Air Today, Gone Tomorrow: the *Haar* of Scotland and Local Atmosphere as Heritage Sites

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ABSTRACT

This article examines the phenomenon of the haar in Scotland, a specific form of fog characteristic of local geography and topography along its North Sea coast. Recognising the role that the haar has played in literature, art, music, and folklore in Scottish history, two primary arguments are made: first, that it merits recognition as part of the country's (and region's) natural heritage, and second, that its unusual form of composition challenges the tangible/intangible divide. The haar is not a site that one can visit, but rather an atmospheric process that comes and goes when conditions permit, embodying transience and ephemerality - characteristics of intangible heritage. Considering the nature of this phenomenon in full for the first time in scholarly studies, as well as the importance of microclimates in heritage landscape theory, this research adds to the growing body of literature calling for a re-examination of the tangible/intangible dichotomy in policy and protocol.

Keywords

haar, fog, mist, micro-climate, cultural climatology, atmosphere, climate change, intangible heritage, heritage landscape, environmental studies, Scotland, Edinburgh.

Introduction

Whether it is as a result of the wave of major climaterelated reports that appeared in the middle part of the last decade (IPCC 2005, Stern 2006), or whether it has arisen in conjunction with a renewed interest in local and place-based approaches, studies of the relationship between weather, climate, and traditional communities have experienced a resurgence in recent years. Numerous different disciplines have adopted this 'climatic turn', resulting in a range of approaches variously termed 'cultural climatology' (Thornes: 2008) and 'ethno-climatology' (Crate and Nuttall: 2009) that seek to bring together the complex interplay between history, geography, anthropology, and the physical

sciences in a novel interdisciplinary fashion. Writing specifically of cultural climatology, Thornes observes that the field -

...is a new area of climatology and geography that is attempting to work across the divide between the social and physical sciences and is currently populated by both human and physical geographers, especially those working on the impacts of climate on culture and culture on climate. (Thornes: 2008, p.571)

The humanities have much to contribute to this undertaking, as is clear. But the need for interdisciplinary engagement is also clear: as Carbonell (2012) recently noted in these pages, part of this interest stems from the understanding of what may well be lost as a result of unchecked processes. Climate change, he argues, along with new technologies and other factors, interferes with the intimate relationship that human beings have with their environment, and results in a loss of 'meteorological orientation'. (Carbonell: 2012, p.64) As local weather is one of the best ways to observe and make sense of larger-scale, often more abstract climatic changes, social studies of science and the environment now increasingly consider weather as a productive area of research. Historians have long understood the importance of weather, in steering agricultural and environmental fortunes and in affecting the outcome of pivotal battles such as the D-Day landings in 1944, but on a more basic level, weather is a conscious part of daily life across the world, actively conditioning the health and activity of the communities it affects. Recognising this fact, Jankovic and Barboza have suggested that speaking about the weather- rather than being a banal conversational trope - is really about social reality: about family, city, region, or nation as well as about our religious, ethnic, professional, and otherwise 'tribal' identities. (Jankovic and Barboza: 2009, p.14)

Following these forays into the field, I here set out to map a specific climatic phenomenon, the cold sea fog on the east coast of Scotland known as the 'haar'. I do so for three main reasons. First, because the literature on this particular phenomenon is simultaneously fragmented by time and place as well as constrained by discipline, and begs consolidation into a more substantive framework. As earlier researchers have argued, studies of sea fog in this region have been largely descriptive, old, and based on observations from a single location. (Findlater et al.:

1989, p.581) Second, in order to add to the growing body of research in cultural climatology, but also to understand the nature and implications of atmospheric processes specifically for future generations of heritage research: to date, as shown below, they have been grounded primarily within conservation-based approaches, but they may be usefully applied to more theoretical concerns as well. Third, as I have argued elsewhere in more detail (Morris: 2011 and Morris: 2014), it is only in recent years that cultural heritage studies have taken the impact of environmental change more seriously; this article seeks to deepen those connections and provide a platform for new ways of observing, recording, and understanding environmental phenomena. The ultimate aim is to propose a new way of thinking about sites generally: to articulate a conception of heritage which is simultaneously tangible and intangible, localised yet transient, and crucially, operative outside the customary boundaries that contemporary protocols claim for heritage sites. Where Bradley (2000) and Ingold (2000) have explored the notion of sacred places as sites of cultural significance, I here aim to advance the notion of a 'site' - in this case, a micro-climate - that is mobile, shifting, and ungoverned by direct human influence.

In order to provide the fullest account of this phenomenon, this research draws on a range of types of data and source material to outline it, from meteorological studies to literary and historical accounts and contemporary ethnography. In what follows, I provide a brief overview of studies of air as heritage before moving into a discussion of the *haar* in particular. Exploration of its climatology and cultural history form the main body of the article, followed by a discussion section that reflects on the issues that the *haar* raises. The article concludes with broader observations about ephemerality, and consideration of future impacts on a process intimately sensitive to changes in atmospheric and oceanic composition.

Air as heritage

Following the call put forth by such consortia as the Science and Heritage Programme in the UK (Science and Heritage: 2012), most modern studies consider the impact of the air and its local qualities *on* heritage. Examining the effects of airborne pollutants, weathering from wind, and particle deposition (leading to blackening)

on historic building materials such as wood and stone has been the core of a significant amount of research in conservation and preservation. Van Grieken et al (1998), for instance, have analysed the effects of air composition on paintings; Grossi et al (2007) have studied the impact of frost on built heritage, and more recently, Becherini et al (2010) have analysed the impact of micro-climates on sealed environments: namely, the remains of the Italian poet Petrarch in his tomb in northern Italy. Damage to built heritage as a result of atmospheric processes has long been observed, from the earliest days of recording wind erosion on the face of the Sphinx to the attempts to mitigate the level of pollution that decades of automobile traffic have left upon the walls of historic buildings like the Colosseum in Rome. In Edinburgh, Scotland, the primary site of this case study, the Scottish poet Edwin Muir once observed the 'poisoned' nature of the buildings due to blackening over time. (Muir: 1935)

Despite a tendency to take air and air quality for granted on a daily basis, however, atmospheric processes themselves are historic, as numerous case studies illustrate. Whether it is the darkening of the skies from volcanic eruptions such as Krakatoa or Mount Pinatubo, the widespread ecological impact of dust storms in the Sahel in Morocco, or the alleged medicinal effects of the climate of the Dead Sea for individuals with dermatological conditions, air has the power to have a profound impact on the lives of those who live in and around it, both on the individual and on the societal scale. Local communities are swift to create names for local conditions, such as the *mistral* or *sirocco* winds or the extensive local meteorological lexicon found in northern Spain (Rubio: 2006). Geographers have long understood the role atmospheric processes and rainfall events play in the political sphere, recognising the many different tensions between upstream and downstream countries along riverbeds, watersheds and rain shadows, and the multiple impacts of those tensions (Scherer: 1990, cf. also Hyslop: 2009). While most of the attention is reserved for large-scale meteorological events such as hurricanes, typhoons, or tornadoes, more modest air events such as fogs have also taken on great significance: certain eco-systems such as the California redwood forests or the Venezuelan cloud forests depend on regular fogs for their continued vitality (Gordon et al.: 1994), and one of the most famous fogs in history, the London fog, arose largely due to adverse air quality from industrial activity and eventually gave rise to the word smog (formed from the combination of the words 'smoke' and 'fog'). Granted, this kind of air event is not exactly celebrated as heritage, especially not for instances such as the 1952 fog that killed 12,000 people (Bell et al.: 2004) – but its power and impact are clear.

Recognising the importance of air and the atmosphere, in recent years contemporary artists and architects have sought to harness it to create particular effects, or to illustrate the relationships that individuals and communities have to their local climates. Notable in this respect are three recent projects: first, the British artist, Antony Gormley's 2007 installation Blind Light at the Hayward Gallery in London, where he constructed a glass room which was pumped full of high-density water vapour, creating an artificial, low-visibility environment within the space: an eerie, isolating effect for visitors, and in Gormley's words, a challenge to the security of architecture: You enter this interior space that is the equivalent of being on top of a mountain or at the bottom of the sea, he commented. Also you become the immersed figure in an endless ground, literally the subject of the work. (Gormley: 2007). Gormley's idea drew partly on a predecessor: a project from the 2001 Swiss National Exposition described in detail by Dorrian (2007), in which the architectural firm of Diller + Scofidio constructed an entire 'building' on Lac Neuchâtel in Switzerland out of carefully-controlled fog and mist generators, and invited visitors to walk around within its 'structure'. One of the achievements of the 'Blur' building, Dorrian notes, was:

...the pioneering of a new kind of environmental commodification – a new development in the socio-political history of air conditioning – which takes the form of a localized air conditioning of environmentally manipulated zones, no longer encapsulated within building envelopes, secured against a generally degrading environment. As the planetary environment atrophies, this argument would run, so capital will seek to reconstitute it in localized and socially exclusive zones, and an ideology of purity would be part and parcel of this. [Dorrian: 2007, p.31]

Third and finally, responding to these notions of degradation and purity from within a cultural heritage framework – recognising the central role of natural spaces in the heritage landscape – the American artist Amy Balkin undertook to enshrine a part of the atmosphere above the California coast as a public park

and heritage site (Balkin: 2004). In this project, entitled Public Smog, Balkin formally sought inscription of a given air parcel above her home state of California on the UNESCO World Heritage List, arguing that, even though in the era of national and global carbon markets in which air for the first time in history has a price, the earth's atmosphere, shared and utilised by all mankind, nevertheless deserves formal recognition along the same grounds as terrestrial sites that enjoy state and international protections - especially against regimes and actors that sought to adversely alter the atmosphere with dangerous levels of carbon dioxide emissions. While inscription on the List was in recent years still pending (Balkin: 2011), her work suggests not just a level of renewed attention to the air for heritage studies, but the prospect of a new, atmospheric turn.

The *haar*: climatology

Like other sea fogs such as the noted advection fogs of the Californian coastline - concentrated primarily around the San Francisco Bay area - the climatology of the haar is now well understood. (The etymology of the word is, however, less so: Sayers (2004) notes its potential origins in Middle Dutch, stemming from the words hare or haere, but acknowledges that there is disagreement on the matter). Classically categorised as either a lowhanging stratus cloud or an advection fog, the phenomenon arises when warm, moist air moving towards land passes over a colder sea surface, cooling

the air below its dew point to where the moisture in the air collects as a thick, chilling mist that persists for a few miles inland before dissipating (Findlater et al.:1989; Ballard et al.: 1991; Pretor-Pinney: 2006; Tardif and Rasmussen: 2007). They frequently follow the onset of high tides (Alexander: 1964, Harrison and Phizacklea: 1985), and are in keeping with the action of land masses serving as a heat reservoir. Smith (1975) notes that the advancing isochrones [tend] to follow the shape of the coastline, whereby the further inland the fog bank travels, the sooner it is likely to be warmed back above the dew point and thereby dissipated. These air masses are usually driven by either high pressure systems forming over Scandinavia and pushing the air westward towards Scotland (Smith: 1975), or by warmer north-westerly winds coming up from the European continent (Paton: 1951). Depending on the prior directionality of the prevailing winds, Gloyne (1966) notes that local geography heavily influences their advance, in that the two Firths (bays) of Forth and Tay provide ideal channels for the penetration of the fog in the one case to Edinburgh and in the other to Dundee - and beyond these points (Gloyne 1966: p.115). Terminology follows these boundaries: while the word haar can be found as far north as the Shetland Islands and as far south as East Anglia, most assessments keep its northern boundary around Aberdeen (Hamilton (1963) notes that the Moray Firth, north of Aberdeen, is relatively fog-free in comparison to the other Firths in Scotland) and its southern boundary around Berwick-upon-Tweed, just north of the border between England and Scotland. [Plate 1]



Haar over Aberdeen city centre and Town House tower. Photo: author.

Most frequently occurring in late spring and early summer, and occasionally in winter, the *haar* typically lasts for hours, or, in severe cases with low local atmospheric instability, days, leading to increased hazards for air, ground, and sea transport, as Bruford (1968) and Bourne (1980) have observed with respect to shipwrecks along the east coast. But one of the best descriptions of the *haar* overall comes from Paton, in his overview of Scottish climatology. Having first identified it as *unquestionably the most deplorable characteristic of east-coast weather*, he observes its effects on communities along the coast:

In Edinburgh it may envelop only the lower coastal parts of the city so that on ascending towards Princes Street from the north one may quite suddenly emerge from dank gloom into brilliant sunshine. More often, it blows over the city in a pall of very low cloud ... [it] is most dense at night and, especially in midsummer, may be completely dispersed by heating over the land by day. But there are occasions in summer when the day begins bright and clear, with fog patches drifting parallel to the coast in a light wind over the sea. Then, suddenly, when the sea breeze sets in, an alarming transformation occurs. The fog swirls relentlessly coastwards and the beaches clear of holiday-makers in a matter of minutes. The rigour of a thick haar may be judged by the manner in which the most ardent golfers on the string of links that fringe these coasts, ruefully but without trace of hesitation, give up as it closes in upon them. (Paton 1951: 38)

While much of the interest in the haar stems from concern over the hazards that it presents - Harrison (1985a) has examined the economic costs not just of fogs in Scotland, but of all hazards resulting from climatic phenomena - it is also true that, within the discourse of Scottish climatology, there is a kind of perverse pride in the adverse, challenging nature of Scottish weather. This pride takes a number of forms, occasionally (but not always) articulated in the context of anti-English sentiment, and has been advanced by a number of researchers and observers, from professional meteorologists to lay naturalists seeking to understand the weather and its impact on everyday life. The Scottish naturalist, Charles St John, made light of his southern countrymen's allegedly frailer dispositions when, writing in the early 1800s, that:

In this part of Scotland [Morayshire] we have much wild and stormy weather in September, and many English sportsman, towards the end of the month, when located in some small shooting-lodge in the wild and distant glens of the inland mountains, begins to think of taking his way southwards (St John: 1982, p.150).

Other writers, such as Gorrie (1868), Sinclair (1891) Speedy (1930), Grant (1951), and Geddie (undated) have all paid close attention to local conditions, remarking in detail on the uniqueness and the formative nature of Scottish weather. Broadly, Perry (1985) observes that Scotland is often perceived as having a more inhospitable, harsher climate than other parts of the British Isles (Perry: 1985, p.5), but Gordon Manley, former president of the Royal Meteorological Society, offers the most complete assessment. Scots of every class and in every walk of life, he writes,

from the manse and surgery, castle and cottage, farm, lighthouse and laboratory, have lived in the same air and have manifested this interest in the weather; that is what I mean when I say that meteorology has flowered here. An Englishman may acknowledge that it has at times been pursued with a more intense and penetrating vision, not unrelated to the perennial need in Scotland for looking further ahead. But there are other cool rainy lands where marginal agriculture prevails which have also produced men of vision: think of Norway, or for that matter Wales and Cumberland. In Scotland the vicissitudes of the weather are, however, of stern significance; the contrasts are sharper than further south. The beauty and brilliance of a Scottish June is the more intensely felt by virtue of its contrast with the grim possibilities of April in Aberdeenshire; the long days of Edinburgh haar; the September wind beating down the oats in Lanark, or the overwhelming wind and rain of December in the Isles; the cold brilliance of a white January on Speyside, or the ferocious penetrating cold of a Glasgow inversion fog. (Manley 1945: p.74)

The haar: cultural significance

In such a respect, it is clear that the weather plays a significant role in shaping Scottish identity. Having outlined the meteorological characteristics of the *haar*, however, it is important to consider its cultural

significance: namely, the role it plays and has played in the cultural landscape, and how residents, observers, and tradition-bearers have responded to the phenomenon, charting its history and incorporating it into their own works. Literary, musical, ethnographic, and historical sources have all addressed the *haar*; in order to see the phenomenon more fully in its context, I take them here in turn.

Writers and poets have long responded to atmospheric and environmental conditions, documenting and observing them in non-fictional, fictional, and poetic works of literature. In 1814, on a sea journey around the coast of Scotland as part of a lighthouse-inspecting mission, the Scottish author, Sir Walter Scott, observed thick fogs settling on the Orkney Islands, where he and his crew had laid anchor. Writing in his journal from the port of Stromness on August 15th, Scott records that Gloomy weather begins to collect around us, particularly on the island of Hoy, which, covered with gloom and vapour, now assumes a majestic mountainous character. Later the same day, he notes that the crew should refrain from complaining about the weather, the tides, and the conditions, even ...though the night gets rainy, and the Hill of Hoy is now completely invested with vapour and mist. (Scott 1998: pp.54-56). Scott's attention to detail in all of his works is one of the chief attributes of his character as a writer, and the fact that he would single out these conditions for mention suggests that they were particularly significant. Understanding how extremes of weather have the power to render an everyday vista (as the Hill of Hoy is from Stromness, dominating its view to the south) into one more transcendent and noteworthy, he calls the reader's attention to the transformation that the elements have wrought.

Writing at the same time, the Scottish novelist, James Hogg, placed one of the pivotal scenes in his novel *Private Confessions of a Justified Sinner* within a severe *haar* on the geological formation of Arthur's Seat in Edinburgh (Hogg: 1824), and in the 1950s the novelist Mary Stewart described in detail the fog and mist on the Isle of Skye in her novel *Wildfire at Midnight* (Stewart: 1956). More recently, however, a number of contemporary poets have responded to the *haar*. (Fog in literature is made famous by such works as Carl Sandburg's poem of the same name or Bram Stoker's *Dracula*, but I here address poems referring to *this* fog.) Annie Boutelle's poem *Haar* explores the visual dimension of the *haar* in a compelling,

beautiful way: describing it first as *Wisps*, *almost not there*, she offers a more nuanced understanding both of its beauty and of its transient nature:

Scarf pulled out

of a magician's pocket. Thin as smoke, fragile as love. Like lighting, it knows

to follow the river. These airborne particles of sea, these determined

fingers of mist, don't beg, but claim their source.

(Boutelle: 2008, p.268).

This poetic understanding of the phenomenon matches its climatology, in that it recognises the tendency, noted by Smith (1975) above, for the haar to follow the bodies of water along the coastline (it knows / to follow the river) before dissipating over land. Finally acknowledging the specificity of its origins, the speaker observes how you bring us news / of the North Sea: oil rigs, container / ships, the swimming silver hordes. The haar serves in this poem as a means of connecting people, as in the final stanzas a group of writers gather together to drink whisky and commune: Nothing but glass separates us, the poem concludes, the haar having brought these individuals together in a way that, the poem suggests, clear weather and sunny skies would not have done.

A poem by Laura Fiorentini engraved on a wall at Edinburgh Airport – therefore one of the first and last encounters with the city that visitors experience – echoes Boutelle's rendering. In her poem *Impressions of Edinburgh*, the speaker notes that *From commanding hills / gray gradients run precipitously downwards / and vanish in a glimpse of sea* (Boutelle: 2012). Elsewhere, McClure (2002: pp.114-115) offers a detailed analysis of the Doric Scots poet Alexander Scott's celebrated poem *Haar in Princes Street*, but it is the poet Rachael Boast who has written most recently and compellingly about the *haar*, identifying it not just in Scotland (in her poem *Tentsmuir*, inspired by the Eden estuary in Fife, north of Edinburgh), but in places as far away as Iceland. In her poem *Gabapentin*, the speaker recalls:

the fjord

at Akureyri where haar came up to the backdoor

looking like a yawn turned inside out yet too bright for itself to be tired,

lit with a tearful excess of light [Boast: 2011, p.45].

As it fully settles in around the speaker, it soon becomes impossible to see anything else:

And as my glasses un-steam

I'm already in a high place, staring vacantly at where a township used to be.

(ibid.)

These observations signal a key aspect of a severe *haar*: its ability, as Walter Scott noted above, to completely envelop a local landscape: emptying it, in a sense, of anything but itself. [Plate 2]

Musicians, too, have responded to the *haar*, both in songs in which it features as a character and in compositions which seek, through melody, structure, and instrumentation, to capture aspects of its character. While this process – the musical appropriation of natural forms – is worth its own area of research, it is possible to highlight several of those works here. A 2003 work by the British composer, Cecilia McDowall, entitled *Dance the Dark Streets* uses piano and strings to create a tense

mood, full of suspense, an attempt that McDowall has written was an attempt to capture the drifting looming quality of that mist from the sea. (McDowall: 2011) Putting the phenomenon into words, the Edinburgh-based musician, Drew Wright, has written a piece called Haar Song in which the singer asks repeatedly, in an almost-monotonous form, can a body catch a body coming through the haar? (Wounded Knee: 2012). Building on a rhythmic, almost obsessive tone, the music seems to mirror the slow and steady onset of the fog. When the Haar Rolls In, a song by the Scottish folk musician, James Yorkston, is a quiet but powerful meditation, in which a sudden and dramatic tonal shift midway through the song suggests the arrival, the



Plate 2

Haar in Princes Street Gardens in Edinburgh. Photo: David Barrett,

imminence, of the haar (Yorkston: 2008). This last aspect, the power of the haar to transform a given space - again, as with its poetry – is a feature of Karine Polwart's song Cover Your Eyes, an invective against the developer Donald Trump's controversial construction of a hotel and golf course in Aberdeenshire, on the north-eastern coast. In Polwart's song, the *haar* is an avenging force, visually silencing a misguided and destructive intervention in an environmentally sensitive landscape. You can tear these dunes asunder, the singer charges,

Pound this wonder into dust with your cruel hands and crooked hearts laden with lust and expensive lies But the haar will stumble in to cover your eyes.

No amount of economic capital can protect this intruder, Polwart suggests. The haar blinds even the most powerful of men.

Experienced more benignly, this phenomenon gives rise to the appreciation of the haar by local residents of the area that it visits. Rennie McOwan, a writer and hillwalker who has explored the role of mist and fog in Scottish highland identity, notes the widespread prevalence, not just of folklore and legends surrounding heavy fogs (often arising from the meteorological phenomenon of the Brocken Specter, such as the Grey Man of Ben Macdui, as Currie (1972) reports), but of features of the natural landscape such as hills and peaks being named after them. There's a rewarding case to be made, he notes,

for halting in mist ... to take in and absorb all the glittering detail, the shining droplets of moisture hanging on the fronds of heather, rushes, hill flowers and grasses, the fresh feel of it on face and hands, the silences its onslaught sometimes brings. It sounds odd to have an affection for it, but it can have that feel to it, even if you are muttering about losing the view and hoping your compass work is up to scratch. (McOwan: 2007, p. 388)

This sentiment of pausing to admire its beauty is echoed in the recollection of one Edinburgh resident interviewed for this research. Jennie Renton, a native and lifelong resident of the city, reported that what she admired most about the haar was just that transcendent nature: It disembodies the city, she said,

...and makes it a more ethereal place. It introduces a slightly ghostlike quality to the place, [which is] evocative of the city's history. Particularly 19th-century Edinburgh was dominated by a sense of things hidden, a city with a brash front but with a character that hides secrets. ... Edinburgh would be a different place without it.

She recalls having grown up as a child in Leith, the coastal docklands neighbourhood of Edinburgh, watching the lighthouse in the Firth of Forth from a nearby tenement and hearing the foghorn as the haar entered the city. It was quite an evocative, unearthly noise, she said, because it was going in the darkness. But I loved that noise. (Renton: 2012) [Plate 3]



Haar on the Forth Rail Bridge in Edinburgh. Photo: Wikimedia Commons.

It is clear, then, that local residents form a deep sense of attachment to the *haar*, an attachment which goes beyond mere observance and which creates strong connections of local identity, past experience, sense of place, and historicity. As the Scottish novelist, Ian Rankin, observed in his novel *Strip-Jack*,

In a haar, Edinburgh seemed to shift backwards through time. You half-expected to see press-gangs on the streets of Leith, hear coaches clattering over cobblestones and cries of gardy-loo in the High Street. (Rankin: 1992, p.102)

Occasionally unpleasant as the phenomenon might be – Paton's use of the word 'deplorable' is an overstatement, as anyone who has ever walked through a mild summer haar will understand – it nevertheless still has the power to charm, beguile, and mystify those who experience it, in the way that other powerful natural sites around the world invariably do. Less well-known, however – and to conclude this section – is the role that it has played in shaping Scottish history, as is found in two separate incidents recorded by modern historians. The first dates to 1093, when the corpse of recently-deceased Queen Margaret was smuggled out of Edinburgh Castle during a haar. As Barnett writes, having first recounted a similar incident in Robert Louis Stevenson's 1897 novel, *St Ives*:

But St Ives and his fellow-prisoners were not the only ones to be lowered over the Castle Rock in a sea fog. Many years before St Ives escaped, a dead queen was lowered over that ugly cliff. The body of Queen Margaret was secretly taken down the western side of the Castle Rock one foggy night in 1093 by her faithful friends. ... Margaret's friends, in their anxiety to fulfil her last wish, bore her body most perilously down the Rock, and so to Queensferry and across the Forth to her own church of the Holy Trinity at Dunfermline. 'Some, indeed, tell us,' adds Fordun in his Chronicle, 'that during the whole of that journey a cloudy mist was round about all this family, and miraculously sheltered them from the gaze of any of their foes'. [Barnett: 1943, pp.216-217]

While the factual basis for this event is of course elusive, the presence of the *haar* enables the story, and suggests that this act would have been much more difficult - indeed, potentially impossible, given that the Castle was besieged by rival forces at the time - had these actors not enjoyed the security of its secrecy.

Six centuries later, amid a very different conflict, the haar seems to have played a role in the Third English Civil War, when Oliver Cromwell was encamped on the east coast at Dunbar in 1650. While there is no space here to offer a full account of the battle, the Scottish historian William Ian Robertson Finlay (1960) notes that the Scottish army led by David Leslie had, unbeknownst to Cromwell and the English forces, purged the vast majority of its elite troops due to changes in officer leadership the night before the battle (3rd September). This meant that a group of clergy were in charge of the Scots forces. As Finlay records,

All night the committee of ministers wrestled with the Lord in prayer, and believed the Lord had delivered Agag into their hands. But when Cromwell saw them all coming down off the Doon Hill it was his turn to mutter 'The Lord hath delivered them into my hand', and when the sun cleared the haar steaming in off the sea behind him he cried 'Now let God arise and his enemies shall be scattered'. (Finlay: 1960, p.46)

The battle turned into a rout: precise figures vary, but in all accounts the loss of thousands of Scottish troops was met by the loss of only a handful of the English. Whether the haar was responsible for shrouding a part of the battlefield and thereby influencing the outcome of the battle (and the war, as Finlay notes, Dunbar being the victory that gave Scotland to Cromwell), is, as with the case of Queen Margaret, difficult to say. Other midcentury historians, such as Barnett (1943) and Scott-Moncrieff (1963) do not mention the haar in their accounts of the battle, nor do they suggest it might have played a decisive role. Nevertheless, its presence in this particular rendition of the tale suggests its entry not just into Scottish history and tradition - in other words, an element of historicity that cannot be ignored - but into the realm of the counterfactual as well. If it did play a role, what, we are invited to wonder, would have happened had the haar not been present? The Act of Union followed only two generations later in 1707; had Leslie's forces defeated the English at Dunbar the history of Scotland might have been very different.

Discussion and conclusion

Several issues arise upon examination of the haar. First, given its long history of engagement - observation, interpretation, documentation, and re-rendering into art - in the course of Scottish history and culture, it seems to merit consideration for inclusion as a type of natural heritage which, to date, has not yet been adequately considered. Natural spaces and phenomena are widely understood in Scotland to form core components of its national identity, as management (e.g. the Scottish Natural Heritage Agency, and policy efforts such as the Year of Natural Scotland, 2013), literature (as above), and scholarship have all observed. Recent research from Scotland has reinforced the longstanding links between place, identity, and memory; in charting Gaelic oral history preservation efforts on the Western Isles, Robertson (2009) argues that Collective memories usually contain a strong spatial dimension and are linked to certain places in the landscape. (Robertson: 2009, p.155, cf. also Bateman (2009) on the role of the physical landscape in the Gaelic folkloric imagination)

As argued above, however, most sites on national and international cultural heritage inventories and protocols are fixed in place, spatially determined, even if their internal characteristics change over time. The typical paradigm involves tourists (and researchers and managers) visiting the sites, an experience which Garden (2006) has characterised as taking part in the heritage landscape, or the heritage-scape. Atmospheric phenomena are no exception to this paradigm, as tourism for such incidents as the northern lights (aurora borealis) or for profound thunderstorms and tornadoes in the American Midwest indicates: Pretor-Pinney (2006) recounts the waves of tourists who come to see a particular cloud formation in Australia known as the 'morning glory', which draws hundreds of spectators and glider pilots to the town of Burketown each year. If this is the case, then weather tourism is in great need of further research, in order to understand the social, economic, and environmental questions it raises - both abroad, in such cases as those, and closer to home. After all, as Harrison first argued, The diverse nature of Scottish topography favours the development of very localised and ephemeral weather perturbations (Harrison: 1985b, p.81) - perturbations which could well be candidates to be tourism drivers in future.

In order to properly consider atmospheric heritage, however, these events do need to be defined; this lack of a definition is what makes the *haar* so interesting in this context. Despite the classic corridor of incidence described above (seasonally determined, located roughly from Aberdeen in the north to Berwick in the south, and limited to a coastal strip no more than a few miles inland at most, when it does manifest), the fact that there is no strictly-observed boundary either in time or space enhances, rather than diminishes, its power to mystify and inspire: in other words, being an extraordinary rather than an ordinary event, its incidental nature adds to its heritage value. If the phenomenon is taken as heritage in this respect, then its constantly shifting nature productively expands the idea of sites having boundaries.

Carman (2002, p.47) suggests that, from an archaeological perspective, sites have traditionally tended to be fixed in conception and practice, but recognition of this expansion is well underway within recent scholarship: in her work on Angkor Wat, Gillespie (2012), for instance, has explored the usefulness (and limitations) of a core-and-buffer zone to the demarcation of the temple complex, challenging the notions of where sites begin and end. Though contemporary management and protocols must, by necessity, set physical demarcations, the idea of 'sites' exists as much in public perception and apprehension as it does in, say, the physical stones or brickwork of a cathedral. The ideas which visitors then bring to those physical spaces makes them engage in a productive dialogue of education and interpretation. In this respect, too, the haar productively challenges the dichotomy of tangible and intangible heritage, for being made simultaneously of a physical element (water vapour and aerosols in the air), it appears and disappears to no human timescale, and only when a given set of conditions converge: it is visible, tactile, and sensory, as anyone who has walked through one knows, but it is also elusive, transient, and ephemeral.

If air can be heritage, as the scholars referenced earlier in this paper have also argued, then microclimates of the kind represented by the *haar* are worthy of consideration, not just as natural heritage, but as simultaneously tangible and intangible heritage, crossing and softening this axis of contemporary classifications – an axis that has already been challenged elsewhere by Harrison (2011) and by Andrews, et al., in these pages:

...a concept as capricious as cultural heritage requires a dialectical approach between materiality and immateriality rather than an oppositional one. Material culture can only be fully understood in the context of its capacity for social or epistemological action, and likewise, the conceptual bases of material heritage to which we owe a great deal of our cultural identity (not to mention occasions for preservation and conservation) could not exist without the objects and spaces to which they belong. (Andrews et al: 2007, p.128)

While they were not the focus of this original article, along with the objects and spaces Andrews et al. mention, natural places and phenomena clearly deserve greater consideration: micro-climates such as the haar exist all over the world, condition the growth of local cultural forms and natural biota, and, by their nature, exhibit the same kind of uniqueness that cultural heritage takes as its implicit foundation for study and analysis. As Chen et al. (1999) have strenuously argued, Microclimatic information provides significant insights when interpreting other ecological processes and vital information when developing management options for a landscape. (Chen: 1999, pp. 295-296). In one very real respect, their appeal - unlike climate-controlled environments such as Sørensen (2012) has outlined, examining indoor cosiness - is their uncontrollability, their volatility: in short, their continued wildness. With respect to this specific analysis, I have here concentrated primarily on cultural texts of various kinds that respond to it; much research needs to be done on the visual (arthistorical) and cinematographic accounts of haar and fog, which, for reasons of space, I have been unable to address here. But it is hoped, nonetheless that, just from an examination of these few domains, the case is made that this is a phenomenon worth considering more fully, and incorporating into wider frameworks - both for its own history and for the lessons it holds for management and research. In this way the haar will contribute to the establishment of what Jankovic and Barboza call -

...a deep hybridity of the weather as an entity endowed with meaning, but also reproduced for consumption, created for voyeuristic gaze, and dismantled into oblivion. Weather and climate could then be seen as the omnibus 'markers' of everyday life for communities who in their ways of life depend on coming to terms with the challenge of atmospheric contingency and wonder-from the hurricane devastation to inarticulate beauty of

mountain snows and to fatal droughts in the developing world. (Jankovic and Barboza: 2009, p.18)

The integration of these phenomena into an interdisciplinary context is still incomplete, and will require a great deal of attention in years to come attention which will, hopefully, be paid soon, given the rate of climatic change currently taking place. For unfortunately, in the era of rapidly increasing environmental change, the implications for sensitive and endangered sites around the world are now clear (cf. UNESCO: 2007, Howard: 2012, and IPCC: 2014). Sites grounded within climates are the classic objects of study, but the climates - specifically the micro-climates - are themselves vulnerable to these changes too. To be meteorologically fair, it is unlikely, given the current rates of atmospheric change, that the haar faces any threat of extinction - nor, unlike Balkin, is this paper arguing for its inscription on the World Heritage List - but it may well appear less and less often as oceans and air temperatures rise, and average conditions for its manifestation become more variable. In this event, despite the reduction of chilly, unpleasant days, something will still be lost, a form of loss that will require reckoning. Landscapes are not just the harbours of physical realities but the stages on which places are made, realised, and experienced: as the Scottish Landscape Forum argued to the Scottish government, landscape ...is strongly linked with the concept of 'place' and ideas of 'place making' - indeed landscape has been described as the relationship between people and place. (Scottish Landscape Forum: 2007, p.8) While the preservation of climates of particular historicity and cultural significance is nearly impossible in comparison to the forms of preservation of historic monuments or landscapes, climate mitigation efforts at the local, national, and international levels must nevertheless step forward to safeguard what we currently know and enjoy. Until then, further investigation and documentation of these 'sites' is crucial - lest the air we breathe today be gone tomorrow.

DEDICATION

It is with deep regret but profound gratitude nonetheless that this article is dedicated to the late Susan Manning, Director of the Institute for Advanced Studies in the Humanities at the University of Edinburgh, who passed away in early 2013. Her keen insight and gracious hospitality made the vast majority of this work possible.

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