

INTERPRETATION OF CELESTIAL AND ENVIRONMENTAL PHENOMENA IN
THE IRISH ANNALS

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Introduction

The Irish annals are one of the most important and remarkable sources for the history of Ireland, and can be demonstrated to run reliably from the seventh to the seventeenth century AD (Smyth, 1972) when the encroachment of English colonial rule resulted in the dissolution of their centres of preservation and recording, which had been mainly undertaken, though probably not exclusively, in monastic communities across the country (Mac Niocaill, 1975). In essence, the annals are yearly descriptive calendars of notable events in Ireland, and commentators have drawn comparisons between these and the type of material presented in contemporary newspapers (Byrne, 1987) exhibiting the characteristics of on-the-spot reporting (Ó Cuív, 1987). The goal of this article is to provide a brief introduction to the Irish annals as a whole, commenting on issues such as their origins, character, and importance, along with the motivations for their recording. Taken within this context, a selection of some of the more unusual celestial and environmental entries in the annals will be presented and discussed.

A quick read through any of the available translated and printed annals, of which there are a considerable volume, will reveal plentiful reports of unusual phenomena across Ireland, some dating back over a thousand years. In the past, scholars may have written off such records as unwanted embellishment of true occurrences, or quite simply as pure fiction. Whilst there are many instances of reports that may be reasonably described as such, more recent work (e.g. Warner, 1990; McCarthy and Breen, 1997; Baillie, 1999) has indicated that there may be some truth behind records of unusual phenomena in the annals, and that such entries deserve closer examination than that which has been previously given.

The selection of phenomena and other reports presented here will be drawn, for convenience, from one set of annals, the well-known *Annals of the Four Masters* (henceforth AFM), edited by John O'Donovan (1851) and reprinted most recently in 1990. AFM are a synthesis, compiled in the seventeenth century, of much of the material contained in numerous collections of earlier annals (Nicholls, 1990), some of which are no longer extant. It should be noted that the synthesis of material in AFM can exhibit instances of irregularity (McCarty, 2005) and more advanced studies utilizing AFM should crosscheck reports with those entered in earlier

available annals. Such a task is beyond the constraints of this study, and to that extent AFM is taken as sufficiently reliable (Walsh, 1944) for an introductory study. In addition, it is hoped that a selection from AFM, being a synthesis, will be more representative of the material contained in the complete body of Irish annals, than that drawn from a study of any of the earlier annals alone.

Alongside the presentation of selected material, a preliminary division into two broad categories is used and an interpretation of the entries is undertaken, which links, where possible, reported events and phenomena to better-documented and explained occurrences from more recent times. Some comment will also be made upon the possible reasons for why such entries were recorded in the annals, and what this may tell us about the nature of the annals as an historical source.

The Irish Annals

The Irish annals provide an annual summary of events in Ireland from the arrival of Christianity in the fifth century AD (McCarthy and Breen, 1997) and comprise of reports deemed in some way 'notable' to the compilers. Because the majority of annals were probably maintained in religious communities, it is of little surprise that there is often a notable ecclesiastical flavour to the recorded information, including reports of the founding (Manning, 2000) and sacking (Lucas, 1967) of religious settlements, along with obituaries of people of religious importance. There is, however, also much material included that would likely have been deemed notable to any observer, including large-scale military conflicts and major political manoeuvrings (O'Byrne, 2003), alongside reports of plague and disease (Mac Arthur, 1949) and reports of weather and related hazards, including drought and storms (Sweeney, 1997). These reports are often localised to the area of original annalistic recording, but individual annals also contain material from other localities, along with entries of national or international interest (Ó Cuív, 1987). In separate annals there can be seen a degree of overlap in events reported. This is due in part to the long-held antiquarian tendency to re-copy and preserve older annals (Ó Cuív, 1987) that were probably borrowed or inherited from other locations, whilst often adding material contemporary to their own times (Bannerman, 1968; Mac Niocaill, 1975). Another factor behind the overlap between annals may be attributed to the willingness of the annalists to record events of national importance, or of international interest (Ó Cuív, 1987), news of which might have reached the ears of contemporary annalists working in different regions at the same time.

On a general level, the Irish annalistic tradition can be said to originate from the initial influences of early Christian missionaries who encouraged the use and development of writing and literature in Ireland from around the fifth century AD onwards (Cahill, 1995). A forerunner of the practise of keeping annals probably originated, around 550 AD (Nicholls, 1990), from notes penned in the margins of

Easter Tables (O'Croinin, 1983; Baillie, 1999), by which the changing dates of Easter were calculated. Thereafter, it is thought that these notes and other material (Kelleher, 1963; De Paor, 1993), including the pre-Christian regnal lists of certain Irish noble families and material from other works of history (primarily from mainland Europe) were incorporated into an original seventh-century annalistic calendar, now termed the *Iona Chronicle* (Mac Niocaill, 1975; Meckler, 1997). This chronicle was named after the island, Iona, situated off the west coast of Scotland and noted for its history of monastic settlement (Byrne, 2001). Although no copy of this or other early annals (e.g. the 'Chronicle of Ireland', see Hughes (1972), Meckler (1997)) survive, the tradition by which later medieval compilers faithfully re-copied older material, demonstrable by textual comparison of entries between annals (Mac Niocaill, 1975; Ó Cuív, 1987), has allowed a substantial body of early material, some of which would have been otherwise lost, to survive.

Motivations for the recording of the Irish annals

In terms of the underlying purpose behind the recopying of older annals by different monastic communities through different periods of Irish history, it may simply have involved the desire of the various communities' members to have their own record of Irish history, from which they could then supplement and continue with the history of their own regions. However, for studies utilizing the Irish annals as a source of Irish history, some further consideration of the motivations of the scribes and their superiors in compiling and maintaining annalistic calendars should be undertaken. It is easy to see why this is the case. If reports in the annals are to be taken as reliable and accurate accounts, then it must be established with some confidence that the motivation for recording the annals was, in fact, to provide a reliable historical record. Or at least that whatever the motivation may have been, that it had the end-effect of providing such a record.

The idea and motivation for the initial compilation of an Irish annalistic calendar (i.e. the *Iona Chronicle*) can be attributed to Colm Cille, the founder and first abbot of the monastery at Iona (O'Loughlin, 2003), who took the fifth century chronicle of Rufinius of Aquiliea, Italy, as inspiration for the project (McCarthy, 2003, 2005). This work, which combined an account of Biblical and European history until the late fourth century AD (McCarthy, 2003), was most likely the model for a similar attempt undertaken in the *Iona Chronicle*, in which material pertaining to Ireland (such as that mentioned previously, and probably also including Irish oral histories and folk-tales from the period before written records were available) was inserted into a chronology stretching back to Biblical times.

Attempts at an integration of Irish and Biblical history can still be seen in some of the annals that remain, such as the *Annals of Inisfallen* (Mac Airt, 1951) and the later-compiled AFM (O'Donovan, 1851). According to Nicholls (1990), the Pre-Christian entries in AFM are largely a reworking of the tenth-century AD version

of *Leabhar Gabhla Éireann*, or 'The Book of the Taking of Ireland', which provided an account of Irish pre-history by means of a combination of speculation and pseudo-historical guesswork (Ó Corráin, 1978), and whose goal was to provide Ireland with a concrete national identity, traceable from Biblical times and integrated with world history (Ó Corráin, 1978, Nicholls, 1990). It is of little surprise that the annalists working on the compilation of AFM in the seventeenth-century thought to include such material, given the rise of Irish nationalism prevalent at the time (Martin, 1987), and it is possible that the motivation for the inclusion of such material in the original *Iona Chronicle* leant towards the development of a coherent and integrated historical record of Christian and Irish history for use in reinforcing the Christianisation of Ireland.

From investigations of the annalistic material which remains available for study, it seems that despite whatever other motivations were being served, the general objective of the construction and maintenance of annalistic records was indeed to preserve a solid account of Irish history, the material for which became more reliable during the seventh-century (Smyth, 1972). Some commentators (e.g. Kelleher, 1963) have suggested evidence that a certain amount of re-writing of the earlier Irish annals was undertaken around the later ninth century in order to serve the political ambitions of the Uí Néill, a noble family based in Ulster, who sought, in cooperation with the religious houses of Armagh who were vying for the ecclesiastical primacy of Ireland, to emphasise their place and role in Irish history by rewriting themselves more prominently into the available annalistic records.

Again, despite such distortions of the early records, Kelleher (1963) proposes that the majority of annalistic entries would have had no bearing on such ambitions, and would therefore have suffered little from tampering, especially after the seventh-century. Such an opinion can be based on comparison of material recorded in annals still available with material recorded in surviving independent records, from which it can be demonstrated that the annalists did, in general, provide faithful accounts of events (Smyth, 1972; Mac Niocaill, 1975). From this, it follows that the later medieval annals, comprised partly from earlier annals no longer extant, likely also provide a generally reliable account of the material contained in the now lost annals, alongside the addition of contemporary events peculiar to each annal's place of recording (McCarthy, 2003, 2005).

Another motivation might be proposed for the keeping of the earliest records, thus feeding into the compilation of the *Iona Chronicle* and later annals. Some insight may be gained into this by a recounting of the spirit and motivation of Friar John Clyn, in his own words, for the keeping of a chronicle, now known as the *Annals of Ireland by Friar John Clyn* (Butler, 1849) during the Black Death, which swept through Ireland in the mid-fourteenth century:

"And I, Brother John Clyn of the Friars Minor in Kilkenny have written in this book the notable events which befell in my time ... so that notable deeds shall not perish with time, and be lost from the memory of future generations

... I leave parchment for continuing the work, if haply any man survive ... "
(Kelly, 2001: 47).

If the fourteenth-century Black Death was a motivating factor for the writing of Clyn's annals, then it seems likely that the widespread sixth-century plague of Justinian (for an account, see Naphy and Spicer, 2000) recorded in AFM under the year 543 AD as "an extraordinary universal plague" was also a stimulus to the keeping of the earliest Irish annals, as it most certainly was to the first recording of ancient Irish sagas and poetry (Richter, 1988; Kelly, 2001). Another factor in this may have been the severe environmental downturn experienced around the same time in Ireland (Baillie, 1994; 1999) that likely brought notable and memorable hardship to the inhabitants of the time.

Several centuries later, the approach of the first millennium, which many Christians in Europe took to herald the approach of the Biblical 'Last Days' (Lacey and Danziger, 1999) may have reinforced the recording of events that were taken as portents or signs (McCarthy and Breen, 1997). Such 'signs' included lunar and solar eclipses and other astronomical phenomena, along with terrestrial and environmental phenomena such as disease, violent storms or floods (McCarthy and Breen, 1997; Kelly, 2001). In the annals, there is an abundance of such entries, and the reporting of these events is often delivered in apocalyptic language, mirroring that of the Book of Revelation (McCarthy and Breen, 1997; Kelly, 2001). Aside from issues of its reliability, one example from AFM under the year 767 AD provides a good study of such language and of associations the annalists made with unusual or severe natural phenomena:

"... terrific and horrible signs appeared at the time, which were like unto the signs of the day of judgment, namely, great thunder and lightning, so that it was insufferable to all to hear the one and see the other ... " (AFM, 767 AD, O'Donovan, 1851)

In such instances, it seems clear that the annalists had specific motivations for the recording of unusual or severe environmental phenomena, and this can be seen in how they interpreted what they saw and recorded. Yet the motivations for the recording of any particular type of event are often complex, and do not usually rely on one factor alone. A good example of this is the fall off in the recording of astronomical phenomena after 1133 AD (McCarthy and Breen, 1997), perhaps due to the relatively uneventful passing of the first millennium, when at the same time instances of severe weather continue to be reported. This highlights the fact that there was more than one motivating factor for the recording of such events, and in the case of weather extremes, it is likely that these continued to be recorded due to their relevance to the society of the times, whose agricultural system was more vulnerable to environmental changes and weather extremes..

The above discussion brings us to a final point, that there is a distinction between the motivations for the recording of particular types of events, and the

motivations for the recording of the annals overall. Indeed, though there are commonalities between all of the annals, it is logical to conclude that different scribes recording or copying at different times would have had their own preferences and views on what was most important for inclusion in their own respective annals. Such preferences would likely have been flavoured by the times and areas in which the various scribes were working, and such considerations must be borne in mind when using the annals as historical sources. For example, in the compilation of AFM, the scribes, being men of the Counter-Reformation and the Renaissance, exhibited a tendency to remove or reword material regarded as disreputable to the Church in their recopying of earlier annals (Nicholls, 1990), such as mentions to the children of the clergy.

However, when taking an overall view of the body of Irish annals that remain available for examination, it seems reasonable to state that whatever the exact motivations for the recording of the Irish annals were, the main goal was to maintain a reliable record of Irish history, a practise with a long tradition in Ireland, and one which the various scribes would have been loathe to interfere with to too great an extent (Walsh, 1944; Smyth, 1972; Ó Cuív, 1987). Thus, what the Irish annals leave to the study of Irish history has been well summed up by Ó Cuív (1987: 511) as "the most copious and reliable native sources for the history of Ireland", to which few European countries, in terms of native chronicles, can compare (Martin, 1975).

Celestial and Astronomical Phenomena

Observations of celestial or astronomical phenomena are numerous throughout the annals, and much work has been undertaken on these entries by McCarthy and Breen (1997). Such reports include mentions and accounts of solar and lunar eclipses, aurorae and comets. Given the volume and general accuracy of reporting of these events, it seems likely that there was sustained and purposeful observation of astronomical phenomena being carried out in Ireland from at least the seventh century AD (McCarthy and Breen, 1997). The motivations for the observation and recording of such events is almost certainly linked, at least in part, to the religious motives discussed in the preceding section, though this does not rule out other motivations for both the systematic observation of such phenomena and their inclusion in the written annalistic record.

At a glance, many of these entries do not pose too great a challenge to interpretation, at least in terms of identifying the underlying phenomena. For example, AFM, under the year 1066 AD, records the following:

"A star appeared on the seventh of the Calends of May, on Tuesday after Little Easter, than whose light the brilliance or light of the moon was not greater; and it was visible to all in this manner till the end of four nights afterwards" (AFM, 1066 AD, O'Donovan, 1851).

This entry has been clearly identified as an account of the passing of Halley's comet, which was recorded in numerous other chronicles throughout Ireland and Europe at the time (O'Donovan, 1851; McCarthy and Breen, 1997). Some reports, however, do pose a degree of difficulty in interpretation, and in such cases it may be tempting to write these off as falsifications or misinterpret the underlying phenomena. For example, events involving the effects of volcanic clouds on the upper atmosphere, notably a darkening of the sun (Stothers and Rampino, 1983; Baillie, 1999), need to be carefully distinguished from entries relating to solar eclipses, the records of which are phrased in a similar manner (McCarthy and Breen, 1997). There are many instances of unusual astronomical and celestial phenomena in the annals, but of most interest here, in terms of its illustrative value, is the account (earlier versions of which are found in other annals) in AFM under 1054 AD:

"A steeple of fire was seen in the air over Ros-Deala [located Westmeath], on the Sunday of the festival of George, for the space of five hours; innumerable black birds passing into and out of it, and one large bird in the middle of them; and the little birds went under his wings, when they went into the steeple. They came out, and raised up a greyhound, that was in the middle of the town, aloft in the air, and let it drop down again, so that it died immediately; and they took up three cloaks and two shirts, and let them drop down in the same manner. The wood on which these birds perched fell under them; and the oak tree upon which they perched shook with its roots in the Earth" (AFM, 1054 AD, O'Donovan, 1851).

This entry, even though imbued with clear elements of fantasy, has been proposed by McCarthy and Breen (1997) to derive from an observation of the 1054 AD supernova, accounts of which are present in records spanning from Western Europe to China (Breen and McCarthy, 1995). The most significant problem facing its interpretation and identification is the manner in which the report of the "steeple of fire" has been integrated with elements of fantasy and myth. But, rather than dismissing the report in its entirety, placing it in the context of the times should lead to the conclusion that such a mixing of fact and fancy is unsurprising, given that the contemporary observers (and subsequent annalists) would not have had a full knowledge of what they were observing or recording, and would thus have placed it in whatever explanatory framework was available (or perhaps politically helpful) to them. In this case, the event, which must have been a very notable sight at the time of its observation, appears to have been integrated within the framework of a medieval telling of the Antichrist legend (Emmerson, 1981; Jenks, 1991; McCarthy and Breen, 1997) in which the Antichrist's arrival before the second coming of Christ was in the form, amongst others, of a winged beast associated with a darkening of the sun and moon, and falling stars. The associations between this legend and the entry in AFM under 1054 AD are not too difficult to grasp, and the

manner in which contemporary observers, recorders and later annalists associated the sighting of the supernova with aspects of the Antichrist legend are also relatively clear. Thus, what appears at first to be an entry of pure fancy in the annals, is in fact rooted in a rare natural phenomenon.

Terrestrial & Environmental Phenomena

Records of environmental and physical phenomena are as numerous, if not more so, than entries relating to astronomical observations in the annals. As with the astronomical phenomena, much of the material relating to terrestrial environmental phenomena (e.g. weather extremes) is readily identifiable, and poses little challenge to interpretation. For instance, take the entry in AFM under 1115 AD:

"Boisterous weather, frost, and snow, from the fifteenth of the calends of January to the fifteenth of the Calends of March, or longer, which caused great destruction of cattle, birds, and men ..." (AFM, 1115 AD, O'Donovan, 1851).

Despite the unusual severity of the reported cold spell, which describes conditions extreme enough to directly cause the deaths of animals and humans alike, the straightforward language of the entry lends a sense of reliability to the report. Furthermore, though conditions harsh enough to lead to the widespread destruction of livestock are rare in Ireland, reports of such occurrences are not unknown, even in the modern period with its associated improvement in both human and livestock housing. For example, the cold winter of 1947 was accompanied by reports of cattle perishing in particular areas in Ireland (Haughton, 1953; Sweeney, 1997).

On other occasions, however, the annalistic records of unusual environmental phenomena can be far more cryptic, partly arising from the fact that some of the reported occurrences refer to phenomena with which the observers and annalists would not have been familiar. Thus, the entries in the annals have undergone a filtering through the perceptions and understandings of the people who observed and recorded the incidents at the time of their occurrence, and also, often through the perceptions of the later annalists who recopied the original records. This led to a layered interpretation of events that becomes readily obvious in the way unusual or exceptional events are reported and recorded. The following paragraphs provide only a small selection and preliminary interpretation of some of the more unusual environmental reports in AFM. It should be noted here again that to provide a fully comprehensive interpretation, the earlier available annals should also be consulted with a view to identifying alternate or earlier reports of the same event, and that AFM is here used for convenience.

"A whirlwind attacked a number of persons, as they where cutting turf on the bog of Tuaim-Mona, which killed one of them, and swelled the faces of the rest; and four others were killed by the same wind in Machaire-Chonnacht" (AFM, 1488 AD, O'Donovan, 1851).

In medieval Ireland, whirlwinds, or tornadoes, were viewed as a supernatural phenomena raised by the fairies (O'Donovan, 1851) and so it is not surprising that the report states the whirlwind "attacked" the people in question, rather than simply being an act of nature. But the phrasing of the report and the unfamiliarity in Ireland with such natural phenomena does not mean that the report itself is a fabrication. Tyrell (2001; 2002) has shown that tornadoes, whirlwinds (and their on-water counterpart, waterspouts) are a noted meteorological occurrence in Ireland, and such phenomena (O'Donovan, 1851) could well explain several other unusual records in the annals, such as that under 1021 AD in AFM, which simply states that "a shower of wheat was rained in Osraighe" and that under 1566 AD reporting "a shower of fish fell in Tirconnell this year". In fact, 'falls' involving all manner of plants and animals, from fish to frogs, are a relatively common occurrence even in modern times (Healy, 1983) and if the reports of such phenomena in the annals are sometimes false, then they are at least no more likely to be so than reports in modern newspapers. Indeed, such events have been reported and discussed even in established journals such as *Scientific American* and *Nature* (Healy, 1983).

Although the selection here can only highlight a fraction of the entries that deserve investigation in the annals, it may be worthwhile to mention a few more, including that under 866 AD, which reports that "a stream of strange water burst forth from the side of Sliabh-Cuallann [Sugar Loaf, Wicklow] (O'Donovan, 1851), in which were fish and coal-black trouts, which were a great wonder to all." A moment's speculation suggests this to be a report of a bog burst, a type of mass movement where the integrity of the outer bog surface (usually on a slope) fails and begins to slide. Bog bursts or 'flows' can occur due to over-saturation in times of heavy precipitation, due to human interference, or from a combination of both (Warburton *et al.*, 2004) and are known to be a regular occurrence in Ireland (e.g. Alexander *et al.*, 1986; Coxon *et al.*, 1989) with a recent notable burst occurring in 2003 in Derrybrien, Galway (McDonald, 2003). As with the prior examples, this report has some unusual aspects, notably the 'fish' and 'coal-black trouts' that may have been added in at some stage along the path of transmission of the reports from the contemporary observers to the annalists, or indeed by the annalists themselves.

A final example consists of reports of the disappearance or 'migration' of lakes, seemingly overnight, such as that reported under 848 AD, stating "Loch Laeigh, in the territory of Umhall, in Connaught, migrated." This is not the only example of such an entry, with others, such as that under 1054 AD, which reports that "Loch Suidhe-Odhraín ... migrated in the end of the night of the festival of Michael, and went into the Feabhail, which was a great wonder to all." O'Donovan (1851) identifies this lake as having been in the parish of Knockbride, Cavan, and identifies 'Feabhail' as the defunct name of a stream which discharges itself into the Boyne. Informed speculation suggests that such entries relate to relatively common

phenomena arising from the characteristics of karstified limestone areas, such as turloughs, lakes which appear and disappear seasonally in Ireland (Coxon and Drew, 2000). But the superficial, fantastic nature of such reports, along with the tendency, as demonstrated in the second example, of the annalists to date unusual reports by the feast or religious day on which an event happened, can lead to the impression (e.g. Dixon, 1953; 1959) that such events are falsifications or gross exaggerations. Certainly, it is a ready possibility that certain strange or 'miraculous' events were contrived by the annalists and clergy to highlight the importance of certain days. Yet *every* annalistic entry must be approached with a critical eye, and to refer to the above example, it is not just unusual events that were identified by the annalists as occurring on days of religious significance, but also more mundane events. This signals that the use of feast days to date events arose more from its convenience and familiarity to the annalists, who being clergymen or scholars, would have had a ready knowledge of what feast or religious day equated to what calendar date.

Conclusions

A number of major points or observations may be made arising from this examination of the more unusual, fantastic phenomena in the Irish annals. It is wrong to dismiss such reports as falsifications without first assessing them in a critical manner. The time and context in which many of the annalistic collections were compiled must be borne in mind. Before the rise to dominance of scientific and empirical ideals, the introduction and use of myth and religious concepts was a ready and familiar means of explaining and evaluating unfamiliar and bewildering natural events across all cultures (Grimal, 1965). Thus, it is only to be expected that the annalists make use of such means when interpreting and describing unusual phenomena, and their use of such does not mean that these events should be treated with absolute, uncritical suspicion. With many events, it has been shown that there is at least a plausible explanation, referring to established natural phenomena known to affect or occur in Ireland. However, it is not argued that all such entries in the annals derive from true events, and many defy, in their language and description, any easy interpretation or explanation. What is important is that such instances should not be allowed to become a measure of the validity of all the annalistic entries, but instead, as stated before, they should highlight the need for a critical approach to the use of the Irish annals, bearing in mind the possible motivating factors for the inclusion of any particular report.

Finally, the unusual and myth-laden entries in the annals are valuable in their own right, even those entries that seem fabricated in their entirety. As a product of their times they have a relevance in commenting upon the nature of the annals as an historical source, and upon the concerns of the annalists in what they chose to record and in how. In such entries can be seen the changing Christian and Gaelic

religious influences of the times, and the state of knowledge of geography and science. The annals are, beneath the surface of the reports, a readable commentary on what was important to the inhabitants of Ireland at various stages of their history, and of how they interpreted the goings on around them. They speak of the prevailing culture, values and beliefs. Thus, the annals are much more than a mere list of occurrences, some true, some false, but are a window to interpreting a world now lost.

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