

**STEALING THROUGH THE BACK DOOR: SENSORY ARCHAEOLOGY IN THE EUROPEAN
MESOLITHIC**

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Abstract A consideration of the senses can be traced through several different strands of research into the European Mesolithic. Whilst the turn of the twenty-first century forms a watermark for approaches to this period, the development of new ways in thinking about the lives of post-glacial hunter-gatherers has taken some time to feed directly into our understanding of sensory experience within this context. Instead, the senses have been taken up peripherally, within wider discussions of space, emotion, and the ways in which we visualise the Mesolithic. This chapter explores this historical development, whilst highlighting the handful of studies which have taken sensory experience as their explicit focus, and developed methodologies which factor for the unique character of Mesolithic datasets. Beyond the conventional academic literature, this chapter also examines the contributions that painters, graphic novelists and sound artists have made to our understandings of Mesolithic sensory experience, sketching out potential avenues for the future of non-text based research outputs in this field.

A consideration of sensory experiences within Mesolithic research has been a slow and irregularly developing theme over the past two decades. Where it has occurred, this development has been linked to a widening of the theoretical approaches taken to the study of the period, largely encapsulated by the flush of edited volumes published around the turn of the twenty-first century (Bevan and Moore, 2003; Conneller and Warren, 2006; Milner and

Woodman, 2005; Young, 2000). These focussed on the Mesolithic of Britain and Ireland, although similar trends can be tracked within the broader literature concerned with the Mesolithic of Europe, particularly in the contributions to the Mesolithic in Europe conferences of Stockholm in 2000 (Larsson, et al., 2003), Belfast in 2005 (McCartan, et al., 2009, Santander in 2010 and Belgrade in 2015. However, this broad-scale alignment of Mesolithic research with more current trends in archaeological theory has yet to result in a widespread or consistent engagement with sensory experiences in the past.

This chapter will plot the tentative development of research into Mesolithic sensory experiences, arguing that these considerations have emerged at the margins of more focussed reappraisals of the definition of space within Mesolithic landscapes, attempts to produce more emotive accounts of the period, and through considerations of the role of colour within our visualisations of the Mesolithic. An appreciation of the senses exists at the fringes of these discussions, and can be contrasted with the small pockets of more focussed research which have attempted to develop explicit methodologies for studying sensory experience in the Mesolithic. Building from this, the chapter will argue that the potential of Mesolithic studies to engage with the senses is inhibited by the dominance of text and particular styles of writing within our academic discourses. Examples of research which has been presented through other media will be considered, before arguing for the potential of non-text based forms of discourse for helping Mesolithic studies move forward with its consideration of the senses.

Sensing Space

An appreciation of sensory experience in the Mesolithic can be tentatively traced back to the mid-twentieth century, with the attempts of various authors to understand site location and

wider settlement patterns. These interpretations, although somewhat uncritical in their execution and application, demonstrate an awareness within the minds of earlier authors that the sensory experiences of people living in the Mesolithic had a direct effect on their behaviour. When Mellars and Radley ascribe the building of structures at Deepcar, West Yorkshire, UK to a 'bitterly cold' prevailing northerly wind (Radley and Mellars, 1964, p.6), they are explicitly acknowledging this—linking contemporary, on-site sensory experiences of the excavators to those in the deep past, and arguing for their role in determining human behaviour.

However, these sensory-based interpretations remained ad hoc and inconsistent (if still influential) throughout the twentieth century. Pollard's (1996) work on the experiential aspects of living on the Scottish shoreline marks a watershed moment for this approach in Mesolithic research. Although this discussion of the social implications of human responses to tidal rhythms does not directly reference sensory experience, it paved the way for a flurry of research which looked to explore these themes in more detail. Through the publication of the works of Mithen (2000), Tilley (1994) and Cummings (2000), sensory experiences gained from visiting Mesolithic sites began to become more critically developed. These works take a landscape approach to their subject matter, and instigate a series of themes picked up by later authors. Tilley and Cummings share an explicitly phenomenological approach to the study of space at a landscape scale. Tilley's work (1994) places a visual emphasis on the sensory experience of Mesolithic landscapes of South Wales, the Black Mountains and Cranbourne Chase in Southern England. He notes the visual links between many Mesolithic sites and specific forms of topography and geological outcrops, arguing that maintaining a line of sight with these markers was of equal importance to access to material resources for the Mesolithic inhabitants of these landscapes. For example, Tilley suggests settlement in both the Early and Late Mesolithic focussed on areas with good visibility of the exposed rock surfaces of cliff

faces in South Wales, despite dramatic fluctuations in sea level and associated environmental changes (Tilley, 1994, p.84). However, Tilley's visual focus sits somewhat at odds with an emphasis on the importance of all five of the (traditional Western) senses, outlined earlier in the same work as part of a phenomenological approach to prehistoric landscapes. It is worth noting that phenomenological approaches to prehistoric landscapes have prompted considerable critique and criticism (Barrett and Ko, 2009; Brück, 2005; Fleming, 2006; Johnson, 2012), in which the equal treatment of the senses sits alongside a range of other concerns.

Cummings (2000) takes a broader approach to the Mesolithic landscapes of South Wales, addressing a wider range of the senses to include sound and smell, as well as the 'visually splendid' attraction of coastal settlement (Cummings, 2000, p.91). She cites the colour of particular forms of vegetation as potentially playing a key role in determining site location, and lists the required acoustic properties for various types of Mesolithic sites within these landscapes. However, the extent to which her observations can be taken further is severely limited by the archaeological and palaeoenvironmental data: both in terms of its availability for these landscapes, and the extent to which the existing dataset was interrogated during Cummings' study. As such, discussions of the various importance of sensory experience remain speculative, and some of the more specific suggestions made by Cummings are unsupported by her analysis of the material record. For instance, her discussion of the need for 'poor acoustics' at hunting camps, and settlement sites being in areas which naturally amplify sound, becomes somewhat tenuous when the acoustic properties of these sites are not further assessed or described.

Cobb's (2009) phenomenological analysis of the Mesolithic archaeology in the Inner Hebrides marks a significant step forward in terms of engagement with Mesolithic datasets, and builds directly on many of the points outlined by Pollard (1996). Here, links are drawn

between alignments with shell middens and key topographical features which aid maritime navigation across the complex seascapes of the Western Scottish seaboard. Lines of sight between sites are also highlighted, and these links further embodied through the sourcing and circulation of specific materials. Yet, despite a call to address 'experience and perception...situated within bodily practices and thus sensual experience' (Cobb, 2009, p.368), analysis relies heavily on the visual properties of materials, and inter-site visibility.

Building from the phenomenological base of theory, both McFadyen (2006; 2007) and Carlsson (2008) take a more considered approach to the issue of space within British and Swedish Mesolithic landscapes. Both authors critically consider the concept of space from an anthropological perspective, with McFadyen (2006; 2007) using a more nuanced understanding of space to redefine both the deposition of material culture across Mesolithic landscapes, and the conceptualisation and recognition of architecture in the absence of evidence for built structures. Carlsson (2008) takes an environmental focus, exploring the different types of spaces evidenced through palaeoenvironmental data, and how their definition was recognised and negotiated through daily practice within the context of the mid-late Mesolithic of central Sweden. Yet despite an initial consideration of sensory experience as a key means of defining space and characterising place, their discussions focus on the *materiality* of space, rather than its experience per se. In a similar vein, Mlekuž's (2012) discussion of cave spaces in the Mesolithic of northeastern Italy and western Slovenia makes a theoretical link between sensory experiences and the understanding of specific types of space, but does not go so far as to discuss the character of those sensory experiences explicitly.

Finally, Leary (2015) makes a concerted effort to consider the role of sensory experience in the understanding of the submerged landscapes of the North Sea. His study of the potential perception of 'Northsealand' (otherwise known as Doggerland), brings together landscape

theory, palaeoenvironmental data, bathymetric modelling and ethnographically documented attitudes towards sea level change, to discuss the potential ways in which these areas were thought of during the Mesolithic. Leary's work presents its own sets of methodological challenges, yet he takes time to outline the significance of wider sensory experiences in understanding these lost landscapes and the process of their submergence:

'The submergence of the landscape not only modified its visual appearance, but its effects on the other senses as well; for example, the acoustic profile of a place will have changed according to the varying proximity of a body of water.'

(Leary, 2015, p.49)

Leary's thoughtful approach offers novel insights into our understanding of even relatively well-studied aspects of sensory experience such as visibility. He notes the ways in which the proximity to large bodies of water can affect the fundamental qualities of light, and the historical instances in which this has been explicitly noted within contemporary societies. As such, although the context of Leary's work prevents many of these ideas from being 'worked through' at a higher resolution with more conventional forms of archaeological data, his treatment of the senses, and of sensory experience within these landscapes, is balanced and centralised to a degree which is rarely achieved in other discussions of Mesolithic space.

Writing Emotion

Alongside this development of phenomenological approaches, Finlay (2004) highlights emotion as an emergent theme in early twenty-first century Mesolithic research. Mithen's (2000; 2003; 2010) writing on his personal experiences of studying Mesolithic archaeology epitomises this, and makes for an interesting point of contrast to contemporary phenomenological accounts of the period. He argues that the experiences of people within

these landscapes today can be used to find common ground; to connect with those of people living on the Outer Hebrides during the Mesolithic. Although never explicitly argued, there is also a recurrent suggestion in Mithen's work that contemporary sensory experiences of the natural world somehow tap into responses associated with shared genetic and evolutionary history:

'I shivered a little, not knowing whether it was from the cold or from the dissolution of time returning me to the Mesolithic world itself. Perhaps it was the hunter-gatherer that I still carry within my genes momentarily taking control of my body and mind, finally tempted out after so many years that I have spent walking and digging in the wild.'

(Mithen, 2010, p.398)

As an example, he discusses a shared interest in the weather; a universal human dislike for rain in terms of being cold, wet, and limiting the amount of activities that one can engage in (Mithen, 2000, p.629). This is contrasted with a similarity in ways in which people both in the present and past would have understood shelter—being dry and warm and shielded from the wind and rain. He notes the spectacular views which some Mesolithic sites afford of both topographical features, seascapes and wildlife, and the physical satisfaction that can be gained from successful flint knapping—experienced through the sound and feel of the work as well as the form of the finished product. He also comments on his experiences of whale beachings around the Mesolithic sites of the Outer Hebrides, and the vivid colours and smells associated with the decomposition of whale carcasses. Mithen (2003, p.137) extends his approach to a consideration of Star Carr (North Yorkshire, UK), a lake-edge occupation with human activity of varying scales spanning 9400–8500 cal. BC. He describes the experience

of life at Star Carr as ‘flames crackling through dry reeds, eyes watering from the smoke, excited children chasing the flushed-out wildfowl, hares and voles’ (Mithen, 2003, p.137).

Mithen writes explicitly about the experiences of Mesolithic people living on the Scottish Outer Hebrides, yet the contribution of this work towards a more critical understanding of sensory experience in the Mesolithic is undermined by the lack of distinction between sensory and emotional experience. Mithen’s writing fluctuates between both; one moment seeking to make a link with the feelings of awe at seeing birds of prey in the wild (and a similar sense of awe and wonder for those in the Mesolithic?), and at others focussing on the sensory stimulus itself—specific sounds or smells. Given the *lack* of links between Mithen’s work and the growing body of phenomenological literature at the time of writing, perhaps this might be better viewed as the development of a particular *style* of writing rather than a shift in theoretical approach. One potential source of influence in this may be the thicker descriptions, or hyper-interpretative style, of other writers working in later prehistoric contexts (e.g. Bradley, 1993; Edmonds, 1999). Warren’s experimental writing on the materiality of Scottish Mesolithic seascapes embodies these approaches, and mixes sensations and emotions in a similar style:

‘Stones were held, weighed, tested, felt, listened to, talked about, laboured over, loved, hated, a source of pride (in a good tool), or of embarrassment (in a failure).’

(Warren, 1997, p.43)

However, it is also worth considering Mithen’s substantial reputation as a popular science writer. When writing for broader audiences, Mithen’s stylistic development might be better understood as an attempt to emphasise the relevance of human experience in the deep past to those experienced in the present; as a method of underlining the shared human experiences of

early prehistoric life to non-archaeological audiences, and spanning the vast distances in time between the deep past and present.

This blurring of the distinction between emotional and sensory experience in the past is mirrored in Hoffman's (2005) powerful discussion of Mesolithic mortuary practices at Ofnet cave (Bavaria, Germany). This cave site features a pair of 'skull nests', with the cranial remains of 14–15 adults and several children—many of which were decapitated from fleshed bodies (Schulting, 2015). Hoffman's take on this classic example of the treatment of human remains is to explicitly focus on the emotional component of these ritualised experiences, before moving on to discuss 'the linked variables of sensory experience and emotional ambiguity' (Hoffman, 2005, p.205). From here, she goes on to draw out similarities in the sensory experiences of dismembering human bodies and more mundane animal butchery tasks. Her final account of the Ofnet burials revolves around a climactic sensory experience designed to create a heightened and intense emotional state within those who witnessed and partook in it, through the flickering of firelight, the banging of drums, the smell of blood and decay, and the vivid colours of bone, skin, fat, and muscle.

Whilst these accounts do provide important milestones within the context of sensory experience during the Mesolithic period, there are recurrent issues at play in all of these studies. Whilst sensory and emotional experiences are, at times, inextricably bound together in cognitive theory (e.g. Barrett, 2006; Dolan, 2002; Niedenthal, 2007) none of the above authors deal with this explicitly within their writing. Furthermore, our ability to study the senses and emotions in the deep past is differentially limited.

Understanding emotion, particularly in connection with sensory experience, requires a wide-ranging and finely tuned understanding of both physical *and* social contexts. To understand how a particular emotional state or experience might play out requires, by necessity, some

form of analogy, and a broader understanding of the other factors such as memory and history that affect an individual's response to a certain situation. Many of these accounts are unable to provide this level of detail.

Approaches which deal with sensory experience as a primary focus may still require this level of contextualisation to argue for the attachment of meaning to specific sensory experiences. However, in the first instance, it is possible to consider sensory experience as a means of characterising life in the Mesolithic prior to the construction of these larger-scale arguments concerning meaning, and it is this opportunity which is sometimes lost when authors begin to blend sensory and emotional experiences within their writing.

Visualisation: A Colourful Mesolithic

Another emergent area of Mesolithic research, which has helped to promote an awareness of past sensory experiences within the research community, has been the growing interest in the ways we visualise the Mesolithic (Ch'ng, et al., 2004; 2005; 2011; Ch'ng and Stone, 2006; Finlay, 2004; Henson, 2017). Perhaps associated with this desire to consider what the Mesolithic *looked* like, sits Nilsson's (2003) early call to examine sensory experience in the Mesolithic alongside more conventional archaeological concerns. In a candid paper delivered to the 2000 Stockholm 'Mesolithic in Europe' conference, Nilsson relates the colour of ripening rowan berries, experienced in the present, to broader scales of analysis in Mesolithic research. In calling for a focus on the lived experiences of Mesolithic peoples; for 'child-to-motherish' archaeological questions, Nilsson places a focus on the sensory nature of Mesolithic experience and asks 'what colour did the Autumn have? How did it smell by the lake?' (Nilsson, 2003, p.147).

At a similar time, Fredengren's work on the Irish Mesolithic raised questions concerning the study of colour within Mesolithic archaeology. At the inland crannog site of Lough Gara (Co. Sligo), she notes that 'people purposefully mixed stones of different colours and textures' (Fredengren, 2002, p.126), and that further studies might seek to take colour and texture as the primary focus of analysis for this lithic assemblage—although she does not deliver such an analysis herself. In discussing the use of alder elsewhere in the Irish Mesolithic, Fredengren (2004) comments on the vibrant red colour of the wood when worked and links this to butchery practices and the use of red ochre in the burials of Mesolithic Scandinavia, arguing for a widespread ritual significance of the colour red specifically within Mesolithic Europe. She notes the way in which conventional forms of archaeological and palaeoenvironmental dissemination inhibit these kinds of discussions, and that the colour of specific timber types is not effectively communicated through pollen diagrams. This final point is telling, suggesting that, for Fredengren, the desire to consider colour here is associated with a drive to critically reconsider the way in which Mesolithic research is visualised, rather than to pursue a more nuanced understanding of the role of colour in Mesolithic life itself (with the opportunity presented by the Lough Gara assemblage being passed over).

Elsewhere, Gibbons and Gibbons (2004) have discussed the practice of dyeing within the Irish Mesolithic. They note the high proportions of dog whelk remains within the Late Mesolithic shell middens of Ferriters Cove (Co. Kerry) and Culfin (Co. Galway), and the use of this species within the Medieval period to dye cloth materials purple. Further analysis of the dog whelk shells from these sites establishes that, although the majority appear to have been broken in a way which suggests the extraction and consumption of meat, a small minority have been broken in a manner consistent with the extraction of dye. Gibbons and

Gibbons then use the historic records on the use of dog whelk to argue that it was possible for a range of shades of purple to be produced in Mesolithic materials.

Gibbons and Gibbons' approach can be contrasted with the discussion of colour at the Early Mesolithic shell midden site of Sand in north west Scotland (Highlands). Here, evidence for a variety of mineral processing activities were identified through the microscopic analysis of bone bevel ended tools (Hardy, 2007), nodules of haematite and limonite (Isbister 2007), and dogwhelk shells (Milner, 2007). However, the fragmented nature of the analysis carried out at Sand (with a different specialist discussing each strand of evidence) prevents a more holistic discussion of pigment processing, the character of the colours produced, or the potential uses of colour in everyday life.

Some of the most focussed and comprehensive research into the use of colour in the Mesolithic is provided by Walker's (2015) discussion of colour at Star Carr. Based on ethnographic parallels, she argues that the ability to produce and manipulate different colours would have been a powerful means of social discourse throughout the Mesolithic. She also notes the underused potential for a more critical consideration of colour within our visualisations of Mesolithic life. Methodically working through the various geological, botanical and faunal resources available to the inhabitants of Star Carr, Walker produces an extensive range of potential pigments through experimental methods. These are recorded as 'swatches' (Figure 1), and help Walker to illustrate the vast variety of colours it would have been possible to create on both material culture and human bodies during the British Early Mesolithic. Ethnographic analogies are then used to demonstrate the range of practices involving the use of colour amongst non-western societies around the world, and argue for their probable occurrence during the Mesolithic period more generally.

<FIGURE 1 HERE>

Focussing on the Senses

Walker's work on colour forms part of a small family of studies which focus more directly on sensory experience in the Mesolithic. These are united not only in their subject material, but also through attempts to develop and apply methodologies which explicitly document sensory experience. Harris (2014) takes a sensory approach to the study of textiles in the Ertebølle period of the Southern Scandinavian Late Mesolithic. She notes the acute need to consider textiles from a wider range of perspectives than the purely technological. Linking the use of prehistoric textiles to costume theory, Harris stresses the sensory characteristics of different forms of cloth and textile in the creation of clothing. In order to study this relationship further, Harris turns to Merleau-Ponty's (1989; 2004) work on the phenomenology of perception, and the research methodologies outlined by Hamilton, et al. (2006).

To explore these questions in relation to the Ertebølle, Harris sources experimental replicas of basketry, netting, leather and treated animal hides evidenced from the archaeological record. These were then presented to a large group of University College London archaeology students, who were subsequently canvassed for responses to basic questions regarding the feel, look and smell of different forms of Ertebølle cloth and textiles. The critical interpretation of the results of these questionnaires facilitates an informed, and hitherto unprecedented, discussion of the different choices on offer in Ertebølle clothing design.

Mills and Pannett (2009) also develop and apply novel methodological approaches to better understand human behaviour in the Mesolithic, placing their focus on the role of sound and hearing. They apply the methods developed by Mills in his work on auditory scene analysis to Mesolithic archaeological datasets. They note the important role that sound plays in

numerous hunter-gatherer ethnographies, and as such the need to develop approaches which tackle sound explicitly. Their case study, the north-east Scottish site of Olicet (Caithness), in many ways represents a typical North-West European Late Mesolithic dataset: a small island in the centre of a river, with local paleoenvironmental records and a small but discrete area of lithic working evidence.

Mills and Pannett (2009) take an experimental approach to this issue, by selecting a similar environmental setting, carrying out several typically 'Mesolithic' activities (such as gathering firewood, building a fire and knapping flint), and recording the role that sound played in each of these tasks. They note that, as people moved around the space, they often passed out of sight amongst trees and topography, but were almost always audible to someone in the centre of the site. They also noted that the individual skill levels of flint knappers produced distinct audio signatures. The rhythmic quality of group flint knapping was also noted to contrast with all other environmental sounds in the area, advertising the presence of people over some considerable distance.

The insights gained by Mills and Pannett are fascinating, and offer a fresh perspective on the sensory experience of life in the Mesolithic. However, the study is preliminary in its scope and methodology, and some of the questions posed have not been followed up with subsequent investigation. Can we see pattering in Mesolithic sites based on their acoustic properties? How do these observations link back to auditory scene analysis, and what can this type of analysis tell us about the enculturation of Mesolithic landscapes? Do other forms of Mesolithic 'activity' produce different results?

It can be argued that although there *has* been a growing appreciation of sensory experiences during the Mesolithic period since the turn of the twenty-first century, this growth has been stimulated by the role of the senses in other research themes, such as the understanding of

Mesolithic spaces, making emotional connections between the present and the deep past, and the ways we visualise the Mesolithic. The works cited above all make valuable contributions to the study of the period in their own right, as their effectiveness in dealing with the senses is a side issue to the main points each respective author aims to make. The work of Mills and Pannett, Harris, and Walker stand apart in being focussed more directly on a consideration of the senses in themselves, and yet it is telling that none of these papers reference the wider body of work on sensory experience within archaeology more generally (e.g. Day, 2013; Fahlander and Kjellström, 2010; Hamilakis, 2013). It is also worth noting that, to date, these three papers stand as single pieces of research. Authors rarely seem to pursue an explicit interest in Mesolithic sensory experience for more prolonged periods of time. As such, our current understanding of Mesolithic sensory experiences is somewhat lacking in its co-ordination and structure—with little in the way of explicit, emergent research questions, or a self-identifying community of researchers looking to directly pursue these avenues of inquiry.

Writing Sensory Experience

A common theme across all these works is the form of dissemination employed; all of the authors *write* about sensory experience in the Mesolithic. Writing down observations of any sensory experience requires a translation into text—the quality of this translation resting on the author's skill as a writer, and the levels of expressive freedom permitted within the context of the publication. Skilful writing technique can result in text which is evocative of the observed sensory experience—the sounds heard by Mills and Pannett, or the feel and smell of textiles investigated during Harris' experiments. However, this translation also presents the opportunity for the character of that experience to be lost, when writing fails to

capture the full quality of the sensation experienced, or communicate its power, immediacy or significance to the reader.

This form of text-based discourse is hardly surprising given the context in which academics work—where peer-reviewed literature holds prominence over other dissemination forms and is incentivised within both broad paradigms of collective research evaluation and individual career development. Mesolithic archaeologists, however, are at a distinct disadvantage when it comes to writing evocatively. Our research community has, since the work of Worsae in the nineteenth century, benefitted from a close relationship with Quaternary science and physical geography studies (Andersen, 2007). In contrast, later periods of prehistory can be argued to have a more established tradition of working with social anthropologists and geographers (Darvill, 2008; Harris and Cippola, 2017; Trigger, 1989). Although several authors have stressed the need for Mesolithic studies to encompass a broader range of writing styles (Elphinston and Wickham-Jones, 2012; Finlay, 2004; Warren, 2005), the historically established links between Mesolithic archaeology and Quaternary science are still a strong influence in the ways in which most Mesolithic research is conducted, and the contexts in which it is published and disseminated. I refer again to Fredengren's (2004, p.31) point; that pollen diagrams do little to convey the colour of felled timber. I would extend this to highlight the way that NGRIP curves struggle to evoke the sensations associated with hypothermia, and radiocarbon chronologies of coastal erosion deposits seldom encapsulate the sound of a tsunami. This is not a failing of these forms of dissemination or their authors—they serve their own purposes which are vital to our understanding of the past—but it does emphasise the ways in which certain styles of discourse inherently overlook sensory experience in the Mesolithic.

It is also worth noting that researching the Mesolithic itself is a specialist skill. The period presents a unique set of challenges associated with the conflation of timescales, an

archaeological dataset which is affected by severe preservation biases and, as a transitional point between early and late prehistory, is influenced by diverse and occasionally contradictory sets of research questions. Standing architecture and 'unchanged' landscapes seldom, if ever, feature within the Mesolithic record, bringing experimental approaches to an almost sole prominence in any attempts to connect with Mesolithic sensory experience. This is a fundamentally different challenge for those faced by researchers working in other periods. As such, attempts by archaeologists who specialise in other periods or specific methodological approaches ('Sensory Archaeologists?'), and who might be better equipped to deliver the 'sensuous narratives' required for a more effective discussion of the senses, risk missing key understandings of the period itself.

I would argue, however, that in order to address sensory experience during the Mesolithic more critically, we need to do more than change our styles of writing. In the first instance, (another) call for the adoption of new writing styles overlooks many of the issues which have led to similar calls in the past having relatively little influence on research practice (Finlay, 2004; Warren, 2000). The interdisciplinary links referred to above have massively benefitted our understanding of this period, yet this close relationship inevitably entails pressure to publish research within environments where writing style is dictated by methodological conventions, and as such are somewhat stylistically restrictive. Although this is certainly not true of all Mesolithic discourse, the key point here is that this relationship means that the challenges of writing about the senses (which affect the study of all periods of the past) are particularly acute within Mesolithic contexts, due to the restricted form that much of our writing takes.

Day (2013) has stressed the potential role that non-textual forms of discourse could play in furthering the debates over sensory experiences, as well as forming key case studies for linking past attitudes towards the senses with contemporary, related debates over the ways we

define sense. Finlay (2004) makes a similar point, and given the particular difficulties that Mesolithic archaeologists face when attempting to *write* sensory experience, it now seems prudent to consider the alternative forms that our discourse might take. An important precedent is set through the work of Holmberg (2013), albeit in a different spatial, chronological and historiographical context. In using contemporary art to explore the sensory component of volcanic activity, Holmberg explores human responses to environmental change in Panama during the first and second millennia AD, and highlights some of the ways in which conventional approaches to environmental archaeology can overlook sensory experience. This chapter will now examine two works which deal with the Mesolithic, but do not use text as the principal form of communication, and will evaluate the ways in which the senses are treated in both.

Brian Graham

Dorest-based painter Brian Graham first began engaging with early prehistory after visiting excavations at Hengistbury Head in 1981. Although not formally trained in archaeology, this interest has been furthered through conversations and correspondence with leading anthropologists and prehistorians. Graham's acrylic on canvas and mixed media on board works have drawn from a number of British Mesolithic sites, and evoke sensory experience through a variety of methods. *Culverwell* (2005), *Pit dwelling* (2005) *Star Carr* (2005), *Ritual site* (2005) and *Starting from scratch I. Star Carr, North Yorkshire* (2010) form part of a much wider body of Graham's work which explores the early prehistory of Britain and Europe. He uses forms from the material records of these sites to create textured motifs, which are worked into rich and critically considered colourscapes. For example, *Ritual site* (Figure 2) uses the form of worked red deer antler and timber from Star Carr. However, these

forms bleed into the background of the piece, which is dominated by the rich and subtle blending of colour. Sometimes these textures obscure the archaeological forms, at other times they bring them into focus. The dark browns within the piece are evocative of the peat deposits which have allowed organic preservation at Star Carr—deposits which were forming during the site's occupation and which would have formed a characteristic part of life at Star Carr. The milky whites which bleed across the piece reference the tones and hues of the tufa and marl deposits which built up in the areas of lake water around Star Carr, and at other Mesolithic sites across Britain. Additionally, the textures created in the use of acrylic here further reference the feel of these sediments, and their interplay with the formal motifs, bring to mind the ways in which sediments and material culture would have merged together at the Star Carr lake shore, in ways which are masked in post-excavation cleaning, 'purification', and analysis of artefactual assemblages (Conneller, 2011).

<FIGURE 2 HERE>

In *Culverwell* (2005) Graham utilises acrylic and canvas textures in two distinct ways to evoke sensory experiences at the site (Figure 3). Linear strokes are used in conjunction with shades of dark greens and whites to create a light-through-trees effect; a reference to the forested environments around Culverwell (Dorset) during the Mesolithic. In the foreground, blotches and swirls work with limey white and brown tones to reference the fragmented surface of the Culverwell shell midden itself. The textures Graham creates are worth highlighting here, as the physicality of these pieces does not translate easily in digital or printed reproductions. In the skilful working of acrylic and canvas with directional brushstrokes and the variable paint loads, Graham creates surfaces which work together with

the colour of the pieces. The end results are powerfully evocative of decay and diogenesis—key elements of the sensory experiences tied into site formation.

<FIGURE 3 HERE>

Despite the presence of literal and formal references in his work, the generally abstract nature of Graham's paintings prevent his work from being interpreted as a conventional form of 'reconstruction'. Instead, Graham prompts more profound questions concerning sensory experience through a consideration of the qualities of light, colour and texture at Mesolithic sites. This is not accidental. The making of these pieces has clearly involved careful research and critical consideration of these elements of sensory experience, and their skilful expression in the finished works requiring specific choices in the methods used to realise each piece (Brian Graham, pers. comm.).

MeZolith

Haggarty and Brockbank's series of *MeZolith* graphic novels (2010; 2016) tell the story of Poika, a young boy living in Northwest Europe during the Early Mesolithic. The authors' backgrounds lie in performance storytelling and concept art respectively, with Haggarty widely recognised as a pioneer of oral narrative research and performance, and Brockbank's CV boasting *Star Wars: Rogue One*, the Harry Potter films and *Captain America: The First Avenger*. *MeZolith* forms part of a wider body of '(pre)historical fiction', which deals specifically with the Mesolithic period (Henson, 2017). It includes the work of Elphinstone (2009) and Paver (2005; 2006; 2007; 2008; 2009; 2010), and has enjoyed some commercial

success, reaching a relatively large audience. Haggarty and Brockbank combine meticulous research into Mesolithic archaeology with a deep knowledge of storytelling traditions, developing an overarching coming-of-age narrative, contained within which are a series of contemporary oral stories set in the context of the Early Mesolithic. Iconic sites and pieces of archaeology appear as set ‘motifs’ within the main narrative and the myths told between characters. The graphic novel medium allows for the use of several different techniques in the construction of the narrative, and the potential to express mood, movement, tension and cinematography in unique ways which are not possible when working in prose or other forms of visual art. As such, *MeZolith* utilises a number of different techniques to evocatively explore sensory experience in the Mesolithic. This is achieved to varying degrees throughout the work, but here I will focus on two key areas: seasonal change and illness.

An area seldom discussed within academic literature is the concept of illness and healthcare in the Mesolithic (Figure 4). This plays a key point in the plot of *MeZolith*, with the main character Poika becoming injured whilst hunting (Haggarty and Brockbank, 2010, p.16) and the wound becoming infected. He becomes feverous and delirious, and is treated by a shaman who uses maggots to clean the wound of dead flesh (ibid, pp.23–25). Haggarty and Brockbank use colour to explore the sensory experience of this feverous state, washing out palettes in the key frames to pale shades of grey and beige to evoke Poika’s weakening, and contrasting blurred outlines with starkly defined characters to reflect the waning and waxing of his consciousness. The final frames before he slips into a delirious dream depict his skin shining with sweat, and colours bleeding out from a portrait of his face to the horizon of his dreamscape. This passage demonstrates the potential of the graphic novel to depict and explore the experience of illness or delirium in the Mesolithic.

<FIGURE 4 HERE>

Our evidence for illness and infection comes from indirect indicators within the human skeletal record—notoriously difficult to draw when working with the generally fragmented and partially preserved datasets on offer in the European Mesolithic. These factors may explain the relative lack of attention that these matters have received, away from specific studies of changing diet through dental pathologies between the late Mesolithic/Early Neolithic of the Ukraine (Lillie, 1996), and bacterial infection within dental calculus of the late Polish Mesolithic (Alder, et al., 2013), which have now been soundly critiqued (Ziesemer, 2015). Discussions of medicine are similarly restricted, working from fragmentary skeletal records and the occasional preservation of plant food remains with low calorific values to demonstrate the consumption of ‘non-nutritious’ foods (López-Dóriga and Diniz, 2015; Regnell, et al., 1995; Saul, et al., 2013), the processing of potentially-medicinal minerals (Isbister, 2007) or healed surgical procedures (Lillie, 1998). However, our accounts of both disease and medicine lack the visceral understanding of the experiences of illness and delirium that Haggarty and Brockbank provide. Here, these experiences form a dramatic element of the broader context in which medicinal practices played out, and highlight the way in which sensory experience would have affected the understanding of the sickness/healing process itself.

One of the devices used by Haggarty and Brockbank to mark the passing of time is the depiction of varying seasons throughout their work. These serve as key points in the narrative, and bring together changes in weather, flora, fauna and human behaviour to evoke shifts in the mood and feel of the story. For instance, funerary preparations are shown taking place in winter, with references to the ceremonies which will take place ‘when the yellow

flowers come' (Haggarty and Brockbank, 2016, p.9). There is sharp transition between chapters which take the reader from deep winter to late spring, with snowy greytone being replaced by vivid shades of green, brown and blue, with bursts of white and yellow provided by flower blooms. These tonal shifts, combined with changes in the clothing and behaviour of the characters (from huddled around fires, wrapped in furs, swapping horror stories to standing waist deep in river water in lighter clothing) evoke a tangible shift in the temperature and weather conditions in the lives of these Mesolithic people. The depiction of insects, migratory birds and mammals, and the associated sounds and movements they bring, further emphasise the dramatic shift in weather conditions. These changes in sensory experience form a defining part of the context of the final burial ceremony, which is explicitly linked to the appearance of yellow flowers. Contrasting this depiction with the roundly-critiqued accounts of seasonality studies (which have formed a key theme within Mesolithic research in the later twentieth century (Milner, 2005)) emphasises the ways in which this form of media is better suited to encapsulating the elements of sensory experience associated with the changing of seasons than has been previously delivered to date by text-based accounts.

Listening to the Mesolithic

Beyond the visual arts, another potential avenue for exploring sensory experiences in the Mesolithic may relate directly to the use of sound. The author's own work, in collaboration with the composer and sound artist Jon Hughes, has sought to explore the emergent technological potential for the recording, mixing and dissemination of sound. These developments have occurred alongside a broadening in soundscape theory; a body of analytical writing which explores the role sound and listening plays in shaping our

understanding of landscape and identity, an offshoot of which is the field of acoustic ecology. In bringing these developments in methods and theory together, Elliott and Hughes (2014) attempt to better understand the ways in which Mesolithic landscapes were *heard*. This has involved working with palaeoenvironmental and archaeological data to build up archives of recorded sound associated with human activity, animal and bird species, weather conditions and ecologies. This approach has been applied in two distinct contexts in England: in the Vale of Pickering (North Yorkshire) and the Creswell Crags (Derbyshire/Nottinghamshire). In the former, our work considered the landscape contemporary to the Early Holocene hunter-gatherer occupations at Star Carr as its primary focus. In the case of the latter, our work has attempted to encompass the long *durée* of the Creswell Gorge's history, spanning early hominin activities, Pleistocene environmental changes, Upper Palaeolithic occupations, and a near-continuous sequence of habitation which runs throughout the Holocene and into the present day.

In both instances, archives of recordings have been assembled to create ambisonic, site-specific pieces of sound art and resources for use within museum exhibitions, which explore the landscapes in question. In this context, sound becomes not only the subject of analysis, but also the primary medium of discourse—a critically constructed platform from which further conversations relating to sound, hearing and sensory experience in the deep past can be developed (Elliott and Hughes, 2014). These conversations have touched on the relationship between these projects and the wider sound studies movement, soundscape theory and the research questions and methods associated with acoustic ecology (Elliott, et al., in press). Stereo versions of the sound outputs are available to stream for free online via SoundCloud (<https://soundcloud.com/jonhughes409/star-carr-sonic-horizons-rough>), and the final material has been presented at academic conferences, festivals and museum exhibitions. It is now curated within the Prehistory Gallery of the Scarborough Rotunda Museum (North

Yorkshire). As such, these conversations have involved a broader range of audiences than conventional academic texts might seek to engage. This has been reflected in the eclectic nature of the responses we have enjoyed, which have ranged from discussions of the experience created by the equipment set-up and mixing software, comparisons between present day and past avian ecologies, the ways in which fear might have been linked to specific sounds in the past, and the character of domesticated dog calls in the Early Mesolithic.

The potential to do this—to create at a relatively low cost high quality recordings of experimentally reconstructed human activity, to access large quantities of environmental sound recordings via the digitised British Library sound archive, to transcribe and store these recordings collectively, and produce metadata relating each sound to its source of origin, its compositional potential and its archaeological relevance, and to disseminate work online for free—marks something of a historical milestone. The opportunity to work in this way was certainly not available to those researching the sensory experience of space within Mesolithic landscapes during the late twentieth and earlier twenty-first century. In many ways, the explosion in digital sound recording and dissemination technology of the past 20 years (Leong and Wright, 2013), mirrors the rapid technological changes which helped fuel the emergence of the sound studies movement at Simon Fraser University in the late 1970s. Here, the rapidly decreasing size and price of high-quality sound recording equipment allowed large-scale ambient sound recording projects to be undertaken on an unprecedented scale, fostering an explosion in the theory of both electronic compositional practice, and the role of sound in everyday life (Bull, 2013). In both instances, historical circumstances have created the opportunity to both work with, and think about, sound in new ways, and sensory archaeologies are well placed to capitalise on this.

The Catch

There are, however, a number of factors which may inhibit the development of this type of discourse. A high level archaeological education and knowledge base is not necessarily the best preparation for critically discussing creative expressions of research, and for many this type of discussion involves stepping outside of the comfort zone of conventional academic practice. Critically discussing a piece of visual art or sound installation comes with its own set of challenges, and building the confidence and trust between researchers in this endeavour is something which will take patience, effort and the acquisition of new analytical skills.

Questions will undoubtedly be raised concerning research methods, and how consistency and quality can be ensured in the research methodologies which inform atextual contributions to debate. In-text citations and bibliographies form the mainstay of archaeological practice in this area, and this needs to be born in mind when moving away from text. How can sources of information and methods be acknowledged in these new media? How can these forms of output be evaluated equally alongside more conventional peer-reviewed texts within more general research frameworks? How do we distinguish between research and outreach outputs when working in this manner, and is that distinction useful if the object of an exercise is to stimulate discussion at all levels?

These are the types of challenges that researchers wishing to work in this way face. Given the need to experience many forms of atextual output 'live', this may place a focus on seminars, lectures and workshops based around the presentation of these works, where authors have the chance to expand on their thoughts and methods in person. It also allows other researchers to scrutinise and debate the methodologies employed in their production. In these contexts, where atextual pieces are used as a springboard for further discussion, we have the opportunity to balance the benefits of transcending text-based discourse and yet still retain

the potential to produce transcriptions of the resulting conversations which can be considered for peer review and fit into more conventional forms of research evaluation.

Conclusion

To reiterate the argument outlined in the first half of this paper, an appreciation of sensory experiences in the Mesolithic has been a slowly emerging theme since the advent of the twenty-first century. Although seldom the sole focus of research, an understanding of the important role that the senses play in understanding the construction of space, the role of emotion within Mesolithic lives and the ways in which we visualise this period has allowed the persistent, if somewhat unstructured and peripheral, advancement of this theme. This has developed *beyond* the influence of the key texts on sensory archaeology, as these are notably absent from the bibliographies of those writing on this subject. The works of Harris (2014) Mills and Pannet (2009) and Walker (2015) stand apart as explicit attempts to develop research methodologies to better understand sensory experience in the past.

A key point here concerns the form that this discourse takes, and the problems that Mesolithic archaeologists face when attempting to 'write the senses'. It is argued that the historiography of Mesolithic research has led to the primacy of a particular style of writing, and that this style is now so deeply rooted within research practice that it has inhibited earlier calls for more diversity in Mesolithic texts. With this in mind, it is well worth Mesolithic research heeding the arguments of Day (2013), and looking beyond text-based media to stimulate our discussions of sensory experience in the period. The work of Graham, Haggarty and Brockbank, and the author's own collaborations with Hughes, suggest that this is already in effect, and is offering new perspectives on Mesolithic sensory experiences.

The tension running throughout the latter part of this paper is the obvious irony of calling for a move away from text-based discourse, through the medium of a chapter in an academic handbook. However, it is key to acknowledge the current context in which research is being conducted; where peer-review publication and research evaluation is *fundamental* to academic practice. Given this context, a non-textual piece on this same subject would be unlikely to reach the audience for whom the subject matter would be most useful! As such, the argument presented here aims to bring into focus a number of works which explore Mesolithic sensory experience, and to outline the challenges faced by researchers who wish to work in this way. In singling out these works, the author hopes to promote them, and to stimulate academic awareness and interest in their form and construction. In an ideal world, perhaps readers might, for instance, follow the links to the author's work on Mesolithic soundscapes at Star Carr provided here, listen and think about that piece, and then engage in further debate and correspondence on its content and research methodology. If that were to happen, this paper would have taken a step towards discourses of the senses which are prompted by a sharing of the experiences in question. And that sounds good to me.

Acknowledgements

I am very grateful to the editors of this handbook, Jo Day and Robin Skeates, for the invitation to contribute on such an interesting subject. Thanks are also due to Brian Graham, the York City Art Gallery, Ben Haggarty and Adam Brockbank for their kind permission to use their images in this paper. Many of the ideas presented here stem from passionate and stimulating conversations with Mark Edmonds and Jon Hughes during the course of the SoundTracks project, to whom I am sincerely grateful. Discussions with Carmen Mills and Wendy Pratt also proved highly fruitful in the development of these ideas. Sophie Charlton

provided expert advice on the study of illness and medicine in the European Mesolithic. I would like to thank Graeme Warren for comments and discussion on an early draft of this paper, and finally Chantal Conneller for her positive peer review and feedback.

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Figure captions

Figure 1. A range of strong colour pigments created from materials available at Star Carr
(Walker, 2015, p.27)

Figure 1. *Ritual site* (Graham, 2005)

Figure 2. *Culverwell* (Graham, 2005)

Figure 3. Depictions of illness in *MeZolith* (Haggarty and Brockbank, 2010)

Figure 4. Transition from Winter to Spring in *MeZolith* (Haggarty and Brockbank, 2016)