



Interrogating the display case: communicating prehistory within Museum Displays

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ABSTRACT - Prehistory museum displays represent a vital medium through which the complex narratives of early human history are communicated to the public. These narratives, however, are not neutral and are subject to a variety of factors such as: institutional mission, curatorial preferences, funding and history of collections. This paper seeks to understand what narratives museums currently convey by providing an evaluation of contemporary prehistory displays in England. The evaluation operates at both a macro and micro-scale to facilitate the interpretation of broad trends influencing the presentation of prehistory, as well as capturing 'fine-grain' detail about how these displays influence visitor engagements.

This paper is based upon a combined visual analysis of 173 prehistory displays across England and visitor-based evaluation of 300 visitors at 6 different museums: The British Museum, The Stonehenge Visitor Centre, North Lincolnshire Museum, Torquay Museum, Weston Park Museum and the Great North Museum. The combined visual and visitor-based evaluation reveals representational disparities between how early prehistoric periods are communicated compared to later prehistoric periods, and the effectiveness of interactive and audio-visual interpretation for engaging visitors with narratives about their earliest past. How these trends relate more widely to prehistory museum displays in Europe is reflected upon in the discussion and the paper concludes with some evidence-based recommendations for effectively communicating prehistory within museum displays.

Keywords: Prehistory; museum; evaluation; visitor studies; survey; representation; display.

Submitted: 1 May 2023 - Accepted: 6 June 2023

1. INTRODUCTION

Prehistory is an expansive and important time period, encompassing over 3 million years of global human history. It therefore incorporates a great breadth of time in which early human species interacted, modern *Homo sapiens* evolved, farming and different metalworking technologies were developed and more hierarchical societies emerged (Scarre, 2018). There are multiple mediums that communicate the past to the public that can greatly influence how the public consume, relate to and understand their deep past. This paper will focus on museum displays over other forms of communication due to the pivotal role they perform in heritage discourse.

Museums are important educational sites, constructing and communicating knowledge through display and are therefore highly influential in how the public perceives prehistory (Pearce, 1990; Hooper-Greenhill, 2000; Barrowclough, 2004; Moser, 2006, 2010; Barker, 2010;

Petrov, 2012). Yet, there are numerous issues museums face when attempting to communicate prehistory to their visitors in a relatable and engaging manner within the restrictions imposed by their collections. Museums are therefore confronted with the following questions when attempting to communicate prehistory within the context of display.

- How can museums communicate the diversity of prehistoric material culture from such a restricted repertoire preserved within collections and a lack of tangible organic remains?
- How can museums present a coherent narrative of prehistory if they do not have many objects or do not have collections relating to all periods of prehistory?
- How can museums communicate complex topics in enjoyable and engaging ways?

To address these interpretational issues that affect the display of prehistory collections a thorough investigation of how prehistory is currently presented

in museums and how visitors are engaging with these displays and narratives in-situ was undertaken between 2017-2020. The combination of both visual and visitor-based evaluation provides evidence-based solutions for creating engaging displays that effectively communicate prehistory to visitors.

1.1. COMMUNICATING NARRATIVES OF PREHISTORY IN MUSEUMS

There have been a few analyses of the representation of archaeology, most notably Beusing's (2011) study of 372 museums across Germany but very rarely have there been any analyses explicitly focused on the representation of prehistory. The majority of analyses of the representation of prehistory have tended to focus on the aesthetics of displays, either within the context of a specific museum or a small sample of museums (Cotton, 1995; Thrane, 1996; Wood and Cotton, 1999; Levy, 2006; Scott and Guisti, 2006; Henson, 2016), or focused on a particular stylistic element such as dioramas, the use of images and presentation of human remains (Gifford-Gonzalez, 1993; Moser and Gamble, 1997; Moser, 1998, 1999; Berman, 1999; James, 1999; Renfrew, 2003; James, 2008; Conkey, 2010; Brown, 2011; Joy, 2014; Beusing, 2016). The findings of these evaluations are accordingly often too specific or restricted in their application to highlight general trends in how prehistory is presented in a wide enough sample of museums to be representative of the wide variety of different types and sizes of museum. These studies, however, have highlighted trends in how prehistory is represented in certain types of museum or certain period-specific representational issues.

Several historiographical studies (Moser, 1992, 1998; Berman, 1999; Mann, 2003; Scott, 2007; Conkey, 2010) have highlighted that the continual focus on certain prehistoric images and scenes - such as the archetypal 'caveman' image - within the museum space and popular media has resulted in the perpetuation of a suite of stereotypes and assumptions associated with the Palaeolithic and hominins. Consequently, often quite outdated assumptions remain embedded in the visuals utilised in prehistory displays. The Mesolithic Research Framework (Blinkhorn and Milner, 2014) has more recently made some general assertions about the lack of attention given to the Mesolithic in prehistory displays in England in comparison to Scandinavia and these points have been further emphasised by Milner et al. (2015) and Henson (2016). This representational imbalance has been investigated by Henson (2016) in his PhD, which more broadly evaluated 10 different mediums of communication, including museum displays and how they represent the Mesolithic. Henson (2016) analysed 8 museum displays in England and 6 in northern Europe utilising narrative theory. This analysis identified that the Mesolithic is still predominantly presented through a cultural ecological approach and associated with a restricted repertoire of subsistence-focused narratives despite recent archaeological finds associated with the

more symbolic and spiritual aspects of Mesolithic life (Henson, 2016). Ballard (2007), has also contributed to the literature about period-specific representational issues, focusing specifically on the Iron Age. Ballard's (2007) study identified how the Iron Age is consistently associated with the Celts and warfare, further highlighting the restricted narratives associated with prehistory. All of these studies of prehistory representation have highlighted the limited display narratives associated with different periods of prehistory in museums. Yet the small number of museums investigated reinforces the need for a broader approach to display evaluation that this paper will provide.

2. GEOGRAPHICAL SCOPE OF THE STUDY

Constraints of time, resources and travel meant that the visual analysis and visitor-based data collection had to be restricted to a focused geographical area, where it was possible to capture a broad sample of the diversity of display styles and museum types. To capture a broad and representative sample the investigation was restricted to a focus on prehistory museum displays within England that were 'permanent' and composed of primarily British/European prehistoric collections. In this paper 'prehistory displays' refer to the representation of British/European prehistory collections dating from the first evidence of human occupation in England about 800,000 years ago till the invasion of the Romans in 43 AD (Lynch, 2007; Dinnis and Stringer, 2014) that are on permanent display to the public.

3. METHODS

To accomplish such a comprehensive evaluation required a dual-scale methodology that could capture both breadth and depth of data. At the 'Macro-scale' to understand representational trends affecting how prehistory is currently communicated in museum displays across England a geographically diverse sample of 173 museums were recorded and analysed (Fig. 1). To complement this broad understanding of prehistory museum display trends, in-depth visitor-data in the form of tracking surveys were collected from 6 case study museums at the 'Micro-scale' to understand visitor engagements with specific prehistory museum displays.

3.1. MACRO-SCALE: VISUAL ANALYSIS OF PREHISTORY DISPLAYS

To identify current display trends influencing the representation of prehistory in museum displays across England, the 173 museums recorded were visually analysed. A series of 'display variables' were developed to mitigate against personal subjectivity, these variables were recorded at each museum using consistent language to facilitate a quantitative, standardised and more objective comparison of visual categories across different types and sizes of museum, thereby revealing a series of trends affecting how prehistory is displayed. These visual

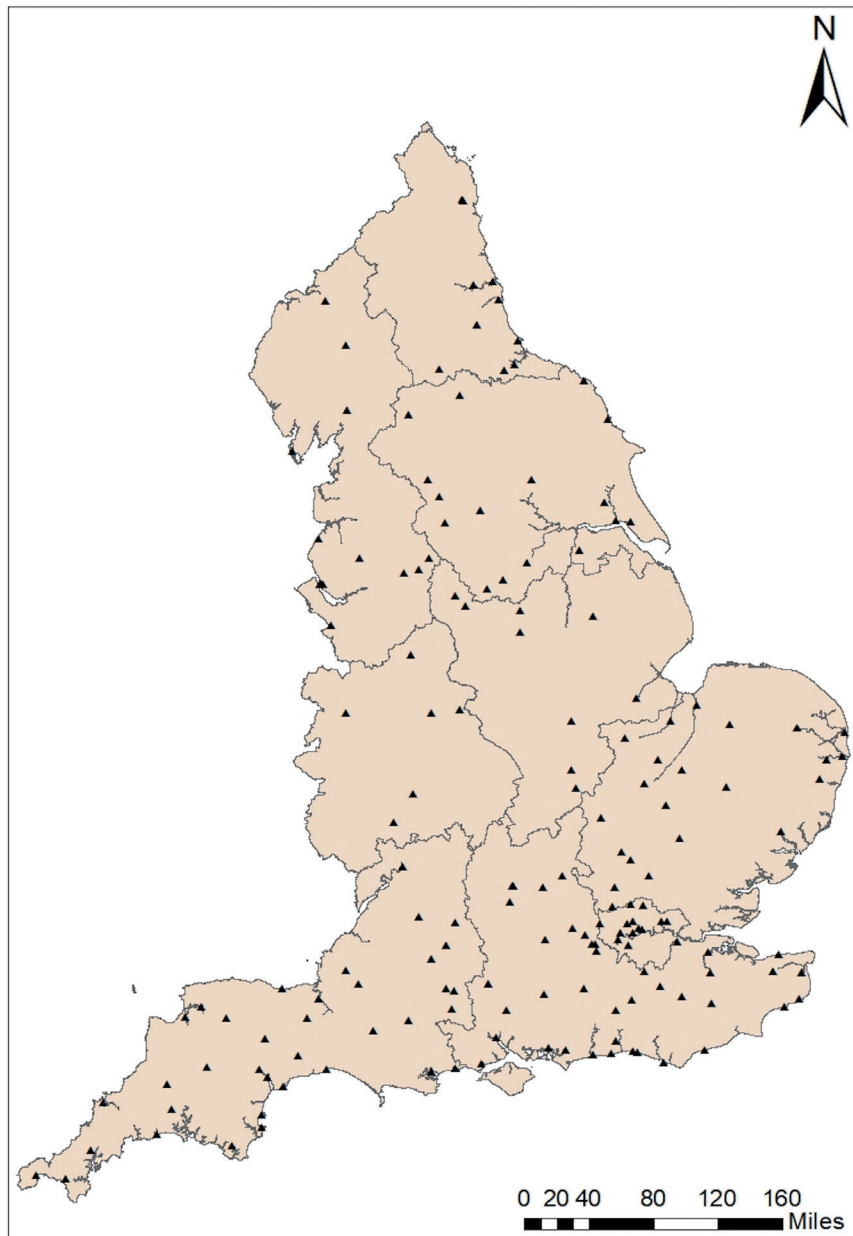


Fig. 1 - Map illustrating the geographical spread of the 173 museums recorded across England.

categories are based on display elements outlined by Moser (2006, 2010), and later adapted by Tully (2010), to analyse trends in ancient Egyptian museum displays. The trends highlighted in this paper relate to the following 6 display variables:

- 1) Age of displays (the year the displays were created/ last updated)
- 2) Amount on display (how many cases/ rooms are dedicated to presenting prehistoric collections)
- 3) Type of material on display (what objects types are presented in displays and how this varies by period)
- 4) Textual interpretation (the content of text panels used to communicate prehistoric narratives and how these vary by period)
- 5) Additional interpretation (supporting interpretation

used to contextualise the objects on display)

- 6) Representation of gender (how men and women are presented within supporting visuals)

3.2 MICRO-SCALE: VISITOR-BASED EVALUATION OF ENGAGEMENTS WITH PREHISTORY DISPLAYS

At the micro-scale to understand visitor engagements with prehistory displays tracking surveys were undertaken at each of the 6 case study museums to capture quantitative behavioural data. Each museum was selected to represent a different type and size of museum, with different amounts of funding and approaches to presenting prehistory and were geographically spread across England as illustrated in figure 2.

Visitor tracking is a method of audience research used

across museums to measure visitor behaviour and there are numerous texts on how this technique can be employed in a diversity of museum contexts (Falk, 1985; Hein, 1994; Serrell, 1997, 1998, 2020; Gutwill, 2002; Yalowitz and Bronnenkant, 2009). The model of tracking used for this research is based upon Serrell's (1997, 1998, 2020) influential research on visitor tracking and the author's experience tracking across the University of Cambridge Museums. This model for covert visitor tracking involves following visitors around the museum space from a distance, recording their behaviour and movements on a floor plan of the gallery, recording the direction that visitors are travelling in, where they stop, what they are looking at and how long they stop for. This type of tracking can produce a wealth of quantitative behavioural data revealing which displays attracted the greatest visitor frequency and longest visitor stop times (known as dwell times) that enable the identification of prehistory communication styles that are appealing to visitors.

4. RESULTS

4.1. LIMITED SPACE

One of the key representational trends identified from the analysis of the displays was the lack of space provided for prehistory. Out of the sample of museums analysed 35 per cent presented prehistory in 1 case or less and 28 per cent presented prehistory in 2-3 display cases, as

illustrated in figure 3. Despite the vast period of time prehistory represents it is often given the least amount of display space within museums. Nearly 1 million years of history is often reduced to 3 cases or less. In contrast later historical periods that cover a few decades of history have entire rooms dedicated to them. Highlighting a disproportionate relationship between the amount of time covered and the display space provided. This lack of display space dedicated to prehistory significantly restricts the narratives associated with the period and the museum's opportunities to communicate with visitors. Furthermore, the lack of space implicitly conveys to visitors that prehistory is not as important as other periods, which are prioritized at prehistory's expense.

4.2. LINEAR NARRATIVES OF PROGRESS

The analysis of the age of displays revealed that just over half have been substantially re-furbished and updated in the past 10 years (2010-2020). However, despite the relative modernity of the displays analysed the overarching narratives continue to contextually situate displays within the temporal framework of the Three Age system from Stone Age to Iron Age with 44 per cent of the museums structuring their displays according to this tripartite framework. Museums utilising this framework to structure the contents of displays use the predominance of tools in their collections to focus on changes in tool technology, communicating linear

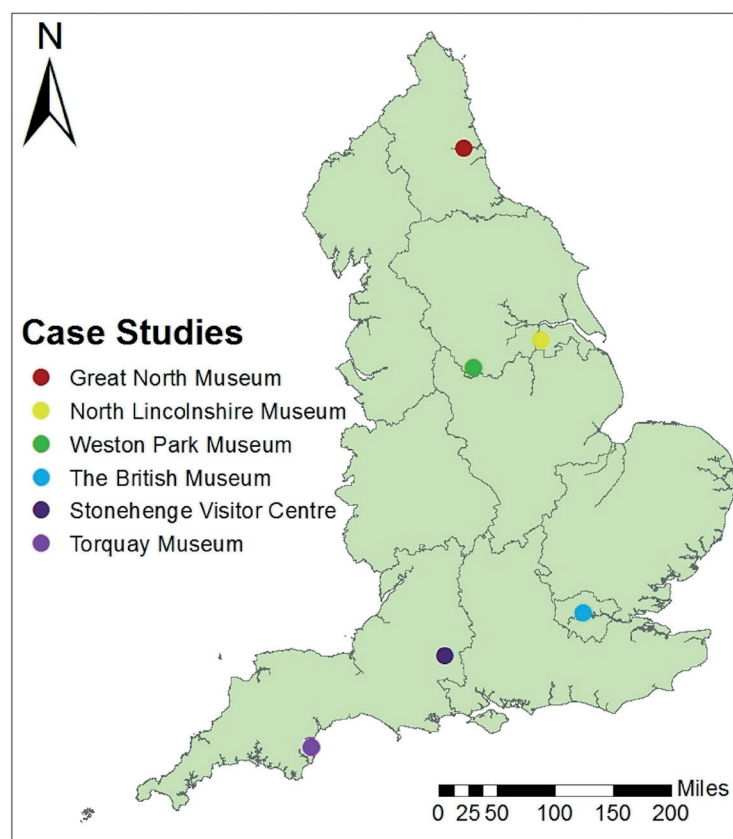


Fig. 2 - Map illustrating the location of the 6 case study museums across England.

Amount of Space used to Display Prehistory Collections
(n=164)

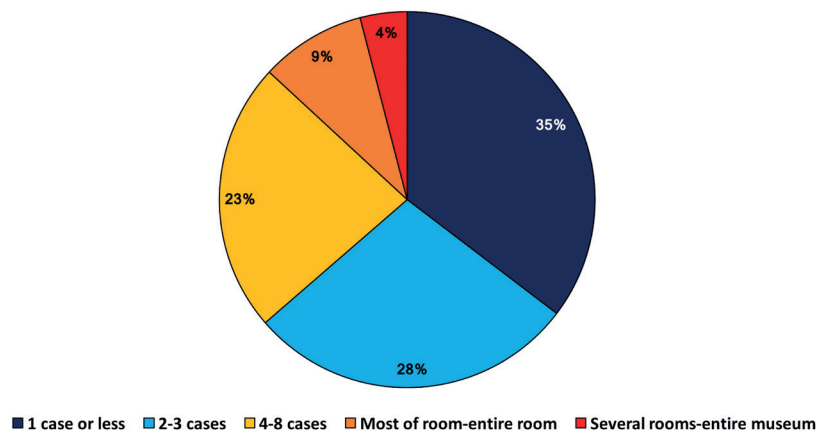


Fig. 3 - Pie chart illustrating the proportion of display space given to prehistory collections across the 164 museums where this could be recorded.

narratives of 'progress'.

The continuity of linear technology focused narratives still preserved within contemporary museum displays serves to disproportionately restrict the representation of the Palaeolithic, Mesolithic and Neolithic, defining these periods solely by durable stone technology, simultaneously homogenising and 'primitivizing' our earliest past. In direct contrast to the representation of the later prehistoric periods, the Bronze and Iron Ages which are associated with a greater diversity of material culture. This diverse repertoire of material culture presented within Bronze and Iron Age museum displays visually communicates to visitors that these people were more technologically and behaviourally complex compared to earlier people. This representational imbalance is further reinforced by museum displays in England which provide more space, more textual interpretation and attribute a greater variety of narratives to later prehistory, illustrating an inverse relationship between the representation of a period and the time depth it encompasses.

4.3. INVISIBILITY OF EARLIER PREHISTORY

Earlier prehistory is relatively 'invisible' in museum displays due to the differential preservation and taphonomic factors influencing the survival of objects, that disproportionately affects the deeper periods of prehistory. Consequently, the composition of most museum collections are often restricted to lithics that in combination with the narrative focus on tool technology dictated by the tripartite structure homogenises the diversity of Stone Age culture and reduces the narratives associated with these periods, particularly the Palaeolithic (980,000-11,500 years ago). This is clearly highlighted in figure 4 summarising the objects on display across the museums analysed where you can see that 93 per cent of these museums display stone tools and weaponry in their Palaeolithic displays, 40 per cent display Pleistocene faunal

remains and other types of material culture that could convey more social/ symbolic narratives of Palaeolithic life are rarely present. Very rarely are decorative or 'symbolic' objects presented in early prehistory displays despite their presence in the archaeological record. A lack of these more diverse objects in museum collections does not, however, mean they cannot be presented. Casts, replicas and visual interpretation can be utilised to supplement the predominantly tool-focused displays. Yet museums in England rarely include casts or replicas to supplement their collections with only 9 per cent of the analysed sample using casts or replicas to support interpretation and visually communicate alternative narratives.

The restricted narratives used to communicate earlier prehistory in displays is further demonstrated by the textual interpretation used in the sample of museums analysed. To understand how the Palaeolithic is explicitly communicated to museum visitors a thematic content analysis of the text used in Palaeolithic-focused text panels was undertaken. Out of the sample, 100 museums were found to display the Palaeolithic and a total of 147 text panels providing supporting interpretation about the Palaeolithic were identified. From the analysis of the content of these 147 text panels, 23 different narrative themes were identified. The narrative themes present in 10 per cent or more of the 50 museums with such interpretation is highlighted in figure 5. These popular narratives communicated to visitors include: describing the Palaeolithic in relation to 'first people' and narratives of colonisation (38 per cent of museums), whilst 28 per cent focused on defining the Palaeolithic in relation to the Ice Age, 18 per cent discussed the landscape and how it changed, 14 per cent highlighted different hominin species, Pleistocene fauna and tool technology and 10 per cent overtly focused on human evolution. From these text panels the Palaeolithic is very much associated with the appearance of early humans and the landscapes

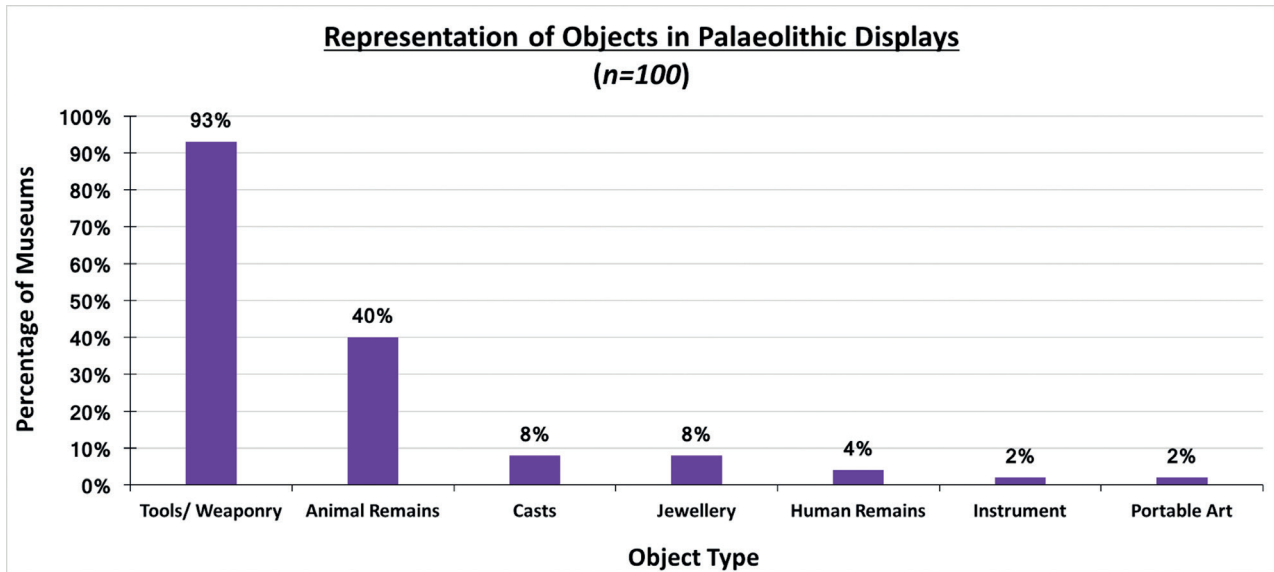


Fig. 4 - Graph illustrating the representation of different types of objects in Palaeolithic displays across the 100 museums in the sample displaying Palaeolithic collections.

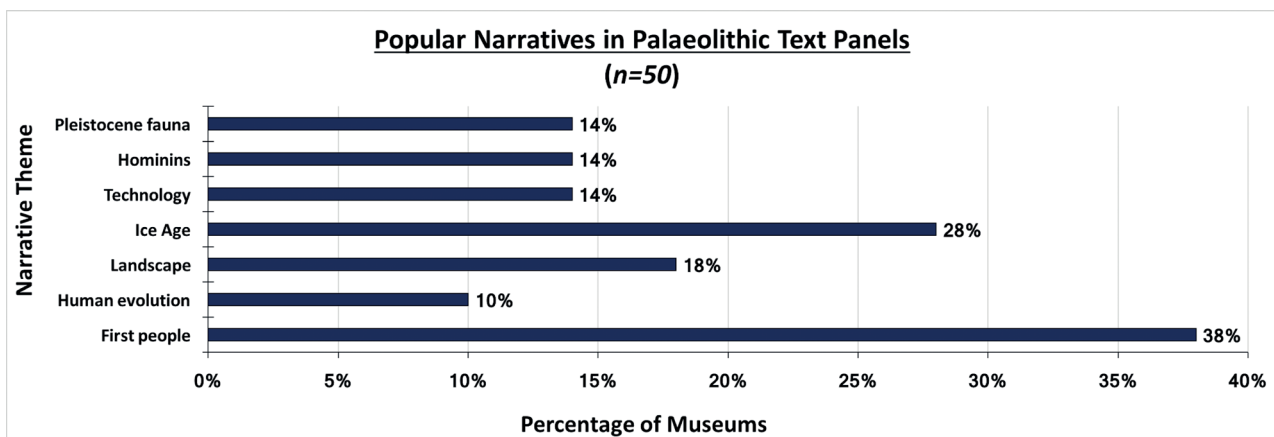


Fig. 5 - Graph illustrating the narrative themes used in 10 per cent or more of the Palaeolithic text panels across the 50 museums in the sample with Palaeolithic text panels.

they inhabited but there seem to be some narratives missing. Where are the narratives about daily life in the Palaeolithic? To connect visitors with the people of the past requires engaging them with the relatable aspects of life in the past but the only aspect of Palaeolithic life referenced in these text panels is tool technology so life in the earliest period of prehistory is discussed in almost exclusive association with flint knapping and butchery. There are no narratives around burial, the production of art or other social/ symbolic aspects of life.

To highlight the representational disparity between how our earliest history is presented to later prehistory, thematic content analysis of Iron Age (750 BC-AD 43) text panels was also undertaken. In contrast to the Palaeolithic textual interpretation investigated there is an abundance of textual interpretation utilised to communicate Iron Age narratives, even though it represents a shorter amount of time. Across the sample 114 museums displayed the

Iron Age and across these museums 271 text panels communicating the period were identified. Whilst, the number of narrative themes identified in these text panels is more than twice as many found in the Palaeolithic text panels. This is clearly illustrated in figure 6, showcasing the most popular of these narrative themes, found in 10 per cent or more of the 271 text panels. In contrast to the Palaeolithic narrative themes there is a diversity of different topics covered from text panels focused on specific Iron Age sites to panels focused on Celtic identity, or farming or Iron Age beliefs or currency or metalworking or burial. These text panels communicate a complex picture of life in the Iron Age. Even though some of these more social/ symbolic narratives could certainly be communicated in Palaeolithic text panels this is not the case, panels about Palaeolithic art or burial, or beliefs or sites are incredibly rare. This contrast in how our earliest prehistory is communicated explicitly within the

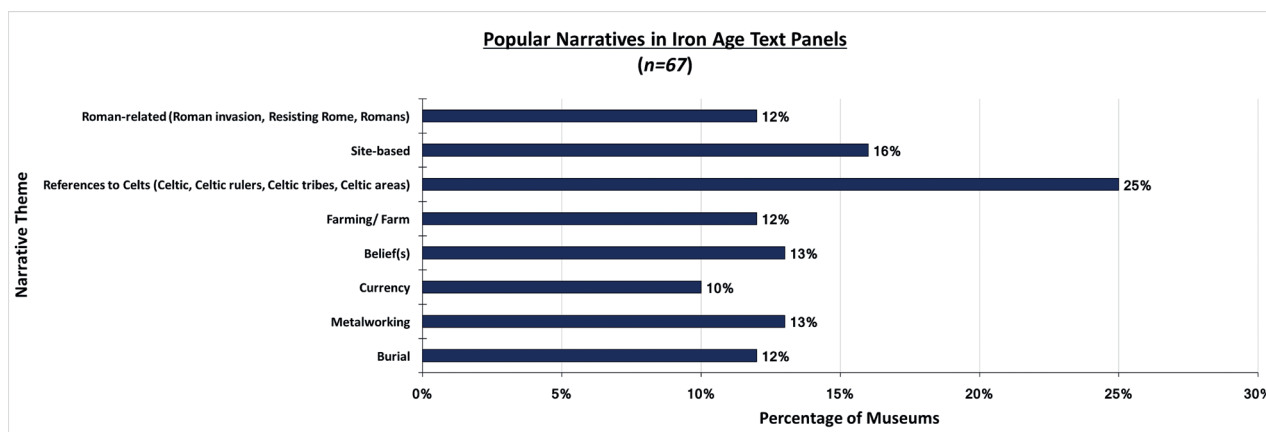


Fig. 6 - Graph illustrating narrative themes used in 10 per cent or more of the Iron Age panels across the 67 museums in the sample with Iron Age text panels.

textual interpretation of museum displays compared to how later prehistory is communicated serves to effectively 'primitivize' our earliest past.

4.4. MISREPRESENTATION OF GENDER

A plethora of literature predominantly from the 1990s (Gifford-Gonzalez, 1993; Porter, 1995; Cook, 1996; Moser, 1999; Sørensen, 1999) highlighted the poor representation of women in prehistory museum displays. These studies emphasised that women are often absent in displays and even when women are depicted, their invisibility is often reinforced by their representation in peripheral, passive and stereotyped roles. In direct contrast to the representation of men in 'active' and behaviourally complex roles at the centre of any visual depictions. Women were persistently and exclusively associated with domestic activities such as cooking, textile making and crafting, which were presented as insignificant and secondary in juxtaposition to men in active and symbolic roles: hunting, farming, making art and tools. Men were cast in the more visually prominent roles and positions, whilst women were nearly always depicted with children, reducing them to their reproductive biology, never affording them any agency beyond their roles as mother and home-maker. Prehistory displays are particularly susceptible to these binary gender stereotypes due to the lack of supporting written records and highly fragmentary nature of archaeological evidence. Despite these interpretational issues, over recent decades it has been repeatedly emphasised that these highly stereotyped roles merely reflected traditional ideas of gendered task-division and the ad-hoc application of ethnographic comparisons to the archaeological record. Such unsupported gendered stereotypes have now widely been dismantled. Yet these narrative changes have not filtered through into contemporary displays. The analysis of supporting visuals such as paintings, illustrations, dioramas and other three-dimensional reconstructions used in the sample analysed, highlighted that women are still widely misrepresented. Women are frequently

depicted with their back to the visitor or with their hair in front of their face so you cannot see their faces, effectively removing their agency (as seen in Andover Museum of the Iron Age; SeaCity Museum; Hull and East Riding Museum). They may be present but they are still 'invisible'.

To understand the extent to which men and women continue to be depicted in stereotyped gender roles the activities represented in the visual interpretation and who was depicted were categorized and quantified. Out of the 153 museums using visuals in their displays, 75 represented gender within these visuals. Figure 7 summarises the categorisation of gendered task differentiation in museum visuals, illustrating that 63 per cent of these museums continue to depict men and women in these traditional stereotyped binary gender roles, whilst 27 per cent of the museums continue to exclude women from depictions altogether.

3.5. ENGAGING VISITORS WITH PREHISTORY MUSEUM DISPLAYS

The quantitative observational behavioural data captured across the 6 case study museums revealed which displays were most effective for engaging visitor attention. This quantitative behavioural data collected from 300 visitors is summarised in figure 8, highlighting the average visitor frequency and dwell time associated with the different types of interpretation across the 6 museums. Audio-visuals and interactives attracted the highest average dwell times with visitors stopping to engage with these displays for 70 seconds and 60 seconds each. These longer dwell times provide more opportunities for visitors to absorb and engage (physically and emotionally) with the tactile and visual elements, anchoring them to the narrative. Whilst text panels represent the least popular form of interpretation across the museums with only 6 per cent of the 300 visitors stopping to engage with them, limiting the opportunities to communicate more complex narratives to visitors.

The observational data from the 6 museums also revealed a trend for visitors to engage with more

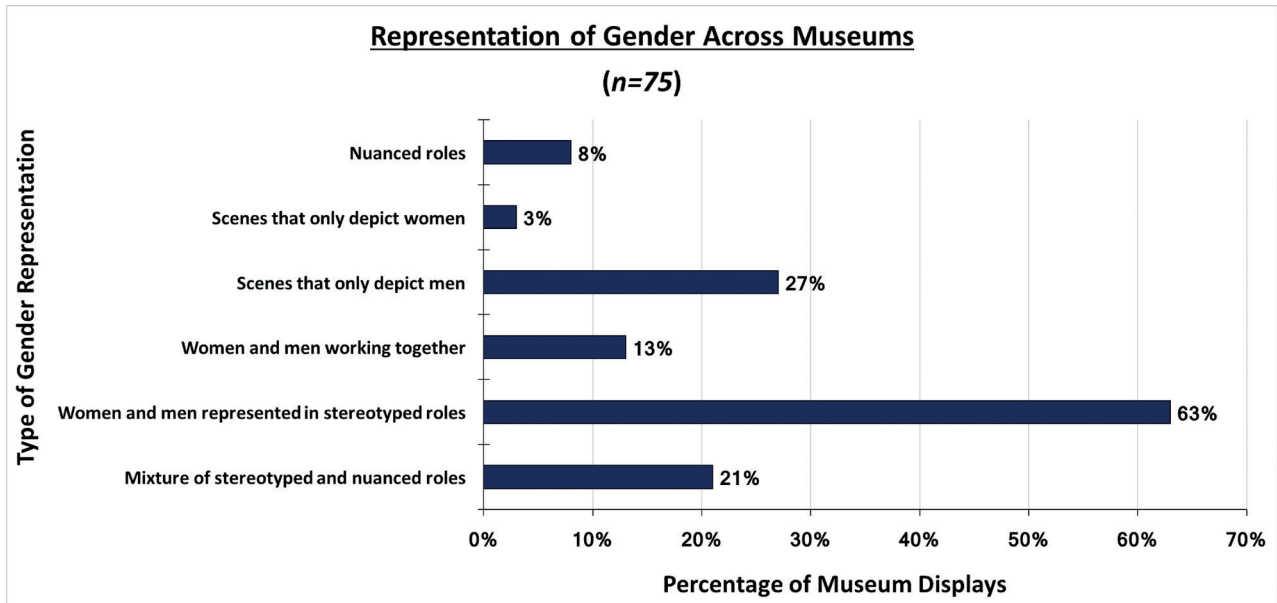


Fig. 7 - Graph demonstrating the percentage of museums within each gender representation category across the sample of 75 museums depicting gender in their visuals.

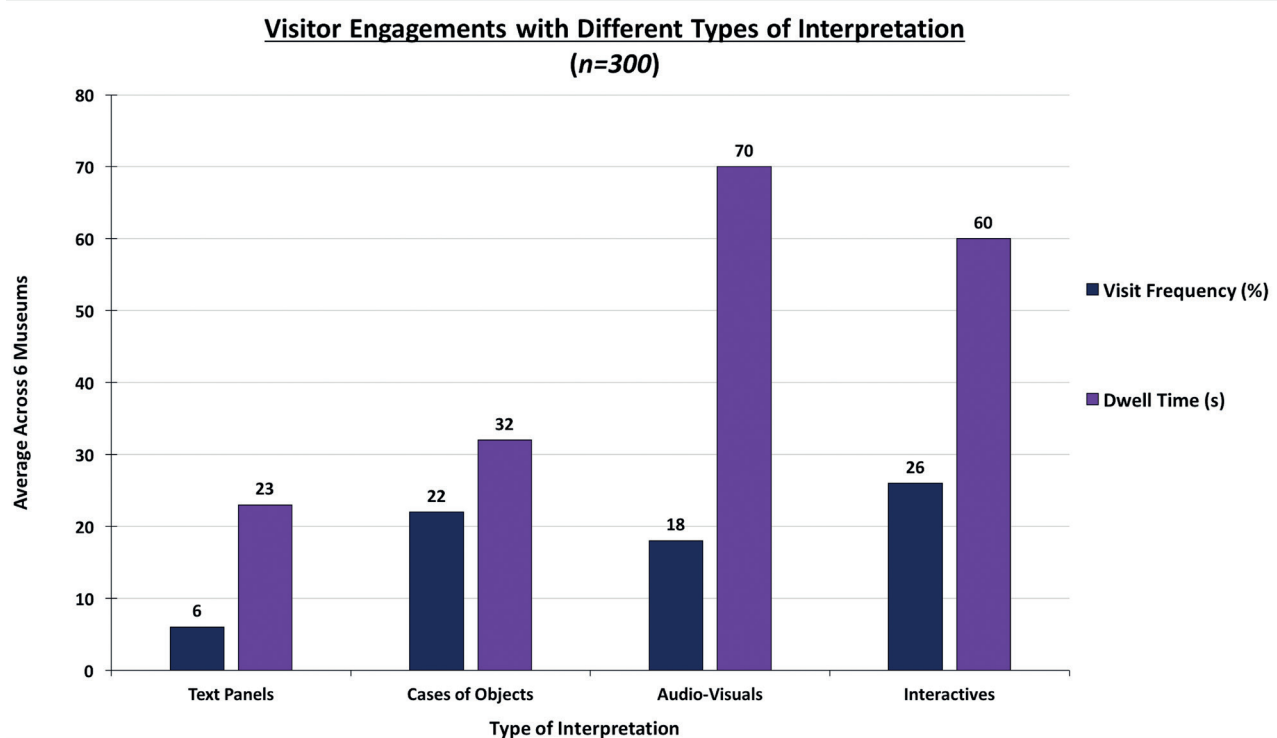


Fig. 8 - Graph summarising visitor dwell times and frequency associated with different types of interpretation across the 6 museums.

‘aesthetically’ intriguing cases such as displays of visible skeletal remains, large wall cases and ‘shiny’ metal objects such as jewellery and weaponry. This pattern for visitors to engage with more ‘visually captivating’ displays was frequently observed across the case studies. Currently such displays of jewellery, art and weaponry are mostly restricted to later prehistoric periods, again limiting engagement opportunities with earlier prehistoric periods.

4. DISCUSSION

The results summarised above have highlighted several representational disparities in how prehistory is communicated to the public through the medium of museum displays within England. Although it wasn’t feasible to extend the sample of museums investigated beyond England it was possible to visit an additional 22 museums in mainland Europe (mostly concentrated

in France and Italy) that although do not constitute a representative sample are useful for reflecting on whether the representational trends affecting prehistory displays in England highlighted in this paper can be seen more widely in European displays.

Three-dimensional reconstructions such as dioramas and life-size replicas of objects and hominins were rarely observed in the sample of museum displays in England yet seem to be more pervasive more widely in Europe. These reconstructions are often utilised to convey the social/symbolic narratives of prehistory, particularly for the Palaeolithic. Those narratives around personal ornamentation, art, domestic life and burial that are missing in the Palaeolithic displays in England are frequently represented using reconstructions (as seen in Gibraltar National Museum; Museu d'Arqueologia de Catalunya, Spain; Pôle International de la Préhistoire, France). These reconstructions, however, continue to depict men and women in traditional binary stereotyped gender roles. Despite the more diverse narratives conveyed by reconstructions in European museums, women are still rarely present and in the few museums that do present women they tend to be on the peripheries as scene decoration or in the usual domestic roles as exemplified by two reconstructions from Museo di Storia Naturale del Mediterraneo where the women are depicted in domestic settings crafting textiles and grinding grain with their faces barely visible.

The social/ symbolic narratives associated with early prehistory that are mostly absent in museum displays across England seem to be frequently communicated using replicas and casts in museum displays more widely in Europe. From recreated full size sections of cave art (Lascaux IV, France; Museo di Storia Naturale del Mediterraneo, Italy), to casts of the Laetoli footprints (Musée de l'Homme, France), to hominin skulls and replicas of portable art (Musée d'Archéologie Nationale; Musée des Civilisations de l'Europe et de la Méditerranée; Musée National de Préhistoire, France). By adopting a wider geographical focus museums in Europe have more readily incorporated replicas and casts of prehistoric objects discovered in other countries, highlighting how prehistory displays in England could include more social/ symbolic narratives to address the invisibility of these narratives in association with the Palaeolithic. Yet, museums in England have been reticent to include three-dimensional reconstructions like dioramas in displays. Perhaps due to the interpretational issues that are associated with dioramas, much like other static forms of visual interpretation, as underlined by Gifford-Gonzalez (1993), Moser (1999) and Beusing (2016) dioramas are restricted to certain stereotypical elements which tend to convey outdated assumptions. These didactic displays are continually recycling aesthetic tropes and are limited by their singular views, reuse of the same stereotypes and subjective nature masked by curatorial authority within the museum space (Moser, 1995, 1999; James, 1999). Despite these potential issues they are a powerful

medium for visualising the past and providing the agency that is often missing in prehistory displays.

The article has reflected on the disparity between how prehistory is represented in displays across England compared to mainland Europe but why is there such a difference in display styles? Why does prehistory seem to be prioritised in European museum displays? There certainly appears to be a greater scale of investment in European museums as highlighted by the € 92 million redevelopment of Musée de l'Homme, France (Lebovics and Boëtsch, 2018) and the £ 47 million redevelopment of Moesgaard Museum, Denmark (Price, 2015), whilst projects of comparable size are incredibly rare in England. It was not within the scope of the paper to evaluate the influence of this differential application of funds, yet these investments in European museums clearly indicate a greater value placed upon investing in heritage assets outside of England that is at odds with the great public appetite for prehistory within England (Biers and Harknett, 2015; Pratt, 2015).

5. CONCLUSIONS

This study has highlighted how traditional presentational styles still influence contemporary representations of prehistory in our museums and how these narratives can serve to reduce the visibility of earlier prehistory and women. However, the reflective discussion of these trends in comparison with displays in mainland Europe indicates how these representational disparities can be mitigated. Principally through the use of supporting complementary interpretation alongside the objects on display including: comparative interactives, replicas/casts and audio-visuals. Such supporting interpretation can both fulfil narrative gaps within specific collections enabling museums to present more social and symbolic narratives and engage the curiosity of the visitor, encouraging them to stop and connect with the narratives on display. Giving a face to the distant past is incredibly powerful for connecting visitors to such a temporally distant period of time, enabling visitors to come face-to-face with people like them. Museums should be more confident in the use of both two-dimensional and three-dimensional reconstructions and replicas to help communicate their stories particularly around early prehistory and the role of women. Without supporting written records such forms of interpretation within prehistory museum displays provide a valuable opportunity to change perceptions of prehistory and enhance the relatability of the period for a greater diversity of audiences.

ACKNOWLEDGEMENTS - My special thanks are due to the organising committee of the '40 years of Casal de Pazzi' conference for the opportunity to showcase the findings of my doctoral research. For taking the time to read through the manuscript my thanks go to my reviewers and Dr Jody Joy for providing such helpful and thoughtful feedback. My gratitude also goes to my PhD supervisory team: Dr Benjamin Roberts, Mrs Gemma Lewis,

Ms Anna Harnden and Ms Sarah-Jane Harknett. For providing me with access and supporting my visitor-based research at the case study museums thanks must go to Dr Neil Wilkin, Dr Julia Farley and Mr Stuart Frost (British Museum); Ms Abigail Coppins (Stonehenge Visitor Centre); Ms Rose Nicholson (North Lincolnshire Museum); Mr Barry Chandler (Torquay Museum); Mrs Martha Jasko-Lawrence (Weston Park Museum); and Mr Andrew Parkin (Great North Museum). This research was funded by a Leverhulme Doctoral studentship in Visual Culture.

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