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Life in the Weather-World: Examining an Eighteenth-Century 'Ecological Perspective'

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Abstract

Within archaeology, discussions on climate are usually framed in the broad-scale and long-term, but by using the diaries as rich sources on local environmental and landscape history, it is possible to develop archaeological insights into climate predicated on the everyday human experience of living in the landscape. This article presents a case study of two Quaker diarists, who farmed on the edge of the Lake District in north-west England during the eighteenth century. One of these diarists, Elihu Robinson, had a world view that linked social, natural and religious spheres of action with his compassionate and deeply felt faith. Arguably, this is an example of a Quaker 'ecological perspective' which contributed to an eighteenth-century environmental ethic. By thinking in terms of Tim Ingold's weather-world, it is possible to see how this perspective emerged in relation to the diarists' interactions with weather and landscape.

Keywords

Cumbria, Eighteenth Century, Landscape, Weather, Diaries, Quaker

Introduction

In a series of articles published in the 1980s, Donald Brooks Kelley (1982, 1985, 1986) commented on the publications, correspondence and memoirs of five prominent eighteenth-century American Quakers, describing them as harbouring an 'ecological perspective'. The Quakers, he argued, had an overarching cosmology through which they strived to attain 'a divinely orchestrated harmony' that united people with God, themselves, others, and the natural environment (Kelley 1982, 87). To Kelley (1985), this reasoning connected them to the more developed concepts of ecology and environmental ethics that were to abound in the twentieth century, often linking environmental issues with matters of social justice. In this respect, Kelley's analysis followed Donald Worster's (1977) *Nature's Economy* which located the roots of modern ecology within the eighteenth century, and foreshadowed others that have continued to trace Early Modern attitudes towards nature and, particularly, their expression in the contexts of colonialism and improvement (Armbruster and Wallace 2001; Cooper 2007; Grove 1995; Jonsson 2013). Important too are the works of Clarence Glacken (1967), Lynn White Jr (1967) and Keith Thomas (1983), which explored how modernity's complex entanglements with the natural world connect with the history of philosophical and religious thought.

Conceived primarily as a history of religion and philosophy, Kelley's interpretation is not without its problems. Great emphasis is placed on the 'ecological perspective' as deriving directly from the Quaker faith, but Kelley himself recognised that such a world view connected with a long-term history of ecological thought and trends in animal stewardship that were not exclusive to the

Quakers (Jonsson 2013; Nash 1989; Worster 1977; Hayward 1994). Moreover, it is freely admitted that far from universal, Kelley is referring to a certain subset of American Friends: the rustic, rural reformists, rather than their city dwelling, merchant counterparts. These Quakers were living long before Ernst Haeckel popularised the term 'ecology', and with his discussions of stewardship and animal welfare, Kelley was perhaps describing an environmental ethic rather than ecology itself (Nash 1989).

This article presents a case study of two Quaker diarists, who farmed on the edge of the Lake District in the north-west of England during the eighteenth century. One of these diarists, Elihu Robinson, linked social, natural and religious spheres of action in a reflexive mesh, which aligned closely with his compassionate and deeply felt faith. Arguably, this is an example of the Quaker 'ecological perspective'. Like Kelley's American example, Robinson's perspective can be understood as emerging from the particular philosophical and religious milieu of the late eighteenth century, yet the significance of this finding is questionable if we consider that the 'ecological perspective' is neither ecological nor exclusively Quaker. The landscape archaeology and history of the area appears to justify this scepticism: there is no identifiable mark that distinguishes the farms of the diarists from those of their non-Quaker neighbours. More widely, the archaeology of Quaker sites encourages a much less rigid view of their identity and religion (Chenoweth 2009, 2014). Consequently, following the work of Tim Ingold (2007, 2011a, 2000, 2015; Ingold and Kurttila 2000), it is possible to reorientate the analysis towards how Robinson's ethical perspective was constructed in relation to his engagements with the weather-world – an intrinsic binding of land and sky. By using the historical diaries to explore the landscape and environmental history of the area, as well as the diarists' interactions with weather, this article examines Robinson's world view in terms of an archaeology of climate nested in the human experience of landscape.

Landscape and Weather-world

Anthropologists examining human-environment relationships have, in the past 15 years or so, found numerous instances where the perception and understanding of weather and climate are deeply engrained within cultural practice, work, individual and group identity, as well as religious expression (Strauss and Orlove 2003; McIntosh et al. 2000; Crate and Nuttall 2009; Roncoli et al. 2008; Hsu and Low 2007). Historical geographers have made similar points; in particular, linking the experience of weather and climate with the social construction of place (e.g. Daniels and Endfield 2009; Veale et al. 2014; Naylor 2006). Likewise, in the eighteenth century, Jan Golinski (2003, 2007) and Vladimir Janković (2000, 2004) have shown that attitudes towards weather were an important medium by which Enlightenment values were developed and conveyed. Wider understandings of nature often found their most cogent and popular expression through discussions of the weather, and the process of recording the weather became tied to prevailing standards of gentlemanly behaviour. Here again, connections between weather and place were paramount: 'differences in weather, like differences in landscape and history, could be important', they were part of local character and identity (Janković 2000, 160).

Over long time-scales, culturally embedded understandings of the natural world are thought to be linked to the ecological resilience of communities – a subject that has garnered much interest in the face of contemporary global environmental change (Redman and Kinzig 2003; Redman 2005; but see also MacKinnon and Derickson 2012; Brown 2014; Pillatt 2012a). Robert Van de Noort (2011) conceives this sense of temporality as archaeology's chief contribution to current debates: 'by offering long-term perspectives ... archaeology is well placed to enhance understanding of the socio-ecological resilience of communities and their adaptive capacity.' There is of course much truth in this, but by its nature the 'climate change archaeology' that Van de Noort describes tends to focus on long-term changes to the terrestrial environment, thereby separating land and climate from the immersive, atmospheric experience of daily weather (Pillatt 2012b, 2012c). To couch archaeological discussions of weather in only those terms is highly reductive. If, as is suggested by Janković (2000), Golinski (2003, 2007), and others, weather is fundamentally about place, it becomes part of the landscape; part of setting in which human agency and social practice were enacted. As Barrett and Ko (2009) maintain, the possibilities of being in the world are situated in relation to the 'historical conditions of material existence', which change over time. Crucially, this is not restricted to abstract notions of societal thought – often out of archaeology's reach – but encompasses the physical, sensual, material reality as it is constantly confronted, produced and reproduced; this includes the weather (Pillatt 2012b).

In recent years, the meshing of landscape and weather has been clearly articulated in Tim Ingold's (2007, 2011b, 2015) concept of the weather-world. Like Barrett's (cf 2001) 'inhabited conditions', Ingold views weather as a 'medium and condition of interaction' (Ingold 2015, 70), and therefore 'the ever-present undercurrent for our actions as we go along in the world' (*Ibid.* 72). Critiquing theories of perception that take as their starting point a wholly terrestrial landscape (see Pillatt 2012b, 2012c), Ingold recognises that 'weather engulfs the landscape' (Ingold 2011b, 132), such that weather can be seen as the 'world's worlding' (*Ibid.* 130). Consequently, to be situated in the landscape is to encounter the world within a dynamic, physical, affective and aesthetic medium, wherein experience is predicated not just on place, but on the fusion, blending or binding of 'the substances and the medium into living form', thereby 'stitching the textures of the land' (*Ibid.* 121). It is from this perspective that the following analysis proceeds: Elihu Robinson's world view emerged from the collision of tradition, custom, popular knowledge and belief, but crucially these were all metered to the (un)predictability of everyday activities set within the changing weather.

Two Quaker Diarists

Starting with the 1689 Act of Toleration, eighteenth-century Quakers benefited from a series of liberalisations that began to free them from the systemic persecution that had marred their early existence. Founded amidst the chaos of the English Civil War in the 1640s, the Quakers spread far and wide during their first hundred years, establishing notable congregations in the American colonies, most famously Pennsylvania, and across England, Wales and the Netherlands. Arguably,

the core of the early movement was to be found in southern Cumbria and north-east Lancashire, where in 1652 the charismatic preacher George Fox held a series of meetings which helped set the new religion on its course. Not far away, on the north-west fringe of what is now the Lake District National Park, the congregation or 'meeting' at Pardshaw Hall was the first to be founded in Cumberland. It became the largest rural meeting in England, and remained a stronghold of Quakerism for about 150 years. Two prominent members of this meeting, Isaac Fletcher and, particularly, Elihu Robinson, are the focus of this article. They were moderately wealthy men, yeoman farmers and members of the growing middle class, with business interests in farming, mining, legal work and overseas trade. Despite 20 years difference in age, Fletcher and Robinson were friends, occasionally meeting up to go on day trips or to engage in the activities of popular gentlemanly science, such as watching the transit of Venus in 1761. Both men kept diaries that have been preserved in the Library of the Religious Society of Friends, London and by Cumbria County Archives Service.

Fletcher's diary has been rigorously annotated and transcribed by Angus Winchester (1994a), but Robinson's diary remains only in its original form (RSS MS Box R3). They span the period 1756 to 1806, beginning with Fletcher's up until his death in 1781, when after only a couple of years of overlap, Robinson's diary continues the record. The diaries are useful for a range of reasons: as historical climatological records, windows on personal experience, expressions of wider trends in contemporary science, religion and popular culture, and as sources of evidence for landscape and agricultural history. They are not perfect sources, however. Diary entries are missing, commentary is limited, and context is often lacking. In archaeological terms the diaries are a rich source; as historical or literary sources, however, they are rather sparse. The regular descriptions of weather are a case in point. In Fletcher's diary, weather is referenced in just under half of his 8000+ entries. For the most part, these comprise a fairly dry daily record of temperatures, precipitation and wind, offering little to work with in terms of understanding his philosophical perspective on the phenomena he described. While Elihu Robinson's discussion is more reflective, tending to refer back to occurrences over the course of a week or month, clarity on the specifics of the day-to-day weather is lost as a result of this broader focus (Table 1).

Insert Table 1

Despite these problems, the level of detail and regularity in recording methods mean that the diaries compare favourably to other climate proxies, and they can be used to provide relatively high resolution insights across their limited time span (Brázdil et al. 2005; Adamson 2015). Qualitative statements can be converted to figures for temperature and precipitation, and then compared to widely used instrumental series (Figure 1; see Pillatt 2012c for a more detailed description of this method). In this case, the reconstructed historical climatological record only rarely correlates with the well known Central England Temperature (CET) series and the England and Wales Precipitation (EWP) series – some of the world's longest running and most referenced instrumental weather records, which compile multiple readings across a broad region on a monthly (later daily) basis

(Manley 1974; Alexander and Jones 2000; Nicholas and Glasspoole 1931). Such correlations depend very much on the specific time period and values observed. For example, Isaac Fletcher's record tends to correlate with the CET during spring and winter but not autumn, whereas Elihu Robinson's diary is a better reflection of the EWP than CET. Many of the discrepancies can be attributed to missing entries in the diaries, while other potential explanations of difference range from the positioning of instruments to the Lake District's unique weather patterns. Nevertheless, the existence of some degree of correlation, fragmentary though it is, suggests that the diaries (and the methods used to analyse them) and the instrumental records are indeed of some value in reconstructing the day-to-day experience of weather in a particular place (Pillatt 2012c, 2012b). This being said, there is clearly some difference in the quality and type of inferences afforded by the local focus of the diaries in comparison to the regional instrumental series. An even starker contrast can be made between the diaries' fine grained, short term analyses and the low resolution palaeoecological records from the nearby area, which present a long term history of environmental change at the expense of detail and chronological resolution (Pillatt 2012c, 78–94).

Insert Figure 1

Using the diaries to construct historical climatological records is clearly a valuable method for examining the past environment, but a more evocative perspective on the past is perhaps found in the numerous anecdotes and commentaries on everyday life. It is striking, for example, how both diaries reflect the continual, unerring impact of weather on day-to-day tasks, forcing changes to travel plans, placing livestock in danger and preventing the harvest being taken in. It is, however, the diarists' experiences of extreme weather that make the most compelling reading. Isaac Fletcher wryly described the intense cold as it froze 'to the very fire sides' in January 1775, and the 'piss pots under the beds' in January 1780. In February and March 1894, Elihu Robinson reported 'numerous accidents upon ye Ice & Roads' and 'the Poor Exceedingly distressed, Several in one day asking relief, Who never asked before'. There are also clear parallels with contemporary experiences: echoing recent major flooding in the Lake District (Glover 2015), Fletcher recorded inundations in 1761, 1764, 1767, 1773 and 1777, while in September 1786 there was 'a very great flood, twas said Cocker rose considerably above ye Foot Bridge at Southwaite: Bridge at Keswick washed down'. Combined with outside circumstances, the consequences of bad weather could be severe. This was evident during the food shortages of 1800, when war and blockades combined with poor harvests. On 12th May that year, Robinson sent his maid to sell potatoes at the market with strict instructions not to ask above eight pence per stone – well below the market rate that day. 'She was soon surrounded by a multitude, agitated by different passions! Some swearing some praying! & perhaps some crying in order to be served: They were soon sold & notwithstanding her care & vigilance, she supposes several did not pay – however she made One Pound, Five Shillings & Nine pence half penny – I think the most I ever made out of one coup – deplorable distress!'

An Ecological Perspective?

For many during this period, the moderate British weather was seen as an example of God's providential benevolence. Providence was an important part of Early Modern theology; a common thread that united the disparate denominations of the post-reformation theological landscape (Walsham 1999, 10). Despite fostering these common understandings, there were nevertheless different ideas about what providence entailed. Robinson's entries discuss godly workings and providence 32 times, and much of the time he saw them as wholly benevolent, laden with the expectation that periods of bad weather would always be followed by good: in 1784, 'after such a wet & cold summer and ye harvest so back it was remarkable favour of kind providence, that ye 9th & 10th month were very dry & pleasant'. Quaker historians describe an ontology that emphasised individual fallibility in the face of divine omniscience (Braithwaite 1961; Dandelion 2007) As such, bad weather was to be endured with patience and submission, with Robinson often saying, as he did in July 1789, 'to reason right is to submit, & do our best'. Consequently, when runs of shockingly bad weather came, like in 1795 when that January became the coldest month recorded in the entire CET series (Manley 1974), they were met with the belief that 'some times seeming evils in the dispensations of providence are productive of substantial good!'

The spell of dire weather leading up to 1800 and the 'deplorable distress' that Robinson's maid encountered at the market is observable in the diaries as increasingly frequent references to drought, weather-affected farming and high prices (Figure 2), and is a time discussed elsewhere in histories of the period (e.g. Neumann and Kington 1992; Beckett 1990, 65). The severity of the situation appeared to prompt a significant change in the diarist's thinking. As the bad weather, blockades, war and a poor economic situation combined, Robinson became increasingly depressed, writing in the spring of 1800 'I have sometimes thought it was not very unlikely, that in ye wisdom & justice of providence, this nation might be humbled by some punishment as well as ye nations around us: and as others have suffered by ye Sword of Pestilence! It seems our lot to suffer by famine!' Here the passive, benevolent providence was transformed into a much more active, supernatural arbiter of social justice. Moral indiscretions came to be considered a causal factor in the coming of bad weather.

Insert Figure 2

In taking this ethical position, and as social and economic conditions appeared to be worsening, Robinson's sensitivity to bad weather was heightened (Pillatt 2012c). In 1801, after a several years of turbulent weather, trade blockades across Europe, news of war and high food prices, he was desperately concerned about the prospect of another poor harvest. The diary entries portray a growing sense of panic as a spell of drought elicited 9 separate diary entries, more than in other year in the diary. These contained ever more tortured pronouncements, including one in June stating that 'He who promised that Seed-time & Harvest should not cease is still kind (if we deserve it!!)'. Robinson's commitment to patience and submission was being sorely tested. However, as the year progressed, his concerns turned out to be misplaced; autumn brought a plentiful harvest which sent prices tumbling. This too was set against a moral stance on the wider social situation, when in

October, Robinson records that the 'Expected Preliminaries of PEACE were Signed' in London, thereby paving the way for the 1802 Treaty of Amiens: 'May this Peace be lasting! AMEN!!!!'

The 'ecological perspective' of Kelley's (1982, 1985, 1986) American Quakers promoted a 'vision of man in harmony with God, in concordance with himself and all men, in balance with his environment, in sheltering regard to his "plants," "seeds," and "vines," and in ecological equilibrium with all God's "beasts," and "creeping things"' (Kelley 1985, 249). Consequently, many of these Quakers were vegetarians, and they subscribed to a rustic, rural life. Robinson's world view was different. His commitment to a benevolent God had prevented him from becoming too superstitious and recalling the sometimes near-malevolence of the medieval deity, yet as the weather worsened any sense of modern Enlightenment rationality was tempered by a propensity to see weather as an active arbiter of morality and social justice. This was the essence of his own 'ecological' perspective, expressed not through vegetarianism or commitments to rustic living, but in the unification of social, spiritual and environmental spheres of action.

The Archaeology of a Weathered Landscape

With their detailed discussion on the experience of weather and insights on eighteenth-century farming life, the diaries portray a situation where, as Ingold (2015, 72) says, the weather was 'the ever-present undercurrent' for the diarists actions. As useful sources for reconstructing local landscape history, the diaries also shed light on how the landscape helped to mould and was moulded by those human relationships with the changing weather.

Lying at the very edge of the Lake District fells, just north of Loweswater, the former home of Isaac Fletcher is nestled within Mosser, an old township with a landscape that rises from low-lying wetland, through enclosed and improved fields, up onto the open fell (Figure 3, Figure 4). Around 3km to the north-west, Eaglesfield, the home of Elihu Robinson, is further out and lower down on the coastal plain, yet the land remains rough and hilly. During the eighteenth century, farming transitioned from a predominantly subsistence regime to one focused on supplying the increasingly busy markets at nearby Cockermouth and Whitehaven. An analysis of the Mosser Quakers' sufferings books – lists of farm produce confiscated for non-payment of church tithes – suggests that the lower-lying farms tended to farm more arable land, while the farms in cooler and more exposed positions bordering the open fell were primarily restricted to rearing and fattening livestock (Pillatt 2012c). An archaeological walkover survey has shown that this division is mirrored in the types of field boundaries, with hedges prevalent on the best agricultural land, while stone walls are found on the higher ground and across the wetter land of Mosser Moss (Pillatt 2012d). The impact of weather on the upland slopes is further implied by a sketch map from 1827, which shows Mosser's heafs – the territories of different sheep flocks, where they gather to graze and sleep – were situated on the eastern slopes of Mosser Fell, outside the bounds of the township, but sheltered from the prevailing westerly winds (Figure 5; Wh DWM 1/106).

Insert Figures 3, 4, 5 and 6

The sufferings for Mosser suggest that livestock produce comprised an ever greater proportion of tithable non-payment confiscations from 1750 onwards (Figure 6), and other tithable records show that sheep and cattle herds were growing – between 1773 and 1775 by approximately 20% (Pillatt 2012c; Ca D/Ben/1/372; Wh YDFCF/1/116). Meanwhile, at Eaglesfield, Elihu Robinson's sufferings show a continuing preference for hardy, weather-tolerant oats over the more fragile crops of wheat and barley. It is possible that these farming choices were the latest in a long line of adaptations to the agricultural regime that responded to and took advantage of the landscape setting and local environment. Mosser (from the Old Norse for 'peat bog' and 'summer pasture') possibly originated as a seasonal grazing site in the early medieval period, with the dispersed settlement pattern reflecting later piecemeal permanent colonisation. This probably began during the thirteenth century when a grant of land to Adam de Mosser established the boundaries of the township. Just on the edge of the upland fell, fields with the names 'High Houses', 'Scale Croft' and 'Foredoors' in the mid-nineteenth century contain a series of earthworks that are perhaps the remains of an upland milking barn, associated with seasonal pasturing during the early postmedieval period.

In the late 1970s and 1980s, Martin Parry's (1978, 1981; Parry and Carter 1985) research in the Lammermuir Hills, Scotland, led him to argue that postmedieval upland colonisation (and desertion) was highly dependent on long-term climate changes, particularly during the so-called Medieval Warm Period and Little Ice Age. However, more recent work, particularly by Richard Tipping (1998; 2002), has questioned this strictly deterministic assessment. The evidence in Mosser suggests no long-term postmedieval abandonment; indeed, land tax returns show that land ownership remained fairly stable throughout the late eighteenth and early nineteenth centuries, and where farm abandonments did happen, as is evidenced by the crumbling remains of the farmsteads of Whinnah and Gillbrow, they did not occur prior to 1839 (Ca QRP/1; Wh YPR 30/4). Meanwhile, the historical climatological record offered by the diaries, together with the diarists' comments, and details of their farm economies reconstructed from the sufferings books, all suggest that the flexible mixed farming regime was well placed to adapt to periods of bad weather, as well as more sustained climatic change (Pillatt 2012d).

Flexibility and adaptability do, nevertheless, betray an intense sensitivity to environmental change. Crude environmental modelling based on Parry's (1978; Parry and Carter 1985) methods show that the sharp changes in altitude within the Mosser township mean that only very small changes in average temperature can have dramatic effects on crop viability over large areas (Pillatt 2012c). All the more striking, then, are the remains of ridge and furrow crop cultivation on the steep slopes above Fellside Farm. Located beyond the large bank and ditch head-dyke, likely one of the oldest permanent boundaries in the township and the ancient limit to the improved and enclosed agricultural land, the farmer would have abandoned years of tradition to plough up onto the open common. Causing high grain prices and food shortages, the geopolitical turmoil of the Napoleonic

Wars and their precursors present the most likely date for this enterprise. For greed or necessity we cannot be sure, but regardless it was likely a highly controversial act, and its success was almost wholly dependent on favourable weather.

Making a Mark

Combined, the archaeological and (historical) ecological evidence underlines the stark nature of the environmental setting: the diarists lived in an area of high rainfall and exposure to the westerly winds, at the margins of profitable crop cultivation, where the combination of physical relief, elevation and worsening weather led to difficult decisions about how and what to farm. The landscape of north-west Cumberland presented a forum where a range of different social and environmental influences competed in the minds of the farmers as they worked the land and tended their animals. Moreover, it was landscape in which harvest quality, societal health, well-being, and weather were manifestly interdependent in a multitude of different ways and across a range of timescales. It is perhaps no surprise that such conditions could foster a perspective on the world in which societal ills and natural phenomena were linked within an encompassing religious ethos. Although this 'ecological' perspective becomes clear within Robinson's diaries, and although Kelley's American Quakers harboured similar ideas, there is very little evidence that this world view found an expression in how Fletcher and Robinson made use of the landscape.

With spiritual tenets emphasising harmony with nature and environmental stewardship, it might be expected that a Quaker world view would have contrasted with the prevailing notions of technological and methodological improvement and emerging capitalism (Tarlow 2007). Archaeologically, the Quakers have been described as “an ideal group for exploring the impact of religion on social life in the past because of the specific, material nature of many of [their] tenets” (Chenoweth 2009, 321). Simplicity, modesty, pacifism, equality, community and morality were aspects of religious life and spiritual experience that were protected by a code of behaviour and consumption that often emphasised 'plainness' (Dandelion 2007, 66–7). As such, a Quaker ecological perspective might appear to leave the diarists uniquely positioned to resist the increasingly pervasive economic ideologies of Early Modernity, perhaps with material consequences in terms of Fletcher and Robinson's approach to running their farms and caring for their livestock. As far as can be determined, this was not the case. The most noticeable factor that differentiated the Quaker farms from their neighbours' was their refusal to pay church taxes – something born of their religion but not of an overriding sympathy with nature. The detailed records of Quaker 'sufferings' allow us to reconstruct farm economies in some detail, but there is little to suggest that a particularly Quaker world view was finding any clear expression within their farming practices. If it did, perhaps through better care for livestock for example, it has left little trace in either the archaeological record or the content of the diaries.

This lack of a distinctive Quaker mark on the landscape is perhaps unsurprising: the archaeology of

eighteenth and nineteenth century Quaker burial grounds has been found to both support and undermine common preconceptions concerning past Quaker communities. Whilst most graves do tend to be plain, comprising few ornamental grave goods and coffins of 'modest decorative appearance' (Bashford and Sibun 2007, 130), there are frequent instances where the rules of Quaker behaviour, set out in missives from the various local, regional and national Meetings, appear to have been broken. Elaborate coffin decoration and grave markers, lead caskets and even expensive burial vaults all impinge upon the expectation that Quaker material remains should reflect a rejection of ostentatious displays of wealth and prestige (Bashford and Sibun 2007; Stone 2009; Bromberg and Shephard 2006). Meanwhile, items of domestic consumption found at Quaker sites tend to be simple but of good quality, and this couples with osteological evidence to indicate moderate wealth and, usually, relatively healthy living amongst Quakers spread far and wide (Bashford and Sibun 2007; Bromberg and Shephard 2006; Ward and McCarthy 2009).

In sum, the mortuary archaeology of Quaker communities suggests that while there are many commonalities, the Quakers were not the same everywhere; they did not always conform to an idealised or stereotypical notion of Quakerism. Chenoweth (2009) explains how the emphasis of difference was an important aspect of Quaker material culture, visible in clothing style, the layout of meeting houses, organisation of settlements, and the kinds of domestic items that were commonly consumed. Yet this was a difference established in different ways, in different places, at different times, and against a popular culture that was also constantly reforming. There is no doubt that the Quakers of the eighteenth century cultivated a shared culture of religious practice, which emphasised a set of commonly held theological tenets and beliefs, and was galvanised by a transatlantic network of travelling speakers. For each individual and each community, however, their religion was made and remade in relation to the material realities of circumstance and setting. Quaker burial practices were as much an active rejection of more popular religious practice as they were a passive reflection of the Quakers' own ideals and ideology, but as the occasional examples of ostentation show, any sense of group action was further complicated by competing senses of individual identity and expression. All aspects of Quaker practice, including those that might otherwise be held to be ubiquitous, such as resistance to slavery and commitments to peace, require redressing when considered in this light (Chenoweth 2014). If Quaker identity and the religion itself were malleable and constantly in formation, the diversity of Quaker material culture around the world also warns us against forming an overly rigid understanding of an 'ecological perspective' or an associated assemblage of materials and practices that can be uncritically assumed to reflect and represent wider Quaker thought. A more dynamic understanding of how faith is made in place, setting and context encourages us to see the landscape not simply as medium on which Quaker values were inscribed, but as part of the worldly experience from which those values were drawn and made relevant. Of course, as is being argued, the weather played an important part in this.

“Always quiet in the land”¹

1 From the advice of the May 1689 Yearly Meeting (Braithwaite 1961, 160)

If the Quakers sought to distance themselves from the corrupting world, then they were still participants within it (Chenoweth 2009, 328). On the farms, contemporary commentators looked on aghast as farmers in Cumberland stuck steadfast to their traditional, outdated crop rotations, but at the same time Isaac Fletcher was experimenting with lime as a fertiliser (Bailey and Culley 1794). Transport and communications infrastructure was gradually improving: roads were being built and upgraded, and only 16km away from Mosser, Whitehaven became one of the busiest ports in the country, providing access to overseas trade that Fletcher and Robinson were only too glad to utilise. Across the landscape, enclosure continued apace as tenants, landlords and freeholders argued about how and whether to turn communal land to individual ownership. For Fletcher, as a part-time land surveyor, this provided ample employment opportunities, sometimes within Mosser itself, where exchanges of land, the enclosure of Mosser Moss and a petition to enclose the Common marked a series of local conversions during the eighteenth century. A related development was the often tumultuous transition from tenancies based on customary rights to formal leasehold contracts – a process by which the traditional class structure was eroded and set against the new market economy and divisive inheritance practices (Searle 1986, 1993). Mosser was somewhat shielded from this particular upheaval because its inhabitants were enfranchised in the seventeenth century, but nevertheless Fletcher would have been affected through his work as a provider of basic legal services to Quaker friends across the region (Winchester 1994b).

According to Kelley (1982, 87), Quakers 'assumed the social dimension of ecology in the conservation of "a certain degree of wealth for the common use of mankind"'. This was an ideology of conservation, stewardship and mutual profit, but changes across the Cumberland landscape and beyond during the late eighteenth and early nineteenth centuries appeared to herald an altogether different kind of ideology – one that centred on individual ownership, commercial enterprise and environmental control. As we have seen, if Quaker farming practices were distinctive, they have been concealed by the passage of time, and within these wider processes. Nevertheless, the physical existence of the diaries themselves is the material evidence of the Quakers' commitment to self-improvement through disciplined documentation. John Ruddy, a Dublin Quaker who kept a diary between 1725 and 1766, found that 'repeated and meticulous observation ... demanded humility and self-abnegation by the observer' (Golinski 2007, 87). Notions of a disciplined daily regime tie in with descriptions of the Quaker faith that underline how all aspects of daily life, including the plain and the mundane, were part of a spiritual relationship with God. During this, the Quakers' 'Quietest' period, Quaker theology described a world that was corrupting, and a human nature that was prone to sin, prompting an emphasis on retreat, inward reflection and discipline – all virtues diary writing was purported to augment (Braithwaite 1961; Dandelion 2007).

In an ethnographic study of life and weather in the coastal regions of British Columbia, Vannini et al (2012, 376) emphasise how practices of work, habits and tasks combine with the sensual, day-to-day immersion in weather to 'weave the very fabric' of the weather-world. In British Columbia, as elsewhere, weather is closely related to mood, not only through simple associations of rain and gloominess, but also in how certain sights, sounds and smells of weather prompt specific memories, and resonate with other aspects of people's lives and their perceptions of the terrestrial environment.

In this respect, to *weave* represents a visceral binding between affective or aesthetic understandings of atmosphere and those of meteorology (Ingold 2015, 73–8). This is a coming together facilitated by action and experience, through being in place. Likewise, it is a coming together recorded in the habitual task of diary writing: Robinson's concerns at the turn of the eighteenth century combined experiences of weather and farm work with observations on geopolitics, his musings on religion and philosophy, and his sense of compassion. Immersed in the weather-world, he sensed a dark and foreboding atmosphere, both aesthetic and meteorological, and very much dependent on his personal experience of time and place. Just as the weather-world weaves together affective and meteorological atmospheres, his diaries wove together expressions of faith and feeling with dry description and instrumental observations. It was between those twin weaves of experience and perception that Robinson's religiously inspired sense of environmental ethics emerged.

Conclusion

The diaries of Isaac Fletcher and Elihu Robinson are rich sources with which to explore provincial Quaker life as it relates to Cumbrian landscape and weather history at the end of the eighteenth century. Prompted by or perhaps even necessitated by the vulnerability of the north-west Cumberland landscape to weather, the writings of Robinson present an ethic-laden view of the world that rested on the perceived interconnectedness of social, environmental and religious activity. His diaries are the material manifestation of an ethos, an 'ecological' perspective, that committed to paper social and spiritual commentary, business and farming matters, alongside records of the weather. Amidst the myriad changes that suffused the landscape of north-west Cumberland at the turn of the century, the diarists confronted new farming practices, new tenurial relationships, and land that was being divided and enclosed. The diarists' religion, their perspectives on nature, their ethic-laden understandings of the world were not static or, as Kelley (1986) conceived, trapped in a particular moment of religious history. They were made in place at a time of change, and in relation to experiences of changing weather and the day-to-day travails of farming life on the edge of the uplands. As the world changed, as the weather-world changed, religious and scientific understandings changed too; they were dynamic and contested and emergent, reflecting complex relationships with the material world and competing perspectives held concurrently.

These are fundamentally archaeological insights but they are radically different from most archaeological commentaries on weather and, much more commonly, climate. In Chris Dalglish's (2012) discussion of archaeology and landscape ethics, he describes landscape relationships as 'the proper subject of landscape archaeology', which then enable critical perspectives 'on the present tense of the landscape' and how its future might be imagined and realised. By thinking in terms of the weather-world, we understand that the landscape the Quaker diarists inhabited was very much connected to sky, inculcated and diffused with weather. In this sense, landscape relationships are weather relationships. Whilst climate change archaeology tends to emphasise the broad-scale and long-term, the diaries reveal interactions with landscape and weather metered according to a range

of temporalities, sometimes prompting stability, sometimes prompting change, but always providing a medium through which the diarists made and remade their understandings of themselves, the landscape, and the world around them (Van de Noort 2011; Pillatt 2012c). If, as Dalglish (2012, 338) recommends, we are to realise 'good landscape relationships' then we would do well to bear these insights in mind.

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D/Lec/301 – Charter granting land rights to Adam of Mosser
YDFCF/1/116 – Pardshaw Monthly Meeting Sufferings Book
YPR 30/4 – 1839 Tithe Map

Cumbria Record Office, Carlisle (Ca)

D/Ben/1/372 – Mosser Tithe Assessments
QRP/1 – Land Tax Records

Library of the Religious Society of Friends, London (RSS)

MS Box R3 – diaries and notebooks of Elihu Robinson

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Tables

Isaac Fletcher	Elihu Robinson
16 th April 1758	January 1791
<p>At home. At meeting in the morning; the Preparative Meeting after. A very great storm of snow from the SW which continued all day. Very deep in & great drifts & a hard gale of wind.</p>	<p>Continues remarkably Changeable: Great Storm on ye 18th, so very Strong Wind that I do not remember ever coming from Cockermouth with more difficulty, in Coming over Moorland – Close Hill it blew me several time out of ye Mid-Road. Frost a little next Morning, Rain again about Noon &c &c.-- and though about ye 24th The Barometer stood nigh Settled Weather, yet continued Dark & gloomy with high Southerly Wind: Coals said to be 30s per ton in Dublin: Provisions of all kinds high excepting Pork (@ 3/6) Business dull severe Weather & ye Poor Distressed!</p>

Table 1: The diarists' differences in writing style

Figures

Figure 1: Temperatures reconstructed from qualitative diary entries and compared with the Central England Temperatures instrumental series. Smoothed using a 5 year moving mean.

Figure 2: Elihu Robinson's diary entries referring to negative impacts of weather on farming life. The weather becomes worse throughout the 1790s. The diary book for 1796-7 is missing.

Figure 3: The landscape of Mosser ranges from low wetland to open upland.

Figure 4: Looking south towards Loweswater from near Bramley Seat. Farming today is predominantly pastoral, but in the past cereal crops were important part of the regime on lower-lying farms.

Figure 5: Looking east towards Mosser Fell from Bramley Seat. Mosser's heafs were situated on the far slopes of the fell, facing eastwards and sheltered from the prevailing winds.

Figure 6: Farm produce recorded as being confiscated from Quaker farms in Mosser for non-payment of the small tithe (after Pillatt 2012c).