the annals concerned with Peterborough Abbey, containing records up to 1122 in one

³⁸ See Cesario, ‘*Fyrenne Dracan*’.

³⁹ See Cesario, ‘Romancing the Wind’.

⁴⁰ See *The Annals of Clonmacnoise: being the Annals of Ireland from the Earliest Period to AD 1408*, ed. Denis Murphy (New York: Cornell University Press, 1896) and *Chronicum Scotorum. A Chronicle of Irish Affairs From the Earliest Times to A.D. 1135; With a Supplement Containing the Events From 1141 to 1150*, ed. and trans. William M. Hennessy (London: Longmans, 1866).

⁴¹ Barbara Obrist, ‘Medieval Diagrams and Medieval Cosmology’, *Speculum* 72, no. 1 (1997): pp. 33-84, at p. 43.

⁴² For a study on the names of winds in Anglo-Saxon England, see Philip Pulsiano, ‘Old English Nomina ventorum’, *Studia Neophilologica* 66 (1994): pp. 15-26.

⁴³ Cyril Hart, ‘The Anglo-Saxon Chronicle at Ramsey’, *Alfred the Wise: Studies in Honour of Janet Bately on the Occasion of her Sixty-fifth Birthday*, eds. Jane Roberts and Janet Nelson (Cambridge: D. S. Brewer, 1957), pp. 66-68, at p. 66 n. 5.

hand, then a record of the death of King Henry I in 1135 added by a different scribe, the *Peterborough Computus* was originally a very large composition comprising two now separate manuscripts: London, British Library, Tiberius C.i (ff. 2r-42v)⁴⁴ and Harley 3667,⁴⁵ as indicated by the similarities of script and quire signatures.⁴⁶

It is no surprising then that winds, an integral part of the sublunary world, appear prominently in many texts and diagrams in the *Peterborough Computus*. Folio 5v of MS Harley 3667, for example, has a circular diagram of the twelve winds. Old English names of the directions and winds, written in the four margins of fol. 7v, surrounding a typological diagram of Christ and the Apostles with Old Testament kings and prophets, are part of a diagram of creation on folio 7v.⁴⁷ In MS Cotton Tiberius C.i Part 1, the four winds appear on folio 5r as part of a circular diagram of zodiac, prophets, seasons, four elements, four cardinal directions, four letters of Adam's name. Isidore's chap. 37 of the *De natura rerum* on *De nominibus ventorum* is copied on folios 16-17v.⁴⁸ The *Peterborough Computus* which shares many similarities with Oxford, St John's College MS 17 (s. xii, Thorney Abbey), together with London, British Library, MS Tiberius E. iv (s. xii, Winchcombe) are the main manuscripts containing Byrthferth's computus.

It should be stressed, at this point, that scholars including Dorothy Whitelock, Neil Ker and Cecily Clark have confidently argued, on paleographical grounds, that the hand responsible for the copying of the *Peterborough Computus* (MSS London, British Library, Tiberius C.i Part 1 and Harley 3667) is strikingly similar to that of the principal scribe of the E-Text.⁴⁹ Cecily Clark concludes that the remarkable similarities between the two hands 'are in the opinion of paleographical experts, enough to justify the conclusion that the manuscripts were all produced in the same scriptorium, possibly even by the same scribe'.⁵⁰ The fact that the main scribe was potentially compiling the chronicle at about the same time as he was working on the *Peterborough Computus* is certainly not without significance. To return to the question of the wind interpolations in the E-Text, it is highly possible that the main scribe of MSE, who was supposedly also responsible for copying glosses in OE to the winds, extracts from Isidore's *De natura rerum* on winds and wind diagrams in both Tiberius C. I and Harley 3667, found the meteorological phenomenon important and worth of being transmitted in his version of the Chronicle.

⁴⁴ For a study of the astronomical material in Tiberius C.i (ff. 2r-42v), see Marion Dolan, *The Role of Illustrated Aratea Manuscripts in the Transmission of Astronomical Knowledge in the Middle Ages*, (unpublished DPhil, University of Pittsburgh, 2007), pp. 227-32 and 344-45. For a study of the manuscript, see Richard Gameson, *The Manuscripts of Early Norman England: c. 1066-1130* (Oxford: Oxford University Press for the British Academy, 1999), no. 404.

⁴⁵ For a study and description of Harley 3667, see Montague R. James, *List of Manuscripts Formerly in Peterborough Abbey Library, Supplement to the Transactions of the Bibliographical Society*, 5 (Oxford: Oxford University Press, 1926), pp. 16, 34; Neil R. Ker, 'Membra disiecta', *British Museum Quarterly*, 12 (1938): pp. 130-35, at p. 132; Cecily Clark, 'Notes on MS. Laud Misc. 636', *Medium Ævum*, 23 (1954): pp. 71-75; N. R. Ker, *Catalogue of Manuscripts Containing Anglo-Saxon* (Oxford: Clarendon Press, 1957), no. 196, and N. R. Ker, ed., *Medieval Libraries of Great Britain: A List of Surviving Books*, 2nd ed., Royal Historical Society Guides and Handbooks, 3 (London: Royal Historical Society, 1964), p. 151.

⁴⁶ Clark, *The Peterborough Chronicle*, pp. xvii-xviii.

⁴⁷ The fully digitalised manuscript can be found on the British Library website: https://www.bl.uk/manuscripts/Viewer.aspx?ref=harley_ms_3667_fs001r.

⁴⁸ The fully digitalised manuscript can be found on the British Library website: https://www.bl.uk/manuscripts/Viewer.aspx?ref=cotton_ms_tiberius_c_i_f043r

⁴⁹ See Whitelock, *The Peterborough Chronicle*, p. 23 and Ker, *Catalogue*, no. 196.

⁵⁰ Clark, 'Notes of MS. Laud Misc. 636', p. 71.

It is not a coincidence either that, among the many authorial interventions made by the main scribe after the text was written, the mutilated gloss of fol. 21v, which as Whitelock suggests, probably originally read *cometa apparuit*, was intended as a correction to the annal for the year 729 which, drawing from Bede's *HE* (*cometa duae*), wrongly reports that *twegan cometan* were seen in that year.⁵¹ Versions ABC of the *Chronicle* do in fact mention only one comet: *Her cometa se steorra hine oðywide* ('In this year the star called "comet" appeared'). By inserting the marginal gloss *cometa apparuit*, in revising his source, the scribe is clarifying for his readership that only one comet was visible in the year 729, not two as transmitted in his exemplar. The chronicler's desire for accuracy, in this case stronger than his devotion towards traditional learning, may have been inspired by his familiarity with the treatise 'On Stars' in London, BL, MS Cotton Tiberius C.i, fols. 20v-21r, where comets, alongside other stars, are discussed at great length.

Eyewitness Testimony in the 'First Continuation' and Conclusions

It seems to me that there is enough evidence to suggest that the Peterborough chronicler was working, more or less simultaneously, on different projects in both Latin and Old English, which required knowledge of history, astronomy and computistical matters. The Latin later addition for the year 625CE in the E-Text, for example, on the adoption and explanation of the Dionysius cycle, consisting of five nineteens – that is, ninety-five years – and the reference to the waxing and waning of the moon in 1107 clearly reflects the scribe's computistical interest.

I shall now turn my attention to the 'First Continuation' of the *Chronicle* (1122 to 1131) in which the events narrated are contemporary, implying a certain degree of historical experientiality on the part of the chronicler. In those years the narrative becomes in fact more personal, rhetorical and emotive with declarative utterances and hyperbolic diction interjected throughout the annals. C. Clark notes that 'the first break in the handwriting, at 1121, corresponds to a change in the relationship between E and the other histories of the period; it corresponds also to a change in manner. Whereas the annals for the previous decade had been terse, those from 1122 onwards are full and lively'.⁵² This change in style is also echoed in the vivid descriptions of natural phenomena which, in the 'First Continuation', are longer and more detailed, and for the chronicler: the greatest, the most terrifying, *swilc nan man ær ne gemunde* ('worse than any man can remember').

The account for the year 1122, for example, starting with King Henry's whereabouts at Christmas and Easter, describes the fire (*se fir*) which on 8 March destroyed a monastery in Gloucester while the monks were singing mass. After that, the chronicler reports that, on the 22nd of the same month, that is on the Tuesday after Palm Sunday, a very big wind occurred (*wæs swiðe micel wind on þet dæi .xi. kalendas Aprilis*), followed by *feale tacne wide hwear on Engaland 7 feole dwild wearen geseogen 7 geheord* 'many signs came far and wide in England and many apparitions were seen and heard'). Those *feale tacne* included *micel eorðdyne* (a great

⁵¹ The account in Bede's *HE*, v. 22 reports that *Anno dominicae incarnationis DCCXXVIII apparuerunt cometae duae circa solem, multum intuentibus terrorem incutientes. Una quipped solem praecedebat mane orientem, altera uespere sequebatur occidentem, quasi Orienti simul et Occidenti dirae cladis praesagae* (In the year of our Lord 729 two comets appeared around the sun, striking great terror into all beholders. One of them preceded the sun as it rose in the morning and the other followed it as it set at night, seeming to portend dire disaster to east and west alike). Text and trans. are from Colgrave and Mynors, *Bede's Ecclesiastical History*, pp. 556-558.

⁵² Clark, *The Peterborough Chronicle*, p. xxiv. See also, Home, *The Peterborough Version*.

earthquake) on 25 July over all Somerset and in Gloucestershire, and another destructive wind, noted on 8 September, preceded the death of Ralph, Archbishop of Canterbury on 20 October. That the events narrated are possibly unfolding before the scribe's eyes can be inferred by the level of detail provided for some of the descriptions. For the wind of 20 October, the scribe tells us about the day *on sancte Marie messedæi* (St Mary's Feast Day) and exact time *fram þa undern dæies to þa swarte nihte* (from 9. a.m. till dark night) on which the meteorological phenomenon occurred. The striking imagery of the fire that destroys the monastery, offered at the beginning of the annal, certainly presages the suggestive description of an aurora borealis, towards the end of the annal, described as a broad fire that sailors witnessed on the day of 7 December:

After that there were many sailors, at sea and on inland waters, who said that they saw in the north-east a great and broad fire near the earth, and it increased in length continuously up to the sky, and the sky opened on four sides and fought against it, as if it was going to quench it, and the fire increased no more then up towards the heavens. They saw this fire at daybreak, and it lasted until it was light everywhere. That was 7 December [...].⁵³

The annal for the year 1131 begins with another description of an aurora borealis, visible on Sunday night 'at first sleep', 11 January, and as was the case with the year 1122, the phenomenon is described as *bærnende fir* (burning fire), and those who saw it 'were afraid as they had never been before' (*wæron swa offæred swa hi næfre ær ne wæron*). In the course of the same year, there was also a great cattle plague all over England 'as had never been in the memory of man' –among cattle and pigs. The annal ends with the personal exhortation: *God hit bête þa his wille beð!* (may God amend it when it is his will!).

Throughout the *Chronicle*, and as can be seen in the examples provided above for annals 1122 and 1131, the chronicler underscores the primacy of eyewitness observation through references to people 'seeing' or 'witnessing' those phenomena. The prominence of eyewitness testimony is clearly elucidated in the annal for 1106, in which after a detailed description of a comet, the chronicler categorically refutes hearsay, emphasising instead the importance of eyewitness experience: *Gehwylce sædon þet hig ma on þison timon uncuðra steorra gesawon, ac we hit openlicor ne awriton, forþam þe we hit sylfe ne sawon* ('Some said that at this time they saw more strange stars. However, we do not write of it more plainly because we did not see it ourselves').

To conclude, I believe that the connections traced between the E-Text of the *Chronicle* and the *Peterborough Computus* lay bare an intriguing pattern of connections between historiography and scientific knowledge. Natural phenomena in the *Chronicle* should therefore be read in connection with the theological scholarship and scientific learning promoted in Peterborough in the twelfth century, of which the compiler of E-Text is an eminent example.

⁵³ *Þæræfter wæron feole scipmen on sæ 7 on wæter 7 sædon þet hi sægon on norðeast fir micel 7 brad wið þnerðe, 7 weax on lengþe upon an to þam wolcne, 7 se wolcne undide on fower healfæ and faht þærtogeanes swilc hit scolde æwencen, 7 se fir weax na þa ma up to þe heovene [...].*

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