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Abstract

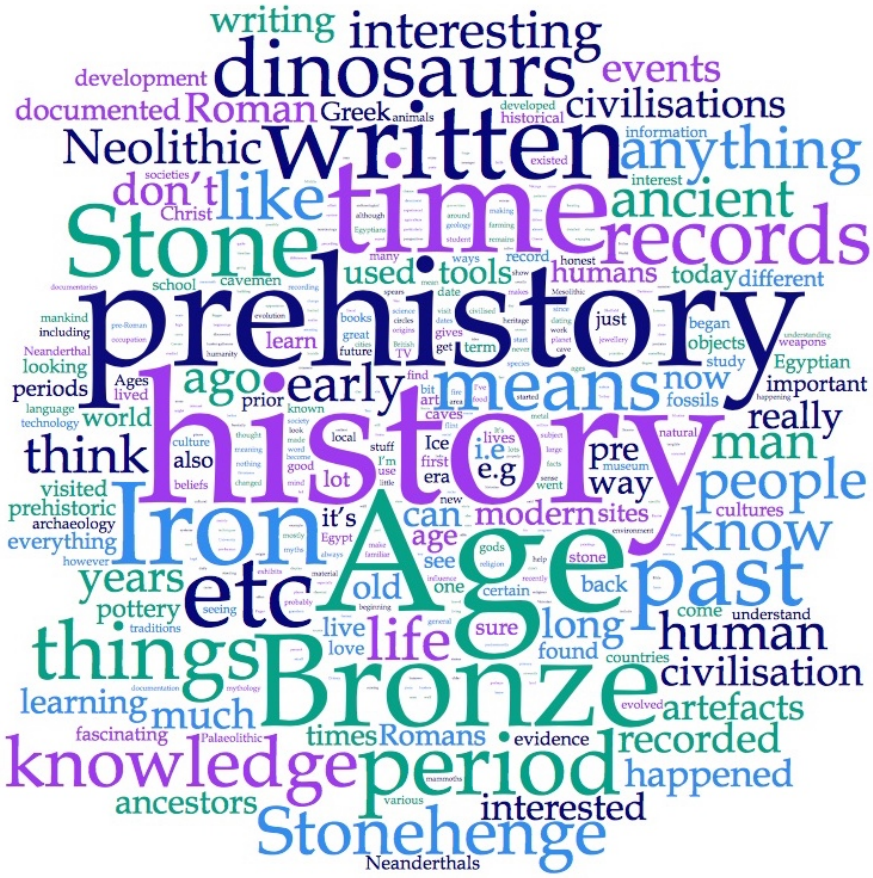
A visual and visitor-based analysis of the presentation of prehistory in museum displays across England

Felicity McDowall

Prehistory museum displays represent a vital medium through which the complex narratives of early human history are communicated to the public. These narratives, however, have not previously been analysed. The thesis addresses this historical imbalance 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 preconceptions and engagements. The combination of a visual and visitor-based analysis adopted by the thesis reveals visitor familiarity and understandings of prehistory prior to viewing displays, trends influencing the representation of prehistory within displays and visitor engagements with these different styles of prehistory display.

To facilitate the visual analysis of prehistory displays and enhance the objectivity of the analysis, 13 variables of display were recorded for 173 museums from Alnwick to Penzance. The expression of these variables analysed within the thesis reveals representational trends influencing the display of prehistory in a diversity of museums. To support the macro-scale visual analysis, tracking surveys and questionnaires were undertaken with 718 visitors across 6 case study museums: The British Museum, The Stonehenge Visitor Centre, North Lincolnshire Museum, Torquay Museum and the Great North Museum at the micro-scale. The visitor-based evaluation of prehistory displays produced qualitative and quantitative data reinforcing the visual analysis revealing how traditional approaches to presenting prehistory still govern displays today. The thesis will emphasise how these displays have resulted in representational disparities that hinder the relatability of our distant past. Moreover, the thesis will illustrate the lack of a recognisable 'brand' associated with prehistory in the public consciousness and will conclude by providing empirically-based solutions to these issues and recommendations for creating representative, enjoyable and engaging prehistory displays.

A visual and visitor-based analysis of the presentation of prehistory in museum displays across England



Word cloud produced from 285 responses to the question 'What does prehistory mean to you?'

Felicity Amelia McDowall

Thesis submitted for a Doctor of Philosophy

Archaeology Department

Durham University

2020

Volume 1 of 2

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Abbreviations

BM	The British Museum
DCMS	The Department for Culture Media and Sport
GNM	Great North Museum
MAC	Museu Arquelogic de Catalunya
MNP	Musée National de Préhistoire
MoL	Museum of London
MSNM	Museo di Storia Naturale del Mediterraneo
MuCEM	Musée des Civilistions de l'europe et de la Méditerranée
NHLF	National Heritage Lottery Fund
NHM	Natural History Museum
NLM	North Lincolnshire Museum
NMS	National Museum Scotland
ST Fagans	St Fagans National History of Wales
SVC	Stonehenge Visitor Centre
TQ	Torquay Museum
WHS	World Heritage Site
WP	Weston Park Museum

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I dedicate the thesis to my beautiful Godson Bailey Oliver who was born whilst I was undertaking this research

Chapter 1: Introduction

1.1 Introducing the research

Prehistory is an expansive and important time period, encompassing over 3 million years of global human history. It therefore incorporates a great expanse 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). It is also a period of great public fascination and interest as evidenced by high viewing figures for television documentaries about the period (Milner *et al.*, 2015; 133; see B.A.R.B, 2020) and high visitor figures for the British Museum 'blockbuster' prehistory museum exhibitions such as '*Ice Age art: the arrival of the modern human mind*' and '*Celts: art and identity*'. Museums are highly influential in how the public perceives prehistory, they are important educational sites for constructing and communicating knowledge through display, mediating between academics and the public (Pearce, 1990; Hooper-Greenhill, 2000; Barrowclough, 2004; Moser, 2006, 2010; Barker, 2010; Petrov, 2012). They are popular sites for learning, self-enrichment and entertainment for the public, with the British Museum ranked as the second most popular visitor attraction in the UK (ALVA, 2019). Museums are thus best placed to inform and engage visitors with the complex narratives of prehistory, particularly following the recent addition of prehistory to the national curriculum for Key Stage Two (KS2) children in England (Department of Education, 2013; Biers and Harknett, 2015). Yet, despite the popularity of prehistory, its immense time depth, integral role in shaping our history and the importance of museums for communicating this vast period to the public, prehistory museum displays in England and the impression of prehistory they are presenting to the public have not previously been evaluated. The thesis has thus developed a dual-scale approach combining methods of visual and visitor-based analysis to provide an evaluation of prehistory displays across England. Representing a study with both

breadth and depth, incorporating a visual analysis of 72% of all prehistory displays in England with an evaluation of 600 visitor surveys (figure 1.1).

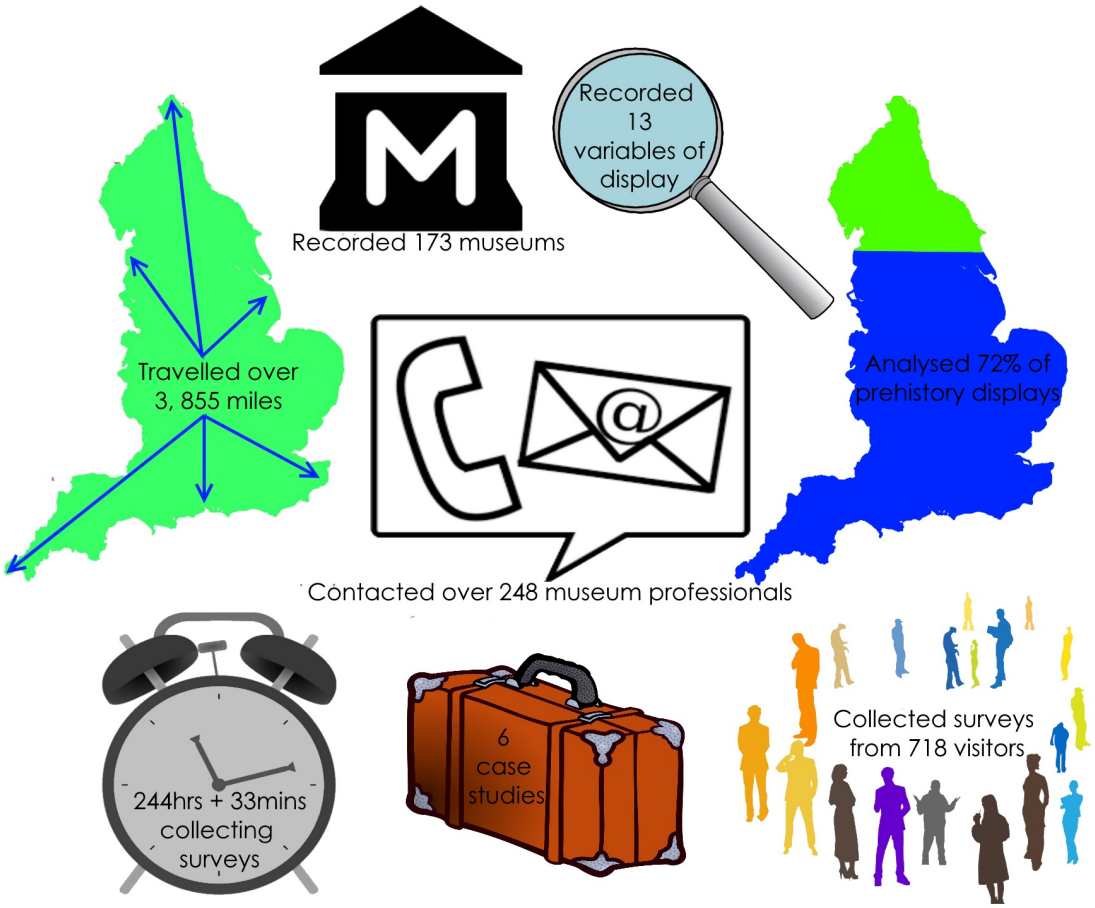


Figure 1.1. Infographic emphasising the scale of the thesis.

1.2 The importance of the research

The thesis utilises a combination of qualitative and quantitative methods to evaluate museum displays in England. The approach presented is paramount for better understanding visitors, current prehistory display styles and which of these styles are most effective for stimulating visitor engagement with the period. The results from the thesis can then form the basis for creating more accessible, enjoyable and engaging displays that are pitched at the right level, cater towards visitor interests and encourage them to engage with displays. Thereby achieving the desired outcome for any museum display and enhancing their appeal to potential and repeat visitors providing greater security in an increasingly unstable economy and tumultuous heritage sector. The effect of the financial crisis of 2008 which has already decimated

the museum landscape is still being felt by museums today which continually face the prospect of damaging budget cuts and closure (Museums Association, 2017, 2018). Furthermore, the economic uncertainty following Brexit and the COVID-19 crisis merely exacerbates these existing issues of systemic underfunding that are so endemic within the heritage sector (Mendoza, 2017; Art Fund, 2020; Museums Association, 2020). Creating displays with wide public appeal and demonstrable importance is thus key for their survival and financial security. It is therefore hoped that the thesis can in some small way help museums of all sizes to tackle these issues by providing greater insight into their visitors and how best to appeal to them. Museums are increasingly required to demonstrate their impact and value to their local communities and visitors (Mendoza, 2017:42), consequently the thesis will demonstrate how museums can measure the impact of their displays.

1.2.1 Why evaluate museum displays?

There are multiple mediums that communicate the past to the public that can greatly influence how the public consume, relate to and understand their past. The thesis however, will analyse museum displays over other forms of communication due to the pivotal role they perform in heritage discourse. There are around 2,500 museums within the UK (Museums Association, 2020), attracting visitor figures in excess of 49 million visits a year with an average of 50% of the adult population reportedly visiting a museum or gallery in the past 12 months (DCMS, 2019). Museums represent the top 4 visitor attractions in the UK (ALVA, 2019) and are perfectly situated between academic and public spheres. Their abundance in combination with the scale of museum visiting within the UK attest to their centrality as arenas for public outreach. In the current 'post-truth' era of social media museums are commonly viewed as trusted repositories of 'expert' knowledge where authoritative versions of events can be ascertained (BritainThinks, 2013). Museums are by no means neutral de-politicised spaces and are often critiqued for reflecting present political ideologies and conceptions onto the past (Pearce, 1990; Shanks and Tilley, 1992; Skeates, 2002). Their narratives, however, framed within primarily didactic environments associated with educational values and expert scholarship are imbued with an aura of

legitimacy. The visitor therefore perceives these institutions to present objective interpretations of the past, in opposition to the media (BritainThinks, 2013). There is consequently a need to critically evaluate and question the narratives that museums are currently presenting about prehistory that are going unchallenged, hidden behind curatorial authority. There is, however, minimal support that curators can access to assist their research upon collections and perhaps influence the narratives being presented in museums. To address this imbalance there are certain scholarship schemes such as the Headley fellowships (Art Fund, 2020) to enable curators to undertake collections-based research to benefit themselves, the displays and the public. Accordingly, the thesis as well as highlighting popular narratives communicated by contemporary prehistory displays also hopes to provide some additional support that curators can access to enable them to make the most of their unique collections.

1.2.2 Why prehistory displays?

The thesis will focus on the representation of prehistory in museums rather than other later historical periods for 5 key reasons.

1 There is demonstrable public interest in prehistory

Prehistory is becoming particularly pervasive in popular culture. The public clearly has an appetite for prehistory as the exceptionally high visitor figures to Stonehenge demonstrate, with 1,555,868 people paying to visit the widely recognisable symbol of British prehistory in 2018 alone (ALVA, 2019). The popularity of the period is also demonstrated by the increase in television documentaries, films and social media platforms focusing on prehistory, as well as high profile televised excavations in recent years (Biers and Harknett, 2015; Pratt, 2015). Prehistory is growing ever more popular in the public consciousness but the period is still frequently misunderstood (Merriman, 1991; Historic England, 2010; Pratt, 2015). Historic England (2010) is therefore attempting to address these issues through their current research strategy for prehistory, to improve its visibility and public engagement with it. The importance

of communicating the value of prehistory and enhancing public understanding is broadly encapsulated by the following statement;

> *"If communities understood the value of their local heritage its protection can be enhanced within the planning process. The risks of not acting are a continuing low awareness and appreciation of prehistory among the public, policy makers and even other parts of the historic environment sector, potentially leading to weak political resolve, reduced funding, and a low priority within heritage policy and planning."* (Historic England, 2010:18)

The thesis aims in part to support Historic England's (2010) research strategy by gauging public perceptions of prehistory, whether current museum displays reinforce or challenge these perceptions and how museums can better engage visitors with this distant and expansive period, facilitating greater potential engagements with prehistory.

2 Prehistory has been subjected to problematic politicisation in recent years

Under the current political climate of increased xenophobia, right-wing extremism and political dissent in the wake of the Brexit referendum prehistory has been increasingly adopted into problematic discourse around race, indigeneity and genetic superiority (Milner *et al.,* 2015; Brophy, 2018; Bonnachi *et al*., 2018; Booth, 2019; Dixon, 2019; Frieman and Hofmann, 2019; Hakenbeck, 2019). The thesis thus represents a timely study against a political landscape in which the deep past is being increasingly co-opted by extremist groups to connect their ancestry with prehistoric sites and people, providing their fanatic ideologies with legitimacy. Prehistory is often invoked by these radical groups to add credence to their political beliefs by claiming exclusive ownership of the past to support their narratives. These issues have plagued archaeologists for decades as different aspects and periods of the past have been used to support a variety of political ideologies over the years (Wood and Cotton, 1999; Ballard, 2007; Brophy, 2018). Prehistory is, however, particularly susceptible to this problematic politicisation due to the lack of written records and ambiguous archaeological record that enable the construction of these narratives and prevent them from being easily challenged. Furthermore, these issues have been

exacerbated by the Brexit referendum results in which prehistoric monuments have increasingly been misappropriated as symbols of 'Britishness', as exemplified by the use of the Neolithic stone circle, Stanton Drew as a backdrop for a pro-Brexit video by the politician Jacob-Rees Mogg in the run up to the 2019 election and the use of the Neolithic burial chamber Wayland Smithy as a ceremonial meeting space by British Neo-Nazis in 2019 (Dixon, 2019; Barclay and Brophy, 2020). Moreover, recent isotopic analysis of a restricted sample of pig teeth found at Durrington Walls have been spuriously linked to a 'Neolithic Brexit' (Barclay and Brophy, 2020), reflecting contemporary political ideologies onto interpretations of the past. Museums are therefore best placed as institutions of perceived authority to subvert and dispute these problematic narratives of 'indigeneity' and ethnically-motivated exclusive ownership of the past. Contemporary geographic boundaries associated with specific cultural-political identities do not map easily onto prehistory and museums are situated to highlight this and capitalise on the powerful narratives of migration and diversity that prehistory interpretation can provide to subvert insidious narratives of superiority and indigeneity.

3 Prehistory has historically received the least attention within museum displays comparative to the time breadth it represents

Prehistory displays have historically been relegated to the back of museums, provided with less interpretation and display space comparative to later historical periods, despite representing a broader expanse of time (Wood and Cotton, 1999). Wood and Cotton (1999) also emphasise how prehistory displays are often conflated with archaeology removing their temporally situated identity, enhancing the relative 'invisibility' of the period compared to more well-known and familiar periods such as the Victorians or the Romans which have traditionally featured more prominently in school curricula and the media and are consequently more embedded within the public consciousness. Promoting a greater representation of prehistory in museums requires investigating whether these issues still persist within contemporary museum displays and how they can be combatted. By identifying trends in how prehistory is currently presented in museums, suggestions will be made to better

reflect current scholarship and improve the representation of prehistory which is central for improving public understanding of the period.

4 Museums face numerous interpretational challenges when presenting prehistory

Prehistory is an inherently difficult period to present to the public (Pearce, 1990: 161) due to the lack of supporting written records that could facilitate the interpretation of its material remains, enhancing its accessibility. Furthermore, its temporal distance from today further decreases its relatability to contemporary audiences and subjects the material remains to greater taphonomic influences resulting in a fragmentary and sometimes ambiguous archaeological record. These issues impose numerous interpretive challenges for museums attempting to convey the complex trajectory of prehistory to the public. Museums are therefore confronted with the following questions when attempting to interpret prehistory within the context of display.

- How can museums present the great expanse of time covered when they cannot relate visitors to identifiable individuals or events?
- How can museums construct compelling narratives encompassing nearly 1 million years of human history without homogenising and simplifying the past?
- How can museums engage visitor's interests with decontextualized similar looking small dull-coloured lithics and pottery sherds?
- 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 objects with more aesthetic value or rarity without over-'exoticising' or over-emphasising their importance?
- 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?

The thesis aims to resolve these questions through a thorough investigation of contemporary prehistory display trends, visitor interests and engagements with prehistory displays.

5 Prehistory displays are a powerful and un-challenged medium of communication

It is widely recognised within museum studies that museums are sites of learning and education for all ages and inherently perform a powerful role communicating archaeological knowledge to the public (Hooper-Greenhill, 2000; Moser, 2006; Bünz, 2012). Despite the democratisation of museum narratives following the advent of critical reflective thinking heralded by 'New Museology' (Vergo, 1989) and an increase in co-curating museum displays with local communities, the majority of museum displays in England remain relatively didactic. Museums are, however, valued for their perceived authority and are often utilised as a supplementary educational resource by teachers, particularly since prehistory entered the curriculum. The introduction of prehistory to the national curriculum was rather unexpected and left many teachers unprepared. After decades of experience teaching other more familiar historical periods, teachers are now required to teach primary school children prehistory, chronologically from the Stone Age through to the Iron Age (Department of Education, 2013). Teachers are facing the daunting challenge of interpreting prehistory for themselves and then teaching this complex period to students in a clear and coherent manner. There has been a mixed response from museums in light of the curriculum change with some rapidly including prehistoric material, some expanding their educational facilities and resources for teachers and others unable to respond to the change due to practical and financial constraints (Biers and Harknett, 2015). The importance placed upon museums for educating children about prehistory further reinforces their instructive role. Such reliance upon museums for their instructive abilities requires a review of the narratives they are presenting, un-challenged within their displays. No such review of a wide sample of museum displays has been forthcoming and consequently the thesis will undertake a critical evaluation of prehistory displays in England.

1.2.3 Original contribution of the research

The thesis represents an original contribution for 3 primary reasons which will be outlined below.

1 The scale of approach

The scale of approach adopted by the thesis operating at both a macro and micro-scale to provide both breadth and in-depth detail of the museum displays analysed has not previously been applied to evaluations of prehistory museum displays. At the macro-scale, which will be further introduced in Chapter 3, the thesis will utilise a visual analysis adapted from Tully (2010) and Moser (2006, 2010) to visually analyse 173 museums recorded across England to identify common prehistory display trends and at the micro-scale, also further elaborated in Chapter 3, the thesis will evaluate 'fine-grain' visitor-data collected at 6 case study museums in a 2-part questionnaire and tracking surveys. These collection methods are rarely undertaken together, it is only by combining both methods that both qualitative and quantitative data can be ascertained. In contrast to this dual-scale methodology combining both visual and visitor-based analysis techniques, previous research has been based upon comparably limited data sets. Previous studies have tended to focus on a geographically restricted data set of 1-5 museums and primarily consisted of anecdotal and subjective inferences about displays and their perception, the shortcomings of which will be reviewed in further detail in Chapter 2. In contrast to these previous studies, the thesis will combine a geographically broad data set of 173 museum displays evaluated utilising 13 visual variables and visitor-data from 600 visitors to evaluate prehistory museum displays.

2 The combination of visual and visitor-based analyses

The thesis utilises an original approach to understanding prehistory museum displays by combining both visual and visitor-based analyses. The combination of these methodologies which will be further emphasised in Chapter 3, will identify how prehistory is represented and which display trends are most engaging for visitors. The findings and methodology can then be applied more broadly to the

representation of other periods within museum displays within and beyond England, broadening the scope of future research.

3 The broad focus on prehistory

Unlike previous analyses of prehistory and its representation the thesis will not focus on just one aspect of display or a single prehistoric period but the representation of all of prehistory from the Palaeolithic to the Iron Age. This focus reflects the representation and treatment of prehistory in most museum displays and enables the recognition of broader display trends.

1.3 Defining the scope of the thesis

Due to the sizable number of museums within the UK covering a broad geographical expanse it would not be feasible to systematically and comprehensively evaluate all of their prehistory displays within the timeframe of the PhD. Therefore, the thesis has restricted its focus to prehistory displays within England. Furthermore, to capture the diversity of prehistory display styles the thesis adopts a relatively broad definition of 'museum displays' including visitor centres associated with prehistoric sites, natural history museums with Palaeolithic material on display, historic houses, art galleries and small volunteer-run heritage centres with prehistoric material on display. Prehistory is generally defined as the history of humans before the written record but the precise boundary for when this period begins and ends is a matter for debate (Hunter and Ralston, 2009; Cunliffe, 2013). The thesis will focus primarily on material excavated from the British Isles as the majority of museum collections in England are unsurprisingly composed of British prehistory and occasionally include European prehistoric material alongside British collections. Global prehistory displays will not be included as these displays are usually presented separately to more local collections of prehistory and are often governed by different display conventions. Consequently, the thesis will only evaluate displays primarily composed of British material dating to any point from the Palaeolithic to the end of the Iron Age. Furthermore, the thesis defines British prehistory as the period from ~800, 000 years ago when the first hominins arrived in Britain (attested to by preserved footprints at

Happisburgh, Norfolk) till AD 43 when much of the British Isles began to be populated by the Romans (Lynch, 2007; Dinnis and Stringer, 2014).

1.3.1 Limitations of the thesis

The combined dual-scale approach adopted by the thesis dictates that both the macro and micro-scale data sets could not be further augmented within the timeframe of the PhD. Consequently, there are a few limitations of the research to be aware of and caveats to be discussed. Firstly, although the geographical breadth of the museums recorded at the macro-scale are restricted to England it was still not practical or feasible to visit all museums with prehistory on display. I do not own my own form of transportation and as a result certain museums which were more inaccessible and situated further away from public transport routes could not be included. Furthermore, as will be further explored in section 3.2.1, this data set is primarily restricted to Accredited museums as it was exceptionally difficult finding museums that are not listed on the Arts Council (2020) Accreditation scheme. Accordingly, museums without Accreditation, unless they possess a well-known prehistory display were not included in the data set. Additionally, even though the Arts Council lists all museums with complete or partial Accreditation, it is still difficult interpreting which of these museums display prehistory. Even after checking their websites and enquiring over the phone and via e-mail it is likely that there are still a number of museums with prehistory displays that were unfortunately not included in the macro-scale data set for visual analysis. These issues with the data-set will be further discussed in Chapter 3. Despite these issues, however it is estimated as will be discussed in section 3.2.4, that over 50% of predicted prehistory displays were recorded in each region of England so a broad understanding of prehistory display trends was still achieved.

The visual analysis although broader in scope than previous analyses as will be discussed in Chapter 2 was inevitably restricted by the timeframe of the PhD. It was only feasible to analyse 13 variables of display, although other variables such as the qualifications of curators, differences in presentational styles between different

types of museums or the online presence for museums could also have been explored if there was more time. Additionally, the visitor-based data collection as will be further emphasised in Chapter 3 was restricted to weekdays during term time to remain consistent across the case studies. Although it is acknowledged that the demographics captured by the visitor-based data will therefore be different to weekend and holiday visitors.

Another caveat to be considered, as will be discussed in Chapter 3 is the effect of tracking distance upon the detail captured on the tracking surveys. The tracking surveys were undertaken at a minimum distance of 2 metres from the tracked visitor to be less intrusive and more discrete. Subsequently, it was not always possible to discern the direction of the visitor's gaze if there were several displays in close proximity. Furthermore, it was not feasible to differentiate whether a visitor was engaging with an object description, specific object or text panel if these were all situated within the same display case. The results of the tracking surveys should therefore be treated with caution and room for minor errors accommodated. Moreover, the demographic data obtained from the tracking surveys and questionnaires could have been further analysed but it was not within the scope of the thesis to go beyond a superficial analysis to create visitor profiles, further discussed in Chapter 4.

1.4 Aims and objectives

The ultimate ambition of the thesis is to undertake a holistic evaluation of prehistory displays in England by investigating contemporary trends in how prehistory is presented in museums and analysing how these displays affect visitor engagements and interactions. Three core aims were utilised to achieve the overarching ambition of the thesis and can be summarised as follows;

1. Gain an understanding of public preconceptions of prehistory
2. Identify common themes and trends in how prehistory is presented in diverse museums across England

3. Identify which display types/ methods are most effective for engaging visitors with prehistory displays

The objectives that will be utilised to accomplish these aims can be summarised as follows;

1. Collect and interpret visitor pre-display understandings and interests associated with prehistory
2. Produce and analyse a comprehensive database of prehistory displays in England
3. Record and interpret visitor engagements and interactions with prehistory displays
4. Collect and interpret visitor responses to prehistory displays

1.5 Research questions

To address the aims and objectives of the thesis as summarised above the following research questions will be applied to structure the thesis;

1. What preconceptions do the public have about prehistory before viewing the displays?
    a) What are the trends and variables?
    b) Where does this knowledge come from?
    c) What do they find most/ least interesting about the concept of prehistory?

2. How is prehistory presented in different types of museum across England?
    a) What are the trends and variables?

3. How do visitors engage with prehistory displays?
    a) What are the trends and variables?
    b) What do they find most/ least interesting about prehistory displays?

c) What do visitors want to see more of in prehistory displays?

d) Do visitors learn from prehistory displays?

1.6 Summary of the research framework

To further reinforce how the thesis is structured around the three key research questions, how the objectives and research aims will be addressed in each Chapter and how they relate to the dual-scale approach combining visitor-based analysis with visual analysis these relationships are outlined below in figure 1.2.

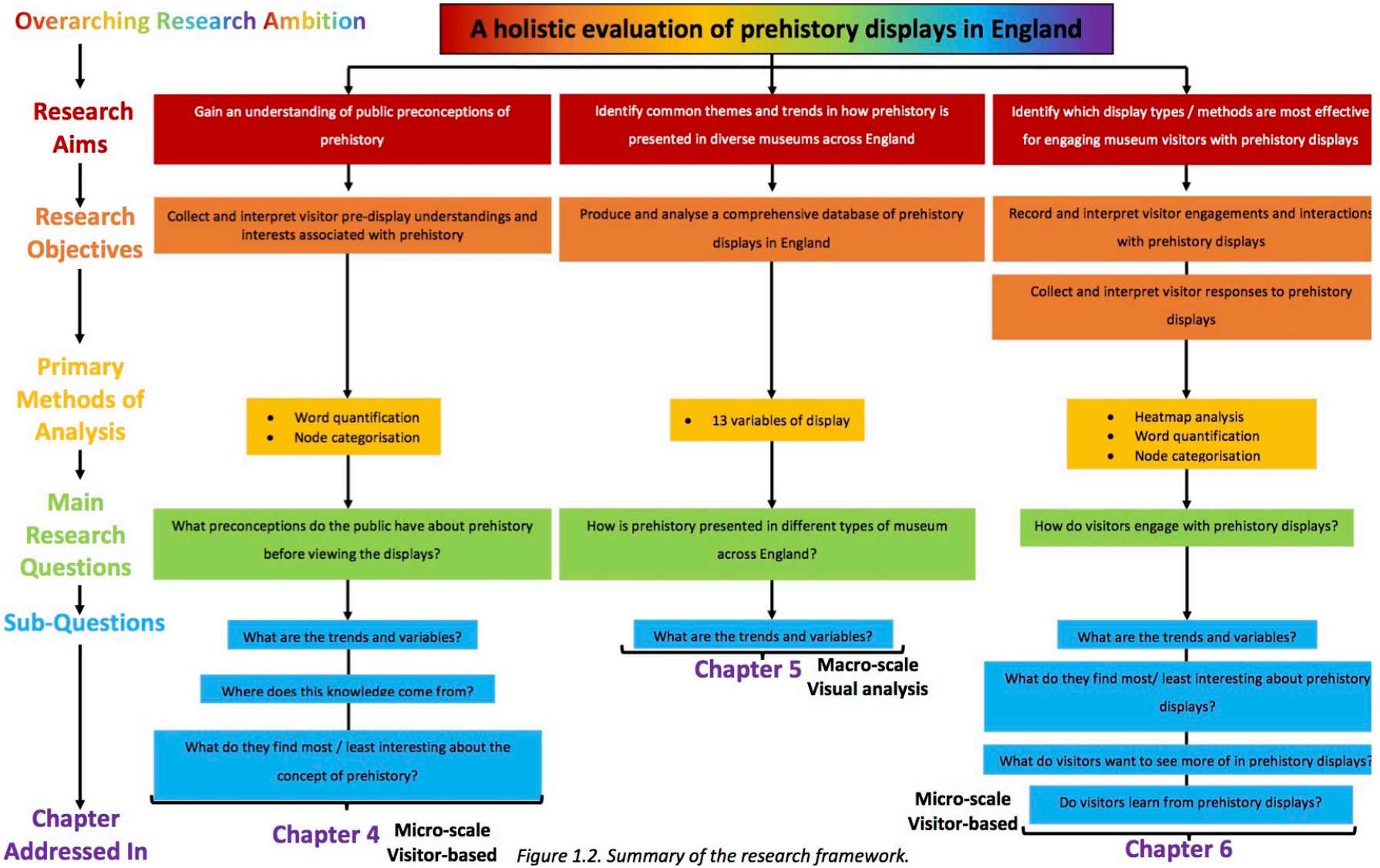


Figure 1.2. Summary of the research framework.

1.7 Structure of the thesis

This Chapter has introduced the research that will be undertaken in the following chapters, outlining the context and importance of this research against a changing heritage landscape. Evaluating the impact of museum displays is pivotal for demonstrating the value of museums and their collections and is especially pertinent in the current economic climate with many museums facing greater financial pressures. The thesis will thus demonstrate how a combined methodology of visual and visitor-based analyses can be utilised to measure the impact of museum prehistory displays.

To further contextualise the research that will be undertaken throughout the course of the thesis, Chapter 2 will review the previous scholarship relating to prehistory museum displays. Previous evaluations and analyses and their findings will be situated in relation to the three core research questions. Focusing on previous research into public perceptions of prehistory, the representation of prehistory in museum displays and visitor engagements with prehistory displays. Following the review of the thus far limited research into prehistory museum displays, Chapter 3 will then outline the dual-scale methodological approach that will be utilised to evaluate prehistory displays. Chapter 3 will explicate how visual analysis will be utilised to capture general trends within prehistory displays at the macro-scale and how visitor-based data collection in the form of questionnaire and tracking surveys at the micro-sale will be used to gather 'fine-grain' data about visitor pre-display preconceptions of prehistory, engagements with displays and their perceptions of displays. Chapter 3 will further reinforce the underlying reasons behind undertaking a combined approach for producing both qualitative and quantitative data that captures broad trends and depth of detail.

After setting up to the contextual background for the research, Chapters 4, 5 and 6 present the findings garnered in relation to each research question. Firstly, Chapter 4 will explore the first research question, '*What preconceptions do the public have about prehistory before viewing the displays?''* by investigating the responses to the

first part of the visitor questionnaire undertaken at the 6 case study museums before viewing displays. These qualitative responses will be analysed utilising word quantification and node categorisation to produce comparative quantitative data about public familiarity and understanding of the period before viewing displays. Chapter 5 will then explore the extent to which these preconceptions are challenged or reinforced by contemporary prehistory displays by addressing the second research question, *'How is prehistory presented in different types of museum across England?'.* This question will be resolved by analysing 13 variables of display across the sample of 173 museums recorded to reveal contemporary display trends between different types and sizes of museums across England. With these trends in mind Chapter 6 will then explore how these various types of display style identified in Chapter 5 were perceived and engaged with by visitors, fulfilling the third research question*, 'How do visitors engage with prehistory displays?'*. Chapter 6 will then utilise the responses from the second part of the questionnaire in combination with the visitor behaviour recorded in the tracking surveys to gain an understanding of what display styles are more engaging for visitors, what content visitors want to see more of and how these displays alter their preconceptions of the period. All of these analysis Chapters will then be brought together in Chapter 7 for discussion to further explore certain salient points revealed during the analysis. Chapter 8 will then present a conclusion summarising the discussion and main findings of the dual-scale analysis and on this basis will suggest further areas for enquiry in future research.

Chapter 2: Literature Review

2.1 Introduction

This Chapter will summarise the previous scholarship undertaken in the intersecting disciplines of museum studies, archaeology and visual culture studies that relate to the 3 core research questions of the thesis. A few studies have evaluated either the representation of prehistory, preconceptions of it or interactions with prehistory displays but never have all of these elements been analysed together across multiple museums, as will be highlighted in this Chapter. The review of literature will primarily focus on the trends identified by previous analyses which can be used as a benchmark against which to measure my analyses. This Chapter will also assess the limitations of previous studies to further emphasise the legitimacy of the thesis.

2.2 Public preconceptions of prehistory

The first research question the thesis seeks to address is, *'What preconceptions do the public have about prehistory before viewing the displays?'* to gauge public preconceptions and familiarity with the concept of prehistory. Before this question is addressed by the visitor-data collected for the thesis in Chapter 4, it is important to first understand the background knowledge of public preconceptions already ascertained by previous surveys. Previous research into public preconceptions of prehistory has, however, so far been somewhat restricted with only one study presenting a specific insight into public preconceptions of prehistory and this study was undertaken over twenty-five years ago (Cotton, 1995; Wood, 1996; Wood and Cotton, 1999). General assumptions about the level of public knowledge associated with prehistory are usually derived from wider studies of public perceptions and attitudes towards archaeology or heritage, which were mostly undertaken in the 1980s (Pearce, 1990; Merriman, 1991). In contrast, surveys more specifically investigating perceptions of prehistory in recent years have been rather restricted in

their focus, either gauging preconceptions in a specific geographic area (Pratt, 2015) or about a specific period of prehistory (TW Research, 2014; Milner *et al*., 2015).

The investigation of public preconceptions of prehistory most comparable and relevant to the thesis was undertaken before and after the 1994 re-display of the Museum of London's (MoL) prehistory displays (Cotton, 1995; Wood and Cotton, 1999). Between February to November 1992 visitors to the museum were asked, '*Please can you tell us what you associate with the word prehistoric?*' (Wood and Cotton, 1999:43). The 1,836 responses collected from this question pose a useful comparison to the visitor-based data that will be analysed for the thesis, over 25 years later. Although Wood and Cotton's study was focused on only one location, it does not demean the representative nature of the responses collected due to the overwhelming number of respondents who participated. Respondents to Wood and Cotton's survey represent a variety of different demographic profiles of visitors from across the UK and further afield (Cotton, 1995).

Wood and Cotton (1999) quantitatively analysed the qualitative responses produced in their 1992 survey to identify the frequency of certain words and phrases that visitors associated with the word 'prehistoric', the results of which are summarised in table 2.1. Despite collecting the responses within the museum the most popular associations with prehistory identified by Wood and Cotton (1999) were '*dinosaurs*' and *'cavemen'*, presenting a level of knowledge reliant upon stereotyped views of prehistory influenced by popular portrayals in the media. Many respondents also associated prehistory with its durable material remains, with a particular focus on the ambiguous categories of *'tools'* and '*weapons'* and the materiality of most prehistory collections composed of '*flint/ stones'*. A number of respondents could define prehistory as '*before written history'* yet very few respondents could name specific prehistoric periods with the *'Stone Age'* mentioned the most frequently, by 74 people and the *'Bronze Age*' mentioned by only 11 people out of 1,836. The impression of visitor preconceptions gained from this survey is an overall lack of familiarity with the period as most preconceptions were reliant upon a very basic

understanding of prehistory centred around outdated stereotypes of violent primitive cavemen living contemporaneously with dinosaurs.

Ranking	N	%	Word (s)
1	527	28.7	dinosaurs
2	176	9.6	cavemen
3	134	7.3	tools/ weapons, flints/ stones
4	104	5.7	animals/ monsters
5	97	5.7	before written history
6	83	4.5	very old
7	74	4.0	Stone Age
8	36	2.0	hunting, mammoths
9	34	1.9	early man, no response
10	32	1.7	history/ archaeology
11	31	1.7	pre-Roman
12	29	1.6	bones
13	22	1.2	before Christ
14	20	1.1	barbarism
15	17	0.9	Ice Age
16	16	0.9	caves, ruins/ relics, Stonehenge
17	15	0.8	early civilisation
18	13	0.7	fossils, cave paintings, huts
19	11	0.6	Bronze Age
20	10	0.5	Celts

Table 2.1. Summary of the 20 most popular visitor responses to the question 'Please can you tell us what you associate with the word prehistoric?' from 1,836 respondents at the Museum of London collected in 1992. Adapted from Wood and Cotton, 1999:43.

The extent to which these understandings of prehistory still persist in contemporary museum visitor preconceptions will be analysed in Chapter 4.

2.2.1 Public attitudes towards the past

Apart from Wood and Cotton's analogous study of public preconceptions, the most comprehensive survey which has attempted to gain an insight into public preconceptions of the past was Nick Merriman's (1989, 1991) nationwide postal survey of public attitudes towards heritage. This survey was undertaken in 1985 with 965 respondents (Merriman, 1991). Merriman's (1991) aim was to understand public attitudes to the past rather than to dissect what people thought about prehistory.

Overall, Merriman (1991) concluded that the public are interested in the past and that museum visiting and interest in heritage is strongly influenced by socioeconomic status. Due to the broad scope of this questionnaire, however, it only specifically addressed 'prehistory' in two questions. The first question that referenced prehistory asked respondents to rank the attractiveness of 6 different periods from prehistory to present which were arranged out of chronological order. The majority of respondents placed the periods in chronological order with prehistory at the bottom, as the least desirable period to live in (Merriman, 1991:34), providing an overwhelmingly negative response. This response perhaps reveals a general understanding of chronology and undesirability linked to the time depth that prehistory represents. It is, nevertheless, difficult to ascertain respondent motivations behind this response due to the static nature of the postal-questionnaire format, which prevents further enquiries from being made. The second question referencing prehistory in Merriman's survey, posed the statement, *'Prehistoric people in Britain were basically the same as us?'* and asked respondents to indicate how much they agreed (Merriman, 1991:101) using a standard 5 point Likert scale. Responses to this question were again rather negative about prehistory, as the greatest proportion of respondents disagreed with the statement, implying that people in prehistory were strange and unfamiliar. These findings appear to indicate a general lack of familiarity associated with the term 'prehistory'. This understanding of public attitudes towards the period should, however, be treated with caution as this survey was carried out over thirty years ago. Consequently, it does not provide any insight into contemporary visitor conceptualisations of the past, which may be influenced by the rapid changes that have occurred in museums during this timeframe, with the professionalisation of the museum sector, increased use of multimedia in the gallery space, increasing visitor numbers, as well the exponential growth of the internet. Furthermore, as this survey was distributed via post, Merriman himself exercised very limited control over who or how the survey was answered and consequently it is difficult to assess how random and representative of the wider population his sample was. Merriman's landmark survey constitutes a broad baseline from which to build a more detailed, complete and current understanding of public perceptions.

An overview of public preconceptions about the 'past' in rather ambiguous terms has also been provided by Pearce (1990) who postulated some key findings revealed by a survey of public attitudes undertaken by Cambridge Research Cooperative in 1983. Pearce (1990) in line with Merriman's (1991) findings identified that there is widespread public interest in the past and associated greater socioeconomic status with a greater understanding of the past. Pearce (1990:135) also suggested that most people's knowledge of the past is at a rather simplistic level influenced by popular media portrayals such as, the iconic image of Raquel Welch in a fur bikini in the film *'One Million Years BC'*, reflecting the preconceptions captured by the first survey undertaken at the MoL (Wood and Cotton, 1999). The general assumptions about public perceptions that Pearce outlines are, however, unsubstantiated by qualitative or quantitative visitor data provided by Pearce so it is unclear quite how she came to these conclusions. Furthermore, the findings discussed by Pearce (1990) like Merriman's (1991) survey were captured over thirty years ago within a very different context. The extent to which these fairly simplistic and stereotyped understandings of prehistory persist within contemporary conceptualisations of the period needs to be addressed and this will be rigorously investigated utilising quantitative methods in Chapter 4.

A more recent review of public preconceptions of the past, focusing in particular on localised narratives of prehistory was undertaken by Pratt (2015). Through interviews with 40 local residents in West Penwith Cornwall, Pratt (2015) aimed to understand how local ideas about prehistory are informed by the rich density of prehistoric megalithic monuments in the local landscape. She noted that the most prevalent themes associated with prehistory mentioned by locals were inspired from non-mainstream discourse and that locals were highly accepting of the ambiguity of prehistory, which for many was viewed as highly engaging (Pratt, 2015). Although, Pratt's (2015) survey provides some insights into localised conceptions of prehistory due to the qualitative nature of the responses which were not systematically or quantitatively interpreted and the restricted focus on local residents in Cornwall her findings cannot be extrapolated more broadly to form an understanding of general

public preconceptions of prehistory. In contrast, the qualitative visitor data collected for the thesis will be analysed quantitatively and represents a cross-section of different museum going publics composed of a diversity of age groups from 16 years old and upwards, as well as 35 global nationalities.

2.2.2 Public familiarity with specific prehistoric periods

In addition to the broad qualitative surveys outlined above a limited number of more period-specific analyses have also provided an insight into public preconceptions of prehistory. An investigation of perceptions of early prehistory focused specifically on the topic of human evolution was undertaken by Scott (2005, 2007) at four natural history museums in America, Britain and Kenya. Scott (2005:75) undertook questionnaire data collection and in-depth interviews with just over 500 visitors at these museums and identified that at least 90% of visitors had prior knowledge of human evolution prior to their visit, with most referencing their education and television programmes as the source of their knowledge. Scott's (2007) questionnaire also revealed that although her respondents were from diverse backgrounds and nationalities, they all shared the same cultural references and utilised the same language when discussing human evolution. Visitors often brought questions of race into their responses with many respondents conflating Africa in prehistory with Africa in the present and viewing evolution as a linear process from primitive apes in Africa to civilised Europeans (Scott, 2005, 2007). These responses emphasised the impact of certain popular television shows and films upon these misconceptions with many British respondents frequently referring to the same 2000 television series 'Ape-man' (Scott, 2007:79). Scott's data clearly demonstrates the influence of popular media upon common misconceptions and highlights the importance of understanding these preconceptions so they can be challenged in the museum.

Another narrowly focused snapshot of public preconceptions of prehistory was also captured by Milner *et al's* (2015) exploration of public familiarity with the Mesolithic period. From 2009 till 2011 surveys were undertaken with 173 local residents in

Scarborough to gauge local understandings of the Mesolithic and awareness of the famous local Mesolithic site of Star Carr. Milner *et al.* (2015) identified that only 8% of respondents expressed an awareness of the site. Furthermore, this study demonstrated that the Mesolithic is not well understood or familiar, as only 9% of respondents had heard of the Mesolithic and two thirds of these responses could not qualify their answers (Milner *et al.,* 2015:236). In general, despite the specific application of this study to the Mesolithic and lack of preconceptions articulated by respondents it is clear from this study that the Mesolithic is not widely present in the public consciousness. This period did not evoke any associations for respondents, highlighting that parts of prehistory unlike later time periods do not have a recognisable or memorable 'brand'. Public knowledge of different prehistoric periods and their associations with them will be further investigated by the analysis of visitor preconceptions undertaken in Chapter 4.

Most studies of public perceptions of the past have been internal to a specific museum, often undertaken in advance of a re-display project or funding application and consequently not many of these studies are accessible or published (Borman, 1994; Kisiel & Ancelet, 2009:134). Unfortunately, many of these internal evaluations are little known about by staff and are frequently unpublished and difficult to access. These specific evaluations are also exceptionally limited in their application due to their restricted focus to a particular museum context or particular audience. This form of visitor-based evaluation of public preconceptions is exemplified by the front-end evaluation undertaken by TW Research (2014) for the British Museum in advance of the 'blockbuster' Iron Age-focused exhibition, '*Celts: Art and Identity*', to gauge public familiarity with the term 'Celts'. The purpose of the exhibition was to outline recent developments in academic thinking and to challenge public preconceptions of Celts by deconstructing the term (Farley, 2018). Three focus groups composed of 24 participants and an unknown number of previous project respondents were asked '*who were/ are the Celts?*'. The responses to this question are summarised in the word cloud below (figure 2.1) and highlight the variable state of public knowledge associated with Celts and the lack of shared preconceptions of the 'Celts' (TW Research, 2014). These results are in line with the general assumptions made by

Pearce (1990), Merriman (1991), Wood and Cotton (1999), and indicated by Milner *et al's* (2015) survey, that there is a general lack of public knowledge or familiarity with 'prehistory' or any of its periods/ people. The results of this particular study undertaken by TW Research (2014), however, should be treated with caution as it was reliant upon a very small sample of people and recruited participants based on their museum visiting history producing sampling bias. Consequently, the results only reflect a very specific demographic profile and are not representative of general public familiarity with the concept of 'Celts'.

Figure 2.1. Word cloud produced from spontaneous independent responses to the question 'Who were and are the Celts?' from over 30 regular museum/ gallery goers compiled by TW Research 2014 (TW Research, 2014:15).

2.2.3 Public interests associated with prehistory

Front-end evaluations undertaken in advance of a re-display or the creation of new displays often ask visitors what they want to learn about/ see in future display content. These studies can therefore be exceptionally helpful for interpreting visitor interests specific to prehistory if they are undertaken for prehistory galleries/ museums. These evaluations as previously highlighted are rarely published so are difficult to access and not widely known about. One of the few examples of published audience research related to prehistory was undertaken by Stone (1994) at the Alexander Keiller Museum, Avebury between 1990-1991. This research project involved consulting 6 specialists/ archaeologists and undertaking focus groups with

school children from ages 5-14 (Stone, 1994). The aim of this audience research was to produce a visitor-driven new prehistory gallery, focusing on the narratives that visitors were interested in. Stone's (1994) audience research was, however, highly limited in its scope and results. He only addressed 6 specialists who he does not name, nor does he explicitly discuss their role and contribution to the re-display. Furthermore, Stone (1994) fails to mention how the focus groups with school children were conducted, what questions they were asked and how many children participated. The findings only provide a summary of the 20 most popular topics the school children wanted to learn about, which mostly related to the daily lives of people of the past (Stone, 1994). It is therefore difficult to ascertain how useful his audience research methods were. The children's interests in daily life, however, do provide an insight into general themes that visitors may be interested in, although it is difficult to know how representative such views are due to the selection bias exhibited in selecting specific children. It is therefore not known whether the interests highlighted by Stone would align with those of other children not pre-selected, older visitors or more contemporary audiences. These methodological shortcomings further reinforce the legitimacy of the thesis for producing a more contemporary and representative understanding of visitor interests related to prehistory.

Public interest in the daily lives of prehistoric people was also recognised by Wood and Cotton's (Cotton, 1995:7) front-end evaluation, as well as market research undertaken in advance of the re-display of Orkney Museum's Neolithic gallery (Allison, 2014). The market research undertaken for Orkney Museum involved distributing questionnaires to 397 people, respondents were given 8 topics and were asked to rank them using a Likert scale from strongly agree to strongly disagree, as to how much they wanted to learn about these topics in future displays. The most popular topic selected by respondents was learning about daily life in the Neolithic, to which 95% of respondents provided a positive response (Allison, 2014). This interest in daily life further reinforces Stone's (1994) findings and is further supported by front-evaluation undertaken for the creation of the Stonehenge Visitor

Centre (SVC), which also identified the popularity of people-orientated themes in two phases of research, further outlined in Appendix 1 (Doughty, 2005; Carver, 2009).

The market research in Orkney also identified that learning about the 'mysteries' of prehistory was the second most popular topic chosen by 93% of respondents (Allison, 2014). This interest in the 'mystery' aspect of prehistory identified by this questionnaire appears to further reinforce Pratt's (2015) finding based on Cornwall residents that people are intrigued and captivated by the ambiguity of interpretation that characterises prehistory. In combination these studies highlight some general public interests in learning about daily life and the perceived 'mystery' of prehistory. These trends, however, are questionable as they are primarily based upon presenting visitors with pre-determined topics of interest and consequently do not capture other public interests not already pre-determined. Furthermore, this style of survey is often critiqued for producing acquiescence bias, in which respondents are more predisposed to agree with topics despite their interests, particularly in face-to-face interviews in which respondents feel pressured to be polite rather than critical (Nichols, 1999), an issue which will be further emphasised in Chapter 3. To negate these issues and enable respondents to answer freely the questionnaire employed in the thesis will be partially self-administered and will rely upon open-ended questions to capture the full diversity of visitor preconceptions and interests that exist.

2.3 The representation of prehistory in different types of museum across England

The second research question that the thesis will address, '*How is prehistory presented in different types of museum across England?*' has also been relatively underexplored in the literature to date. There have been a few generalised 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 and provide a rather subjective overview of a restricted number of displays, either

focusing on a specific museum[1] 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). Furthermore, published evaluations specifically focused on the representation of prehistory are primarily composed of occasional exhibition reviews, as demonstrated by Ascherson's (2000) critique of the prehistory displays at the National Museum of Scotland, Price's (2015) review of the new archaeology displays at Moesgaard Museum and Chippindale's (2016) precis of the innovative text-based temporary exhibition *'Neo Preistoria' at* Triennale di Milano. 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 can, however, indicate at a very general level, trends in how prehistory is represented in certain types of museum that can provide a basis for my analysis of prehistory displays in England that will be outlined in Chapter 5.

2.3.1 The visual language of prehistory displays

> *"although every image embodies a way of seeing, our perception or appreciation of an image depends upon our own way of seeing." (Berger, 1972:10).*

Before attempting to understand how prehistory is presented in the visual medium of museum displays it is important to first explore how the visuals utilised in these displays can generate meanings. These meanings are mediated and constructed through the relationships between the museum visitors, their preconceptions, how

[1] Frequently carried out to support an application for funding but with no intention of enacting any changes as a result of the findings (Tully, 2010).

they approach viewing displays and how the displays themselves are presented (Skeates, 2005). To deconstruct and understand these relationships requires an analytical approach founded upon visual culture theory. This section therefore aims to introduce visual culture theory and how adopting an analytical approach to museum displays as visual mediums can facilitate an understanding of prehistory display trends.

Berger's pioneering text '*Ways of seeing*' (1972) simultaneously challenged interpretive assumptions and stimulated an increased democratisation in the study of art history. This democratisation of how we understand the visual soon permeated into other fields including museum studies. Consequently, since the 1970s the study of the visual has gained momentum, culminating in the advent of critical reflexive studies of visual culture and the consumption of visual materials (Gifford-Gonzalez, 1993; Hooper-Greenhill, 2000; Barnard, 2001; Mirzoeff, 2002). The study of visual culture promotes the interrogation of visual materials, deconstructing the politics of viewing and highlighting the assumptions embedded in our own interpretations of the visual (Walker and Chaplin, 1997; Hooper-Greenhill, 2000; Mirzoeff, 2002; Skeates, 2005). Hooper-Greenhill (2000) has successfully integrated a critical visual culture studies approach into an evaluation of the museum space. By viewing museum displays as a form of visual culture in themselves they can be deconstructed and evaluated (Hooper-Greenhill, 2000; Skeates, 2005; Levy, 2006). The visual culture of museum displays communicate what could be termed 'hybrid ideologies', ideologies which are formed as the result of curatorial authority, collection biases and the political agendas of specific institutions, among other factors. By adopting a critical approach to visual culture studies one can start dissecting these various ideologies embedded in museum displays and the assumptions they convey to the public. Museum displays are thus perfectly situated as arenas of visual information exchange for the application of such a critical approach to aid the interpretation of period-specific representation.

The hermeneutic tradition of visual culture studies in particular has highlighted the diverse 'ways of seeing' and interpretations that individuals experience with the

same visual materials (Hooper-Greenhill, 2000; Barnard, 2001; Mirzoeff, 2002). Each individual interprets and understands visual phenomena differently depending on their personal 'horizons', composed of their own unique beliefs, interests and past experiences (Barnard, 2001). Thus by adopting a hermeneutic approach to the study of museum displays one can begin to contemplate the diversity of interpretations museum visitors extrapolate from the same displays (Hooper-Greenhill, 2000). The interpreter will, however, never be truly able to understand another's interpretive framework or 'horizons' as they will inevitably always be restricted by their own 'horizons' (Barnard, 2001). It is therefore important to be aware of my own personal biases and assumptions when attempting to understand the complexity of meanings embedded within museum displays. The thesis will therefore focus on pre-defined variables of display to decrease the influence of my personal subjective experiences of museum displays and my 'horizons' upon the evaluation of prehistory displays. Furthermore, due to these individualistic biases and assumptions that we bring to the museum space (Scott, 2007:3) there is a need to analyse the current preconceptions the public have regarding prehistory through audience-based evaluation as well as display-based critiques (Tully, 2010). After all, museums need to understand their visitors thoroughly to create engaging displays that meet their expectations and interests. Apart from Wood and Cotton's (1999) evaluation at the MoL, however, previous analyses of museum displays have not combined visitor-based evaluations with a critique of the displays themselves.

The application of a reflexive visual culture approach to prehistory displays reveals that the creation, selection and reproduction of certain aesthetic tropes within images of prehistory, over others through time produces a taphonomic effect on how the public imagines prehistory. 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. Consequently, often quite outdated assumptions remain embedded in the visuals utilised in prehistory displays, Wood (1995:63) argues that smaller museums with less funding and resources are

particularly susceptible to perpetuating these outdated stereotypical depictions. Moser (1992, 1995, 1998) has highlighted how these stereotypes develop and continue to be recycled in her study of the imagery associated with human origins. For instance, the popular stereotypical 'hunched-over primitive hairy caveman' image of Neanderthals can be traced back to Kupka's 1909 illustration of the La Chapelle-aux-Saints Neanderthal (Figure 2.2) (based on Boule's interpretation) as highly animalistic with a stooped posture (Moser, 1992). There were alternative images produced at the same time as Kupka's that depicted Neanderthals as more symbolic and human-like but it is Kupka's stereotype which has persisted and been continually reproduced (Figure 2.3) (Moser, 1992). It seems that certain images of prehistory prove more popular at catching the public imagination than others. I need to be aware of how this selectivity of images, especially within the museum has altered visitor preconceptions of prehistory. Thus, in Chapter 5 I will be interrogating the visual language of prehistory displays in England and the narratives they convey will be analysed in Chapters 4 and 7.

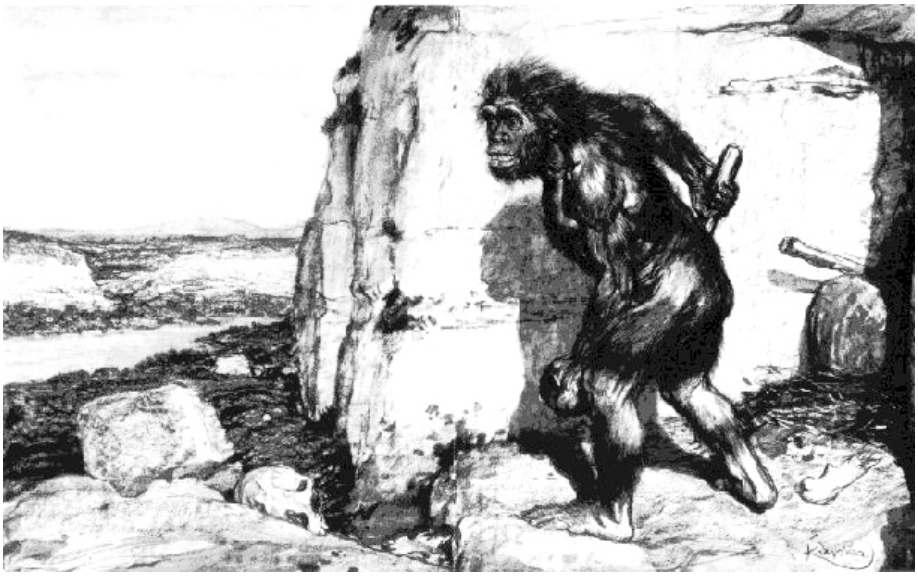


Figure 2.2. Kupka's 1909 illustration of a Neanderthal. (Zilhão, 2012:36).

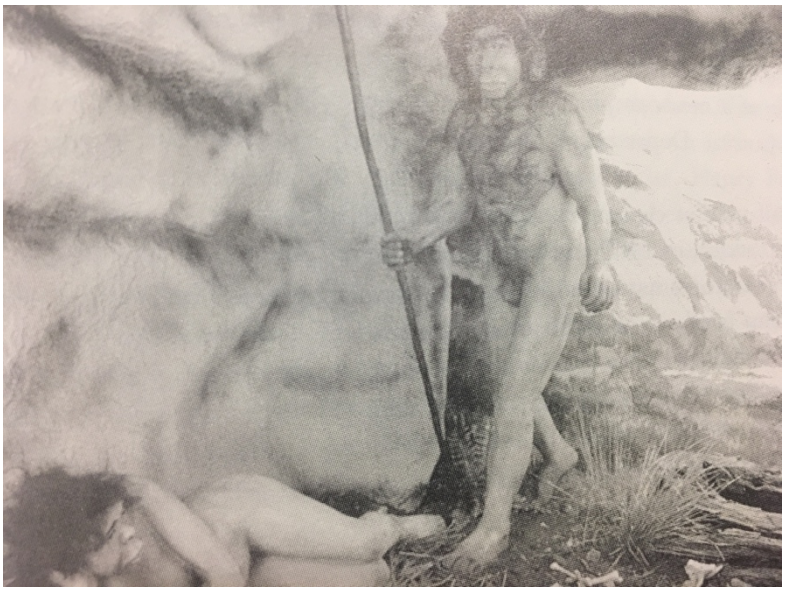


Figure 2.3. Neanderthal diorama from the Préhistorama Museum, France created by Eirik Granqvist in the early 1990s illustrating the archetypal hairy Neanderthal with stooped posture in a cave setting. (Moser, 1998:XXI).

The visual environment of the museum has a significant impact upon a visitor's museum experience and perceptions of the past (Hooper-Greenhill, 2000). It is thus important for any study of perceptions to also analyse the visuals that are being utilised in museum displays. By their very nature, artistic reconstructions will inevitably always be subjective representations. Yet, they have great power within the museum space, they can transcend language barriers and an individual's knowledge base but ultimately they are constructed according to "the spectator's own 'visual language', which may be culturally fairly specific." (James, 1999:121). The culturally specific nature of the visuals employed in prehistoric reconstructions have been exposed by James (1999), as well as Wood and Cotton (1999) who have emphasised how such speculative reconstructions tend to convey the same limited themes of 'hunting', 'trade and exchange', 'farming' and 'burial'. Themes which reflect contemporary social constructs and ways of understanding the past, illustrating how our own perceptions are reflected back on the past during the process of interpretation.

Moser (1999) has explored how the visuals employed in museum displays may affect visitor perceptions of prehistory through her critical historiographical approach to the use of dioramas in museums. Dioramas, much like other static forms of visual interpretation, as underlined by Gifford-Gonzalez (1993), Moser (1999) and Beusing (2016), are restricted to certain stereotypical elements which tend to convey outdated assumptions. The stereotypical settings of prehistory dioramas have remained consistent through time despite new discoveries and the production of more scientifically accurate representations of humans (Moser, 1999). Moser (1999) emphasises how prehistory dioramas tend to focus on evolution and progress, presenting early human species as culture-less savages with a lack of clothes and plenty of hair, docile expressions and often accompanied by a club. These depictions, as identified by Berman (1999:288) are primarily "data-independent" based upon minimal and non-existent archaeological or anatomical evidence yet they persist within museums and popular media. 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). Scott and Guisti (2006) have explored the impact of these hominin dioramas on museum visitors at the American Museum of Natural History and found that dioramas, despite the interpretation provided, were commonly misinterpreted as representing linear evolutionary progress from primitive African ape-men to modern Nordic looking Europeans. These problematic impressions subliminally influenced by cultural concepts of race are currently left unchecked within the incontrovertible power of museums. The extent to which this restricted repertoire for depicting early humans is still present in contemporary museum displays needs to be addressed and will be explored in Chapter 5, whist the potential influence of these pervasive depictions will be reviewed in the analysis of visitor pre-display preconceptions in Chapter 4.

2.3.2 Gendered representations of prehistory

The majority of critical literature relating specifically to the presentation of prehistory in museums was predominantly undertaken in the 1990s and was generally focused

on the representation of gender. This focus on gender can perhaps be seen to have developed as the result of the increased application of feminist critiques to archaeology since the 1980s and the pioneering conference '*Women, Heritage and Museums'* (WHAM) in 1984 (Gifford-Gonzalez, 1993; Sørensen, 1999). This literature has highlighted that women are often invisible in museum displays, especially prehistory displays and that when women are present they are depicted in highly stereotyped roles that reflect contemporary ideas of gendered task-division (Gifford-Gonzalez, 1993; Porter, 1995; Butler, 1996; Cook, 1996; Wood, 1996; Moser, 1999; Sørensen, 1999; Ballard, 2007; Bünz, 2012; Henson, 2016). Prehistory suffers from this in particular, due to the highly fragmentary nature of archaeological evidence upon which interpretations of gender roles are based.

Numerous scholars (Gifford-Gonzalez, 1993; Porter, 1995; Butler, 1996; Wood, 1996; Moser, 1999) have drawn attention to the persistent association of women with domestic activities which are presented as insignificant and secondary, in opposition to men associated with more proactive pursuits. Men are frequently depicted in reconstructions and illustrations hunting, tool making and performing ritual acts and are described with active language (Cook, 1996; Moser, 1999). Men are therefore essentially presented as the providers and the drivers of human development, cast in the more visually prominent roles and positions in artistic representations of sites and artefacts as well as dioramas. Cook (1996), amongst others, argues that these concepts of male-female task separation in prehistory are merely a reflection of our current notions of gendered task division and that these binary divisions are often not supported by ethnographic or archaeological research. Yet, despite the recognition of these issues museum displays of the 1990s continued to utilise these binary depictions of stereotyped task division within prehistory displays (Cook, 1996; Moser, 1999; Sørensen, 1999).

Sørensen (1996, 1999) has highlighted that there has been an increased and conscious decision to include more women in reconstructions to negate the invisibility of prehistoric women. The increased presence of women, however, does not enhance their power within the museum space, as they are not necessarily

directly connected to the narrative framework of the display (Wood, 1996; Sørensen, 1999) and as emphasised by Bünz (2012:97) in her semiotic analysis of the prehistory displays at the National Historical Museum in Stockholm, the roles of women are often visually underdeveloped. Frequently, they are smaller in size compared to depictions of men, often obscured in the background with passive facial expressions, reducing their role to merely ornamental, as exemplified by the diorama in Krapina Neanderthal Museum (figure 2.4) (Gifford-Gonzalez, 1993; Sørensen, 1999). The impact of this body of critical feminist literature has resulted in an increased awareness of the pronounced gendering that is often unconsciously transferred into the museum space and has therefore brought these unconscious assumptions into consciousness. The extent to which these revelations have altered public perceptions of gender roles in prehistory and actual museum practice has yet to be ascertained and this will be investigated in Chapters 4 and 6.

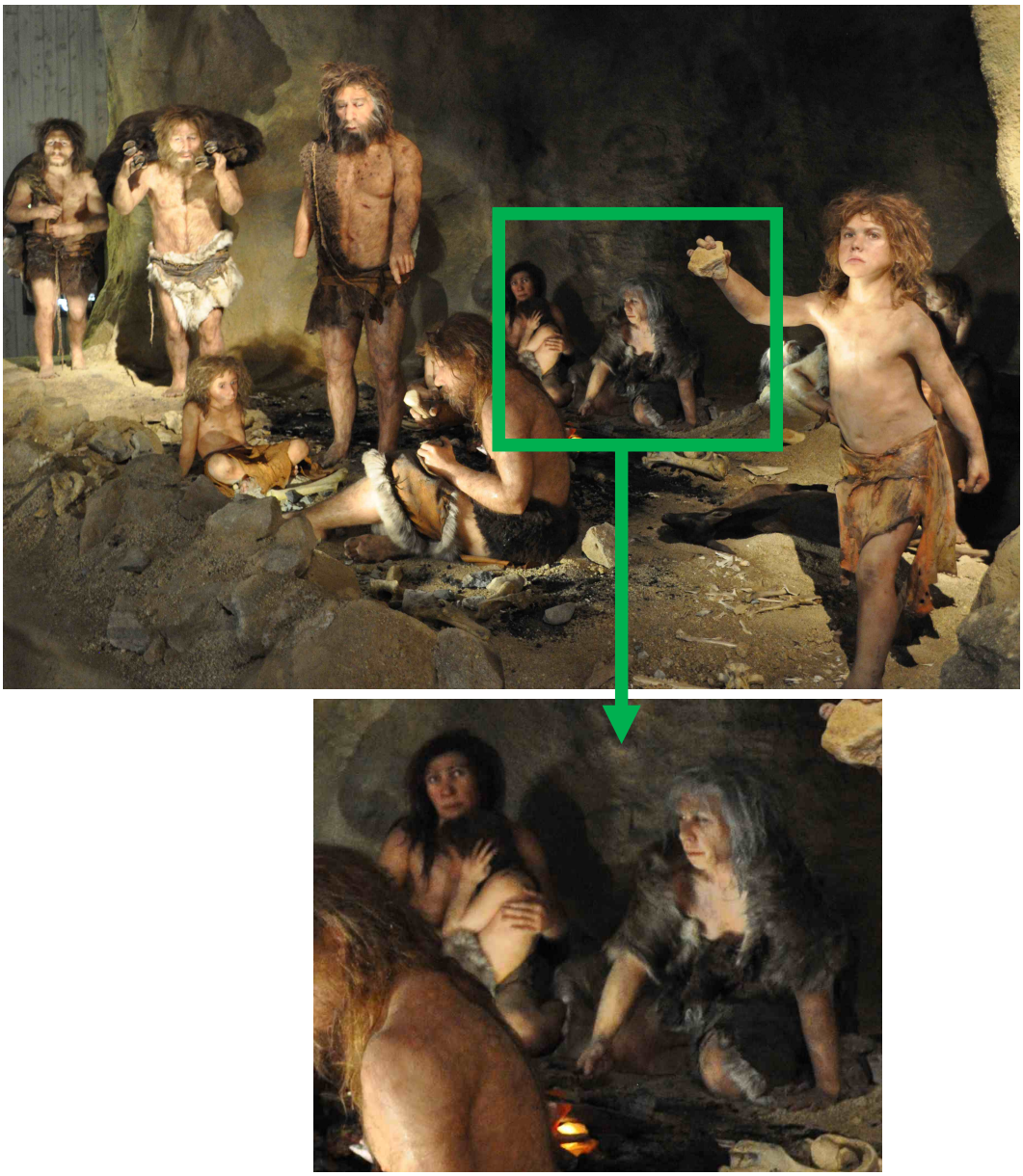


Figure 2.4. A diorama of Neanderthal daily life in the Krapina Neanderthal Museum, Croatia produced in 2009 by sculptor Elisabeth Daynès. The back section is magnified to highlight the obscured female presence at the back of the scene. (Daynès, 2009).

These arguments of material and representational invisibility have also been co-opted into debates about the presence of children in the past and within museum displays (Crawford and Lewis, 2009; Lillehammer, 2015: Roberts, 2006). Consequently, literature exploring the presence of children in the past has often been integrated into studies of gender due the invisibility of both of these socially constructed groups in traditional archaeological narratives (Crawford and Lewis,

2009; Gero and Conkey, 1991). Yet these integrated studies further conceal the agency of children by equating them to "*objects of adult agency"* (Crawford and Lewis, 2009:11). This is perhaps best illustrated by the representation of children in prehistory museum displays that often present young children and babies in exclusive association with women. Effectively utilising children as 'props' to symbolise reproduction, reinforcing engendered stereotypes. Despite children being proportionally more present than adults in the past (Crawford and Lewis, 2009; Joy *et al.,* 2016) and the proliferation of studies exploring their presence in the archaeological record over the past thirty years (Baxter, 2005; Crawford *et al*., 2018; Kamp, 2001; Moore and Scott, 1997; Scott, 2009; Sofaer Derevenski, 1994), they are not often afforded their own agency or incorporated into the central narratives within archaeological discourse or prehistory displays (Lillehammer, 2015). These issues persist in part due to the difficulty of defining and identifying children in the archaeological record (Joy, 2016; Joy *et al.*, 2016; Lillehammer, 2015; Roberts, 2006). Yet the presence of children within material culture may be revealed by the presence of miniature objects that could have been used as toys or practice objects, whilst mistakes observed in the production of pottery and knapping of flint could potentially further indicate the tangible presence of children (Joy, 2016; Joy *et al.,* 2016; Lillehammer, 1989, 2015). Such ideas were explored by the Museum of Archaeology and Anthropology's temporary exhibition *'Hide and Seek: looking for children in the past'* in 2016, and the creative approach adopted by the exhibition opens up avenues for further enhancing the representation of children in future museum displays.

2.3.3 Evaluating the aesthetics and implicit narratives of prehistory displays

Evaluating museum displays has become a prominent sub-field in museum studies in recent years. Most published and accessible studies, however, tend to focus more on evaluating public access to museums or evaluating the collections of the museums themselves rather than the displays, exemplified by Lynch's (2007) review of prehistory museums in the North East, which evaluated the strengths and weaknesses of museum collections rather than evaluating how they are presented within the museum. Only a restricted number of studies have taken a broader

approach to understanding the representation of prehistory in museum displays. Some general comments were made about the issues surrounding the presentation of prehistory in the 1990s by Pearce (1990:161) and Wood and Cotton (1999:30-33) who highlighted the restricted repertoire of prehistoric material culture in most museum collections and the tendency for prehistory displays to be presented synonymously with archaeology. Furthermore, despite the influence of 'New Museology' and the 'critical turn', Wood and Cotton (1999), as well as Ballard (2007:174) and Bünz (2012:97) have emphasised that didactic narratives of linear technological progress rooted in 19th century evolutionary thinking still persist within prehistory displays. The recognition of these general trends are useful for understanding whether prehistory displays in England today have changed from these traditional didactic displays of the 1990s/ 2000s, which will be examined in Chapter 5.

Apart from Pearce (1990) and Wood and Cotton's (1999) general comments about prehistory museum displays only a very limited number of more detailed analyses of prehistory displays have been undertaken. These evaluations, however, still represent relatively generalised overviews in comparison to the scope of the thesis. They do not use objective categories to compare displays and instead compare displays on a more subjective and aesthetic-driven level due to their singular focus interpreting displays according to the evaluator's own personal 'horizons' without accounting for visitor experiences. These issues are exemplified by Levy's (2006) small analysis of 7 museums in Finland, Sweden and Norway undertaken between 1998 and 2002. Levy's (2006) study explored how indigenous groups were presented in prehistory displays, with a particular focus on the politicisation of design, architecture and use of space within these museums. Due to the restricted focus of this study on the representation of the Saami community it did not enlighten general prehistory display trends within northern Europe nor did it interrogate visitor perceptions of the displays. Furthermore, although the study highlighted the importance of visual analysis for assessing museum representation the investigation was purely based upon Levy's interpretation of the museums and their narratives and did not account for how these displays were viewed by others and did not

therefore move beyond a subjective political commentary. In contrast to Levy's study the thesis will utilise a combination of visitor-based data and visual categories of analysis as the basis for evaluating museum displays more empirically and objectively.

Previous studies of prehistory displays have highlighted certain period-specific representational issues. The Palaeolithic as previously outlined in section 2.3.1 is often presented in association with outdated primitive caveman stereotypes. The Mesolithic Research Framework (Blinkhorn and Milner, 2015:27) 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.* (2015:233-4) 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). Henson's (2016) study like Levy's (2006) is primarily visual and based upon his own personal experiences and did not account for visitor perceptions or engagements with displays. Additionally, due to the wider focus of Henson's study on multiple forms of communication his museum sample like Levy's (2006) is also very restricted and consequently cannot be viewed as representative of wider display trends. 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 general subjective natures of

these analyses further reinforces the need for a broader and less subjective approach to display evaluation which will be provided by the thesis.

2.4 Visitor engagements with prehistory museum displays

The third research question that the thesis will address, *'How do visitors engage with prehistory displays?'* is also an area of research that has rarely been explored before. Very few studies have analysed how visitors engage with prehistory displays and those studies that have analysed visitor interactions with and opinions of displays are often restricted to internal and inaccessible museum evaluations. Moreover, the evaluations of visitor engagements with prehistory displays often neglect to describe their methodologies in enough detail to extrapolate useful insights about how to evaluate or interpret visitor interactions. The limited scope of such evaluations is exemplified by Batey's (1999) evaluation of a temporary tactile prehistory exhibition at Glasgow Museum. The techniques employed by Batey cannot be replicated or adapted as she did not provide any explanation of how she assessed the success of the exhibition (Batey, 1999). The evaluation did, however, in very general terms outline the popularity of haptic engagements with prehistory displays. The impact of interactive elements in prehistory displays will be further assessed by the thesis in Chapter 6.

One of the few published evaluations of a prehistory exhibition was undertaken by Wood and Cotton (1999) to evaluate the prehistory displays at the MoL before and after the re-display of 1994. Wood and Cotton undertook an innovative multi-pronged approach, incorporating different forms of visitor data collection to gain a richer understanding of visitor perceptions and engagements. Initially they carried out tracking surveys in 1991, monitoring visitor movements and behaviour within the gallery (Merriman, 1994; Wood, 1996). From these surveys it was noted that a quarter of visitors walked straight through the gallery and of those that did spend time in the gallery only a tenth spent longer than 10 minutes, emphasising the short dwell time spent in the prehistory gallery (Wood, 1996). These tracking surveys in combination with the survey data about visitor perceptions discussed in section 2.2

were utilised to interpret the lack of visitor engagements with the old prehistory displays and guided the new exhibition content. To combat the popular misconceptions they had identified, images of stereotypical cave men and dinosaurs were placed at the entrance of the new gallery with the question '*Now what does prehistory mean to you?*' at the end of the gallery to encourage reflective thinking (Wood, 1996; Wood and Cotton, 1999). Furthermore, the lack of engagements identified with text-based interpretation in the tracking surveys influenced the inclusion of more large visual panels to communicate information visually and the use of information hierarchies on text panels (Cotton, 1995; Wood and Cotton, 1999). The impact of these new displays were subsequently evaluated utilising follow up tracking surveys, a follow up questionnaire and focus groups which revealed that visitor dwell time increased from just over 8 minutes to an average of 11 minutes whilst attitudes towards prehistory changed and visitor responses demonstrated a better understanding of prehistory. This small-scale study, although focused on only one museum using data collected over 25 years ago highlights how the combination of interpreting visitor preconceptions and evaluating their engagements can be utilised to improve prehistory displays to increase potential engagements, better cater towards visitor interests and simultaneously challenge preconceptions. The thesis builds upon these methodologies to produce an up to date investigation of prehistory displays that highlights contemporary visitor behaviour associated with prehistory displays.

In addition to Wood and Cotton's (1999) evaluation of the MoL's prehistory displays, another study highlighting how prehistory displays can be evaluated was undertaken by Brown (2011) in 2008. Brown (2011) utilised personal meaning maps to capture qualitative visitor responses to the temporary exhibition '*Lindow man: a bog body mystery*' on display at Manchester Museum. The PMMs were undertaken in conjunction with questionnaires to capture visitor's prior knowledge, interpret their socioeconomic status and gauge their perceptions of the exhibition by asking them to rate certain features using a 5 point Likert scale. This exhibition was designed to provoke an emotional response and employed poly-vocal interpretation and invited visitors to interact and interpret Lindow Man for themselves to enhance the

inclusivity of the experience. This approach could have been rather alienating but Brown's (2011) qualitative data identified a predominantly positive response to the displays, particularly the ambience which had been tailored to evoke a sense of landscape. Brown (2011) also concluded that this exhibition greatly enhanced visitor knowledge of Lindow Man. These findings are, however, difficult to contextualise as he did not publish his data or summarise how each of the rated elements were perceived and so it is not known how these conclusions are quantitatively substantiated.

It was only feasible to access[2] three summative evaluations of temporary prehistory displays that both outlined their evaluation methodologies and provided an impression of visitor engagements with prehistory displays. Two of these reports were compiled for the 'blockbuster' British Museum exhibitions; *'Ice Age art: arrival of the modern human mind'* (Fusion Research and Analytics, 2013) and *'Celts: art and identity'* (Morris Hargreaves McIntyre, 2016; Farley, 2018) undertaken by external consultants on behalf of the British Museum. The third evaluation was undertaken in-house for a smaller-scale exhibition at Plymouth City Museum, entitled *'Whitehorse Hill: a prehistoric Dartmoor discovery'* (Dixon and Munro, 2015). These summative evaluations utilised a combination of different methodologies to measure visitor perceptions and engagements with displays. The Ice Age Art evaluation was the only one to utilise a combination of both tracking surveys and questionnaires to ascertain visitor perceptions of the exhibition. The evaluation combined gallery observations of 300 visitors with visitor exit-surveys from 79 visitors (Fusion Research and Analytics, 2013). The resulting information was used to identify the average amount of time visitors spent in the gallery as an indicator of the visitor interest provoked by the displays. The popularity of certain areas were highlighted by increased visitor interactions and dwell time, as illustrated in this visual representation of visitor behaviour from their report (figure 2.5). The responses to the corresponding exit-survey revealed visitor interests in more detail, identifying

[2] These evaluations are not accessible within the public domain but were kindly shared with me to support my research by the Head of Interpretation at the British Museum, Stuart Frost and the Curator of Archaeology for Plymouth City Council, Fiona Pitt.

visitor interests in the skill of past people (figure 2.6), lack of negative comments and general layout issues of overcrowding (figure 2.7). The overwhelming interest in the skill and craftsmanship of prehistoric people is perhaps not surprising within the context of an art-themed exhibition. This interest does, however, indicate that objects of prehistoric art that exemplify the sophistication and skill of past people can provoke more intense visitor engagements as attested to by the visitor responses and high dwell time at cases of Palaeolithic art observed in the exhibition.

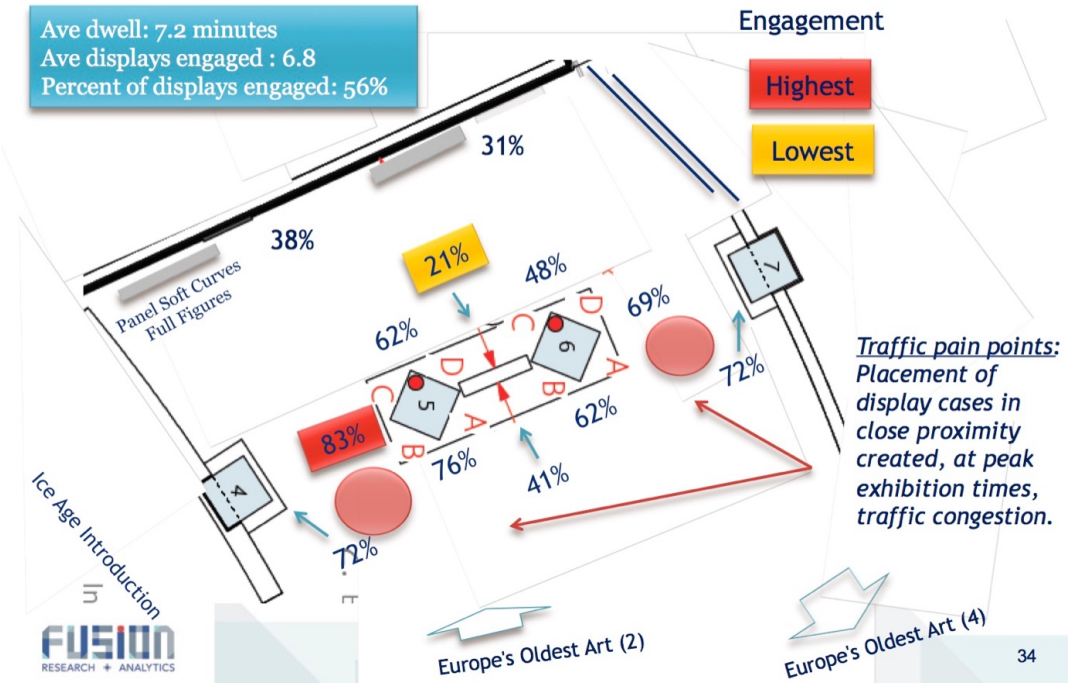


Figure 2.5. Map illustrating the level of engagement with one section of the Ice Age Art exhibition (Fusion Research and Analytics, 2013:34).

Figure 2.6. Word cloud illustrating the most popular responses to the question 'What did you like best about this exhibition?' (Fusion Research and Analytics, 2013:69).

Figure 2.7. Word cloud illustrating visitor responses to the question 'And what did you think could be improved?' (Fusion Research and Analytics, 2013:71).

A more restricted methodology was utilised in the summative evaluation of the Celts exhibition in which visitor observations were not used to interpret engagements. Instead, 1,000 exit surveys were collected at the end of the exhibition and 299 surveys completed online after viewing the displays (Morris Hargreaves McIntyre,

2016). Providing visitors with a survey to complete online away from the exhibition introduces the issue of memory and positive bias, as respondents are more likely to view their visit more favourably outside of the museum context and are less likely to recall their visit in enough detail to provide representative responses. This survey did, however, negate the issues often associated with qualitative data by utilising direct closed-ended questions about visitor experiences restricting visitor responses to 1 of 3 options, facilitating a more systematic and objective quantitative analysis of the responses. This analysis revealed that the majority of respondents were satisfied with the flow/ layout of the gallery, ambience, amount of information, tone of textual interpretation and themes presented. This general impression of enjoyment is, however, difficult to understand in more detail as these closed questions cannot reveal the underpinning motivations and ideas behind these responses. The only insight specific to visitor perceptions of prehistory displays was an overwhelming interest in the display of the Gundestrup cauldron (figure 2.8) and widespread issues with the use of an audio soundscape to enhance the ambience of displays expressed in the visitor survey (Morris Hargreaves McIntyre, 2016). The widespread interest in the Gundestrup cauldron (an object displaying skilled craftsmanship), appears to reinforce the high level of visitor interest expressed in relation to some of the objects of Palaeolithic art observed in the summative evaluation of the Ice Age art exhibition. From the two British Museum evaluations, it appears that visually appealing objects demonstrating expertise and sophistication when presented in prehistory displays can evoke greater visitor engagements than text-based interpretation. The impact of certain aesthetically intriguing prehistoric objects upon visitor engagements will be further evaluated using a combination of tracking surveys and questionnaire responses in Chapter 6.

Figure 2.8. Photograph of the aesthetic Gundestrup cauldron, as displayed in the British Museum 'Celts' exhibition (Morris Hargreaves McIntyre, 2016:25).

The summative evaluation undertaken at Plymouth City Museum, in contrast to the evaluations undertaken for the British Museum was relatively small in scale. The evaluation did, however, utilise a multi-pronged approach, combining 133 feedback forms, 129 comment cards, 8 peer group comments and 27 comments in the museum visitors book to understand how visitors experienced the Bronze Age exhibition (Dixon and Munro, 2015). From this data the summative report produced confidently proclaimed that replicas, large visuals, interactive games and the discrete presentation of human remains within the exhibition were highly valued and enjoyed by visitors (Dixon and Munro, 2015). These assertions further demonstrate greater levels of visitor engagement with tactile and visual interpretation previously indicated by Batey (1999), Wood and Cotton (1999) and the summative evaluations

conducted for the British Museum (Fusion Research and Analytics, 2013; Morris Hargreaves McIntyre, 2016), as well as visitor interests in viewing human remains which has been widely observed in studies debating the representation of human remains (Swain, 2002; Walter, 2004; Patterson, 2007; James, 2008; Sayer, 2010; Brown, 2011; Joy, 2014; Williams and Giles, 2016). The conclusions about visitor engagements made by the summative report for Plymouth City Museum are supported by relevant qualitative responses from the visitor feedback forms. Upon further investigation, however, the collated feedback (Pitt, 2015) used to create the summative report revealed that the supposedly robust methodology adopted in the summative evaluation was not as rigorous as it appears. Consequently, this study cannot be utilised to formulate such confident conclusions. The collated feedback (Pitt, 2015) provides more details about the methodology and inadvertently highlights numerous methodological issues. Firstly, the feedback forms, which the majority of the analyses were based upon were initially left in the exhibition filled out based upon visitor discretion, they were then distributed at related academic talks and given to tour groups. This sampling approach is highly inconsistent and was therefore neither random nor representative of wider visitor perceptions. Secondly, the question asking visitors to rate their overall experience provided an imbalance of predominantly positive options; '*Excellent', 'Very Good', 'Good', 'Not Very Good'* and *'Poor'*, options which potentially introduced a positive bias within responses. Furthermore, no neutral option was included either, further influencing visitors into providing a positive response if they felt rather ambivalent about the exhibition. Thirdly, the rest of the questions included in the feedback form were open-ended and the responses to them were highly variable in content so could not be easily interpreted. Despite these issues the report surreptitiously cherry-picked responses to support their conclusions which were unsubstantiated by the qualitative responses. Lastly, the apparent 'peer-review' consisted of e-mails from friends congratulating the curator for their exhibition and were consequently inherently biased. Overall, these methodological shortcomings illustrate many of the issues associated with evaluating visitor engagements with displays. The examples of evaluations discussed in this Chapter all exhibited some form of methodological flaw. It is therefore difficult to formulate a general understanding of visitor engagements

with prehistory displays beyond a broad awareness that visitors engage more with tactile elements, aesthetic objects and human remains and prefer visual interpretation over textual interpretation. The lack of credible visitor-data exploring engagements in specific prehistory display contexts highlights the need for the thesis to create a foundational understanding of such visitor behaviour. The thesis will utilise a combination of both tracking surveys and questionnaires which will be analysed quantitatively to gain a deeper insight into visitor interactions and perceptions of displays.

2.5 Summary

This Chapter has summarised and reviewed the limited amount of previous scholarship that has been conducted in relation to the three core research questions of the thesis. These previous studies were critiqued, enabling the identification of certain benchmarks to measure my results against. It was stressed that many of these analyses were undertaken between 25-35 years ago and so may not bear much resemblance to the data analysed in Chapters 4, 5 and 6 of the thesis.

Firstly, previous analyses of public preconceptions were explored which revealed that the public is generally not very familiar with prehistory, although some people may be able to broadly define it and associate the period with stone technology. It was emphasised that most people associate prehistory with outdated primitive caveman stereotypes and dinosaurs. The discussion of some key front-end evaluations revealed visitor interests in learning about daily life in prehistory and the perceived 'mystery' of the period. Public preconceptions and interests in prehistory as a concept will be further investigated using visitor-based data in Chapter 4 to identify whether these stereotyped preconceptions persist, whether knowledge has improved or if other previously unrecognised associations or interests are more common within the public consciousness today.

Secondly, this Chapter examined previous studies of prehistory display representation which revealed the subjective nature and limited scope of previous

studies. Despite the restricted nature of such research some key presentational issues were highlighted including the misrepresentation of gender, prevalence of linear narratives of progress and restricted repertoire of topics and themes associated with the presentation of each prehistoric period in displays. In Chapter 5 of the thesis, contemporary museum displays in England will be evaluated objectively to reveal whether prehistory displays have deviated from these trends or if they continue to represent prehistory in this traditional format.

Lastly, this Chapter reviewed a restricted number of relevant and accessible summative evaluations of visitor engagements with prehistory displays. These evaluations, however, demonstrated a number of methodological issues, reinforcing the legitimacy of the thesis. General trends gleaned from these evaluations indicated higher visitor engagements with human remains, tactile elements and visual interpretation over textual interpretation and an interest in the perceived skill of past people demonstrated by the displays of aesthetic shiny objects, like the Gundestrup Cauldron in the '*Celts'* exhibition. The variability of visitor engagements will be further analysed in relation to these forms of interpretation and others in Chapter 6 to provide a greater understanding of effective display styles for engaging visitors with prehistory.

The dual-scale methodology developed to evaluate prehistory displays and simultaneously negate the various methodological issues highlighted in previous evaluations will be outlined in the following Chapter 3.

Chapter 3: Methodology

3.1 Introduction

This Chapter will outline the different methodologies that will be combined to evaluate prehistory displays across England. An approach that analyses both the physical museum displays and their reception by museum visitors. To understand both the large-scale trends in how prehistory is presented in museums and simultaneously gain an in-depth understanding of how certain displays affect visitor engagements the thesis will operate at two scales. At the macro-scale prehistory display trends across England will be evaluated using methods of visual analysis and at the micro-scale visitor-based data will be utilised to evaluate visitor preconceptions and engagements with prehistory displays at 6 case study museums. It is only by combining both of these scales into a cohesive framework that the inherent subjectivity of a singularly broad scale approach and the restricted application of a singularly museum-specific analysis can be avoided, and the three core research aims can be addressed.

Firstly, this Chapter will outline the macro-scale methodology which provides the foundations for addressing the second research aim of the thesis by elucidating the techniques of visual analysis that will be used in Chapter 5 for identifying common trends in how prehistory is currently displayed in museums of different types and sizes across England. This discussion will also highlight how the second research objective will be fulfilled by explicating how the broad record of prehistory displays was created and how it will be evaluated in Chapter 5 to reveal display trends across museums in England. Following the discussion of the macro-scale methodology, this chapter will highlight the visitor-based methodology that will be used in the micro-scale approach to address research aims 1 and 3 in Chapters 4 and 6. This section will highlight how a combined methodology utilising both tracking surveys and questionnaires can capture visitor preconceptions of prehistory prior to viewing displays, as well as visitor responses to and associated behaviour with specific case-

study displays. This chapter will also outline the sampling approach, ethical implications involved in the collection of visitor-based data and an acknowledgement of the external factors that affected and influenced the data collection process and the resulting analyses undertaken in Chapters 4-6.

3.2 The macro-scale

To address the second research aim of the thesis to, '*Identify common themes and trends in how prehistory is presented in diverse museums across England*', the thesis will fulfil the second research objective to '*Produce and analyse a comprehensive database of prehistory displays in England*'. This record (Appendix B) will only account for permanent museum displays as temporary displays are governed by different conventions of display and due to their transience are more difficult to record. To produce such a record requires a framework for identifying museums with prehistory displays, a selective approach for visiting these museums and a more objective methodology for recording the displays to facilitate the analysis of display trends between museums, as outlined below.

3.2.1 Criteria for selecting prehistory displays

Developing a framework for identifying museums that display prehistory is rather challenging due to the large quantity of museums spread across England and the difficulty involved in ascertaining which of these museums display prehistory. It is not known how many museums there are in England overall due to the variability of how an institution can be defined as a museum. Furthermore, there is no singular up to date reliable and comprehensive list of all museums in England that could be consulted. Nor is there any such database of all museums displaying archaeology or prehistory that would account for the diversity of different types of museums. One way of extrapolating a rough estimate of how many potential museums might display prehistory is to consult the annual spreadsheet of Accredited museums that is compiled by the Arts Council (2020) and made publically accessible. This list of museums changes annually as new museums are awarded Accreditation and other

museums leave the scheme. Although this source does not include museums without Accreditation or those working towards Accreditation, it does however, provide a good starting point for understanding how many museums might present prehistory in their displays. Furthermore, because the museums listed within the scheme need to meet certain minimum requirements and definitions as an institution to be Accredited all those listed are classified as a museum. Thus to mitigate against the variability of unaccredited museums that do not meet the standard definition of a museum this methodology will primarily record Accredited museums.

There are a total of 1,742 museums in England currently Accredited by the Arts Council (2020) and it was difficult identifying how many of these museums potentially had prehistory on display from looking at the list of museum names provided on the Arts Council spreadsheet. Consequently, in order to identify which museums had prehistory on display I reviewed the list of Accredited museums and either contacted each museum directly to ask whether they had any prehistory on display (by telephone or e-mail) or searched their website for further information. To account for museums not listed in the Accreditation scheme that also display rich prehistory collections such as the Museum of Prehistory in Cheddar Gorge and Stonehenge Visitor Centre I also actively asked curators for recommendations of museums they knew of with prehistory and I also sent an enquiry through the Society for Museum Archaeology's mailing list, which received an overwhelming response with several curators e-mailing me with suggestions. The process of identifying potential museums to visit was therefore a rather lengthy process. Consequently, it was important during this process to keep a record of which museums had been contacted, whether the museum had responded and if they had, which museums were positively identified as displaying prehistory and which museums did not present prehistory. This spreadsheet utilised the 2018 list of fully Accredited and provisionally Accredited museums from the Arts Council which was then edited to include 10 additional non-accredited museums and whether each museum was known to display prehistory or not (Appendix A). This spreadsheet was used to understand how many museums displayed prehistory and was constantly updated based upon my research visits to museums and continuing enquiries with curators.

3.2.2 Factors affecting the macro-scale data collection

In addition to identifying which museums display prehistory it was essential that I ascertained how much they had on display in advance of my visit. I soon realised this was an important step as I could travel a long distance at great expense to arrive and find no prehistory on display. My initial enquiries were far from straight forward as there was often difficulty in identifying whether museums had prehistory on display even when I had been in contact with the museum. From these early experiences I learned that there is a general lack of understanding within smaller volunteer-run museums as to which parts of their collections could be defined as prehistoric. I was frequently told to ring back when the Chairman was in as they weren't sure what was on display or if it could be classified as prehistory. I often had to explain what I meant by prehistory and there was frequently confusion over whether I was interested in geological specimens, natural history, metal artefacts[3] or archaeological material in general. Unfortunately, even after I provided a definition of what I meant by prehistoric material there were still a few misconceptions. For example, I was shown a recreated 18th century blacksmith's forge when I was enquiring about artefacts from the Iron Age in the Museum of Dartmoor Life.

Further challenges highlighted by my initial enquires included a myriad of practical access issues that meant I was unable to visit certain museums. The most common of these issues were restricted opening hours, particularly at smaller volunteer-run museums and difficulties travelling to museums situated in the countryside or away from major public transport routes. It was not therefore, always possible to either identify which museums in my spreadsheet had prehistory on display through my remote or person-based enquiries or to visit those museums that did display prehistory. A summary of these issues which will ultimately limit the scope of data collection are as follows;

[3] There have been several occasions when I have mentioned 'Bronze Age' or 'Iron Age' and have been directed to objects made of these materials from later periods.

1. Individual museum knowledge of their displays
2. Individual museum knowledge of what classifies as human prehistory
3. Cooperation of museums
4. Correspondence with museums
5. Information and its validity on a museums website
6. Physical accessibility
7. Timeframe of data collection

To combat some of these issues I restricted my visits to volunteer-run museums to those where I could ascertain that there was definitely at least one case of prehistoric objects on display. Furthermore, to facilitate my broad overview of how prehistory is presented in museums across England I visited museums by region with the preliminary aim of visiting at least 50% of all museums that I estimated had prehistory on display based on the list of fully and provisionally Accredited museums (Arts Council, 2018) and my own enquiries. For the purposes of these regionally-selective visits I divided England into nine regions based upon the division of counties within the Arts Council spreadsheet (table 3.1).

Region	Counties included
South West	Cornwall, Devon, Somerset, Dorset, Wiltshire and Gloucestershire.
South East	Hampshire, Oxfordshire, Kent, Buckinghamshire, Berkshire, East Sussex, Surrey and West Sussex.
London	
East Midlands	Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire and Rutland.
West Midlands	Shropshire, Herefordshire, Staffordshire, Worcestershire and Warwickshire
East England	Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Norfolk and Suffolk.
Yorkshire	South Yorkshire, West Yorkshire, East Riding of Yorkshire and North Yorkshire.
North East	County Durham, Northumberland, Tyne and Wear and Tees Valley.
North West	Cheshire, Cumbria, Greater Manchester, Lancashire and Merseyside.

Table 3.1. The 9 regions selectively visited and the counties encompassed by each region.

3.2.3 Variables of display

To record and analyse the prehistory displays more objectively than previous studies a series of 13 variables of display were formulated to record when the museums were visited in each region. The analysis of these variables was then utilised to achieve the second research aim of the thesis by facilitating a standardised and more objective comparison of visual categories across different types and sizes of museum, to reveal trends in how prehistory is displayed. As highlighted in Chapter 2 there are a lack of

evaluations that elucidate visual methods of analysis specifically applied to prehistory displays so to develop this method of visual analysis I adapted techniques developed in the field of Ancient Egyptian museum studies. These variables of display are based upon the variables outlined by Moser (2006, 2010) and later adapted by Tully (2010) that were employed to analyse trends in British museum displays of Ancient Egypt. A summary of these variables of display as outlined by Moser (2006, 2010) and Tully (2010) are provided in table 3.2.

Moser (2006) initially developed a methodology for the analysis of visual categories within a specific museum context to analyse Ancient Egyptian displays at the British Museum in the 18th/ 19th centuries. This visual analysis was supported by an evaluation of how objects were acquired and the displays received by visitors during this particular geographical and temporal context. Moser later expanded and generalised the criteria she utilised in her historiographical approach for analysing how museum displays create knowledge in a paper expounding the usefulness of understanding elements of display and their impact on the visitor (Moser, 2010). However, due to the introductory and generalised nature of this paper, which was primarily intended for guiding independent visual analyses of museum displays, it was not clear how these expanded 8 display elements could be applied in a museum context to analyse displays objectively. Furthermore, as highlighted by table 3.2 the display elements delineate several of her previously outlined criteria into more categories of analysis. These expanded categories however, seem to overlap in scope and are more difficult to differentiate. For example, element number 1, *'architecture, location and setting of displays'* is inextricably linked to the separate element 5, '*layout'*, as both of these categories attempt to analyse the spatial arrangement of displays and how these influence visitor movements within the space.

To better understand how the variables of museum displays affect visitor perceptions of the past Tully (2010) further expanded Moser's methodology for analysing the representation of Egyptian displays and integrated this with visitor-based data. Tully's (2010) visual analysis was composed of evaluating the displays at four museums by dividing display techniques into eight parts, adapted from Moser (2006)

and Lindauer (2006). These variables that affect museum displays also impact how a visitor perceives and engages with the displays either consciously or subconsciously. Tully's (2010) evaluation, however, did not record visitor responses to the displays themselves but merely described the displays in each of the four museums and compared them with each other, providing a rather superficial and subjective understanding of how museums present Ancient Egyptian material and how this influences visitor preconceptions. It is after all, inherently difficult to integrate a more quantitative standardised method of comparison within the subjective sphere of visual analysis.

Criteria for analysing displays outlined by Moser (2006:3)	Display elements that create meaning as outlined by Moser (2010:24-30)	Components of display for visual analysis as outlined by Tully (2010:196)
1. Space allocated	1. Architecture, location, setting	1. The overarching method of display
2. Location within the museum	2. Space	2. Display furniture
3. Structure of collection on display	3. Design, colour, light	3. Lighting and use of colour
4. Spatial distribution of objects	4. Subject, message, text	4. The architecture and decoration of exhibition rooms
5. Architecture/ design of the room and building	5. Layout	5. Space dedicated to different themes or specific collections- hierarchy of display
6. Interpretive aids	6. Display types	6. Spatial relationships between objects
	7. Exhibition style	7. Interpretive aids
	8. Audience and reception	8. The architecture of the museum building itself

Table 3.2. Summary of the variables of display previously outlined by Moser (2006, 2010) and Tully (2010) and how they have linguistically categorised these variables.

The variables of display outlined by Moser (2006, 2010) and Tully (2010) provided a useful starting point for developing my methodology for recording prehistory displays and fulfilling the second research objective of the thesis. Despite the different geographical and temporal focus of these studies, the application of this method of visual analysis within a museum setting enables it to be easily adapted for analysing prehistory displays. Other scholars have also emphasised the impact and influence of certain structural and design elements upon the representation and resulting perception of a period. The level of lighting, colour schemes, selection and arrangement of objects, spatial layout, use of text, images, models and dioramas

have all been highlighted as elements vital for visually communicating different narratives to the visitor (Pearce, 1990:163; Skeates, 2002; Levy, 2006:137; Ballard, 2007:171). It is the interplay between these elements that form what Shanks and Tilley (1992:68) have termed "*aesthetic systems",* which convey certain narratives and create meaning through their visual interpretation by the visitor. These elements, however, have never before been quantitatively or empirically evaluated in analyses of display representation. Therefore, to further interrogate the interplay between these features and the relationships they can have upon each other and visitor perceptions of prehistory, these features were integrated into this study to create 13 variables of display to be recorded for each prehistory display evaluated and these are summarised in table 3.3. There are a range of variables that could have been utilised to guide the visual analysis but it was not possible within the scope of the thesis to accommodate more than 13 variables as highlighted in section 1.3.1.

Recording information pertaining to these variables in the database of museum visits (Appendix B) enabled me to standardise information about the different displays so they could be quantitatively and more objectively compared in Chapter 5. These comparisons facilitated the identification of certain recurrent themes in the styles and overarching narratives of display serving to address the second research aim. To illustrate the standardisation that these categories of analysis provide, a summary of each of these display variables is specified in table 3.3 alongside a summary of how these variables were recorded within the database of museum visits and how they were then comparatively analysed.

The 13 variables of display, expanded from previous visual analyses are categorised into 3 types of display variable;

1. **'Pre-display variables'** – These include elements not directly referenced in the museum space such as the title of the displays which can alter visitor expectations pre-display and the age of displays which influence the overall representation of the 'design variables'.

2. **'Design variables'** – These include physical design elements associated with the interpretation and presentation of the period within the galley space and range from the amount of material on display to the types of lighting used.
3. **'Holistic variables'** – These include variables that result from the inter-play between certain design variables such as the presentation of human remains which is influenced by the amount of human remains on display, the type of human remains on display, their visibility and the types of associated interpretation provided.

The division of the 13 variables of display that were utilised in the analysis of prehistory displays are provided in figure 3.1, which also highlights their inter-relationships. A schematic illustration demonstrating how the display variables can be interpreted within a prehistory gallery and were recorded in the database of museum visits is provided in figure 3.2.

No.	Variable	Description	How recorded and analysed
1	**Name of gallery/ prehistory section**	This variable recorded the name of the gallery/ section presenting prehistory or the section that the displays are grouped in as the name that prehistory displays are given can affect visitor expectations, how visitors relate to the material and what preconceptions they may bring to viewing the displays.	• The names of prehistory galleries/ sections were transcribed for every museum producing qualitative data. • The names were input into a word cloud generator to quantify the frequency of words used in association with prehistory displays. • The names were also grouped together into categories to quantitatively assess how many of these names explicitly reference prehistory, implicitly reference prehistory or frame the displays in association with a different theme such as 'local archaeology'.
2	**Age of displays**	This variable recorded the year the displays were created or last updated as the date that displays are created can greatly influence the style of displays based on the prevailing display trends and archaeological theories of the time. Furthermore, the age of displays is also linked to the availability of funding opportunities.	• The year each prehistory display was created/ last updated were recorded where known. • The years were then grouped into discrete categories of age ranges such as '1990s', 'early 2000s', 2010-2014', to facilitate a quantified comparison.

No.	Variable	Description	How recorded and analysed
3	**Amount on display**	This variable required a description of how many cases of prehistory are on display, whether objects are presented in only part of a case, a few cases or a room, as this variable affects the potential opportunities visitors have for engaging with objects.	• The number of cases/ rooms presenting prehistoric objects were recorded • The number of cases/ rooms were then grouped into discrete categories of space from 'part of a case' to 'entire museum', to facilitate a quantitative comparison of space dedicated to the period between museums. • The amount of space was then further categorised into values judgements from 'a very low amount' to a 'high amount', to gain a clearer impression of the amount of prehistory typically displayed in museums.
4	**Type of material on display**	This variable categorised the objects on display based on their material properties and interpreted function, as the core aspect of museum displays the selection and presentation of certain objects visually communicates certain narratives about the period and creates the overall aesthetic impression of the displays, which in turn influences how the period is perceived by visitors.	• The predominant material composition and types of objects associated with each prehistoric period on display were recorded. • The frequency of different materials on display were quantitatively compared between museums. • Object types were grouped together into discrete categories based upon their interpreted function, including, 'weaponry', 'tools' and 'portable art' to facilitate a quantitative comparison of the prevailing types of objects on display for each period and the implicit narratives they present.

No.	Variable	Description	How recorded and analysed
5	**Colour scheme**	This variable recorded the predominant colours used within the prehistory displays as colour, subconsciously influences visitor perceptions through colour associations. Colour perception also contributes to the overall visual narrative and aesthetics of the displays. The relationship between the colour used to frame the objects on display and the objects themselves can either highlight or subdue the overall visual impression of the material on display.	• The prevailing colours used in the backing of cases and the colour of the walls in the gallery were recorded separately using consistent language to facilitate a quantitative comparison of popular colours used in prehistory displays between museums.
6	**Types of lighting**	This variable recorded the types of natural or artificial lighting that are used in and around the cases to showcase the material on display. The relationship between colour and lighting can significantly impact the overall visual impression of the objects and ambience of the gallery depending on how it used in the space. Lighting can juxtapose, frame, highlight, camouflage, reveal or conceal.	• It was not feasible to accurately record the level of lighting within the displays objectively so the type of lighting was recorded instead using consistent language to facilitate quantitative comparisons of popular forms of lighting used in association with prehistory displays.

No.	Variable	Description	How recorded and analysed
7	**Display furniture**	This variable recorded the technology used to present objects within the cases as these forms of furniture and structural support also contribute to the overall visual impression of displays and visitor interpretation of objects.	• Each type of display furniture and its material properties were recorded using consistent language to facilitate a comparison of popular types of structural features used to present prehistoric objects.
8	**Spatial relationships between objects**	This variable recorded how close the objects are together within the displays, how dense displays are and whether objects are presented in patterns as these spatial relationships also contribute to the overall aesthetics of the displays and influence visitor perceptions of the period.	• The density of objects were recorded using discrete categories from low to high to facilitate a quantitative comparison of the quantity of material on display. • The proximity of objects were also recorded using pre-determined discrete categories such as 'some objects overlapping', 'objects well-spaced apart' and 'each object presented separately' to quantitatively compare the spatial relationships between objects in cases. • Several types of proximity were recorded at certain museums depending on the variability of relationships present in displays.

No.	Variable	Description	How recorded and analysed
8	**Spatial relationships between objects**		• If a display arranges objects within a particular pattern this was recorded as 'objects displayed in a pattern' to quantitatively compare the amount of museums using artistic arrangements of objects.
9	**Text panels**	This variable recorded the use of textual interpretation associated with prehistory displays as the amount of text panels (inside and outside of cases) and the topics they convey influence visitor understanding, engagements and perceptions of prehistory and the narratives associated with each period. These panels are utilised to interpret the material on display and support the overall narrative of the displays and influence visitor conceptualisations of the material with which they are presented.	• The number of text panels at each museum were recorded to quantify the average number of text panels used in prehistory displays and the average number of panels associated with each prehistoric period. • The headline information on the text panels was transcribed for every museum producing qualitative data. • The headline information was then input into a word cloud generator to quantify the frequency of words used to convey prehistory and the different prehistoric periods. • The headline information was also categorised based on the themes conveyed to quantitatively compare narrative themes associated with prehistory and specific prehistoric periods.

No.	Variable	Description	How recorded and analysed
10	**Additional interpretation**	This variable recorded any additional forms of supporting interpretation that are used to present the prehistory and contextualise the objects on display. These forms of additional interpretation include audio-visuals, interactives and text-based supplementary information. These forms of interpretation influence how visitors can interact with and interpret displays, they alter visitor perceptions of prehistory and reinforce or create narratives.	• The types of audio-visuals used in displays such as 'paintings' and 'illustrations' were recorded using consistent language to facilitate a quantitative comparison of the prevalent types of audio-visuals used in prehistory displays. • The contents depicted in the audio-visuals such as 'people' and 'objects' were also recorded using consistent language to facilitate a quantitative comparison of the prevalent themes conveyed by the audio-visuals. • The predominant forms of visual content conveyed by the different types of audio-visual were further categorised into discrete visual narrative categories such as 'people-centric' and 'landscape-centric' for each museum to quantitatively compare the frequency of visual narratives used to convey prehistory to visitors. • The types of interactives such as 'tactile elements' and 'microscopes' that are used in displays were also recorded using consistent language to facilitate a quantitative comparison of the types of interactives used to engage visitors with prehistory.

No.	Variable	Description	How recorded and analysed
10	**Additional interpretation**		• The types of textual supplementary information such as 'ringbinders' or 'newspaper articles' were also recorded using consistent language to facilitate a quantitative comparison of the types of text-based supplementary information.
11	**Representation of gender**[4]	This variable recorded how men and women are represented within prehistory displays and the tasks they are associated with in depictions, whether women are included in depictions, whether men and women are presented in stereotyped gender roles or if both men and women are presented working together in a variety of roles. This variable impacts how gender is perceived in the past and will provide a useful comparison to the research undertaken with prehistory displays of the 1990s.	• The presence of women and men in visual interpretation was recorded to ascertain how frequently women are present in depictions of people. • The activities that men and women are depicted in such as 'farming' and 'crafting' and whether they are depicted undertaking these activities together or separately was recorded using consistent language to facilitate a quantitative comparison of the activities each gender is associated with. • The presence of androcentric and gendered text such as 'early man' and 'women the gatherers' within text panels was also recorded to quantify the frequency of such language in prehistory displays.

[4] Only the binary genders of male and female were recorded as depictions of gender do not represent more diverse genders beyond biological sex.

No.	Variable	Description	How recorded and analysed
11	**Representation of gender**		• The activities associated with each gender and the presence of androcentric/ gendered language recorded were used to further categorise whether genders are represented in stereotypical roles, more nuanced roles or a mixture of both to facilitate a quantitative comparison of the representation of gender across the museums.
12	**Presentation of human remains**	This variable was only recorded if human remains were present. If human remains were present, this variable described how they are displayed and contextualised within the prehistory displays, as the presentation of human remains can influence the types of engagements visitors can have with the space, can support the objects and interpretation and reinforce certain narratives.	• Several features were recorded for this variable including; The type of human remains such as 'disarticulated' or 'cremated'. The visibility of remains as 'easily visible' or 'discreetly displayed'. The level of context such as 'lots of context' or 'no context' The type of context associated with the remains, such as 'facial reconstruction' or 'pathologies highlighted'

No.	Variable	Description	How recorded and analysed
12	**Presentation of human remains**		The display style/ associations with human remains such as 'in urn/ cup' or 'alongside weaponry' • These aspects were recorded using consistent language to facilitate a quantitative comparison of the prevailing display trends that govern the presentation of human remains in a prehistory display context.
13	**Overarching display narrative**	This variable recorded the overall framework used to contextualise and structure the prehistory displays, predominantly through textual interpretation to produce a coherent narrative. This variable affects how visitors navigate through the space, relate to the displays and perceive the objects presented and ultimately interpret and understand the period.	• The overall narrative conveyed by the structure of the displays and the supporting textual interpretation was used to record the overarching display narrative using consistent language such as 'chronological' or 'site-based' to facilitate quantitative comparisons of the narrative structure of prehistory displays.

Table 3.3. Summary of the 13 variables of display and how they were recorded in the database of museum visits.

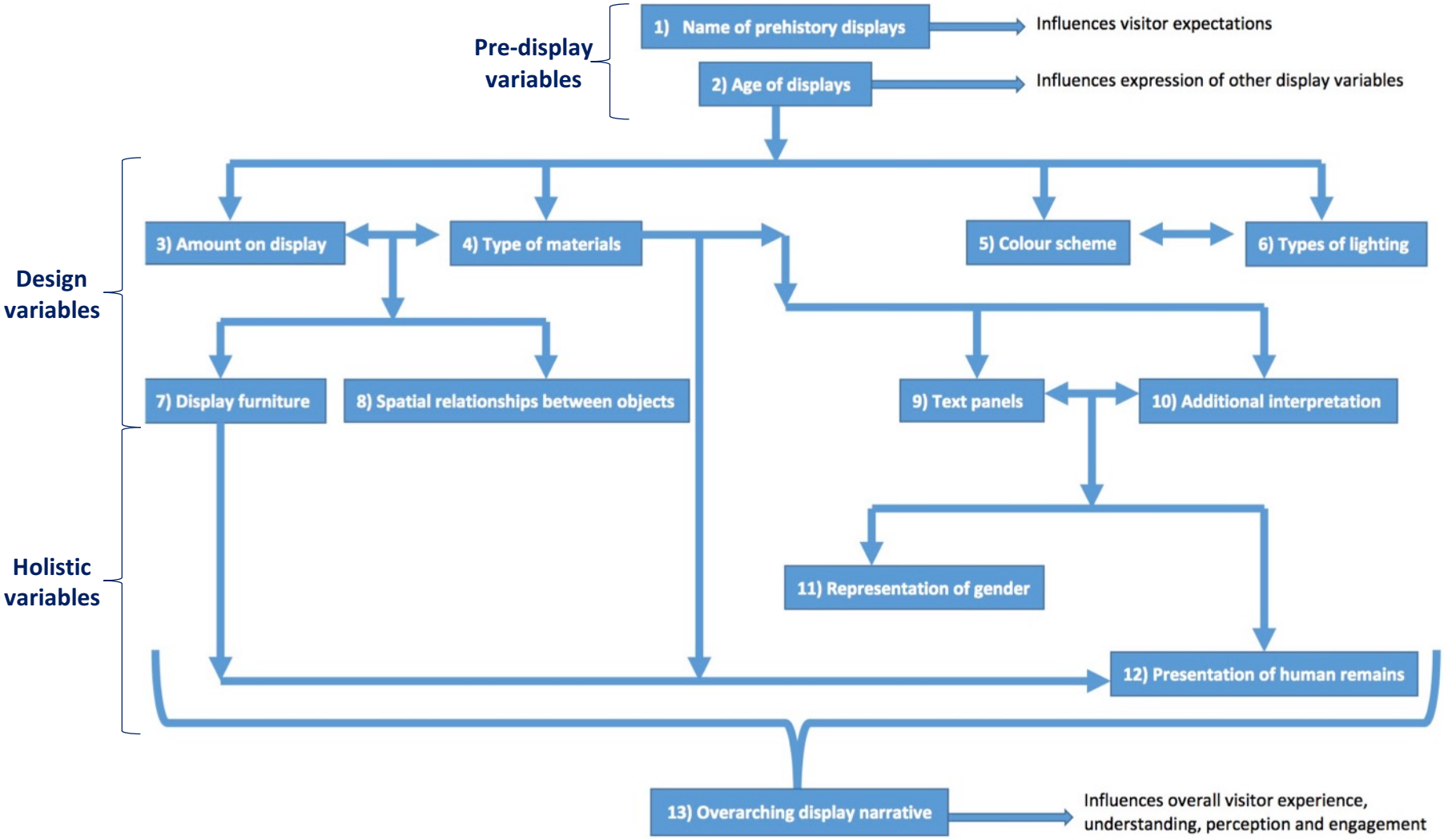
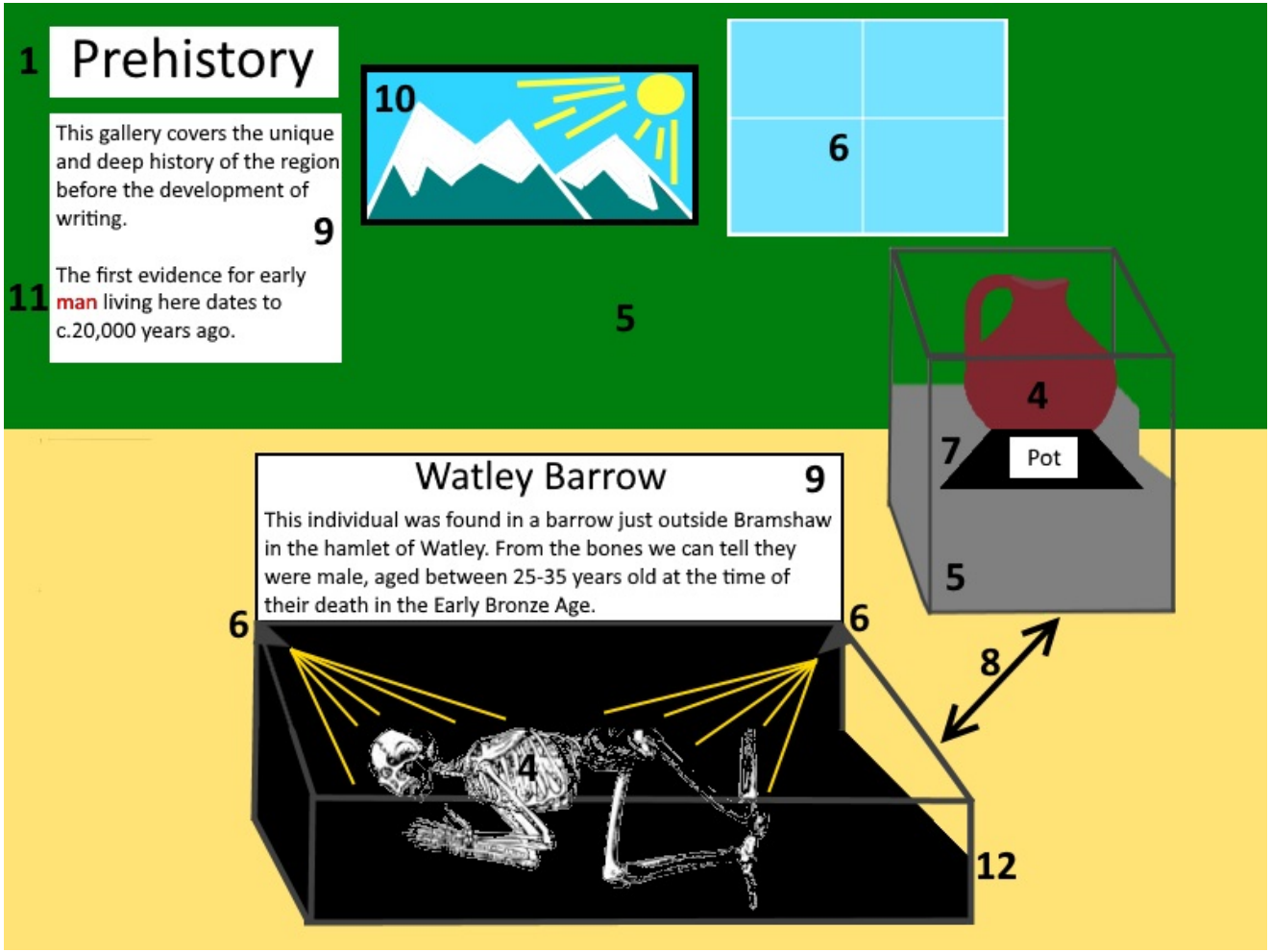


Figure 3.1. The relationships between the 13 variables of display and their categorisation.



Display Variable	Details
1	Prehistory
3	2 cases
4	Pot & Human remains
5	Wall colour: Green Case colours: Black & Grey
6	Natural lighting & In-case lighting
7	Podium
8	Separate cases, Well-spaced apart
9	2 text panels
10	Painting of a landscape
11	Androcentric language
12	Fully-articulated skeleton, easily visible, with some context provided in an associated text panel, no associated objects
13	Broadly chronological

Figure 3.2. Schematic map of a fictional gallery illustrating 12 of the variables of display and how they can be recorded in the corresponding table. The age of displays is not included as this pre-display variable is usually ascertained outside of the gallery.

In addition to recording information pertaining to the 13 variables of display at each museum the type of museum was also recorded to enable me to quantify how many types of each museum I had visited. Furthermore, I endeavoured to record any other relevant information in the database of visits, such as any further details provided by curators, architectural history if known, the circumstances of the display's creation, why they were created, how the displays were funded and whether there were external designers involved. These factors also play a role in determining the displays but are more difficult to record and not possible to record for most museums so cannot be included in the analysis. Overall, from the display variables recorded I was then able to calculate how frequently prehistory displays are updated, how different museums interpret and present 'prehistory' both through design elements as well as audio-visual and textual interpretation and these insights are outlined in Chapter 5.

The analysis of display variables 3 (amount on display), 4 (type of material on display) and 9 (text panels) will also be used to reveal period-specific representational trends, by highlighting how the repertoire of material culture and narratives associated with each period may have changed since the period-specific evaluations of Ballard (2007), Milner *et al*. (2015) and Henson, (2016) outlined in section 2.2.3.

The 13 variables of display highlighted and their analysis within the thesis represents a quantitative comparative approach to visually analysing prehistory displays in England reducing the influence of my personal subjectivity on the analysis.

3.2.4 Introduction to the macro-scale data collected

From January 2017 till January 2020, 173 prehistory displays were recorded across 40 English counties in the spreadsheet of museum visits (Appendix B). The 13 variables of display outlined in the previous section were recorded where feasible at each of these museums to capture the diversity of prehistory display styles in different types and sizes of museum. A map of all of the museums recorded is provided in figure 3.3 to illustrate the geographic distributions of these recorded museums and the corresponding table 3.4 lists all of these museums by name. To

further demonstrate the distribution of museums recorded in each region figures 3.4-3.11 illustrate the location of displays recorded within each region alongside tables 3.5-3.13 listing the museums recorded in each region to provide a more detailed view of the data set. From these maps it is apparent that there are only 5 counties where no prehistory displays were recorded, these were Leicestershire in the East Midlands, Herefordshire and Warwickshire in the West Midlands, the Tees Valley in the North East and Lancashire in the North West.

Museums with prehistory displays are geographically widespread, some are in quite inaccessible areas and may only display a single hand axe, whilst others are more centrally located with more space dedicated to the period. Consequently, rather than attempt to visit all displays which would not be feasible (as outlined in section 1.3.1), at the start of my museum visits I aimed to record at least 50% of the prehistory displays in each region of England to capture a sample of the diversity of display styles across the 9 regions. Reaching this goal was, however, more difficult than anticipated so to enhance the data set in late January/ early February 2019 I e-mailed 243 museums that I had not yet had the opportunity to visit to enquire whether they had any prehistory on display and if so, whether they could send me photographs and details of their displays so they could be included in my database of museum visits. This plea was well received and most museums sent images of their displays where the material and any associated interpretation was clear to see. However, this was not always the case, as some museums only sent one photograph, or photographs that were too close up so the number of cases, types of cases, colour scheme and lighting were not easily visible. Other museums sent photographs that were taken too far away so it was not possible to read the object descriptions or discern any information from text panels. Consequently, due to the more fragmentary nature of the information about the variables of display at these 97 museums, they are included in a separate worksheet in the same museum visits database (Appendix B). All of these museums recorded both in person and via e-mail are represented in the following distribution maps and corresponding tables.

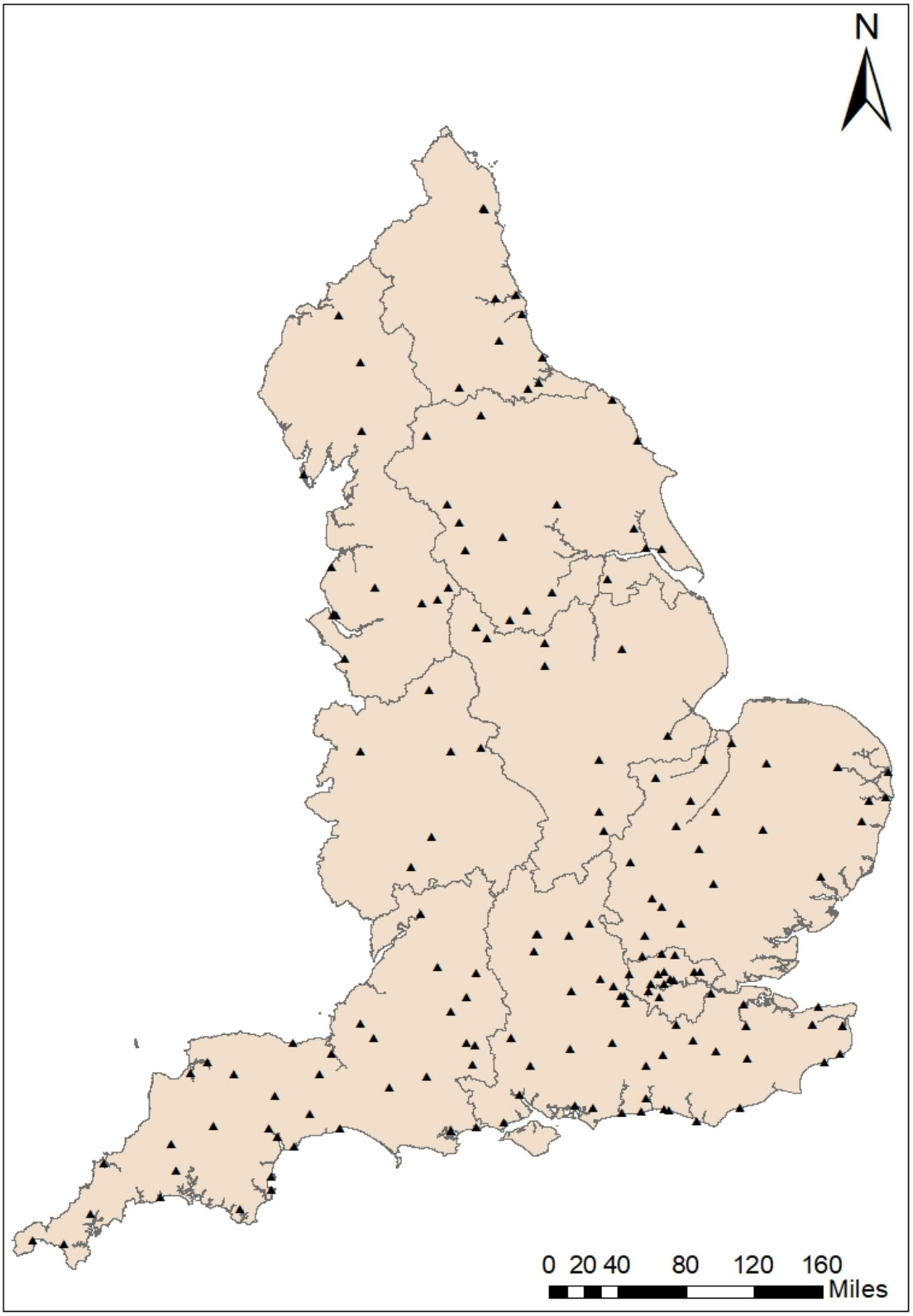


Figure 3.3. Map showing the geographical distribution of the 173 museums recorded (map created by author in GIS).

Name of Museum	Region	County
1. Abingdon County Hall Museum	South East	Oxfordshire
2. Alexander Keiller Museum	South West	Wiltshire
3. All Hallows Museum of Honiton	South West	Devon
4. Amesbury History Centre	South West	Wiltshire
5. Andover Museum	South East	Hampshire
6. Ashmolean Museum	South East	Oxfordshire
7. Athelstan museum	South West	Wiltshire
8. Bailiffgate Museum and Art Gallery	North East	Northumberland
9. Bankfield Museum	Yorkshire	West Yorkshire
10. Barnet Museum	London	London
11. Beccles and District Museum	East of England	Suffolk
12. Bexhill Museum	South East	East Sussex
13. Blake Museum	South West	Somerset
14. Brent Museum	London	London
15. Brighton Museum and Art Gallery	South East	East Sussex
16. British Museum	London	London
17. Brixham Heritage Museum	South West	Devon
18. Buckinghamshire County Museum	South East	Buckinghamshire
19. Burgh House and Hampstead Museum	London	London
20. Bushey Museum and Art Gallery	East of England	Hertfordshire
21. Buxton Museum	East Midlands	Derbyshire
22. Callington Heritage Centre	South West	Cornwall
23. Canterbury Roman Museum	South East	Kent
24. Castleton Village Museum	East Midlands	Derbyshire
25. Chatteris Museum	East of England	Cambridgeshire
26. Chertsey Museum	South East	Surrey
27. Chesterfield Museum and Art Gallery	East Midlands	Derbyshire
28. Cliffe Castle Museum	Yorkshire	West Yorkshire
29. Clifton Park Museum	Yorkshire	South Yorkshire
30. Colchester Castle	East of England	Essex
31. Cookworthy Museum	South West	Devon
32. Cranbrook Museum	South East	Kent
33. Crawley Museum	South East	West Sussex
34. Creswell Crags	East Midlands	Nottinghamshire
35. Curtis Museum	South East	Hampshire
36. Dales Countryside Museum	Yorkshire	North Yorkshire
37. Dartford Borough Museum	South East	Kent

Name of Museum	Region	County
38. Dean Heritage Centre	South West	Gloucestershire
39. Dock Museum	North West	Cumbria
40. Doncaster Museum and Art Gallery	Yorkshire	South Yorkshire
41. Dorman Museum	Yorkshire	North Yorkshire
42. Dover Museum	South East	Kent
43. Droitwich Spa Heritage Centre	West Midlands	Worcestershire
44. East Surrey Museum	South East	Surrey
45. Eden Valley Museum	South East	Kent
46. Egham Museum	South East	Surrey
47. Ely Museum	East of England	Cambridgeshire
48. Emsworth Museum	South East	Hampshire
49. Enfield Museum	London	London
50. Eyam Museum	East Midlands	Derbyshire
51. Fairlynch Museum and Arts Centre	South West	Devon
52. Folkestone Museum	South East	Kent
53. Godalming Museum	South East	Surrey
54. Gold Hill Museum	South West	Dorset
55. Great North Museum: Hancock	North East	Tyne and Wear
56. Gunnersbury Park Museum	London	London
57. Halesworth Museum	East of England	Suffolk
58. Hartlepool Museum	North East	Durham
59. Hedon Museum	Yorkshire	East Yorkshire
60. Hillingdon Museum	London	London
61. Horsham Museum	South East	West Sussex
62. Hove Museum	South East	East Sussex
63. Hull and East Riding Museum	Yorkshire	East Yorkshire
64. Ipswich Museum	East of England	Suffolk
65. Kendal Museum	North West	Cumbria
66. Kettering Museum	East Midlands	Northamptonshire
67. Lawrence House	South West	Cornwall
68. Leeds City Museum	Yorkshire	West Yorkshire
69. Littlehampton Museum	South East	West Sussex
70. Liverpool World Museum	North West	Merseyside
71. Lowestoft Museum	East of England	Suffolk
72. Lyme Regis Philpot Museum	South West	Dorset
73. Lynn Museum	East of England	Norfolk
74. Maidenhead Heritage Centre	South East	Berkshire

Name of Museum	Region	County
75. Maidstone Museum	South East	Kent
76. Malvern Museum of Local History	West Midlands	Worcestershire
77. Manchester Museum	North West	Greater Manchester
78. Mansfield Museum	East Midlands	Nottinghamshire
79. Museum of Archaeology and Anthropology	East of England	Cambridgeshire
80. Museum of Archaeology, Durham University	North East	Durham
81. Museum of Barnstaple and North Devon	South West	Devon
82. Museum of Cornish Life	South West	Cornwall
83. Museum of Dartmoor Life	South West	Devon
84. Museum of Gloucester	South West	Gloucestershire
85. Museum of Liverpool	North West	Merseyside
86. Museum of London	London	London
87. Museum of Prehistory, Cheddar Gorge	South West	Somerset
88. Museum of Richmond	London	London
89. Museum of the Iron Age	South East	Hampshire
90. Museum of Wigan Life	North West	Greater Manchester
91. Museum of Wimbledon	London	London
92. National Memorial Arboretum	West Midlands	Staffordshire
93. Natural History Museum	London	London
94. North Hertfordshire Museum	East of England	Hertfordshire
95. North Lincolnshire Museum	East Midlands	Lincolnshire
96. Norwich Castle and Museum	East of England	Norfolk
97. Old Guildhall and Gaol	South West	Cornwall
98. Oxford University Museum of Natural History	South East	Oxfordshire
99. Padstow Museum	South West	Cornwall
100. Penlee House Gallery and Museum	South West	Cornwall
101. Penrith and Eden Museum	North West	Cumbria
102. Peterborough Museum	East of England	Cambridgeshire
103. Pitt Rivers Museum	South East	Oxfordshire
104. Poole Museum	South West	Dorset
105. Portland Basin Museum	North West	Greater Manchester

Name of Museum	Region	County
106. Preston Park Museum	North East	Durham
107. Reading Museum	South East	Berkshire
108. Red House Museum and Gardens	South West	Dorset
109. Redbridge Museum	London	London
110. Richmondshire Museum	Yorkshire	North Yorkshire
111. Rochester Guildhall Museum	South East	Kent
112. Royal Albert Memorial Museum	South West	Devon
113. Royal Cornwall Museum	South West	Cornwall
114. Rutland County Museum	East Midlands	Rutland
115. Saddleworth Museum and Gallery	North West	Greater Manchester
116. Saffron Walden Museum	East of England	Essex
117. Sandwich Guildhall Museum	South East	Kent
118. SeaCity Museum	South East	Hampshire
119. Seaford Museum	South East	East Sussex
120. Sherborne Museum	South West	Dorset
121. Shrewsbury Museum and Art Gallery	West Midlands	Shropshire
122. South Molton and District Museum	South West	Devon
123. South Shields Museum & Art Gallery	North East	Tyne and Wear
124. Spalding Gentleman's Society	East Midlands	Lincolnshire
125. Spelthorne Museum	South East	Surrey
126. St Albans Museum and Gallery	East of England	Hertfordshire
127. St Barbe Museum and Art Gallery	South East	Hampshire
128. Stevenage Museum	East of England	Hertfordshire
129. Steyning Museum	South East	West Sussex
130. Stonehenge Visitor Centre	South West	Wiltshire
131. Sunderland Museum and Winter Gardens	North East	Tyne and Wear
132. Swaffham Museum	East of England	Norfolk
133. Swindon Museum and Art Gallery	South West	Wiltshire
134. Thame Museum	South East	Oxfordshire
135. The Atkinson	North West	Merseyside
136. The Beaney House of Art and Knowledge	South East	Kent
137. The Bowes Museum	North East	Durham
138. The Burton Art Gallery and Museum	South West	Devon

Name of Museum	Region	County
139. The Collection: Art and Archaeology in Lincolnshire	East Midlands	Lincolnshire
140. The Craven Museum	Yorkshire	North Yorkshire
141. The Duke's Museum at Alnwick Castle	North East	Northumberland
142. The Grosvenor Museum, Chester	North West	Cheshire
143. The Higgins Art Gallery and Museum, Bedford	East of England	Bedfordshire
144. The Museum of Cannock Chase	West Midlands	Staffordshire
145. The Museum of Somerset	South West	Somerset
146. The Norris Museum	East of England	Cambridgeshire
147. The Novium, Chichester	South East	West Sussex
148. The Potteries Museum and Art Gallery	West Midlands	Staffordshire
149. The Rotunda Museum: The William Smith Museum of Geology	Yorkshire	North Yorkshire
150. The Salisbury Museum	South West	Wiltshire
151. The Seaside Museum Herne Bay	South East	Kent
152. The Treasure House	Yorkshire	East Yorkshire
153. The Ware Museum	East of England	Hertfordshire
154. The Wellingborough Museum	East Midlands	Northamptonshire
155. Time and Tide Museum of Great Yarmouth Life	East of England	Norfolk
156. Tiverton Museum of Mid-Devon Life	South West	Devon
157. Topsham Museum	South West	Devon
158. Torquay Museum	South West	Devon
159. Tullie House Museum	North West	Cumbria
160. Tunbridge Wells Museum	South East	Kent
161. Valence House Museum	London	London
162. Victoria Gallery and Museum	North West	Merseyside
163. Watchet Market House Museum	South West	Somerset
164. Wells and Mendip Museum	South West	Somerset
165. West Stow Anglo-Saxon Village	East of England	Suffolk
166. Weston Park Museum	Yorkshire	South Yorkshire
167. Whitby Museum	Yorkshire	North Yorkshire
168. Wiltshire Museum	South West	Wiltshire
169. Winchester City Museum	South East	Hampshire

Name of Museum	Region	County
170. Windsor and Royal Borough Museum	South East	Berkshire
171. Wisbech and Fenland Museum	East of England	Cambridgeshire
172. Worthing Museum and Art Gallery	South East	West Sussex
173. Yorkshire Museum	Yorkshire	North Yorkshire

Table 3.4. Summary of all 173 museums recorded, their region and county.

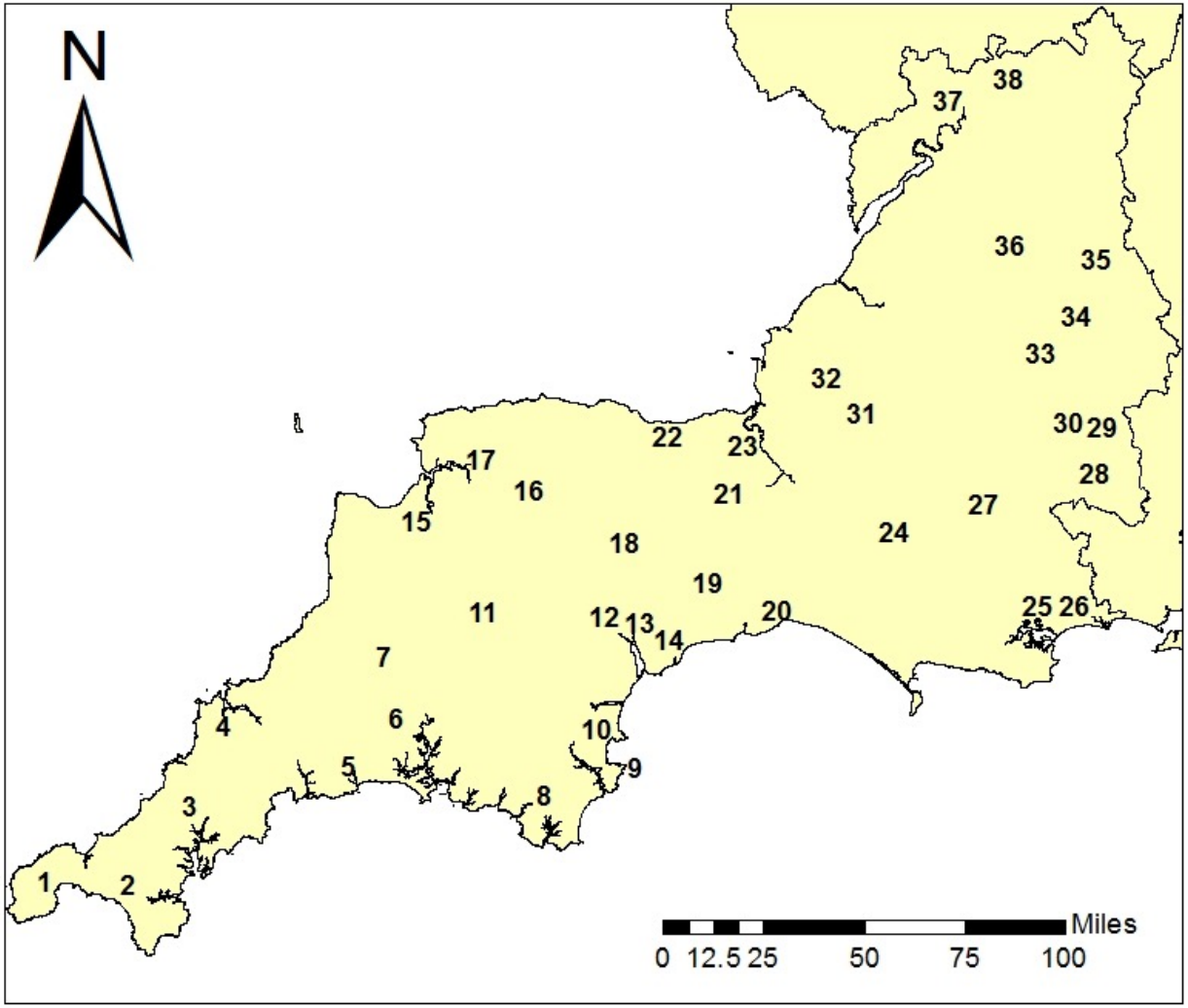


Figure 3.4. Map of the 38 museums recorded in the South West. The corresponding museums represented by the numbers on the map can be viewed in table 3.5. (map created by author in GIS).

No	Name of Museum
1	Penlee House Gallery and Museum
2	Museum of Cornish Life
3	Royal Cornwall Museum
4	Padstow Museum
5	Old Guildhall and Gaol
6	Callington Heritage Centre
7	Lawrence House
8	Cookworthy Museum
9	Brixham Heritage Museum
10	Torquay Museum
11	Museum of Dartmoor Life
12	Royal Albert Memorial Museum
13	Topsham Museum
14	Fairlynch Museum and Arts Centre
15	The Burton Art Gallery and Museum
16	South Molton and District Museum
17	Museum of Barnstaple and North Devon
18	Tiverton Museum of Mid-Devon Life
19	All Hallows Museum of Honiton
20	Lyme Regis Philpot Museum
21	The Museum of Somerset
22	Watchet Market House Museum
23	Blake Museum
24	Sherborne Museum
25	Poole Museum
26	Red House Museum and Gardens
27	Gold Hill Museum
28	The Salisbury Museum
29	Amesbury History Centre
30	Stonehenge Visitor Centre
31	Wells and Mendip Museum
32	Museum of Prehistory, Cheddar Gorge
33	Wiltshire Museum
34	Alexander Keiller Museum
35	Swindon Museum and Art Gallery
36	Athelstan museum
37	Dean Heritage Centre
38	Museum of Gloucester

Table 3.5. List of all museums recorded in the South West alongside the number they are represented by on the distribution map in figure 3.4.

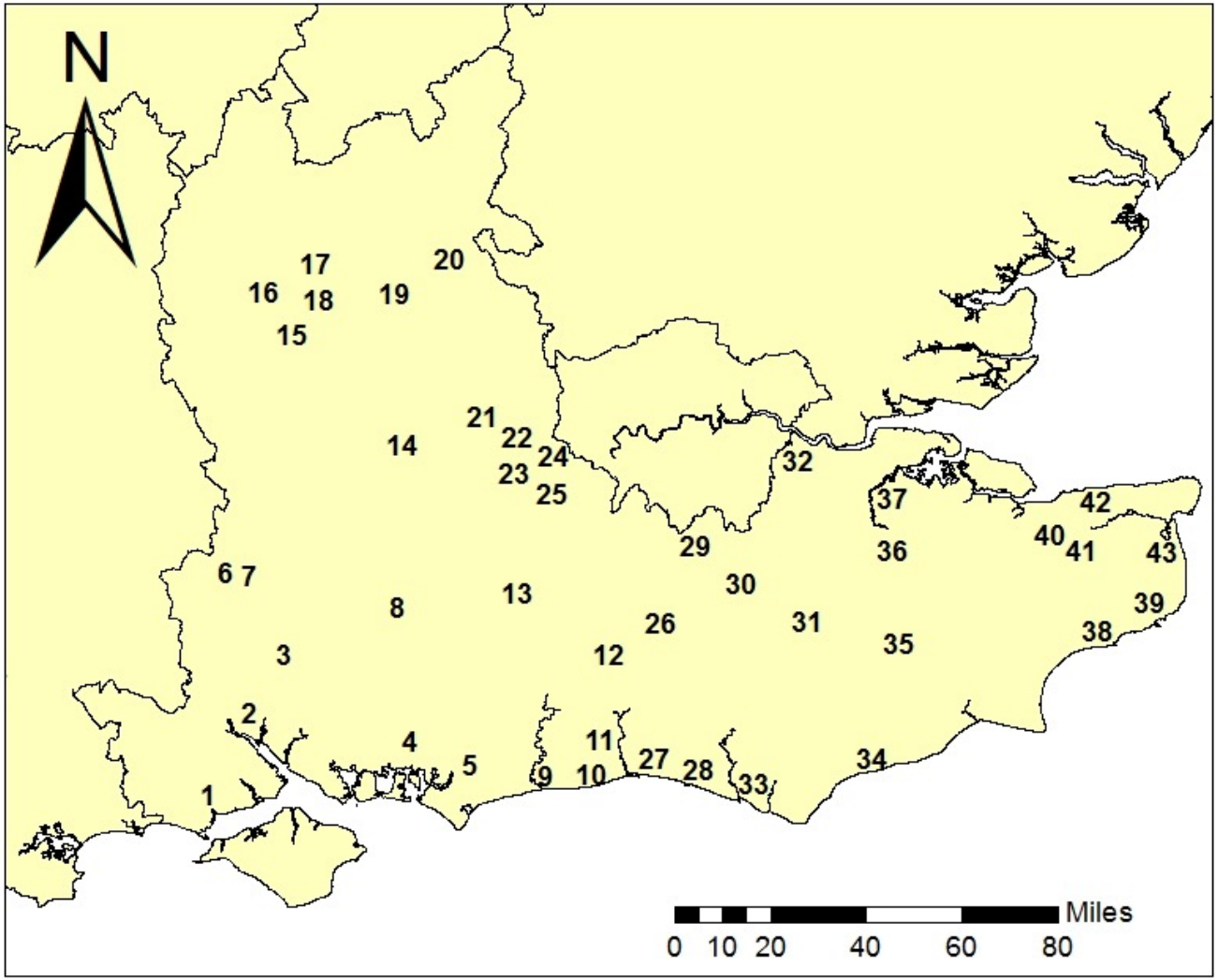
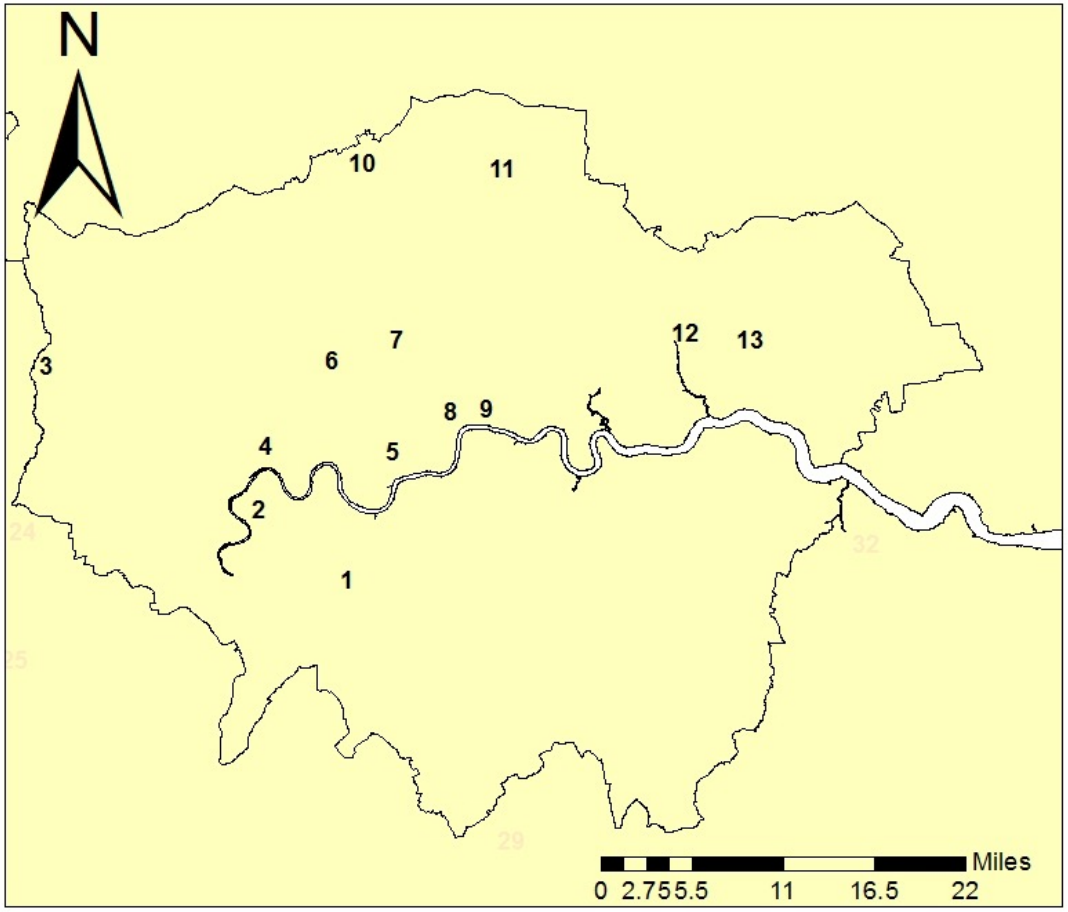


Figure 3.5. Map of the 43 museums recorded in the South East (map created by author in GIS).

No	Name of Museum	No	Name of Museum
1	St Barbe Museum and Art Gallery	41	Canterbury Roman Museum
2	SeaCity Museum	42	The Seaside Museum Herne Bay
3	Winchester City Museum	43	Sandwich Guildhall Museum
4	Emsworth Museum		
5	The Novium, Chichester		
6	Museum of the Iron Age		
7	Andover Museum		
8	Curtis Museum		
9	Littlehampton Museum		
10	Worthing Museum and Art Gallery		
11	Steyning Museum		
12	Horsham Museum		
13	Godalming Museum		
14	Reading Museum		
15	Abingdon County Hall Museum		
16	Ashmolean Museum		
17	Oxford University Museum of Natural History		
18	Pitt Rivers Museum		
19	Thame Museum		
20	Buckinghamshire County Museum		
21	Maidenhead Heritage Centre		
22	Windsor and Royal Borough Museum		
23	Egham Museum		
24	Spelthorne Museum		
25	Chertsey Museum		
26	Crawley Museum		
27	Hove Museum		
28	Brighton Museum and Art Gallery		
29	East Surrey Museum		
30	Eden Valley Museum		
31	Tunbridge Wells Museum		
32	Dartford Borough Museum		
33	Seaford Museum		
34	Bexhill Museum		
35	Cranbrook Museum		
36	Maidstone Museum		
37	Rochester Guildhall Museum		
38	Folkestone Museum		
39	Dover Museum		
40	The Beaney House of Art and Knowledge		

Table 3.6. List of museums recorded in the South East.



No	Name of Museum
1	Museum of Wimbledon
2	Museum of Richmond
3	Hillingdon Museum
4	Gunnersbury Park Museum
5	Natural History Museum
6	Brent Museum
7	Burgh House and Hampstead Museum
8	British Museum
9	Museum of London
10	Barnet Museum
11	Enfield Museum
12	Redbridge Museum
13	Valence House Museum

Figure 3.6. Map of the 13 museums recorded in London. (map created by author in GIS).

Table 3.7. List of museums recorded in London alongside the number they are represented by on the distribution map in figure 3.6.

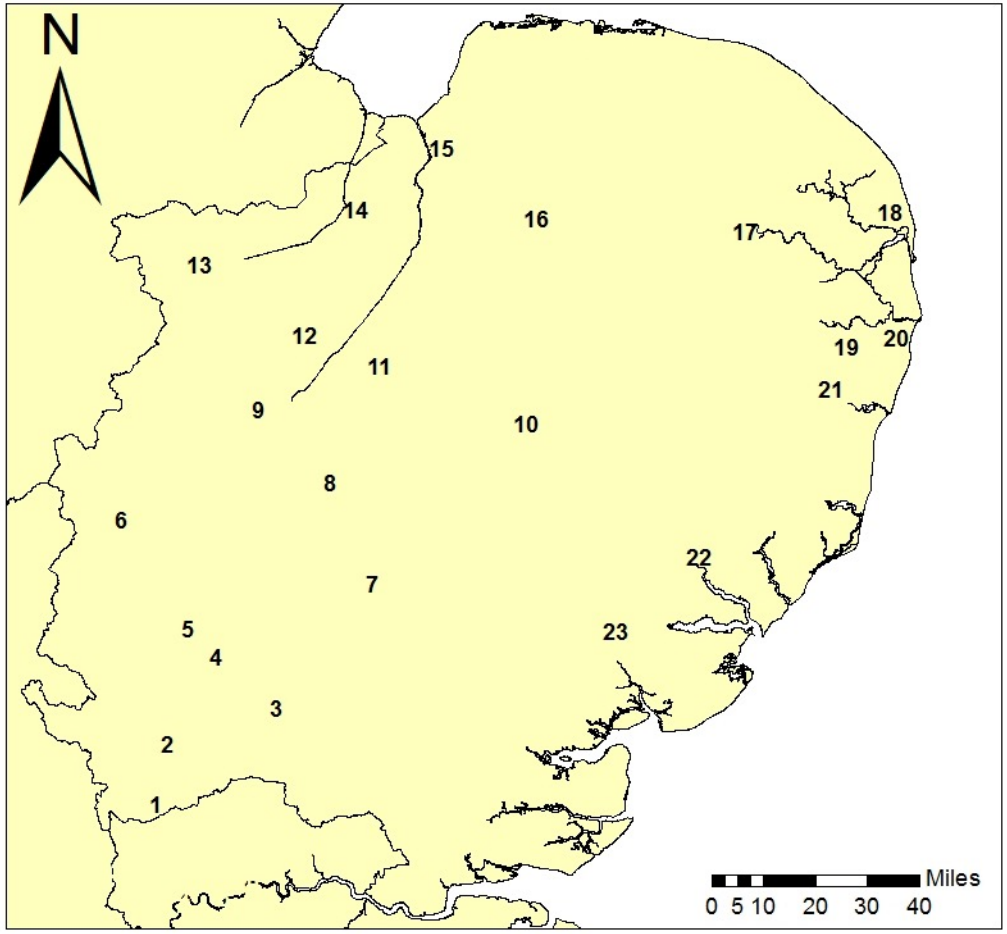
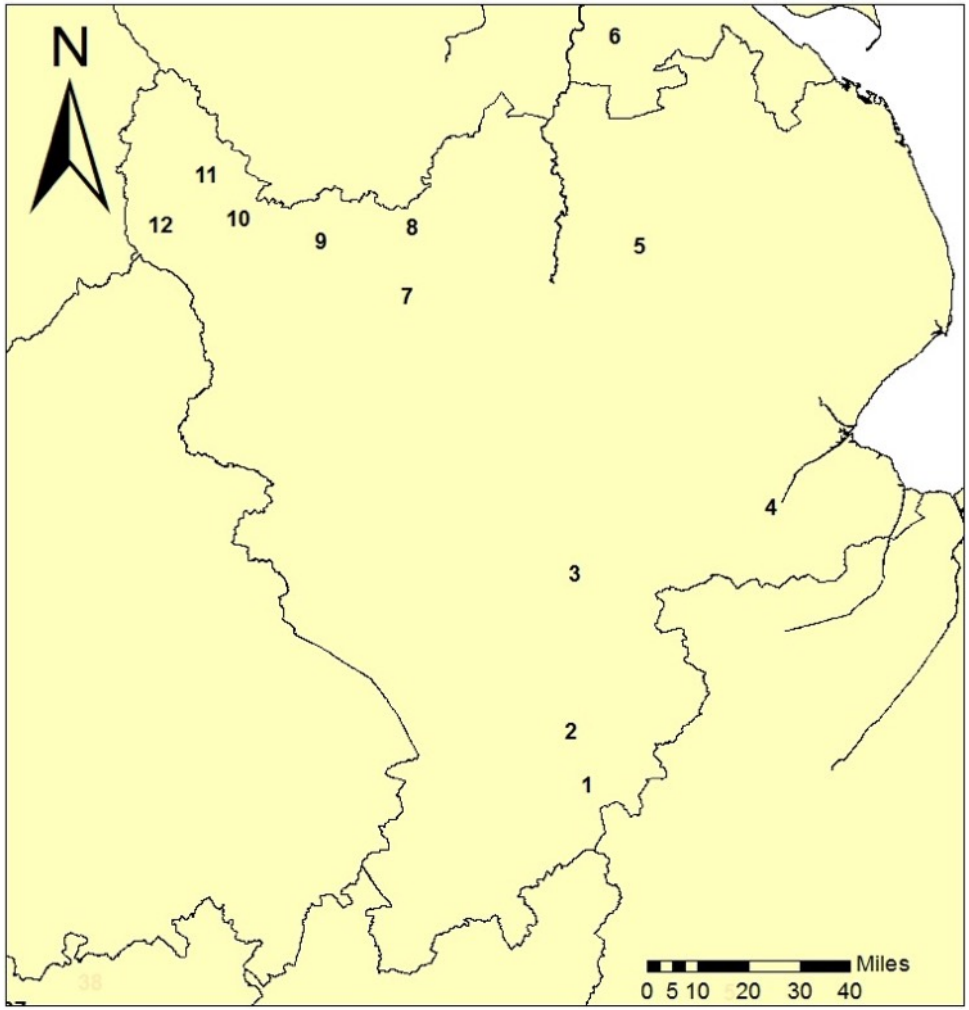


Figure 3.7. Map of the 23 museums recorded in East England (map created by author in GIS).

Table 3.8. List of museums recorded in East England.

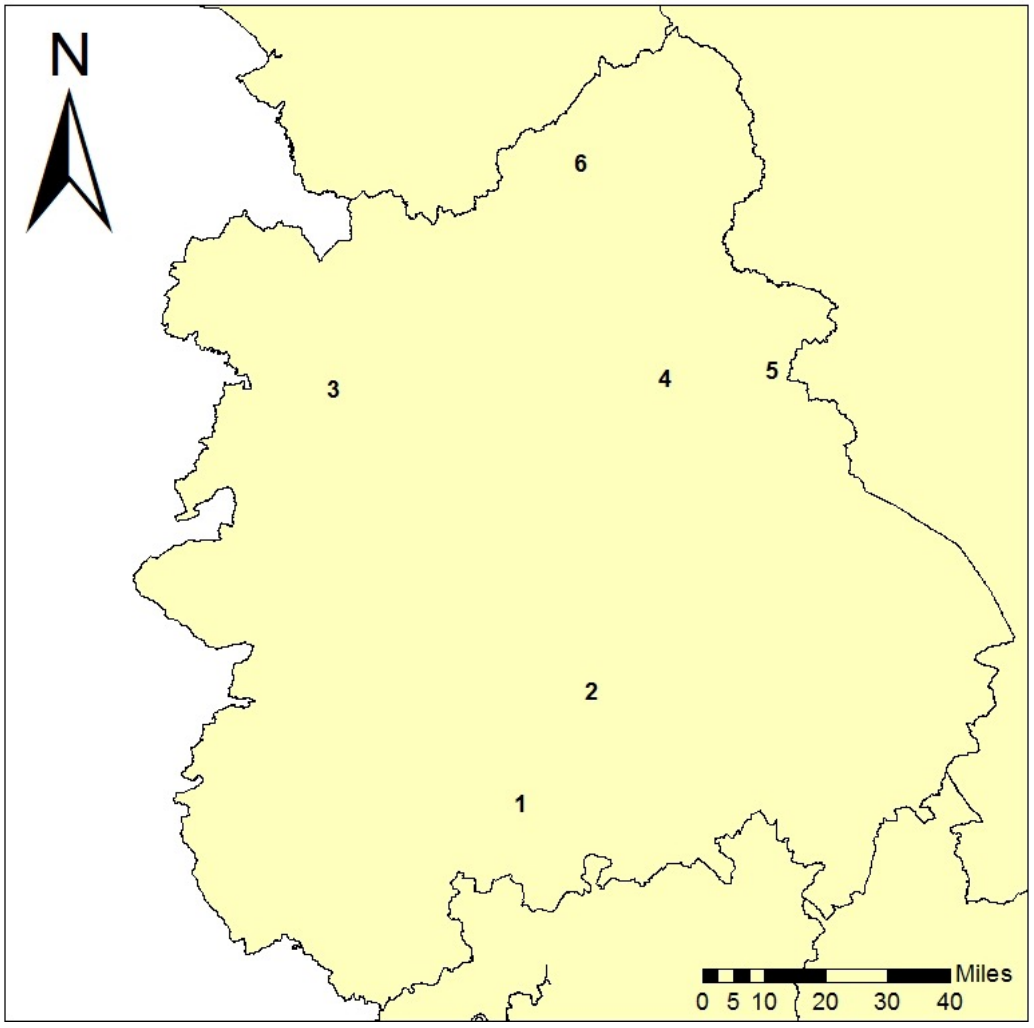
No	Name of Museum
1	Bushey Museum and Art Gallery
2	St Albans Museum and Gallery
3	The Ware Museum
4	Stevenage Museum
5	North Hertfordhire Museum
6	The Higgins Art Gallery and Museum, Bedford
7	Saffron Walden Museum
8	Museum of Archaeology and Anthropology, Cambridge
9	The Norris Museum
10	West Stow Anglo-Saxon Village
11	Ely Museum
11	Lynn Museum
12	Chatteris Museum
13	Peterborough Museum
14	Wisbech and Fenland Museum
15	Lynn Museum
16	Swaffham Museum
17	Norwich Castle and Museum
18	Time and Tide Museum of Great Yarmouth Life
19	Beccles and District Museum
20	Lowestoft Museum
21	Halesworth Museum
22	Ipswich Museum
23	Colchester Castle



No	Name of Museum
1	The Wellingborough Museum
2	Kettering Museum
3	Rutland County Museum
4	Spalding Gentleman's Society
5	The Collection: Art and Archaeology in Lincolnshire
6	North Lincolnshire Museum
7	Mansfield Museum
8	Creswell Crags
9	Chesterfield Museum and Art Gallery
10	Eyam Museum
11	Castleton Village Museum
12	Buxton Museum

Figure 3.8. Map of the 12 museums recorded in the East Midlands. Number 6 is North Lincolnshire Museum which is located within the Yorkshire regional boundary based on data from the Office for National Statistics but I have included it within the region of the East Midlands as it is situated in the county of Lincolnshire (map created by author in GIS).

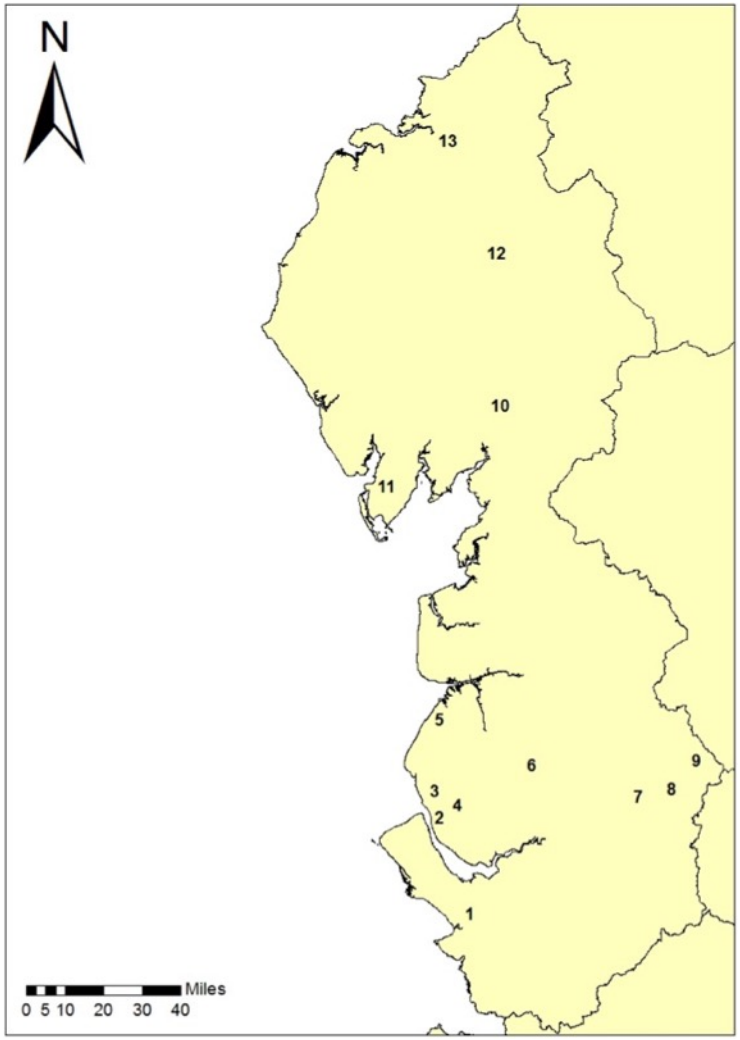
Table 3.9. List of the 12 museums recorded in the East Midlands.



No	Name of Museum
1	Malvern Museum of Local History
2	Droitwich Spa Heritage Centre
3	Shrewsbury Museum and Art Gallery
4	The Museum of Cannock Chase
5	National Memorial Arboretum
6	The Potteries Museum and Art Gallery

Figure 3.9. Map of the 6 museums recorded in the West Midlands (map created by author in GIS).

Table 3.10. List of the museums recorded in the West Midlands.



No	Name of Museum
1	The Grosvenor Museum, Chester
2	Liverpool World Museum
3	Museum of Liverpool
4	Victoria Gallery and Museum
5	The Atkinson
6	Museum of Wigan Life
7	Manchester Museum
8	Portland Basin Museum
9	Saddleworth Museum and Gallery
10	Kendal Museum
11	Dock Museum
12	Penrith and Eden Museum
13	Tullie House Museum

Figure 3.10. Map of the 13 museums recorded in the North West (map created by author in GIS).

Table 3.11. List of all the museums recorded in the North West.

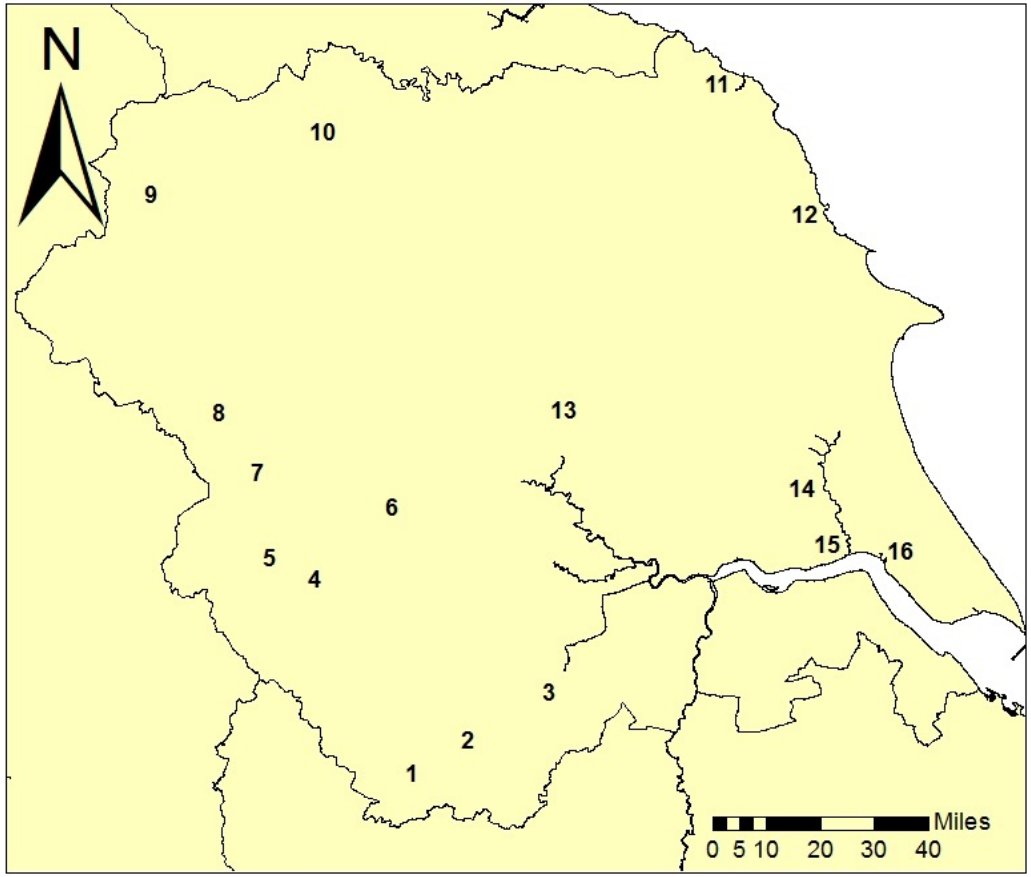
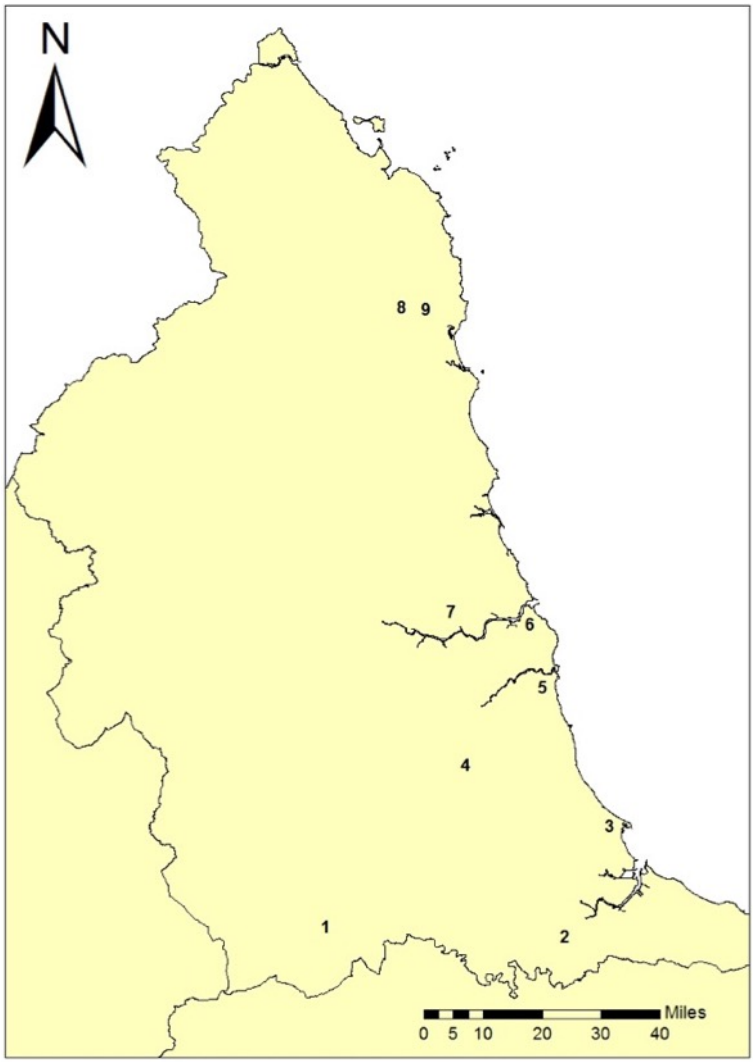


Figure 3.11. Map of the 16 museums recorded across Yorkshire (map created by author in GIS).

Table 3.12. List of the 16 museums recorded in Yorkshire.

No	Name of Museum
1	Weston Park Museum
2	Clifton Park Museum
3	Doncaster Museum and Art Gallery
4	Bankfield Museum
5	Heptonstall Museum
6	Leeds City Museum
7	Cliffe Castle Museum
8	Craven Museum and Gallery
9	Dales Countryside Museum
10	Richmondshire Museum
11	Whitby Museum
12	Rotunda Museum
13	The Yorkshire Museum
14	The Treasure House
15	Hull and East Riding Museum
16	Hedon Museum



No	Name of Museum
1	The Bowes Museum
2	Preston Park Museum
3	Hartlepool Museum
4	Durham University Museum of Archaeology
5	Sunderland Museum and Winter Gardens
6	South Shields Museum & Art Gallery
7	Great North Museum: Hancock
8	Bailiffgate Museum and Art Gallery
9	The Duke's Museum at Alnwick Castle

Figure 3.12. Map of the 9 museums recorded in the North East (map created by author in GIS).

Table 3.13. List of the 9 museums recorded in the North East.

Due to the duration of the data collection it was inevitable that some displays would be updated or closed after they were recorded and there was not always an opportunity to re-visit[5] these museums. In total there are 5 museums where I am aware of such changes; Manchester Museum, Ely Museum, Tunbridge Wells Museum, Hedon Museum and Redbridge Museum. There are likely many more museums that have changed their displays since they were initially recorded in the database of museum visits, as some of the museums I was in contact with expressed their intentions to redevelop displays if they could secure funding. It must therefore be noted that this dataset is not completely comprehensive or all-encompassing but is large enough to highlight the diversity of prehistory display styles and trends in the expression of display variables.

The number of museums with prehistory displays that were recorded in each region are summarised in table 3.14. To calculate the coverage of prehistory displays I have taken the number of museums with prehistory displays as a percentage of the total number of museums in a particular region. This total number of museums in a particular region comes from my sample of museums in Appendix A and consists of a combination of Accredited museums from the Arts Council's 2018 Accreditation scheme and curator-driven suggestions of unaccredited museums. The sample of museums in each region is therefore not representative of all museums as there was no source that provides up to date museum listings by region.

To calculate the likely number of museums with prehistory on display in a particular region I have included all museums which either explicitly advertise having prehistory displays, were visited and found to have prehistory on display or responded to my e-mails confirming they had prehistory on display. However, the real number may be slightly larger as there are still 36 museums within the sample of museums where it could be not ascertained whether they displayed any archaeological or prehistoric material despite numerous attempts to contact the museums, although these museums represent only 3% of all of the museums researched. Furthermore, I have

[5] I only had the opportunity to re-visit Tullie House as it redeveloped the prehistory displays a few months after my initial visit.

calculated the number of prehistory displays recorded as a percentage of all the likely prehistory displays in that region to demonstrate that I have met the minimum target of 50% coverage for each region.

Area	No. of Accredited [6]museums	No. of additional non-accredited museums	Total no. of museums in sample	Estimated no. of prehistory displays	% of the sample museums with prehistory displays	No. of prehistory displays recorded by e-mail	No. of prehistory displays recorded in person	Total no. of prehistory displays recorded	% of prehistory displays recorded
North West	139	0	139	21	15%	6	7	13	62%
North East	63	1	64	12	19%	2	7	9	75%
Yorkshire	142	1	143	22	15%	5	11	16	73%
West Midlands	130	1	131	9	7%	6	0	6	67%
East Midlands	107	0	107	18	17%	9	3	12	67%
East of England	163	1	164	36	22%	14	9	23	64%
London	132	0	132	18	14%	9	4	13	72%
South East	235	2	237	55	23%	28	15	43	78%
South West	205	4	209	49	23%	18	20	38	78%
All	1316	10	1326	240	18%	97	76	173	72%

Table 3.14. Summary of the number of museums recorded across England, the percentage of museums with prehistory displays and the percentage of museums with prehistory displays that were recorded.

[6] Based on the number of Accredited museums released in 2018 by the Arts Council.

It was expected that due to the issues associated with presenting prehistory highlighted in Chapter 2, as well as the variety of museums that exist across England that museums with prehistory displays would account for a very small proportion of museums in England. Out of the sample of 1,326 museums researched, only 240 were estimated to present prehistory, equating to only 18% of the sample investigated. This trend appears to be reflected regionally with less than 24% of museums in all regions displaying prehistory. This generally low proportion of museums presenting prehistory varies regionally and is comparatively much lower in the West Midlands, London and the North. Furthermore, table 3.14 highlights that it cannot be assumed that regions with a larger proportion of museums, display more prehistory than regions with fewer museums. The lowest number of prehistory displays relative to the number of museums was observed in the West Midlands where only 9 displays were identified as likely prehistory displays out of 131 museums. In contrast, although the North East only has 64 museums, a greater proportion of these museums display prehistory.

Through the combination of visiting and contacting museums the initial aim to record at least 50% of the prehistory displays in each region was surpassed with 62% - 78% recorded in each region. Overall 72% of prehistory displays in England were recorded (based upon my estimations), although certain areas were much easier to access and record in comparison to others which is why there can be quite a large disparity between the number of museums visited in person versus recorded by e-mail. Contact with museums was most influential in the Midlands, where variables of display recorded by e-mail correspondence with museums accounted for most of the recorded displays. The largest proportions of prehistory displays were recorded in the South due to the high concentration of museums and greater frequency of prehistory displays in the South West and South East. All of these museum displays were recorded based upon the 13 variables of display and these variables will be quantitatively analysed to facilitate comparisons between different types and sizes of museum and address research question 2 in Chapter 5 of the thesis.

3.3 The micro-scale

In contrast to the breadth of the macro-scale, to address research aims 1 and 3 of the thesis to both *'Gain an understanding of public preconceptions of prehistory'* and '*Identify which display types/ methods are most effective for engaging visitors with prehistory displays'* requires a more focused micro-scale approach utilising visitor-based data. By focusing on individual case studies this approach provides more 'fine-grained', detailed insights into visitor perceptions and engagements within a prehistory display context. At each case study museum, both tracking surveys and questionnaire data collection were undertaken together to garner both qualitative and quantitative data. It was only by collecting both types of data that a comprehensive insight into visitor ideas about prehistory and how visitors experience displays could be achieved. The tracking surveys produced a wealth of quantitative data about how visitors navigate through the displays and interacted with the content. To provide an insight into visitor motivations and perceptions behinds these observed behaviours qualitative data was also captured to provide a richer understanding of visitor pre-display preconceptions, an individual's experience with prehistory displays and how they articulated these experiences, accounting for a greater diversity of responses, unconstrained by pre-determined categories. This qualitative data was then quantitatively analysed to enable visitor experiences to be compared between museums providing a foundational empirically-grounded understanding of public preconceptions of prehistory and their perceptions and engagements with prehistory displays.

3.3.1 The case studies selected

To gain an in-depth understanding of visitor preconceptions of prehistory, how visitors interact and engage with particular types of prehistory display visitor-based data was collected at 6 museums, as case studies. Museums were selected to represent different types of museum of different sizes with correspondingly different styles of display that were recorded in the macro-scale museum visits database. The museums selected are as follows: The British Museum (BM), Stonehenge Visitor

Centre (SVC), North Lincolnshire Museum (NLM), Torquay Museum (TQ), Weston Park museum (WP) and the Great North Museum (GNM). These museums reflect a wide geographic spread across England, highlighted in figure 3.13 with SVC and TQ located in the South West, the BM in London, NLM in the East Midlands, WP in Yorkshire and GNM in the North East. Visitor-based data was collected from these 6 case studies between December 2017 until December 2018 and this data will be analysed in Chapters 4 and 6.

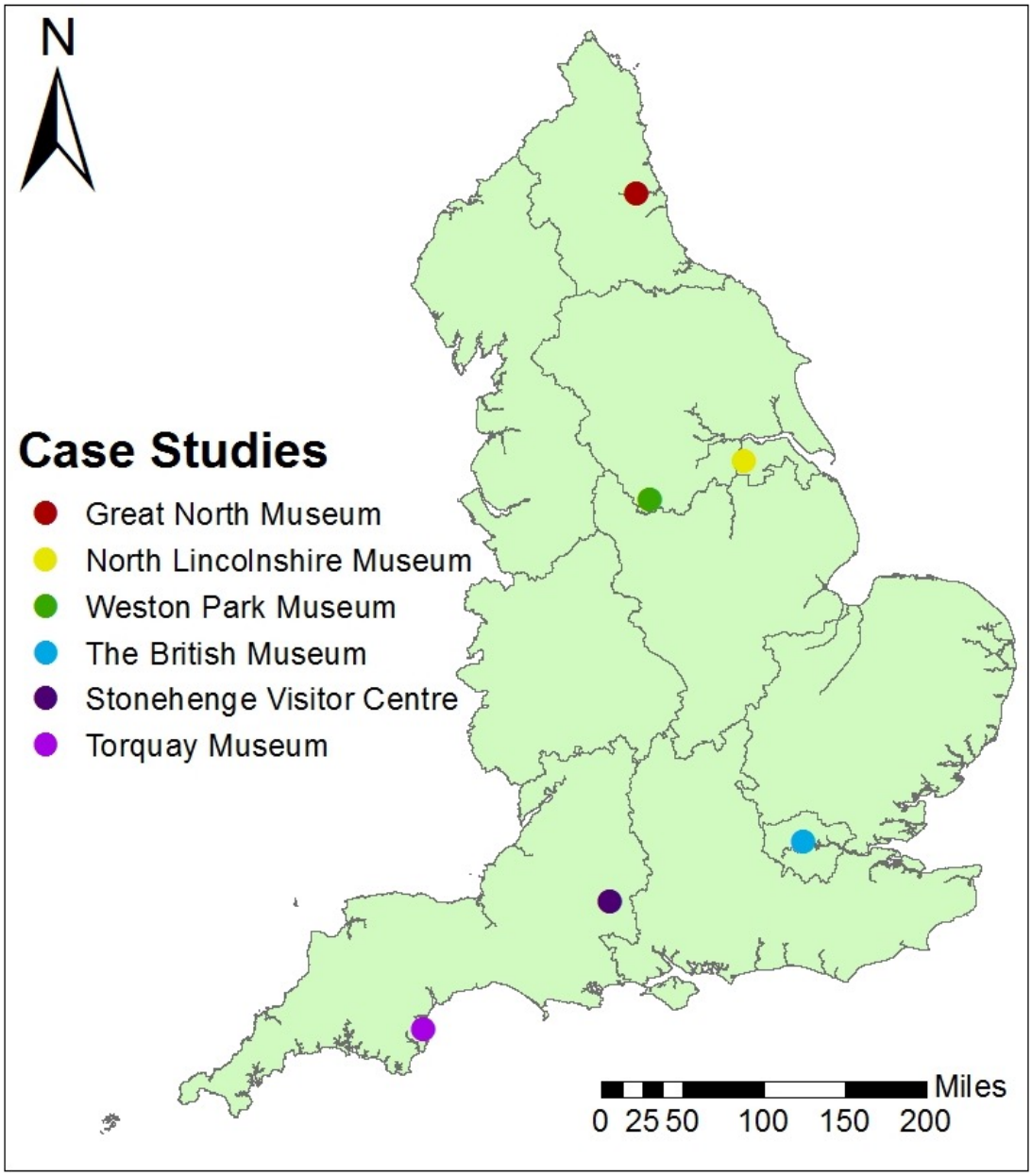


Figure 3.13. Map illustrating the geographic distribution of the 6 case studies across England.

This section will briefly introduce the contemporary prehistory displays at the museums to provide an understanding of how the different styles of displays may affect visitor interactions with the different spaces. It is of paramount importance to situate the 6 prehistory displays evaluated into their unique museological contexts in advance of the analysis of visitor-based data collected at these case studies, which will be discussed in Chapters 4 and 6. This background context is required to address research question 3, *'How do visitors engage with prehistory displays?'*. Each of the case study museums' prehistory displays are unique and understanding these displays is essential for facilitating an interpretation of how they can influence visitor perceptions and engagements with prehistory. A more detailed and comprehensive description of each of the prehistory display histories is provided in Appendix 2 and a description of their contemporary displays is provided in Appendix 3.

Museum displays are the product of a variety of factors that affect the development and creation of collections and the display of these collections. Consequently, each museums' prehistory displays are unique due to the specific conditions and events that led to the creation of their particular collections and interpretation strategy. These factors that influence the display of prehistoric archaeological material are summarised in the following Venn diagram (figure 3.14) and highlight the variety of influences that can impact on a particular institution's displays. It is vital to understand the broad history of the 6 case study museum's collections to interpret the various influences that have impacted on these prehistory displays and consequently figures 3.18, 3.23, 3.28, 3.32, 3.37 and 3.41 summarise the history of the prehistory displays at the case study museums.

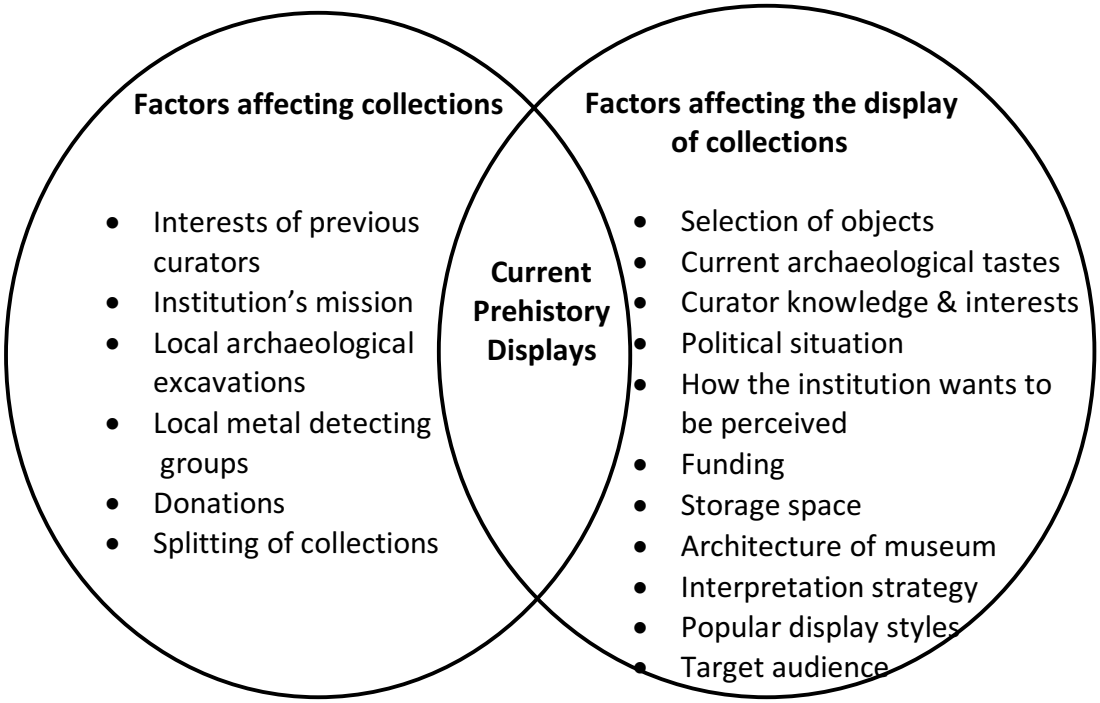


Figure 3.14. Factors affecting the display of prehistory in museums.

National Museum Case Study: The British Museum, London

The British Museum (figure 3.15) was chosen for the National Museum case study as it represents England's premier museum due to its prestigious global and national collections and its prominent position in England's capital city. Consequently, it is one of the most popular British tourist attractions, exemplified by visitor numbers in excess of 6 million each year (British Museum, 2019a). As one of the first publically accessible museums in the country the BM played an influential role in the development of museums in Britain in the late 18th century and continues to exert a powerful influence in the museums sector today (Caygill, 1992; Lewis, 2000). Since its inception in 1759 the scope of its collections have continually widened and it has attracted more than 350 million visitors since it first opened (British Museum, 2019a). Currently the museum boasts a global collection of more than 8 million objects and markets itself as a 'global museum' due to the geographical and temporal breadth of its international collections.

Figure 3.15. The front of the British Museum (McDowall, 2017)

The current British prehistory displays at the British Museum are split between two adjoining open-plan rooms, Room 50 and Room 51[7]. These rooms are part of a series of rooms that run parallel to form a corridor of open-plan displays that can be accessed via two entry points. The earliest prehistory is presented in Room 51 '*Europe and Middle East 10,000-800 BC'* (figure 3.16) and the Iron Age is presented in the adjoining Room 50 '*Britain and Europe 800 BC- AD 43'* (figure 3.17) which shifts geographical focus to exclude the Middle East and to place more emphasis on national archaeology. The narrative is broadly chronological and interpretation is predominantly object-based supported by relevant audio-visuals. There are no interactives within the Rooms but occasionally an object handling desk is available just outside of Room 50 to facilitate more haptic experiences. Display cases are concentrated along the sides of the Rooms, forming a large central aisle through the displays which visitors have a tendency to walk straight through. To try and retain

[7] As a result of the museum's collecting history its prehistory collections are global in their coverage and as the focus of this project is the reception of British prehistory only the rooms containing British prehistory are focused on.

visitors within the space, two cases are tactically positioned in the central aisle of Room 51. How effective these cases are for encouraging visitors to stop and dwell will be assessed in Chapter 6. The museum possesses extensive Palaeolithic collections but currently only displays material from the Mesolithic onwards with a spatially determined priority given to later prehistory, further discussed in Appendix 2.1.

Figure 3.16. Photograph of Room 51 at the British Museum (McDowall, 2017).

Figure 3.17. Photograph of Room 50 at the British Museum (McDowall, 2017).

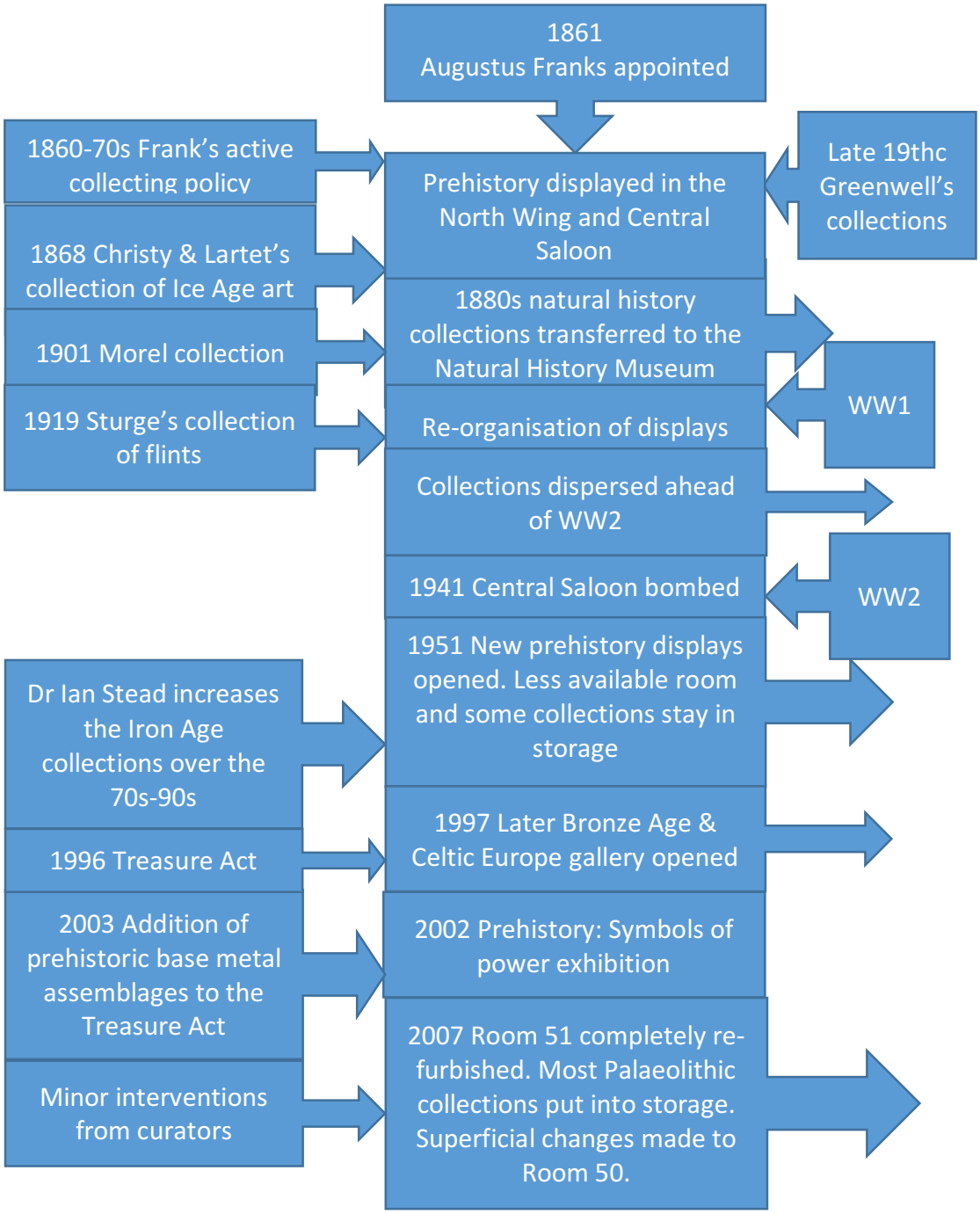


Figure 3.18. Summary of events influencing the British Museum's collections and prehistory displays. A more detailed history is presented in Appendix 2.1.

Site-based Museum Case Study: The Stonehenge Visitor Centre, Wiltshire

The Stonehenge Visitor Centre (figure 3.19) was chosen for the site-based museum case-study as it only recently opened in 2013 and is associated with the most famous British prehistoric monument that for the public is emblematic of our deep past (Hill, 2008). Furthermore, its use of audio-visual and interactive displays provide a juxtaposition with the more traditional style represented by the BM. The site is administered by English Heritage and is part of a wider project to manage the Stonehenge landscape that cost £27 million (English Heritage, 2013). Due to the amount of investment in the project there was great flexibility in how the museum could produce an immersive experience to connect with a diverse international audience with differing knowledge of the site and British prehistory.

Figure 3.19. Photograph of the Stonehenge Visitor Centre from the car park (Ison, 2013).

The main exhibition at the Stonehenge Visitor Centre, '*Stonehenge, People and Meaning'* includes a series of displays focused on topics associated with the site of Stonehenge. Adjoining the main exhibition space is a smaller square temporary exhibition space that changes seasonally. At the time of the data collection the

current temporary exhibition was '*Feast! Food at Stonehenge'* (figure, 3.20) an exhibition focusing on what archaeological science can reveal about ceremonial feasting in the Neolithic. In the main exhibition space over 250 archaeological objects are presented in 5 cases to contextualise the site within a wider understanding of the period and local landscape (figure 3.21). Each case focuses on a particular question about the site, including; '*How was Stonehenge built?',' How was Stonehenge used*?', '*Who built Stonehenge?',' What was life like when Stonehenge was built?' and 'What was happening near Stonehenge?*'. These cases are broadly laid out chronologically but there are multiple ways that visitors can navigate between the cases. Each case contains a video and an interactive element and there are several large audio-visuals utilised in the displays. Most prominently once visitors have entered the exhibition they are funnelled into the centre of a circular orientation space that presents a 3 minute 360° immersive audio-visual film of Stonehenge through time (figure 3.22).

Figure 3.20. Photograph of one of the cases in the temporary exhibition 'Feast! Food at Stonehenge' (McDowall, 2018).

Figure 3.21. Photograph of 4 of the 5 freestanding cases and part of the large landscape video on display at Stonehenge Visitor Centre (McDowall, 2018).

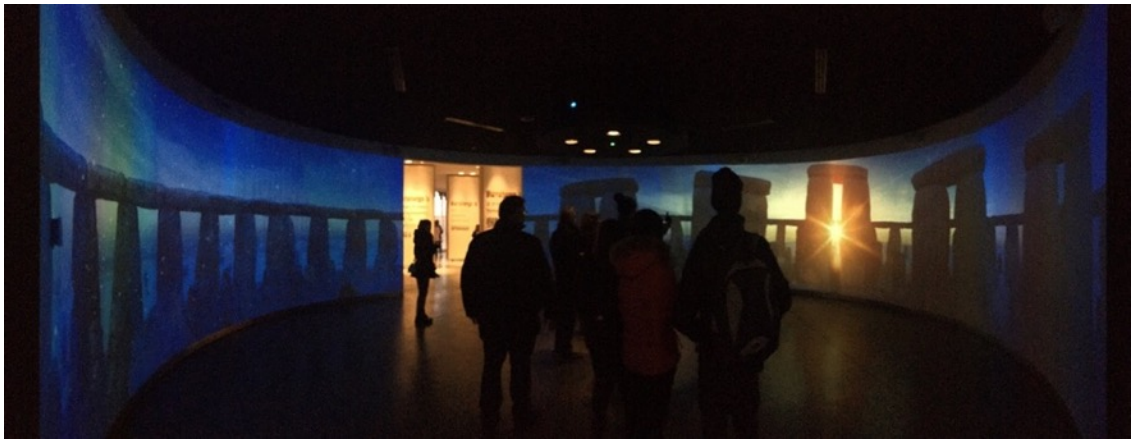


Figure 3.22. Photograph of the 360° immersive audio-visual film showing the Winter Solstice at Stonehenge (McDowall, 2018).

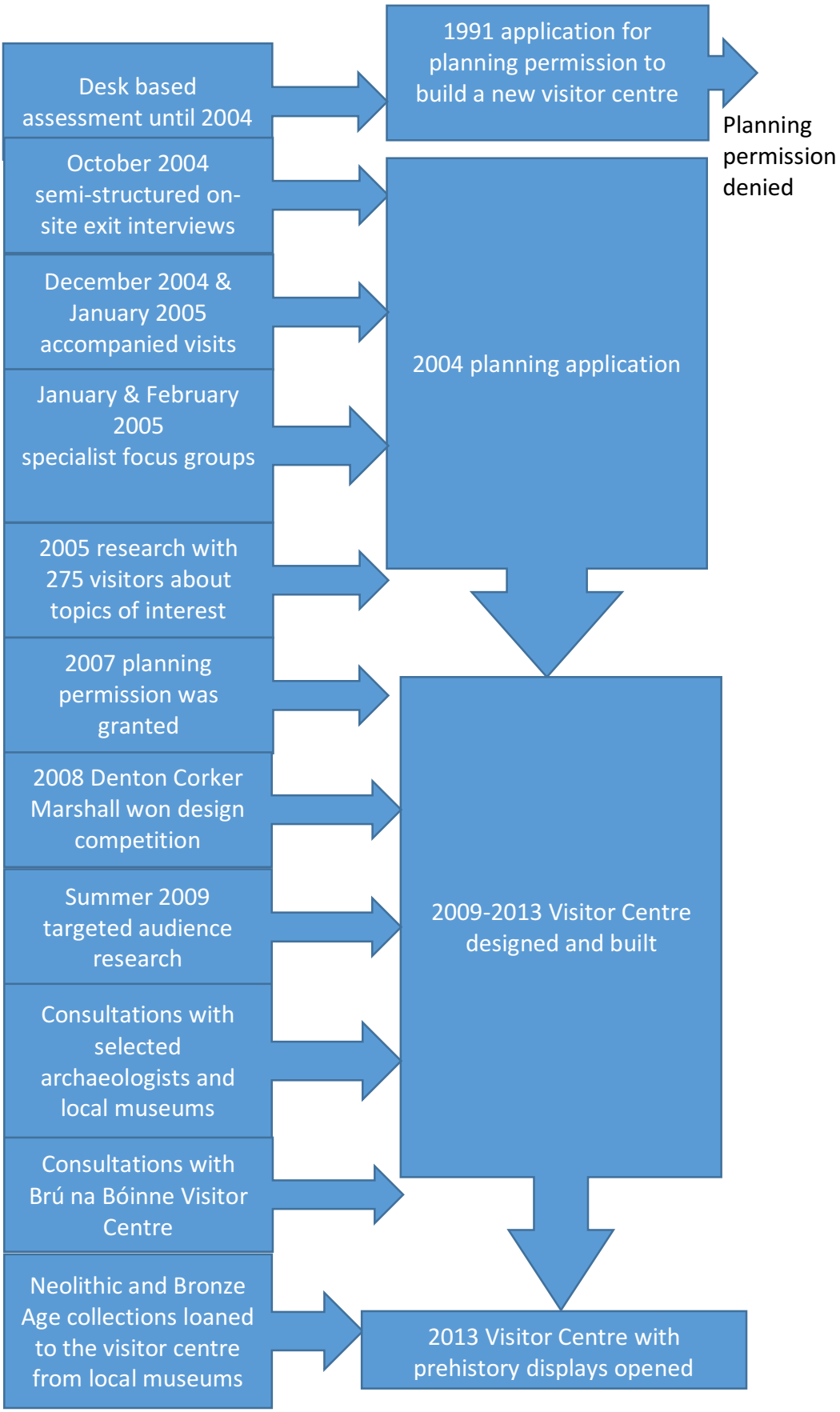


Figure 3.23. Summary of steps involved in the front-end visitor evaluation for the Stonehenge Visitor Centre. A more detailed history is presented in Appendix 2.2.

Regional Museum Case Study: North Lincolnshire Museum, Scunthorpe

North Lincolnshire Museum (figure 3.24) in Scunthorpe was chosen as the regional museum case study as this small local authority museum showcases the rich prehistoric wetland archaeology of the region. Furthermore, the location of the museum maintains the geographical spread of the museums selected.

Figure 3.24. Photograph of the front of North Lincolnshire Museum (McDowall, 2018).

The prehistory displays at North Lincolnshire Museum are presented in the wider '*Archaeology*' gallery and are physically separated from later historical periods in the gallery. The newly redisplayed '*Archaeology*' gallery is located on the top floor of the museum and presents the history of North Lincolnshire chronologically. The prehistory displays are divided using the Three Age system which is clearly written on the carpet and the displays themselves, which are further split into the three lithic ages. The room guides visitors through the chronology of the space by colour-coding the carpets, cases and text panels for each period. There are several large

photographs of reconstructed prehistoric women (figure 3.25), an interactive area (figure 3.26) for children in the centre of the later prehistory section which was changed (figure 3.27) between the two periods of data collection, as well as two tactile elements to support haptic engagements with the displays.

Figure 3.25. Photograph of the Iron Age woman image used to introduce visitors to the Iron Age in the archaeology gallery at North Lincolnshire Museum (McDowall, 2018).

Figure 3.26. Photograph of the previous children's activity station within the prehistory displays at North Lincolnshire Museum (McDowall, 2018).

Figure 3.27. Photograph of the new children's interactive area within the prehistory displays at North Lincolnshire Museum (McDowall, 2018).

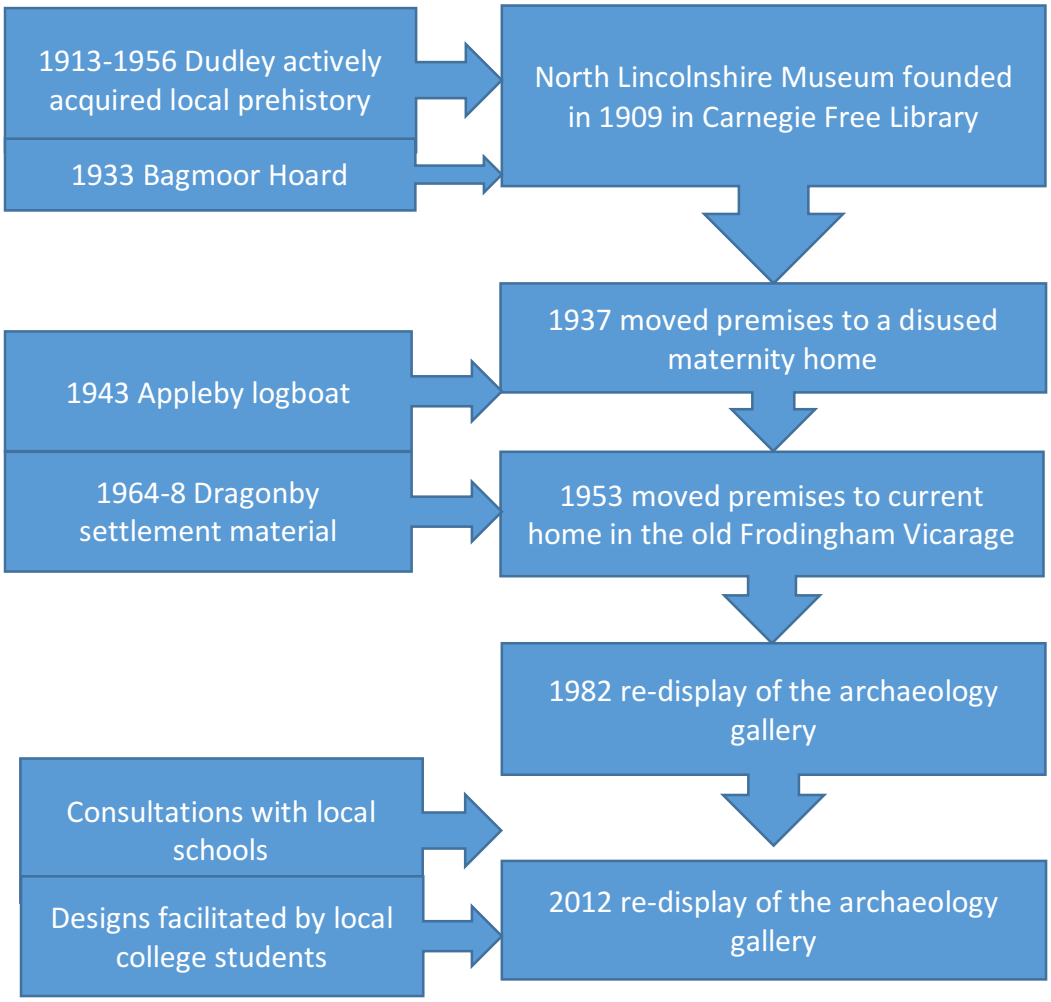


Figure 3.28. Brief history of the prehistory displays at North Lincolnshire Museum. A more detailed history is presented in Appendix 2.3.

Local Museum Case Study: Torquay Museum, Devon

Torquay Museum (figure 3.29) was chosen as the local museum case study as this independent museum run by the charitable Torquay Museums Trust represents a small local museum with an internationally important prehistory collection that was greatly influential in the development of Palaeolithic archaeology. This museum reflects the 19th century trend for museum development based on local society collections and now faces an uncertain future as a result of the COVID-19 crisis (Torquay Museum, 2020).

Figure 3.29. Photograph of the front of Torquay Museum (McDowall, 2016).

Prehistoric material excavated from local cave sites is displayed in the *'Ancestors'* gallery at Torquay Museum. The gallery can only be accessed when either leaving the adjoining *'Agatha Christie'* gallery or going up some steps from '*The Time Ark'*[8] spacious open-plan gallery that also presents some prehistoric material. In contrast

[8] This gallery with prehistoric material was not focused on as it presents the deeper geology of the area rather than the archaeology and primarily displays material pre-dating human history.

to the other case studies, the *'Ancestors'* gallery primarily presents Palaeolithic material due to the collection's history detailed in Appendix 2.4. The museum houses the largest collection of Iron Age pottery in Devon according to the museum's website (Torquay Museum, 2019b) but none of this material is currently on display. Much like the BM, the displays are predominantly object-based utilising supporting audio-visual interpretation, apart from a large interactive station (figure 3.30) in the centre of the square room. Another interactive and tactile experience is provided by a woolly rhino skull on open display that visitors are apparently able to touch (figure 3.31) (Chandler, 2016).

Figure 3.30. Photograph of the interactive discovery centre in the middle of the 'Ancestors' gallery at Torquay Museum (McDowall, 2018).

Figure 3.31. photograph of the tactile woolly rhino skull on open display at Torquay Museum (McDowall, 2018).

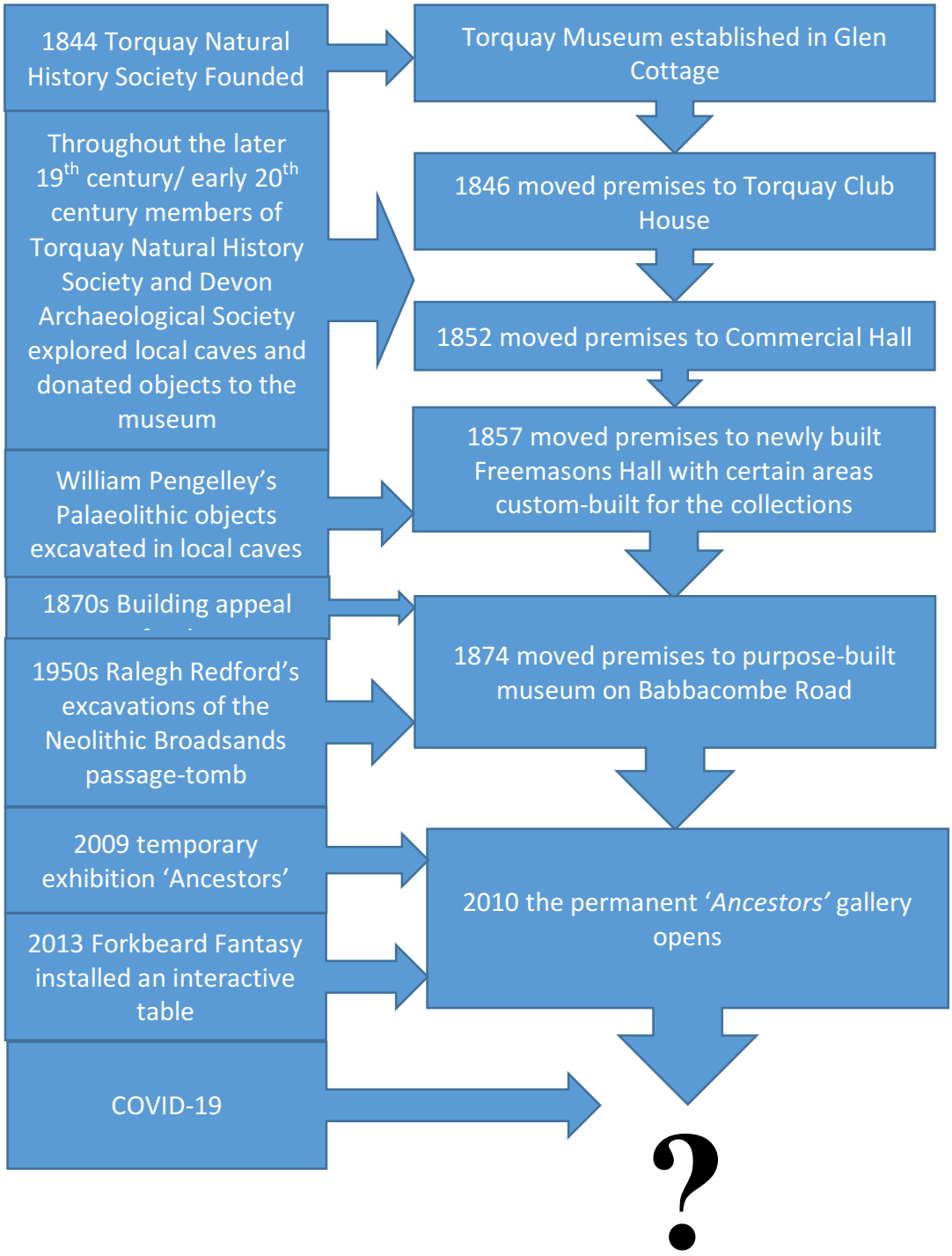


Figure 3.32. Brief history of the prehistory displays at Torquay Museum. A more detailed history is presented in Appendix 2.4.

City Museum Case Study: Weston Park Museum, Sheffield

Weston Park Museum (figure 3.33) in Sheffield was chosen as the city museum case study as this independent museum run by the charity Museums Sheffield possesses a rich prehistory collection excavated from local barrows in the Peak District. Furthermore, the museum was recently refurbished in 2015 (Museums Sheffield, 2019d) and represents a newer more contemporary style of display when compared with TQ or the BM.

Figure 3.33. Photograph of the side of Weston Park Museum (McDowall, 2018).

The European prehistory displays at Weston Park Museum are presented in the open-plan rectangular archaeology gallery '*Beneath your feet*' (figure 3.34). Within the permanent exhibition space there are also two cases that are utilised to present temporary exhibits. At the time of data collection the current temporary exhibition was '*Cyprus-Island of Copper*' focusing on the museum's Cypriot collections,

particularly pottery spanning the Early Bronze Age to Roman period (figure 3.35).

Figure 3.34. Photograph of the entrance to the archaeology gallery at Weston Park Museum (McDowall, 2018).

Figure 3.35. Photograph of one of the temporary exhibition cases at Weston Park Museum (McDowall, 2018).

The prehistoric material in the permanent displays follows a chronological narrative with a local focus around the walls of the room, similar to the archaeology gallery at NLM. In addition to the object-based displays there is a flint knapping video associated with a tactile hand axe, several interactives including a reconstructed roundhouse (figure 3.36) that visitors are able to interact with and go inside. Sometimes there is also an interactive table where visitors are given the opportunity to handle archaeological objects from the collection as well as replicas of some of the artefacts on display.

Figure 3.36. Photograph of the reconstructed roundhouse at Weston Park Museum (McDowall, 2018).

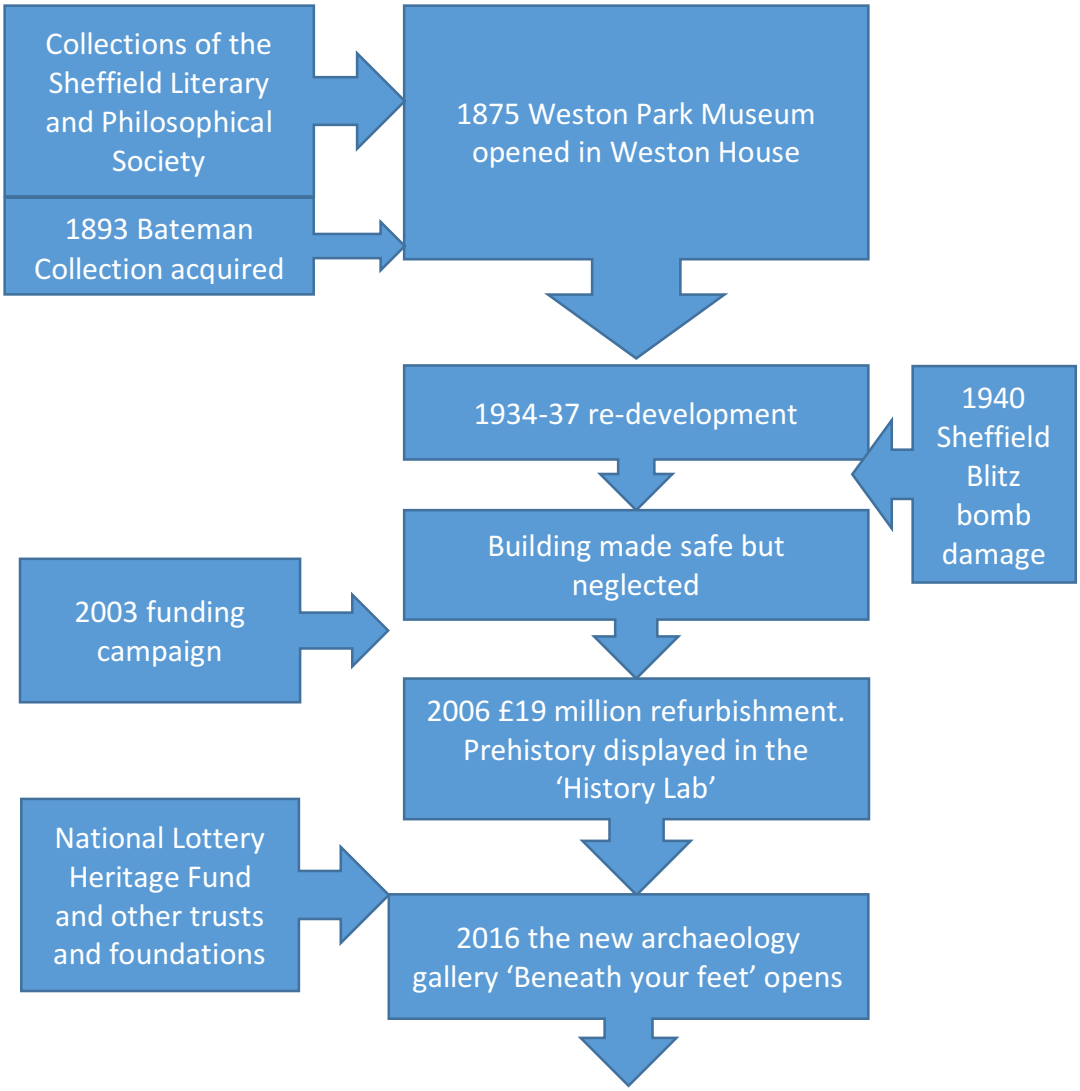


Figure 3.37. Brief history of the prehistory displays at Weston Park Museum. A more detailed history is presented in Appendix 2.5.

University Museum Case Study: Great North Museum, Newcastle

The Great North Museum: Hancock (figure 3.38) was chosen as the university museum case study as this museum is affiliated with Newcastle University and has not been as recently refurbished as SVC or NLM. The museum's collection history much like NLM and TQ and many other museums created in the later part of the 19th century reflects the trend for previously private collections that can no longer be supported by private societies to become founding collections for local museums (Kavanagh, 1998). The GNM in its current form only came into being in 2009 after a three year £26 million redevelopment programme that involved the amalgamation of three Newcastle museums into one; The Hancock Museum, the Shefton Museum and the Museum of Antiquities (Great North Museum, 2019a, 2019b).

Figure 3.38. Photograph of the Great North Museum from the front (McDowall, 2017)

The prehistory displays at the Great North Museum are presented in a long rectangular gallery entitled, '*Ice Age to Iron Age'*, which has several entry points.

Visitors can either enter from the natural history room at the start of the chronological displays, come in half way through from the Roman gallery or at the end of the room from either the Dinosaur gallery or stairwell. There is even an entrance at the opposite end of the gallery by the start of the displays from a children's activity room known as '*Mouse House'*. With all of these access points there is no introductory panel to introduce visitors to the space. The displays are, however, still arranged chronologically from the Palaeolithic to the Iron Age, although there are very few Palaeolithic objects on display. The display cases like the prehistory displays at the BM are lined along two walls forming a similar 'corridor' space (figure 3.39). Supporting interpretation is provided by a flint knapping video, video of sea level changes through time, computer interactive (figure 3.40) and tactile interactives related to the rock art on open-display.

Figure 3.39. Photograph of the 'Ice Age to Iron Age' gallery from the main entry point (McDowall, 2017).

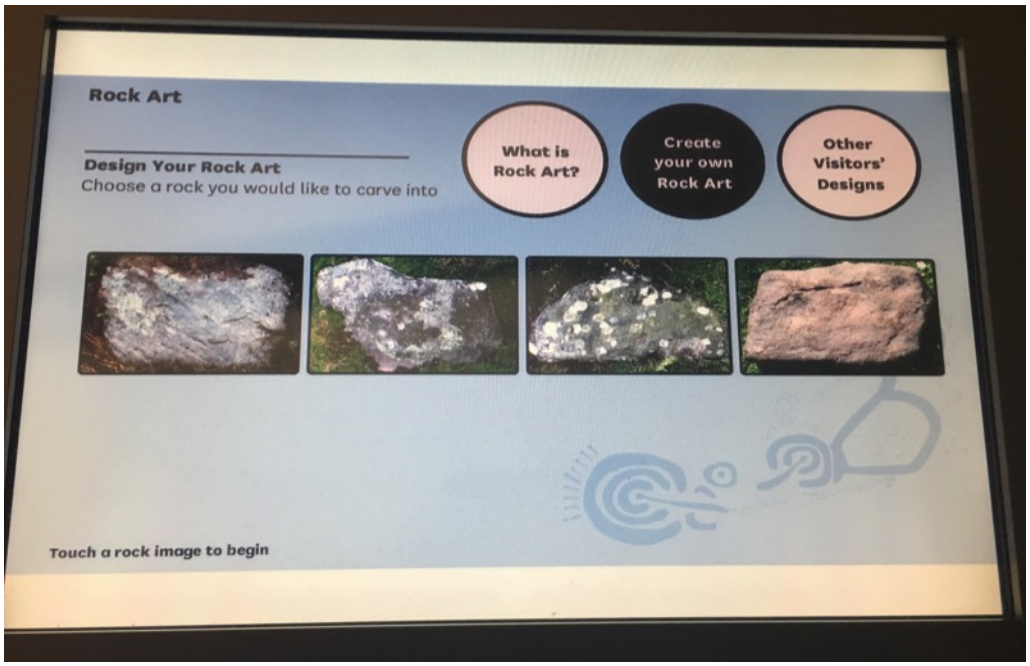


Figure 3.40. Photograph of an interactive screen at the Great North Museum (McDowall, 2017).

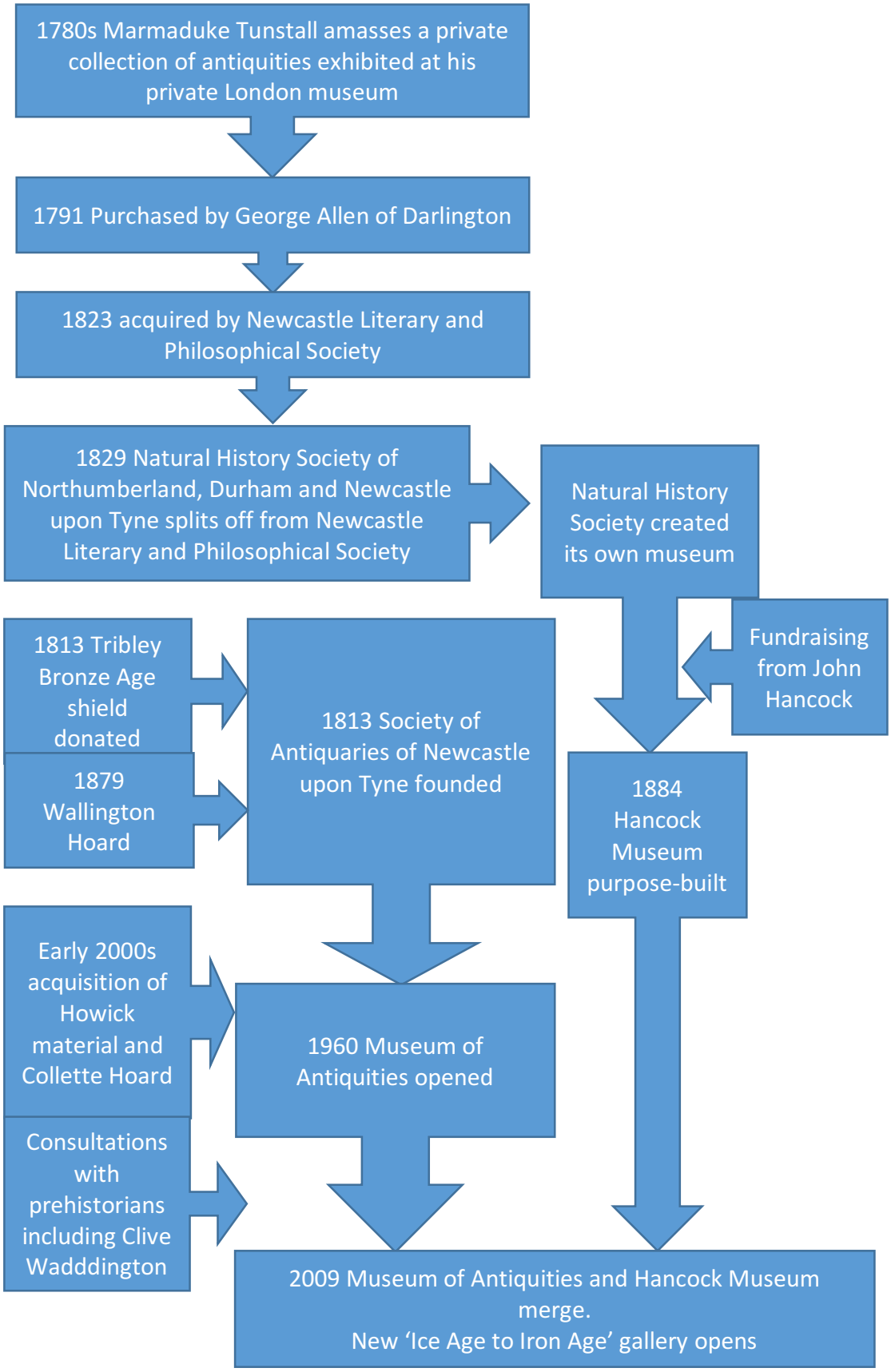


Figure 3.41. Brief history of the prehistory displays at the Great North Museum. A more detailed history is presented in Appendix 2.6.

3.3.2 Capturing visitor engagements in tracking surveys

At each case study visitor tracking was undertaken to gain an understanding of how visitors experience that particular gallery and interact with the displays. Visitor tracking is an established method of audience research in the museums industry 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). My model for tracking is based upon Serrell's (1997, 1998, 2020) influential research on visitor tracking and my own consultations with visitor data collection specialists at the British Museum (Frost, 2016, 2017; Purseglove, 2016) and the University of Cambridge Museums (Harknett, 2016). My model for visitor tracking involves following visitors around the museum space, recording their behaviour and movements on a floor plan of the gallery, recording what direction visitors are travelling in, where they stop, what they are looking at and how long they are stopping for. This type of tracking survey can produce a wealth of data about how the gallery space is used, the average time people spend in the gallery, their engagements with the gallery and how they are engaging with the gallery.

3.3.3 The ethics of tracking surveys

There are two main forms of monitoring visitors with tracking surveys, those utilising 'overt surveillance', alerting the visitor to the presence of the tracker and gaining their explicit consent to be tracked and those utilising 'covert surveillance', in which the visitor is unaware they are being tracked and implicit consent is gained by their presence in a public space (Yalowitz and Bronnenkant, 2009; Christian, 2019). Both of these forms of tracking are governed by ethical considerations principally guided by the tracker and the institution in which they are tracking, as well as general principles of respect and beneficence. A summary of the various advantages and disadvantages of both forms of tracking are presented in table 3.15.

Type of Tracking	Advantages	Disadvantages
Overt Surveillance	• Visitors can be observed in closer proximity and more detail • More detail about visitor motivations can be gained through questioning the tracked visitor	• Changes visitor behaviour and is consequently susceptible to the 'Hawthorne effect' • No control is exercised over the sample of tracked visitors
Covert Surveillance	• Captures natural behaviour unaltered by the 'Hawthorne effect'	• Lack of 'fine-grain' detail about the visitor's visual attention beyond case-level detail

Table 3.15. Outlining the key advantages and disadvantages of the two forms of tracking.

It was deemed most important to gain a representative understanding of visitor's natural behaviour and consequently the form of tracking adopted for the thesis will utilise 'covert surveillance'. It was of vital importance to capture visitor's unaltered behaviour as alerting them to my presence could have exaggerated visitor engagements and consequently increased dwell times. To ensure the ethical integrity of the surveys several measures were taken to mitigate the ethical risk for the visitor;

- The survey was fully compliant with general data protection regulations (GDPR)
- The survey was approved by the departmental ethical committee at Durham University and each of the museums where tracking was undertaken.
- I consistently maintained a minimum distance of 2 metres from the tracked visitor so as not tot to impinge on their visit.
- I was identifiable by an identification badge and clipboard.so visitors were aware of my presence, could ask me questions about my research and could challenge me if they felt uncomfortable.
- I did not hide my intentions and would void any tracking survey if approached by a visitor asking about my research.

3.3.4 Recording visitor behaviour

To ensure consistency and the random representative nature of the sample of tracked visitors selected visitors where chosen when they passed an imaginary line, so that every visitor had an equal probability of being selected (Raj, 1972; Weiss, 1998; Nichols, 1999; Iarossi, 2006; Jensen, 2017). Multiple tracking surveys cannot be undertaken at the same time and consequently visitors were only selected for tracking once a tracking survey was complete and the previous tracked visitor had left the space. The consistent and random sampling approach was chosen to reduce the potential influence of personal bias over the selection of tracked visitors (Jensen, 2017).

To record the selected visitor's movements schematic maps of the displays at each museum were created in advance of the survey data collection and these can be viewed in Appendix 4. The route of the visitor could be recorded on these maps, as well as every stop they made, the direction of their visual attention, how long they stopped for in seconds (timed using my phone stopwatch) and the overall time they spent in the gallery. A 'stop' was defined as a visitor standing still for 1 second or more and was either classified as a normal 'stop' in which the visitor was observed looking at a case, object, text panel or other gallery element or a 'non-case stop' in which the visitor was observed undertaking activities not associated with the gallery content such as looking at a map or phone. Recording the path of the visitor is key to understanding the predominant ways visitors are navigating around the space, whether they are entering from a certain point, moving clockwise, anti-clockwise, hopping between certain cases or primarily visiting a certain area. This information is crucial in understanding whether spatial movements impact on a visitor's understanding of the narrative in the gallery.

If a visitor simply walked through the space with the intent to move through quickly to get elsewhere these 'walkthroughs' were not recorded as a tracking survey. If the visitor, however, slowly walked through the space and looked at gallery content without stopping or stopping once this was included as a tracking survey, as this

behaviour indicates engagement with the content, even though it was more transient. Due to the high visitor frequency and rapid visitor pace at the British Museum, in combination with the location of the prehistory displays in a corridor-like space 'walkthroughs' were a persistent problem and it was subsequently not feasible to record the 'walkthroughs'. When recording the visitor's visual attention due to the 'covert surveillance' method employed the data only captured engagements at the case-level but this information was still very insightful for interpreting visitor behaviour with different displays, revealing more about overall visitor engagements with the 'aesthetic system' of a particular case rather than individual elements of a display. It was important to distinguish wherever possible when an individual was looking at a specific display feature such as a text panel or case by drawing an arrow to visualise their direction of attention. This information was then used to calculate the average number of elements stopped at, individual visitor frequency associated with each display element and average dwell time associated with each display element in a particular museum.

My model of tracking accounts for both active and passive visitor engagements in the museum space, by recording all visitor activities. A repertoire of symbols, summarised on the schematic maps in Appendix 4 are recorded on the surveys to demarcate the location of the tracker at the beginning of the survey and where visitors stop, as well as where visitors are when they stop to use their phone, take a photograph, call a friend over to look at something or are themselves called away to look at something. An example of how these symbols can be employed on a tracking survey is provided in Appendix 5. Recording these diverse behaviours provides more detailed information about how a space is used, whether certain cases over others are photographed or engaged with and how visitors interact with each other in the space, revealing the way that visitors holistically experience the gallery. Observable demographic information about the tracked visitors was also recorded at the bottom of the schematic maps to facilitate the interpretation of visitor profiles captured by the sample of tracking surveys at a particular museum.

3.3.5 Capturing visitor preconceptions and perceptions in a questionnaire

To understand both visitor preconceptions of prehistory before viewing displays and visitor perceptions of the prehistory displays at the case study museums anonymous visitor-based data was collected in a 2-part questionnaire. The first part of the questionnaire addresses the first research aim of the thesis to '*Gain an understanding of public preconceptions of prehistory'* by asking questions related to visitor understandings and interests associated with prehistory. The second part of the questionnaire (in combination with the tracking surveys) addresses the third research aim of the thesis to, '*Identify which display types/ methods are most effective for engaging visitors with prehistory displays'* by explicitly asking visitors what they thought of the displays. The questionnaire also employed questions about the visitor's age, profession, sex and current location of residence to provide demographic information about the visitors across the case studies that will be used to create 'visitor profiles' for each case study in Chapter 4. These 'visitor profiles' will then be utilised to dissect the preconceptions and perceptions exhibited in the questionnaire to identify if there are any patterns based upon visitor background and expectations in Chapters 4 and 6.

The questionnaire needed to be engineered carefully to avoid the methodological shortcomings of previous evaluations of visitor perceptions which did not guard against the potential influence of response bias. To avoid response bias within the questionnaire the phrasing and format of the questions needed to be consistent (Iarossi, 2006; Jensen, 2017). It was imperative where possible to always include a *'Don't know'* or '*Other'* response option so as to avoid respondents selecting an option randomly if they genuinely were not sure which response to choose or could not find the appropriate response listed (Nichols, 1999).

The questionnaire was partially self-administered which has numerous advantages in comparison to other styles of questionnaire. I could exercise control over the sample and provide visitors with the opportunity to ask questions if they needed further clarification. Furthermore this style of questionnaire reduces the

acquiescence bias that can be introduced in face-to-face interviews in which respondents can feel pressured to provide polite and positive responses.

The main issue associated with utilising a partially self-administered questionnaire is the greater potential that when visitors are filling the questionnaire in unguided that they can change their mind or just find it too inconvenient and don't fill it in completely. This issue then lowers the completion and collection rate. Subsequently, in the initial stages of data collection it was found that visitors often walked off and left the surveys abandoned. To mitigate against this issue, I adapted my methodology and provided respondents with questionnaires attached to clipboards giving them greater incentive to bring the questionnaires back when they were finished. This simple act was very successful as the introduction of clipboards significantly increased both completion and return rates.

3.3.6 The pilot study

In order to refine my questions and select those that would elicit the most informative responses a pilot questionnaire (Appendix 6) was undertaken in December 2016 at Torquay Museum, Devon to understand respondent behaviour and to determine the questions that would be used at the case studies. Following advice from Gemma Tully (2016) who has undertaken similar research (3.2.3), when the questions were initially formulated it was important for them to be kept to a minimum so they would fit on one A4 page and be filled out quickly by visitors to increase the likelihood of respondents participating (the response rate) and the completion rate. This tactic, however, resulted in shortening questions and an order of questions which did not elicit the intended diversity of responses.

The most significant changes made to the final questionnaire are as follows;

- The demographic questions were changed from open-ended to closed-ended questions to facilitate quantitative analysis.

- Question 5, *'What do you find most and least interesting about prehistory'* was split into two parts to encourage more balanced responses.
- Question 7 *'What does prehistory mean to you?'* was provided with more space and moved further up the sheet to be Question 3.
- Question 3 was also supplemented with additional prompts in brackets to guide the visitors as to what they could write about, as more direction was needed.

The final questionnaire with the revisions made to the pilot questions and the additional Part 2 focused on specific displays can be viewed in Appendix 7. It was hoped that due to the alterations made to the pilot questionnaire that the final questionnaire would elicit the appropriate responses to provide both insightful qualitative and quantitative data reflective of public preconceptions about prehistory and visitor perceptions of the particular prehistory displays at the 6 case studies and this will be assessed in Chapters 4 and 6.

3.3.7 The sampling method

To mitigate against the effects of response bias conservative sampling, snowball sampling and quota sampling were not used in the collection of visitor-based data, as these methods are subject to a greater degree of bias because visitors are not given an equal probability of selection (Jensen, 2017). Visitors were selected for both the visitor tracking and questionnaires by utilising a consistent random sampling approach (Raj, 1972; Weiss, 1998; Iarossi, 2006). This type of selection is one in which every visitor has an equal opportunity of being selected (Weiss, 1998; Iarossi, 2006; Jensen 2017) and avoids selecting individuals based on my own unconscious bias (Jensen, 2017). Furthermore, to minimise the impact of visitor-based data collection on the individual's visit, visitors for both of these surveys were only selected if they entered the exhibition space, indicating their decision to view the displays. Visitors were selected through a continual ask approach, approaching visitors who passed an imaginary line and recording those who declined to participate, noting down general observable demographic information about them to identify if there was a sampling

bias (Jensen, 2017). Unfortunately, the continual ask approach can be hindered by galleries with a smaller attendance, as a lower visitor frequency serves to restrict the sample of visitors to whoever happens to visit on a particular occasion of data collection. Once visitors were selected via the continual ask approach they were then asked for explicit consent as to whether they would be interested in participating to conform to ethical guidelines stipulated by both Durham University and the individual institutions. Furthermore, the data collected was inherently anonymous so was compliant with GDPR. Moreover, at the start of the questionnaire to situate the respondent within the context of the research and further support the verbal instructions and introduction provided, a brief introduction about who I am, the time commitment required to fill in the questionnaire, the contents of the questions and what the information was being collected for was included at the top of the questionnaire. This information in combination with the verbal instructions enabled respondents to make an informed decision about whether they consented to participate in line with my departmental ethical policy.

Due to the length of the questionnaire covering 3 pages it was important to fully explain the commitment required to potential respondents so they could make an informed decision about participating and to enhance the chance of respondents completing the questionnaire in full and returning it. It was essential that potential respondents were given several opportunities to refuse to participate without making them feel uncomfortable. This was vital for collecting representative and useful responses. If visitors felt pressured to participate or if I persuaded them, this would decrease their attention with the survey and decrease the probability that they would complete the questionnaire and return it. To avoid these issues once a visitor was selected to participate using the continual ask approach, I politely approached the visitor briefly introducing the research. If the visitor ignored me or explained that they were unable to or did not want to complete the questionnaire I recorded observable demographic information about them in a record of refusals, which can be viewed in Appendix C (Nichols, 1999:66; Jensen, 2017) and politely accepted their refusal. This was an important aspect of the data collection because, although I was identifiable as a visitor with my name badge it looked like I worked for

the museum so needed to seem friendly and amenable, as I appeared to represent the museum. If the visitor expressed interest in my research I would continue with a more detailed explanation of how the questionnaire is filled in and how long the questionnaire is whilst showing them the questions, verbally guiding them through the process. It was explicitly explained how many questions were in the questionnaire and that visitors should answer Part 1 before looking at the displays and Part 2 whilst/ after looking at displays. The different content of the questions was also addressed and I stated that the part 2 questions were based on the prehistory displays and further reinforced this by pointing out the relevant display areas. To further enhance the clarity of the 2-part questionnaire the questions were delineated into two parts written on the physical questionnaire. The visitors were then given another opportunity to refuse as I would explicitly ask them if they were still interested in participating. At which point they could use the excuse that the survey would take up more time than they expected and leave the process. However, if the potential respondent still keenly expressed their interest I would hand the questionnaire over and answer any further clarification questions if needed.

The visitor data collection was undertaken with visitors over the age of 16 as undertaking such data collection with children requires a different approach to engineering the questions and raises ethical issues surrounding informed consent (Heimlich, 2015). Furthermore, since the addition of prehistory to the national curriculum a number of projects have developed to assess the needs of school groups and children in particular, including a PhD project at Southampton University exploring the influence of the curriculum change upon museum education related to prehistory.

To demonstrate that there was no selection bias involved in selecting participants a record of those who refused to participate was also collected at each case study, as outlined in section 3.3.7 and can be viewed in Appendix C. This record was used to document how many people refused, why they refused and their observable demographic features. In total across the 6 museums, 319 visitors refused to participate and the refusal rate differed greatly between the case studies. The BM

had the highest refusal rate with 137 refusals for 59 respondents, whilst the NLM had the lowest refusal rate of only 11 people for 53 respondents. The record of refusals also highlights that at certain museums particular age groups were more likely to participate than others, which is discussed in greater detail in Appendix 8 and reflects a similar demographic profile between questionnaire respondents and visitors who refused, highlighting the lack of sampling bias upon the sample of questionnaire respondents.

3.4 Factors affecting micro-scale data collection

It was important that at each case study I had sufficient time to carry out enough data collection. Consequently, for each case study I initially aimed to spend approximately 2 to 3 weeks at the museum undertaking visitor tracking followed by questionnaire data collection. The visitor tracking was undertaken during the first phase of data collection as tracking is the most time consuming activity, especially in galleries where there is either a low frequency of visitors or galleries where visitors have a long average dwell time of more than twenty minutes. I aimed to collect 50 tracking surveys and 50 questionnaires at each case study museum to provide a large enough sample to recognise visiting patterns and avoid a saturation of results. Often there is a very different visitor demographic on weekends and in school holidays that is not representative of the usual visitor profile throughout most of the year. Thus I only undertook the data collection on weekdays outside of school holidays to be consistent across all of my case studies and reflect the visitor population throughout most of the year. It was therefore expected that the smaller museums would have a lower visitor frequency during this period as weekends and school holidays are far more popular than weekdays.

In total, surveys from 718 visitors were collected across the 6 museums and took a total of 244 hours and 33 minutes to collect over a period of 7 months from December 2017-November 2018. A period of two weeks per museum was initially allocated to collect the minimum number of 50 tracking surveys and 50 questionnaire surveys at each case study. However, the number of surveys collected during this

timeframe at each museum differed greatly due to visitor frequency between the sites and the influence of visitor frequency on data collection is further explored in Appendix 9. At North Lincolnshire Museum (NLM) and Torquay Museum (TQ) the low visitor frequency combined with inclement weather conditions during the data collection period meant that obtaining the minimum of 100 surveys was far more time consuming than at the other sites, as highlighted in table 3.16. Consequently, a return visit to NLM and an extended visit to TQ was required to meet the minimum data requirements at these sites. A summary of all of the surveys collected at each museum, the specific period of data collection and hours spent collecting the data is presented in table 3.16.

Museum & Period of Data Collection	No. of Tracking Surveys	Time Collecting Tracking Surveys	No. of Questionnaires	Time Collecting Questionnaires	Total No. of Surveys Collected	Total Time Collecting Surveys
BM 20.11.17 - 01.12.17	56	6 hours, 49 minutes	59	7 hours	115	13 hours, 49 minutes
SVC 15.01.18 - 24.01.18	72	21 hours, 32 minutes	73	8 hours, 1 minute	146	29 hours, 33 minutes
NLM 19.02.18 - 09.03.18 & 03.07.18 - 05.07.18	51	35 hours, 29 minutes	53	35 hours, 37 minutes	104	71 hours, 6 minutes

Museum & Period of Data Collection	No. of Tracking Surveys	Time Collecting Tracking Surveys	No. of Questionnaires	Time Collecting Questionnaires	Total No. of Surveys Collected	Total Time Collecting Surveys
TQ 22.03.18 - 29.03.18 16.04.18 - 01.05.18	54	28 hours, 21 minutes	51	41 hours, 59 minutes	105	70 hours, 20 minutes
WP 25.06.18 - 02.07.18	65	17 hours, 10 mins	66	11 hours, 7 minutes	131	28 hours, 17 minutes
GNM 19.11.18 - 28.11.18	58	12 hours, 34 minutes	59	18 hours, 54 minutes	117	31 hours, 28 minutes
All	356	121 hours, 55 minutes	361	122 hours, 38 minutes	718	244 hours, 33 minutes

Table 3.16. Summary of the visitor data collected across the 6 case studies.

In addition to the influence of visitor frequency on the data collected other factors also influenced the tracking and questionnaire data collection at the case studies in less measurable ways. It was not practical or feasible to account for the impact of these additional factors or mitigate against their influence on the data collection process and thus their potential influence can only be acknowledged.

Admission Cost

A key factor determining the length and intensity of visitor engagements is the cost to view the displays. The impact of cost upon visitor engagements has been widely observed within summative evaluations which have highlighted that the more visitors spend to see a display the more likely they are to engage with more of the content and spend longer engaging with the content than a free gallery experience (Davies and Heath, 2013). Cost is a primary motivator for visitors who want to get value for their money and maximise their viewing experience. Free museums are less likely to retain visitors for as long as paid for exhibitions as visitors have not made a financial commitment to their experience. Admission prices can also dictate visitor interest levels in museums, particularly museums that charge a higher fee. Within the case studies only SVC and TQ charge an admission fee. Entry to SVC is free for English Heritage members or £19.40-£21.50 per person, whilst TQ is only free for children under 3 years old and costs between £4.30-£6.90 per person for admission. It was therefore expected that SVC, which charged a high entry fee would attract the largest dwell time and provide greater evidence of engagements out of all of the case studies. It was, however, difficult to completely attribute higher or lower engagements wholly with price. Visitors to SVC for example are primarily visiting to see the monument rather than the museum which for many is an added and unexpected extra that they do not necessarily have time to fully explore or appreciate. Furthermore, out of all of the visitor responses collated, the admission price was only explicitly referenced twice in the questionnaire responses. Despite charging an admission fee, the TQ case study, as will be outlined in Chapter 6 demonstrated some of the lowest visitor engagements compared to WP, NLM and

GNM which do not charge for admission. The influence of the price of entry is consequently not straightforward and too difficult to assess. An awareness of how admission price can alter visitor behaviour and experiences was, however, kept in mind when interpreting the visitor-data analysed in Chapters 4 and 6.

Position within the museum

The layout of the displays within the museum and the architecture of the museum can impose certain restrictions upon how visitors can navigate through and experience displays, potentially hindering their possible interactions. This issue has been highlighted by Thrane (1996) on his assessment of the BM's prehistory gallery which he emphasises is inconveniently positioned as a 'corridor-like' space which visitors tend to walk straight through to access other exhibitions. It was consequently expected that this architecture would negatively affect visitor retention and engagements with the space, as well as visitor perceptions gathered in the questionnaires. Another possible layout related issue that may have affected the visitor frequency at NLM and TQ exacerbating the effects of the low visitor frequency at these museums, was the position of the prehistory displays, situated in more inaccessible areas in these museums. At NLM the prehistory displays are located at the top of the museum whilst at TQ the prehistory displays are situated on an obscured intermediary level between the highly popular Agatha Christie gallery and the geology gallery. These positions appear to have reduced visitor footfall and have consequently influenced the visitor responses and engagements recorded, with some respondents even explicitly referencing access issues within the questionnaire.

Visitor motivations

Another factor that influenced visitor preconceptions, expectations and engagements captured in the visitor-based data collection was an individual visitor's motivation for visiting the museum. To try and account for this aspect visitors were explicitly asked in the questionnaire if they had initially intended to view the prehistory displays and were asked certain demographic questions to ascertain the

visitor profiles present. It was also apparent within visitor's responses whether they were visiting to see prehistory or not. For example, as would be expected many respondents at SVC had visited to see Stonehenge and referenced this in the questionnaire. In contrast, at TQ most visitors were primarily visiting to see the famous Agatha Christie gallery and consequently many responses provided reactions to that gallery rather than the prehistory displays, despite the clarity of the questions focused on prehistory. Every individual has their own motivations for visiting displays and these will be further explored in Chapter 4.

Visitor politeness

Questionnaires involving questions that are more critical in their phrasing that require respondents to critique displays tend to produce overwhelmingly positive responses. The most common response to questions about how displays can be improved or if visitor did not like something is 'nothing'. Very rarely do visitors use this opportunity to provide a recommendation or critique. It can then be difficult to interpret whether the responses truly reflect their experiences if they are answering politely rather than objectively. This phenomenon has been observed in numerous visitor studies (Nichols, 1999; Davies and Heath, 2013; Dixon and Munro, 2015) and consequently any positive responses to the negatively-phrased questions in the questionnaire will be treated cautiously rather than optimistically when interpreting the responses.

3.5 Methods for interrogating the visitor-based data

Quantitative methods of analysis were used to facilitate the interpretation of visitor behaviour recorded in the tracking surveys and visitor preconceptions and perceptions recorded in the questionnaire. These methods revealed trends and patterns within the data collected and enabled the results to be compared between the different case studies. Several methods of analysis were used in combination to provide a holistic understanding of visitor pre-display preconceptions of prehistory

addressing the first research aim of the thesis and a holistic understanding of visitor engagements with prehistory displays addressing research aim 3.

3.5.1 Recording and interpreting the tracking data

To interpret the usage of the prehistory displays from the 50 tracking surveys undertaken at each museum several methods were employed to quantify the visitor behaviours recorded. These methods rely upon interpreting visitor behaviours associated with different display features and types of interpretation. However, as previously highlighted in section 3.3.3, it was not feasible to accurately record visitor engagements with each individual object, text panel, object label, audio-visual or interactive within the gallery space. Instead, display features in close proximity which were viewed together were grouped as a 'tracked feature'. For example, at the BM the preserved body of Lindow man is presented in a case alongside a photograph of Lindow Moss and two interpretation panels (figure 3.42). It was therefore not possible to distinguish when a visitor was looking at each of these individual elements as visitors often stood in the same spot whilst looking at and between these elements, consequently they were grouped together to represent one 'tracked feature'. These groupings could only be created after collecting the tracking surveys when it became apparent after observing the visitor's visual attention, which elements could not be differentiated. These 'tracked features' were then numbered on the schematic map for each case study and can be viewed in Appendix 10. A summary of the corresponding numbered 'tracked features' and the types of content and individual display elements they encompass is also provided in Appendix 11. These numbered 'tracked features' were then utilised to record the tracking data in Excel spreadsheets (Appendix D). Each tracking survey was individually input into these spreadsheets, every time one of the 'tracked features' was stopped at by a tracked visitor, the total time spent at the feature by that visitor was recorded in the spreadsheet. After recording this information it was then possible to calculate the average dwell time spent at each of these 'tracked features' to interpret the length of engagements with the displays at each museum. These spreadsheets were also utilised to determine the visitor frequency with each of the 'tracked features' by

calculating the percentage of tracked individuals stopping at each feature within the sample of 50 tracking surveys. This information was then used to identify which types of interpretation and display styles were most popular with visitors, revealing their levels of engagement, facilitating an understanding of research question 3.

Figure 3.42. Photograph of the display elements included in tracked feature 37 at the British Museum described in Appendix 11 (McDowall, 2017).

Heat maps and visitor engagements

From the average dwell times and visitor frequency recorded it was possible to produce 'heat maps' which visually demonstrated how each of the galleries were used. This technique is adapted from Yalowitz and Bronnenkant, (2009) and Harknett (2017) who have produced 'thermal maps' to visually communicate visitor frequency with individual tracked features in their interpretations of tracking surveys. An example of one of Harknett's (2017) thermal maps is presented in figure 3.43. These maps demonstrate the most visited areas in warmer colours such as red and orange, less visited areas in yellow and rarely visited areas in the colder colours of blue. The

visitor frequencies associated with each of the 5 colours have been altered for my heat maps, in which visitor frequencies are substantially contracted. Instead of representing visitor frequencies from 60%-100% in the 2 warmest colours, my heat maps attribute a visitor frequency of 30% or more to the two warmest colours, as it is unrealistic to expect visitors to engage with more than 50% of displays (Serrell, 1997, 1998; Harknett, 2017). Furthermore, numerous scholars including Harknett (2017) have suggested that even highly engaged visitors rarely visit over 50% of displays so expecting more engaging displays to attract more than 50% of visitors is illogical. Consequently, the percentage of visitors stopping at display features were utilised to classify visitor frequency more generously in the case study heat maps explored in Chapter 6, as illustrated by figure 3.44, which outlines which colours were associated with different categories of visitor frequency in my analysis.

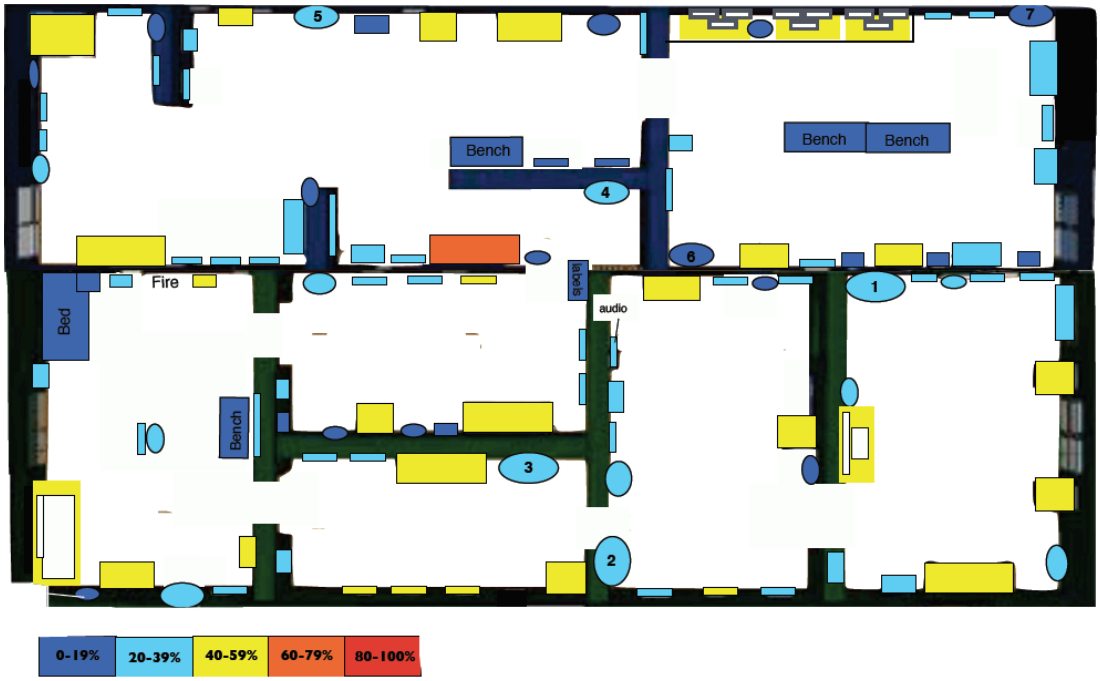


Figure 3.43. Thermal map produced from tracking surveys undertaken at the Fitzwilliam Museum's temporary exhibition 'Madonnas and Miracles' based on tracking data from 83 tracking surveys (Harknett, 2017:2).

50%+	Visitor Frequency
30-49%	Visitor Frequency
16-29%	Visitor Frequency
1-15%	Visitor Frequency
0%	Visitor Frequency

Figure 3.44. Summary of the colours associated with different visitor frequencies used to present the tracking data on the heat maps in Chapter 6.

To create the heat maps in the thesis the different colours were overlaid onto the schematic tracking maps alongside the corresponding visitor frequency and average dwell time. These figures provide an extra layer of interpretation and enable the visitor engagements to be viewed more holistically. Heat maps were not produced based on average dwell time, as a singular focus on dwell time can distort an understanding of general trends in engagement. Dwell time does not account for how popular tracked features are and consequently by focusing solely on dwell time a feature can appear more engaging than it is. If only one person stops at a feature but spends 10 minutes interacting with it, the average dwell time for the feature would be high even though it hasn't got a wide appeal within the sample of tracked visitors. Thus, although, an understanding of dwell time at each feature is important, it must be considered in conjunction with visitor frequency at each feature. These heat maps will be analysed in Chapter 6 to reveal what types of display and interpretation visitors find most engaging.

Visitor routes and access to interpretation

To further contextualise the interpretation of visitor behaviour with the different prehistory displays, the predominant routes visitors used to navigate through the displays were also calculated. It is important to understand the routes that visitors take through the prehistory displays as these routes will determine visitor understanding of the displays and how they interpret the narratives presented. In 5 of the case studies there are multiple access points to the displays increasing the variety of routes that visitors can take through the displays. At SVC, although there is

only one access point to the displays there are still multiple options for how visitors can orientate themselves around the displays after they are funnelled into the main exhibition room. To determine the common route ways undertaken by visitors the tracking surveys at each museum were separately analysed to reveal visitor directional preferences at each case study and these spatial movements were annotated on the schematic maps to visually demonstrate these routes in Chapter 6.

The first three stops and visitor preferences

To further understand how visitors interacted with the 6 different prehistory displays the first three stops each visitor made as they entered the prehistory displays were recorded for each visitor and were utilised to calculate the most popular first stops. This information was recorded as these are the displays which are immediately inviting to the visitor as they enter the space and they are not always the displays facing the visitor where they enter the space. These displays are important to understand as they are the 'hooks' that successfully capture the visitor's attention as they process through the space making them stop rather than walk straight through. These may not necessarily be the displays curators or designers intended visitors to first stop at and it is why they possess such 'stopping power' that is the key to unlocking what constitutes an enticing prehistory display. These displays which are stopped at by 10% or more of tracked visitors in their first three gallery stops are visually represented in orange colours and the three most popular first stops are represented in red on the schematic tracking maps in Chapter 6. This interpretive method is adapted from Harknett's (2017) summary of the first four visitor stops utilised to interpret their tracking data in summative evaluations at Cambridge University Museums and an example can be viewed in figure 3.45.

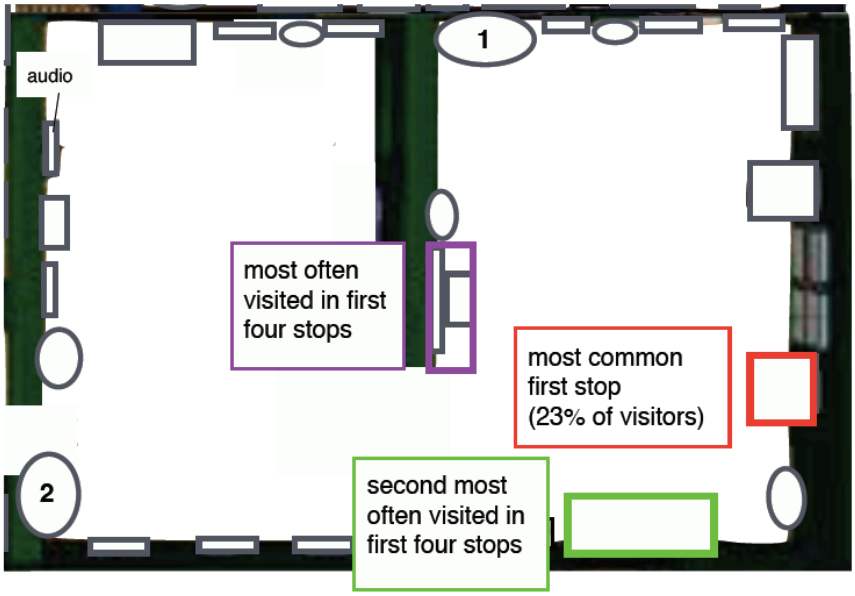


Figure 3.45. The first four stops highlighted by Harknett in their evaluation of the Fitzwilliam Museum's temporary exhibition 'Madonnas and Miracles' based on tracking data from 83 tracking surveys (Harknett, 2017:6).

Quality of visit

To further understand visitor engagements and interactions with prehistory displays and meet the third objective of the thesis, other active behaviours beyond 'stopping' were also analysed. At each case study there were other behaviours recorded quantitatively that reveal further active engagements with the displays beyond merely stopping to look and read about a display. The tracking maps enabled the recording of when visitors call a friend/ partner/ family member over to look at something and conversely when the tracked individual was called away from where they were looking to another display by someone else in their group. The active behaviours of touching, pointing and undertaking interactive activities were also recorded. All of these behaviours were recorded to calculate the overall percentage of tracked visitors undertaking active behaviours. Conversely passive behaviours that can be interpreted as a lack of engagement with displays were also recorded. It was inherently more difficult to measure these passive behaviours as the majority of information recorded related to visitor engagements. However, two metrics were recorded on the tracking maps that could be quantitatively analysed to reveal passive

behaviours; the usage of mobile phones and the number of 'non-case' stops an individual makes. Sitting down on the furniture in the room could also be considered a passive action if a visitor is sitting down because they have reached saturation point and need a break. Yet, many visitors were observed tactically sitting down in view of certain displays to continue their engagements in comfort. These passive engagements were consequently deemed too difficult to interpret and are discussed in more detail in Appendix 18.

To answer research question 3a and identify the trends and variables dictating visitor engagements with displays, the types of visit and how visitors experienced the different spaces across the case studies were interpreted to provide an overall quality of visit for each case study. This calculation accounts for the average visitor dwell time, the average percentage of displays visited, proportions of visitor frequency at displays and frequency of visitors expressing active behaviours at each case study. The average visitor dwell times were calculated by taking the mean average time for the 50 tracking surveys at each case study. This figure reveals the average visit duration, whether visitors have a tendency to spend a long time walking around the displays or process through quite quickly. This frequency is, however, dictated partly by the size of a gallery, size of the overall museum and price that visitors pay as well as their level of engagement/ interest. Consequently, the dwell time must be interpreted alongside these other measures of engagement to categorise the quality of visit for a case study. The average percentage of displays stopped at by visitors reveals how much visitors are exploring the space before they leave. However, this measure can also be affected by the size of the galleries, as a smaller number of displays and consequently tracked features will inflate any percentage of displays visited. For example, at TQ there were only 18 tracked features and so if a visitor only visited 1 of these displays, calculated as a comparative percentage their visit would represent 6% of the displays which gives the misleading impression that they have visited multiple displays. To give an understanding of the varying sizes of the case studies and mitigate the impression provided by inflated percentages the total number of tracked features for each museum will also be considered in the interpretations of the quality of visit at each case study in Chapter 6.

A further metric used to facilitate an understanding of visit quality was the proportion of visitor frequency at displays. For the heat maps of visitor frequency each tracked feature was subdivided into a colour chart from cold dark blue to red hot. The percentage of displays in each of these 5 colour categories has been used to calculate the proportion of display visit frequency. These calculations reveal the quantity of displays visited rarely, if at all (0%-15%), intermediately visited (16%-29%) and frequently visited (30% +) at each case study. These proportions indicate whether certain galleries have a larger representation of frequently visited or rarely visited displays. The frequency of active engagements were also included in the calculations of quality of visit, as these behaviours were easier to quantify than the passive behaviours previously discussed and this will be further emphasised in section 6.3.8. Active engagements together with the other factors outlined were used to classify the quality of visit. These criteria are expanded and adapted from Harknett's (2017) more restricted model of quality of visit which is only based upon the two metrics of the number of elements visited and the average time spent per element. The classification criteria for calculating the quality of visit for each museum used by the thesis are outlined in table 3.17.

Type of Visit	Classification Criteria
High Quality	1) A visit which relative to the gallery's size has a long average dwell time of 10 minutes or more **and/ or** 2) A high percentage of 25% or more displays visited **and** 3) A higher proportion of frequently visited displays compared to rarely visited displays 4) A high frequency of active behaviours of 40% or more
Medium Quality	1) A visit which relative to the gallery's size has an intermediate average dwell time of 5 minutes or more **and/ or** 2) An intermediate percentage of 11-24% displays visited **and** 3) A higher proportion of moderately visited displays compared to frequently and rarely visited displays 4) A medium frequency of active behaviours of 20-39%
Low Quality	1) A visit which relative to the gallery's size has a low average dwell time of 4 minutes or less **and/ or** 2) A low percentage of 0-10% of displays visited **and** 3) A higher proportion of rarely visited displays compared to rarely visited displays 4) A low frequency of active behaviours of 19% or less

Table 3.17. Criteria for classifying quality of visit.

Four conditions for each category are provided to facilitate the interpretation of higher quality engagements with the displays from lower quality engagements. Percentage of displays visited is not the only factor for determining quality of visit as an individual can spend a long time engaging in depth with a singular display or spend a long time engaging with multiple displays to gain breadth of experience. Both of these engagement styles indicate a high quality visit so to account for these different styles the quality of visit is determined by a combination of average dwell time and amount of displays visited.

3.5.2 Recording and interpreting the questionnaire data

The questionnaire data obtained at the case studies as highlighted in section 3.3.5 was predominantly qualitative. To interpret this broad, detailed and variable information required quantitative analysis methods to reveal trends within the information recorded. The transcribed qualitative responses were recorded in Appendix 12 and categorised in an Excel spreadsheet in Appendix E to facilitate a quantitative analysis of the responses.

Word frequencies and word clouds

To gain an initial impression of visitor preconceptions and interests at the case studies the visitor responses were fully transcribed (Appendix 12) and were input into a word cloud generator to quantify the frequency of words used in visitor responses. This method revealed consistent language used by respondents to articulate their preconceptions of prehistory and their perceptions of the prehistory displays at the case studies, helping to address research aims 1 and 3. To further emphasise the common words utilised by respondents in their responses the relative frequency of the words used are illustrated in word clouds in Chapters 4 and 6. Word clouds depict words referenced the most in a larger font size to those used more infrequently to visually communicate respondent word frequencies.

Thematic node categorisation

The qualitative data produced in response to the questions in the questionnaire are highly informative but were difficult to interpret. To further facilitate their interpretation similar responses were grouped together and categorised into thematic ‘nodes’. This process of node categorisation is usually achieved using the social research analysis software NVIVO. After receiving training in NVIVO software, however, it became apparent that this categorisation was easier to accomplish manually without using pre-determined categories. Instead, reviewing the topics referenced in responses to guide the categorisation process, to capture the full

diversity of visitor preconceptions and perceptions recorded. This type of coding to interpret qualitative responses was employed by Tully (2010) in her quantitative analysis of visitor perceptions of Ancient Egypt and by Kisiel and Ancelet (2009) in their interpretation of visitor responses to fossils and the fossil record. These nodes enabled the qualitative responses to be analysed quantitatively and unlike the calculations of word frequencies, node categorisation accounted for the variability of responses that articulate the same ideas. For example, in response to the third question on the questionnaire asking respondents what prehistory meant to them, several individuals defined prehistory as pre-dating writing. This type of response, however, was written in multiple ways, as highlighted by three respondents from the BM;

> *"Prehistory to me is events that would have occurred long ago, for instance anything that pre-dates any civilisations that may have documented histories, such as the Egyptians or Babylonians."*

> *"To me, since history refers to recorded events, prehistory would refer to anything that dates before that…"*

> *"the past before it was written down/ or documented as "history"…"*

All of these responses convey the same idea so can be grouped together under the thematic node, '*Before written records'*. This categorisation process can be viewed in Appendix E where each survey response is attributed to the relevant thematic nodes. By utilising node categorisation it was possible to see more associations that were not captured in the quantification of word frequency, this was particularly useful if there was a lack of shared language used by respondents to express their views towards prehistory as will be explored in Chapter 4.

3.6 Summary

This Chapter has further reinforced the methodological integrity of the thesis by explicating the merits of the dual-scale approach combining both methods of visitor-based and visual analysis. It was emphasised that it is only by combining a broad understanding of displays at the macro-scale with a detailed understanding of visitor perceptions and engagements with displays at the micro-scale that the ultimate ambition of the thesis to undertake a more holistic evaluation of prehistory displays in England can be achieved. This Chapter has outlined the sampling approach utilised at both the macro and micro-scale for selecting the museums recorded, the practicalities of collecting the data and the limitations associated with these sampling methods. A summary of how the two scales operate in relation to the data collected, methods of analysis employed to interpret the data and the research questions this data addresses is provided in figure 3.46.

The explication of the macro-scale has revealed the necessity of using 13 standardised variables of display to quantify and compare prehistory display trends between museums. It was emphasised how recording and interpreting these variables of display will negate the influence of my personal subjectivity upon the interpretation of representational trends, unlike previous analyses of prehistory displays reviewed in Chapter 2. This method of visual analysis will be utilised in Chapter 5 to reveal how contemporary prehistory displays in England present prehistory to the public, addressing the second research question of the thesis.

The explanation of the micro-scale discussed how visitor-based data will be recorded and analysed to reveal visitor pre-display preconceptions and their engagements with specific prehistory displays. It was expounded how the qualitative data from the questionnaires will be transformed via quantitative analysis methods to identify shared visitor preconceptions of prehistory, addressing the first research question of the thesis and how these same methods can also be applied to interpret visitor perceptions of prehistory displays to address the third research question of the thesis. Furthermore, the combination of undertaking tracking surveys alongside

questionnaires was stressed as essential for interpreting visitor engagements with prehistory displays, as well as their motivations behind these behaviours. Moreover, the case studies selected at the micro-scale were situated within their individual museological contexts to facilitate the interpretation of visitor-based data that will be analysed in the following Chapter 4.

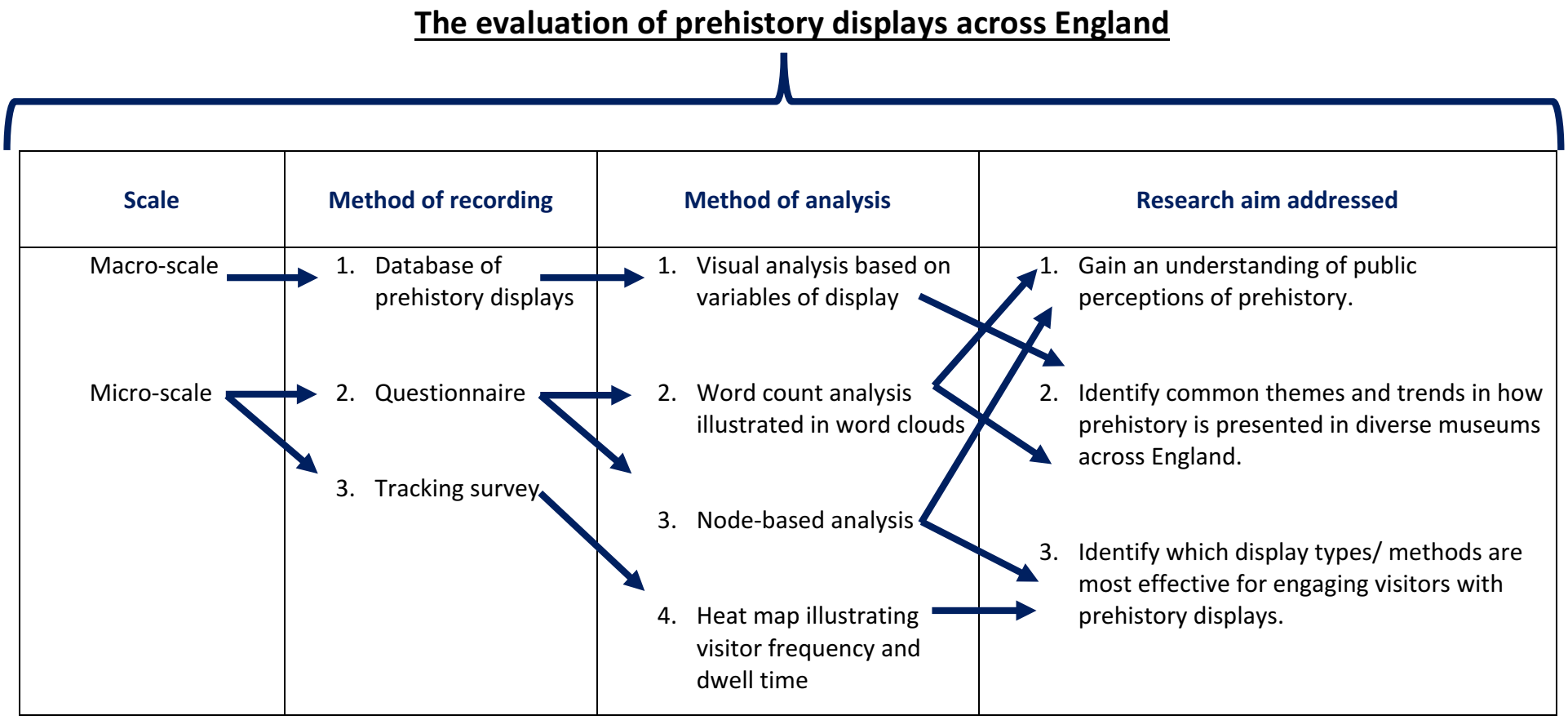


Figure 3.46. Summary of the various methods that will be used to address the three research aims of the thesis.

Chapter 4: Visitor preconceptions of prehistory and influencing factors

4.1 Introduction

This chapter utilises the micro-scale questionnaire data collected from 300 visitors across the 6 case studies to address research question 1, *'What preconceptions do the public have about prehistory before viewing the displays?'*. This Chapter will address this research question by quantitatively evaluating visitor preconceptions about prehistory captured in the first part of the questionnaire answered by visitors before they had seen the prehistory displays at the case studies. Collating and evaluating this visitor-based data will effectively fulfil the first research objective of the thesis to '*Collect and interpret visitor pre-display understandings and interests associated with prehistory',* thereby achieving the first research aim of the thesis to *'Gain an understanding of public preconceptions of prehistory'*.

Firstly, this Chapter will summarise the visitor-based data collected at the case studies and what this data reveals about visitor demographics and will be utilised to create visitor profiles for each of the museums which can then facilitate an understanding of the different expectations and understandings of different audiences across the case studies. This Chapter will then categorise the primary response styles and types of content used by visitors to express their understanding of the subject of prehistory. The qualitative responses about visitor understandings and interests in prehistory will be quantitatively analysed to reveal visitors embodied ideas about prehistory and how they relate to it. Visitor understandings of and familiarity with prehistory and how demographic factors may influence these different expectations will be explored by quantifying the frequency of words used in responses and categorising responses into thematic nodes. These methods of analysis will enable response patterns to be identified for each question and will enable the comparison of responses between case studies and visitor profiles. The chapter will then conclude by reviewing all of the responses to questions 3 and 5

together to highlight general visitor preconceptions of prehistory prior to viewing displays demonstrated by respondents.

4.2 Interrogating the demographic data

To address research question 1a and understand which variables affect visitor preconceptions of prehistory the influence of certain demographic factors upon visitor understandings of prehistory needed to be ascertained. This required the identification of different visitor profiles represented across the case studies by interpreting trends within the demographic data collected. Demographic information was captured in responses to questions 1, 2, 4 and 6 of the questionnaire. An in-depth analysis of this data and the relationships between the different demographic variables across the case studies was not feasible within the scope of the thesis, as emphasised in section 1.3.1. Consequently, this data is briefly explored in Appendix 13 and was utilised to create visitor profiles to understand an individual's background, as well as how they have previously been exposed to prehistory and how their experiences and knowledge have shaped their perceptions of the period.

To gauge an understanding of the selected visitors' museum visiting behaviour, respondents were asked how many times they had visited a museum in the past year and the responses are summarised in figure 4.1. This question was not museum-specific and didn't specify a particular year so captures how many museums an individual has visited over the year. The most popular visit frequency across all museums was '2-5 times' and respondents infrequently selected '6-10 times' or '10+ times'. The visitors who responded to this questionnaire are more likely to visit museums with moderate to high frequency since they are already demonstrating their interest by visiting and responding to this questionnaire. Yet there are very few respondents in the high frequency options, these options represent about 10-15% of respondents across the museums and only WP has more than 20% of respondents in the '6-10 times' category. There are also slight differences in visit frequency between museums, for example at TQ there are equal numbers of visitors who have visited a

museum ‘once’ and visitors who have visited ‘2-5 times’ in the past year, whilst NLM has the most respondents that have ‘never’ visited a museum in the last year.

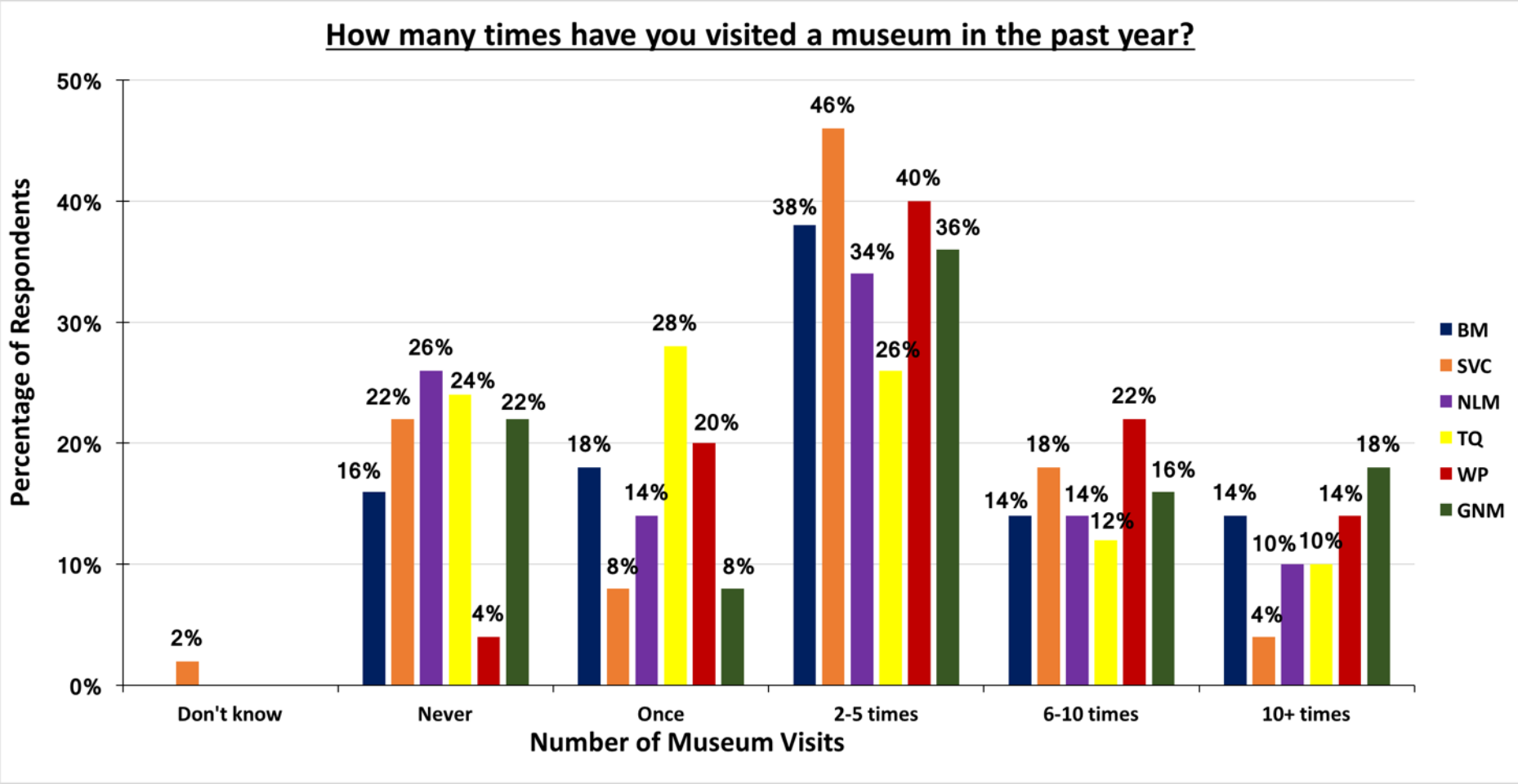


Figure 4.1. Questionnaire respondent's museum visit frequency across the museums.

To further explore visitor motivations, visitors were also explicitly asked in question 6 of the questionnaire if they had intended to view the prehistory on display in the specific museum and the responses to this question are summarised in figure 4.2. Across the case studies the majority of respondents self-reported as intending to visit the prehistory displays which was expected as visitors were only asked to participate if they had already entered the gallery and had therefore made a decision to engage in some format with the prehistory displays. However, expressing an interest in viewing the prehistory may not be reflective of the respondent's true choices due to the questionnaire's focus on prehistory the respondents may have felt more inclined towards a positive response. Furthermore, there was often confusion about the displays in part 2 of the questionnaire, with many answers from respondents reflecting their opinions on the wider museum and non-prehistoric displays. Yet despite all of these issues which should produce a strong positive bias there is still a large number of respondents at each museum that explicitly stated that they did not intend to view the prehistory displays as highlighted in figure 4.2. At TQ in particular there were almost equal numbers of respondents who did and did not intend to view the displays, as many visitors came to see the famous Agatha Christie gallery rather than the local archaeology. At the BM 42% of respondents did not intend to view the prehistory displays, due to the layout and location of the gallery many visitors used the gallery as a 'corridor' to walk through to other galleries so were more likely to be passing through to see other exhibits. After all most visitors to the BM go to see the 'star' objects highlighted on the visitor map, objects such as the Rosetta stone, Parthenon marbles, Assyrian reliefs, Easter Island head, Lewis chessmen and Sutton Hoo helmet. None of the British or European prehistory collections are highlighted in the 'don't miss' section of the BM's internal floor map and so it is less likely that visitors will be prioritising visiting these displays if they are short on time and trying to get around as much as they can.

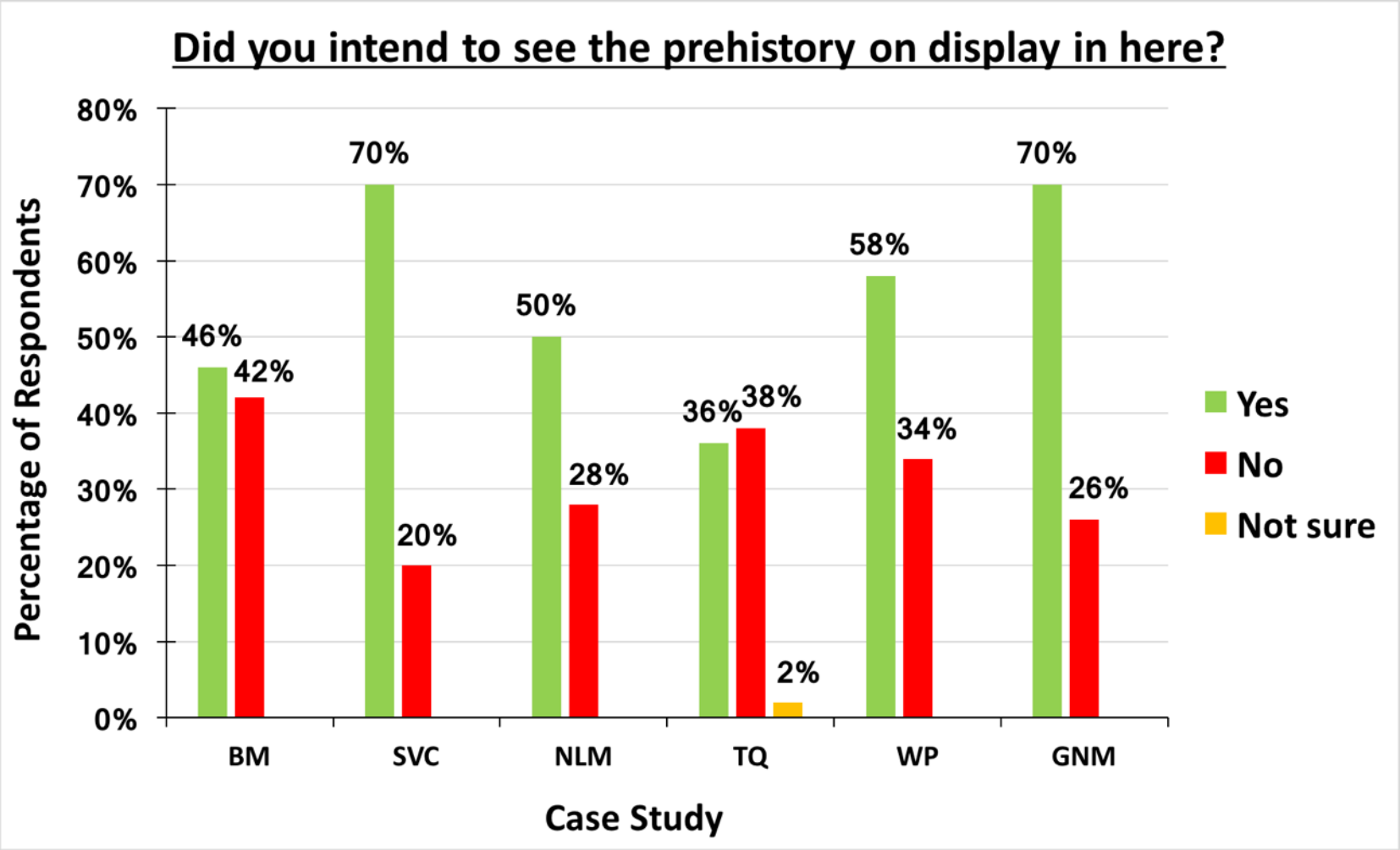


Figure 4.2. Percentage of respondents that intended to visit the prehistory displays.

Before exploring visitor preconceptions of prehistory in this Chapter it was important to first ascertain how visitors had previously been exposed to the topic. Thereby addressing research question 1b by identifying where visitors have previously learnt about prehistory. Visitors were explicitly asked in question 4 of the questionnaire where their primary source of prehistory knowledge was from and were presented with several pre-determined options including an 'other' and 'don't know' option and the frequency of responses are summarised in figures 4.3 and 4.4. 'Museums' were selected as the most frequent response, representing 45% of all responses further reinforcing the legitimacy of the thesis. Notably, across all case studies 'radio' was the least popular source of knowledge, followed by 'fictional books'. 'Academic books' and 'fictional films/ T.V' were also quite poorly represented across the sample. In contrast, many respondents cited 'school' and 'documentaries' as their main sources of information. There were slight differences between different age groups with more respondents over 60 selecting 'radio' and fewer respondents over 60 selecting the 'internet', reflecting differences in age-related opportunities for accessing information.

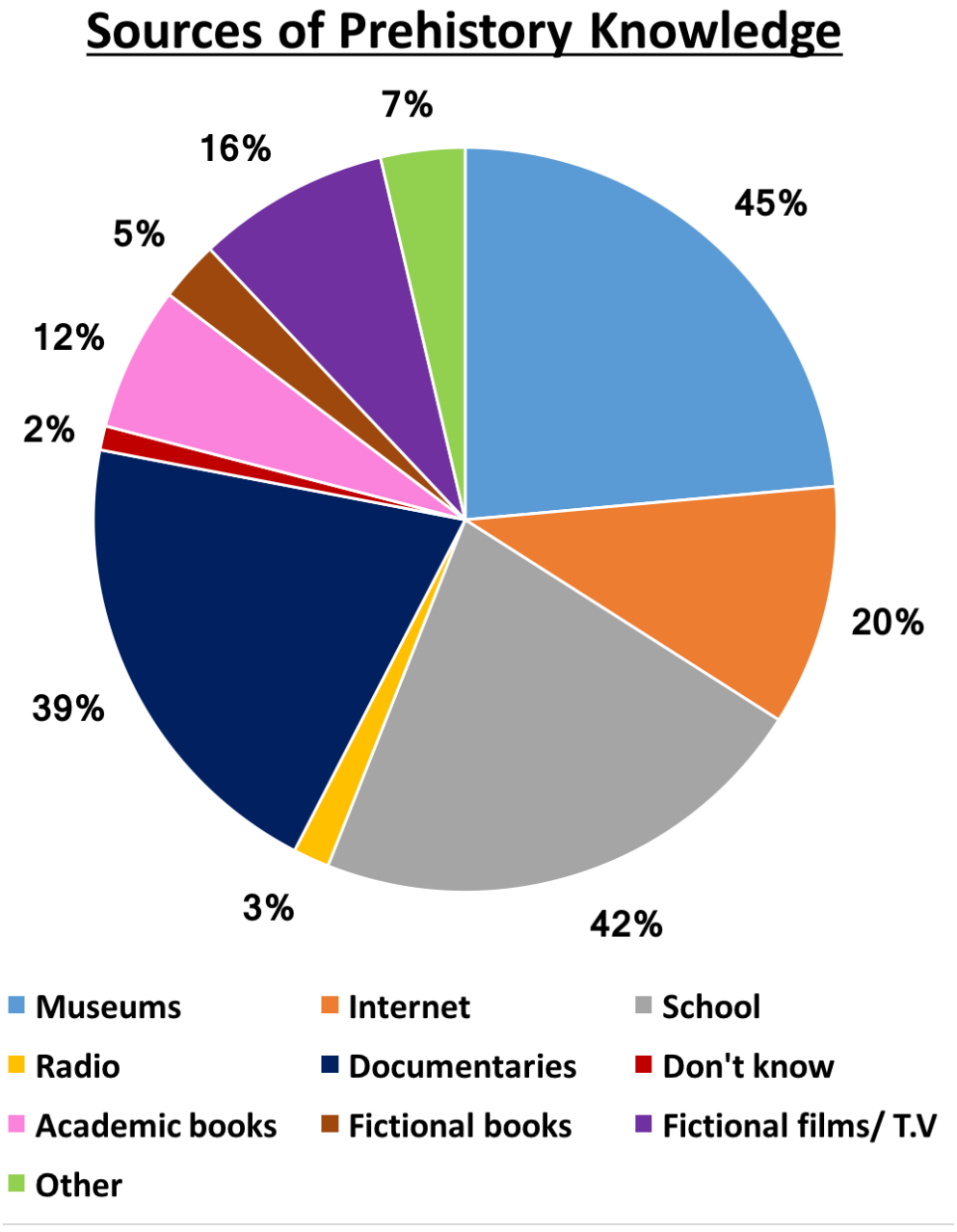


Figure 4.3. Pie chart illustrating the primary sources of respondent's knowledge about prehistory across the case studies.

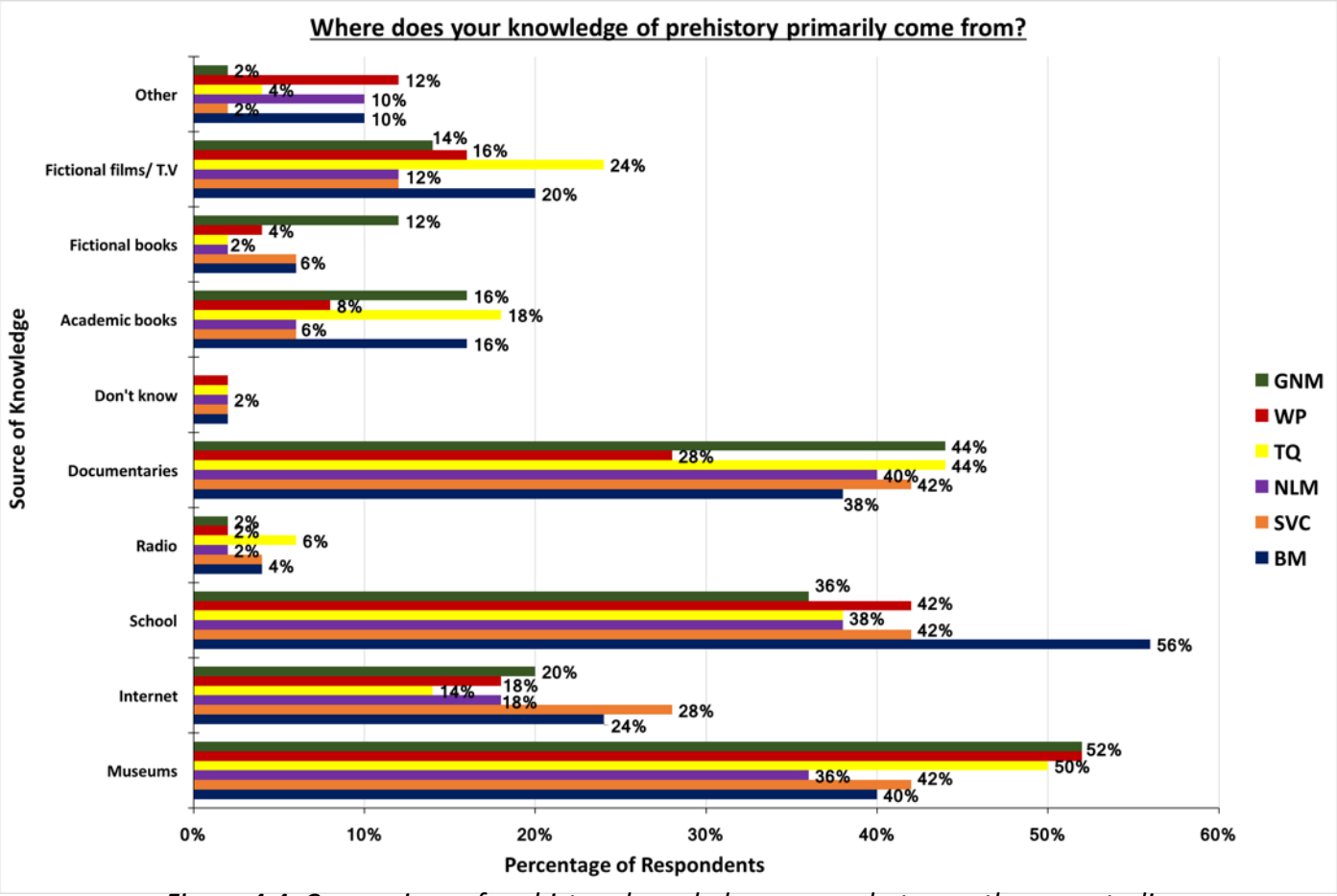


Figure 4.4. Comparison of prehistory knowledge sources between the case studies.

4.3 Creating visitor profiles

An individual's museum experience, their expectations, how they relate to and understand displays is heavily dependent on their background and life experiences (Scott, 2007:3). These experiences are shaped by many factors and circumstances, some of which have been ascertained from responses to the demographic questions in the questionnaire. Demographic variables influence an individual's opportunities, access to knowledge, level of education and consequently exposure to learning about the past. The following infographic (figure 4.5) summarises some of these relationships between various demographic variables and experiences that structure an individual's worldview and interactions, including their response to and interest in museums.

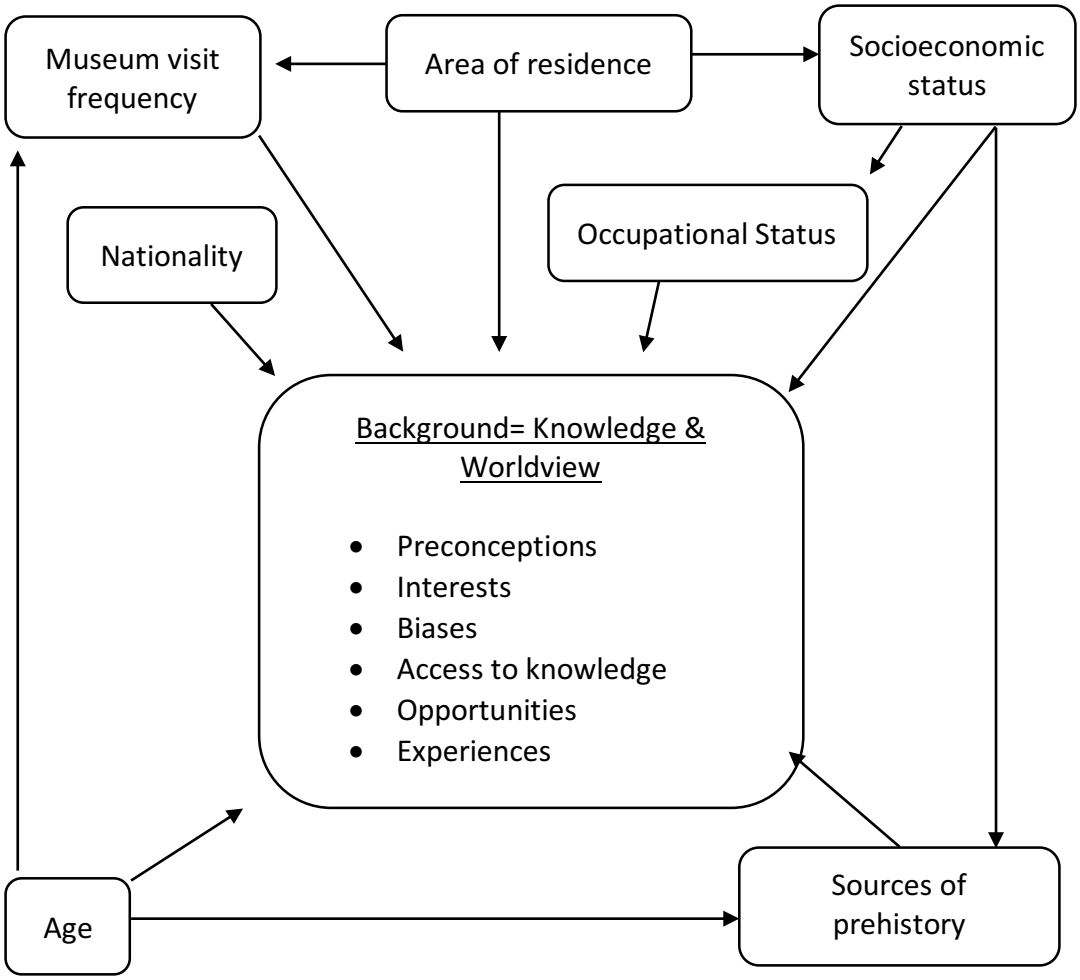


Figure 4.5. Inter-relationships of demographic variables and their influence on an individual's background, knowledge and worldview.

From the demographic data summarised in Appendix 13 it was possible to identify 5 different visitor profiles represented across the museums. These profiles are based upon nationality, area of residence, occupational status and age and are summarised below in table 4.1 and the museums they are associated with are presented in table 4.2.

Profile No.	Description
1	• British • Retired • Local
2	• British • Retired • UK resident
3	• Diversity of nationalities • Young adult • Student
4	• Diversity of nationalities • Overseas • Young adult • Diversity of job sectors
5	• British • UK/ Local resident • 51-60

Table 4.1. Summary of the 5 visitor profiles identified at the 6 museums.

Museum	Nationality	Residence	Age group	Job sector	Occupational status	Museum Visiting frequency	Interest in prehistory	Interpretation	Profiles represented
BM	British & European	Overseas	16-20 & 21-30	Business/ Finance	Quite a few students	2-5 times	46%	European & British tourists primarily composed of young professionals and students who visit museums quite frequently and have some interest in prehistory but primarily visit the museum to see other galleries.	3,4
SVC	British & Australian	Overseas	21-30	Hospitality/ Retail/ Tourism	Quite a few Students	2-5 times	70%	British and Australian tourists primarily composed of students and young adults who visit museums quite frequently and have a strong interest in prehistory. Visitors have visited the museum specifically to see the prehistory.	3,4

Museum	Nationality	Residence	Age group	Job sector	Occupational status	Museum visiting frequency	Interest in prehistory	Interpretation	Profiles represented
NLM	British	Local & UK	60+	N/A	Large proportion of retired individuals	Never & 2-5 times	50%	Mostly local residents and some visitors from further afield who have some interest in prehistory but primarily visit the museum for activities with children. The majority of visitors are over 60 and retired and there is a stark division between those who are not interested in museums and those who visit quite regularly.	1, 2
TQ	British	Local & UK	60+	N/A	Large proportion of retired individuals	Once & 2-5 times	36%	Retired British tourists and local residents with a minimal interest in prehistory. There seem to be two groups; those who visit museums fairly regularly and are visiting primarily for the temporary exhibition and Agatha Christie gallery and those who rarely visit museums and have come to the museum for an indoor activity on a rainy day.	1, 2

Museum	Nationality	Residence	Age group	Job sector	Occupational status	Museum Visiting frequency	Interest in prehistory	Interpretation	Profiles represented
WP	British	Local	21-30	N/A	Large proportion of students	2-5 times	58%	Local residents composed primarily of young professionals and students who visit museums quite regularly and have some interest in prehistory but primarily visit the museum for other reasons.	3, 4
GNM	British	Local & UK	21-30 & 51-60	Health and Social care/ Emergency services	Quite a few students	2-5 times	70%	Mostly visitors from elsewhere in the UK as well as a predominance of local residents. Primarily young adults (many of whom are students) and those nearing retirement.	3, 4, 5

Table 4.2. Summary of the demographic data collected across the museums. Each category provides the most popular responses for that particular museum.

4.4 Categorisation of response type

To address the first research aim of the thesis and identify visitor's level of knowledge and preconceived associations with prehistory the case study participants were asked the open-ended question '*What does prehistory mean to you?',* before they had the opportunity to view the displays. It was intended that this question would capture any ideas visitors had as well as their current understanding in a mind-map style answer where they were not restricted and had the freedom to write anything that seemed relevant to them. The wording of the question was intentionally ambiguous and was interpreted in two ways, some respondents took a direct approach by writing all of their knowledge about the topic, whilst others took a more reflective philosophical approach and answered about the value and importance of prehistory to them personally and to people more generally. These personalised answers often reflect on the individual's life experiences and the relevance of prehistory to them and their identity. For example, at WP respondent number 43 shares her career-based connection with prehistory;

> *"as I am a Doula, I love prehistory because, pregnancy, labour, birth and breastfeeding were natural, respected and supported by matriarchal women community in most cases"*

Respondent number 26 at the GNM also recounts how important prehistory is for understanding how life was and how the past relates to their hobby as a photographer;

> *"need to know about history, how life was and compare with life now, photography is my hobby and being able to take pictures of the past is fascinating"*

To further understand the predominance of these two styles of response the answers have been classified as either '*Descriptive*' or '*Reflective*'. The number of answers attributed to these styles of response are summarised in figure 4.6. Responses which

are categorised as '*Unclassified*' are ones which are not relevant to the question and make no attempt to describe their understanding of prehistory or articulate the value of the period. This type of unclassified response is exemplified by respondent number 43 at GNM who simply answered question 3 with "*I support Chelsea*", a statement about a contemporary football club which bears no relevance to the question. Figure 4.6 demonstrates that the majority of responses to question 3 were descriptive with most respondents attempting to conceptualise and articulate what prehistory is and what they associate with it and the more reflective responses accounted for less than 20% of the responses across the 6 case studies.

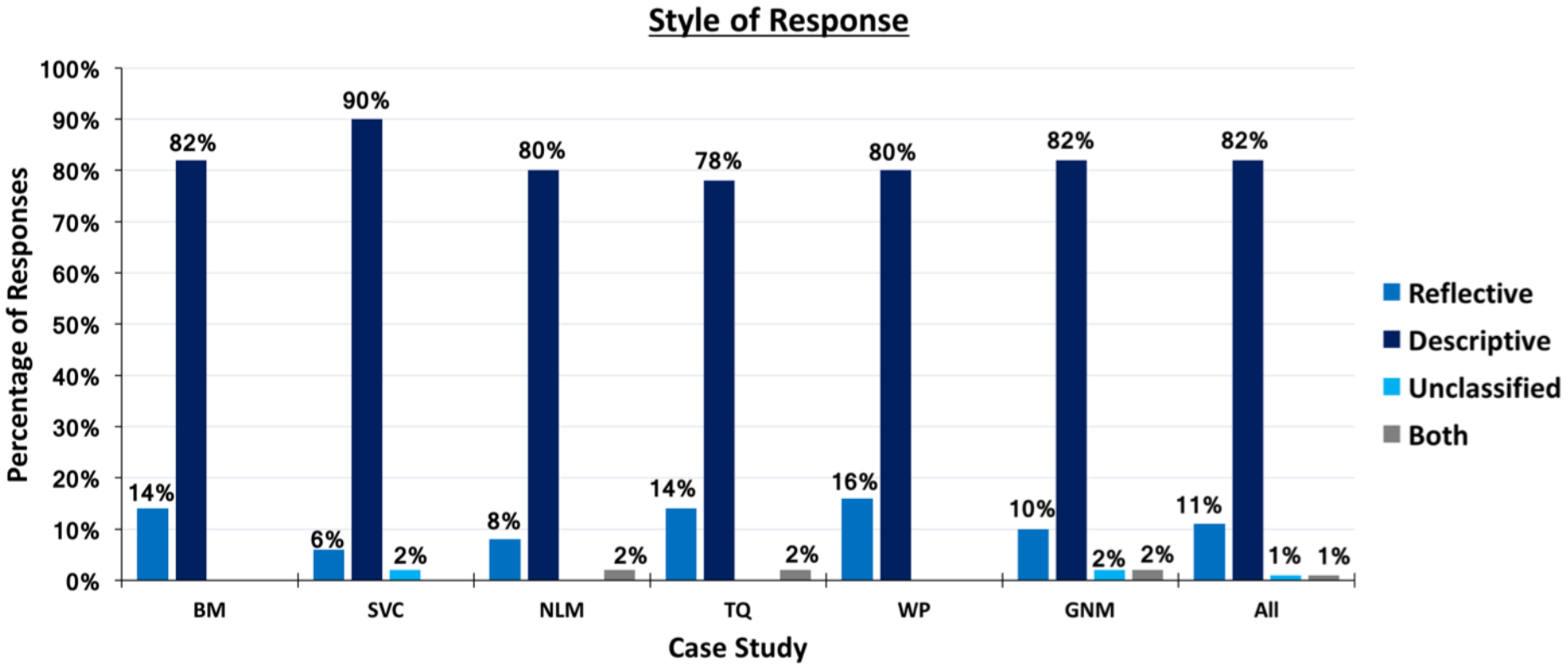


Figure 4.6. Percentage of responses to question 3 classified as reflective or descriptive at each case study.

As highlighted in Chapter 3, based on findings from the pilot study respondents were given some additional guidance as to what they could include in their answers for question 3 with the suggestions; *'you can name dates, sites, individuals, periods, ideas, objects etc'*. This guidance was intended to provide some focus to the question, yet the majority of responses did not refer to the suggested sites, dates, individuals or objects. Out of the 300 respondents 95% answered the question and provided a diversity of associations in relation to prehistory. The number of responses that expressed their knowledge in relation to the areas suggested were calculated and the results are presented in figure 4.7.

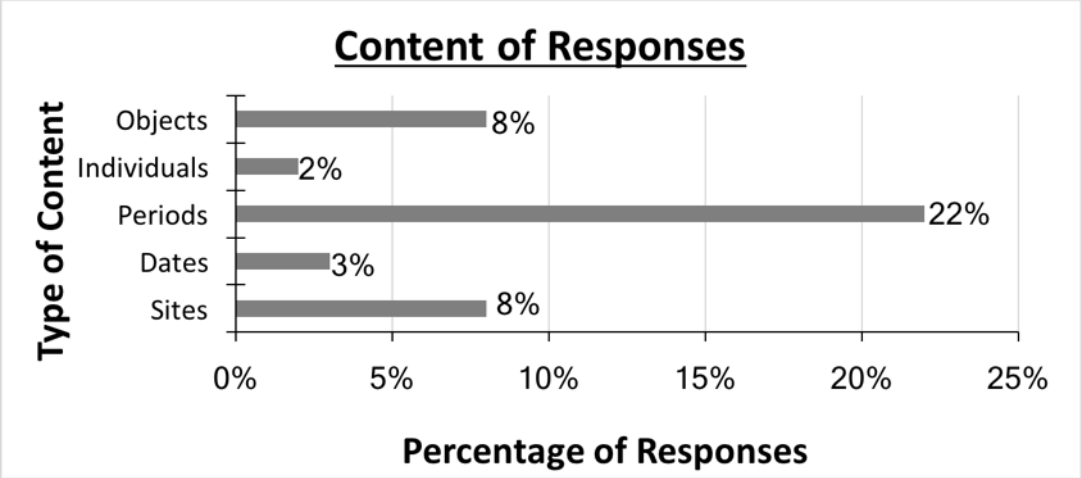


Figure 4.7. Percentage of responses in each guidance category provided for question 3.

Despite the variability of respondent's approaches to question 3, only 2% of respondents mentioned named individuals, 3% mentioned dates and 8% mentioned sites or objects. In contrast 22% of respondents specified a period of prehistory, indicating a widespread awareness of the traditional Three Age system, yet the temporal range of dates that were cited in the few responses that specified dates demonstrate the uncertainty respondents experienced when attributing a specific date to these periods. Respondents could identify the periods commonly used to frame prehistory but did not know how to situate them in time. The dates attributed to prehistory ranged from 200 million years ago to 2000 BC. Furthermore, "*2000 BC"* was a popular specific date that was referenced by respondents and possibly reflects

a conflation of BC with years ago, as many other responses define prehistory as "*before Christ*" and 11% of respondents did not seem able to differentiate prehistory from history, as exemplified by respondent 3 at TQ who defined prehistory as;

> *"heritage, World War I and II, Kings and Queens, local history, world history – Tsar – Russian revolution, prehistoric man/ life/ dinosaurs, etc"*

The variable responses to question 3 convey confusion over the chronology and timeframe of prehistory with many respondents listing only two of the Three 'Ages'. Furthermore, 31% of the responses that referenced the Three Ages of 'Stone', 'Bronze' and 'Iron' listed the Three Ages in the wrong chronological order. The most common chronology that was articulated by 63% of these responses situated the Iron Age as the period preceding the Bronze Age. Additionally, 9% of responses also referenced later time periods and civilisations that possessed a form of writing, including Greece, Rome, Egypt, the Vikings, the Saxons and the Indus Valley. Furthermore, 24% referenced even later time periods and civilisations including the Aztecs, Inca, Mayans, Medieval period, Victorian era and pre-colonial Africa. Overall, these time-based responses reflect a general understanding of prehistory as a distant and ancient period and visitors thus conceptualise it utilising the ancient civilisations that they have previously been exposed to through TV documentaries, popular media and school. These ideas may also reflect the way that individuals were taught history in school, categorised into distinct civilisations. It was only with the curriculum change in September 2014 that prehistory was made statutory in the National Curriculum for KS2 children in England (Department of Education, 2013). Prior to this change British history focused on important events from the Romans onwards and it was up to an individual's teacher's discretion whether they chose to include any prehistoric examples as studies for certain topics of history such as *'Invaders and Settlers'* (Department of Education, 2013). Unlike other European countries there has never been a strong tradition for learning about prehistory in either primary or secondary schools in Britain and this systemic bias towards later time periods may partially explain why these other periods were so pervasive within responses to question 3.

The lack of respondents referencing named individuals illustrated in figure 4.7 is likely due to both the lack of well-known 'prehistoric' archaeologists and lack of written records from which could be derived the names of prehistoric people. Of the few responses that did mention individuals by name some provided the nicknames for well publicised hominin fossils including; '*Lucy*', '*Piltdown Man'*, '*Nutcracker Man'* and '*Cheddar Man'*. Other respondents demonstrated confusion with the temporal parameters of prehistory by providing the names of the Geologists '*James Hutton'* and '*Hugh Miller*', names of historical individuals from Jewish and Roman mythology, '*Lilith*', '*Venus*' and '*Diana*' and even figures from modern history such as '*Tsar Nicholas II'*. This small sample of responses again demonstrates the diversity of prehistoric knowledge that visitors have, as well as the widespread confusion respondents demonstrate when articulating the chronology of prehistory with some conflating archaeology with geology and others conflating prehistory with history. The prehistoric hominins referenced by respondents have all been widely publicised with '*Lucy*' mentioned in almost every recent documentary about human evolution.

'*Cheddar Man*' was recently the focus of his own documentary '*The first Brit: The 10,000 year old man*' (2018). The documentary was released on the 18th of February 2018 and the response from NLM which refers to Cheddar Man was written only a few weeks later on the 7th of March 2018. These responses must, however, be put in perspective. Even though the prehistoric humans referenced have been given widespread exposure in the media they were only mentioned once each out of all the 285 responses. This may represent a lack of familiarity with human evolution despite such exposure to the topic in biology lessons at school and the mass media. Alternatively, however, these responses could instead represent a lack of awareness that the term 'prehistory' encapsulates human evolution. Perhaps respondents would have more frequently mentioned hominins if the question had specified that human evolution is a part of prehistory, providing respondents with events they could conceptualise outside of a chronological understanding.

The lack of a general understanding of prehistory is further highlighted by the lack of respondents that refer to prehistoric sites. In the few responses that mentioned a prehistoric site, '*Stonehenge*' was the most popular response and was named in 79% of the site-based responses. This is perhaps unsurprising given the popularity of the site which has featured in several documentaries over the years and represents the 6th most popular paid-for attraction in the UK, which attracted 1,555,868 visitors in 2018 (ALVA, 2019). This monument has come to symbolise our distant past and is frequently referenced in the media and museum displays to orientate the public with prehistory. The BM prehistory displays for example utilise large panoramic photographs of Stonehenge on either side of the gallery to anchor visitors in the Bronze Age even though there is no material from this site on display. Other sites that were referenced and the frequency with which they were referenced in responses are summarised in table 4.3 below.

Site	Time Period	Number of mentions	Where mentioned?
Arran	/	1	NLM
Avebury	Neolithic	1	TQ
Carnac	Neolithic	1	NLM
Creswell Crags	Palaeolithic	1	NLM
Dartmoor	Bronze Age	2	TQ
Ecton Mine	Bronze Age	1	NLM
Flag Fen	Bronze Age	1	NLM
Gölbekli Tepe	Neolithic	1	SVC
Grotte de Lascaux	Palaeolithic	1	BM
Kents Cavern	Palaeolithic	2	TQ
Ness of Brodgar	Neolithic	1	WP
Newgrange	Neolithic	1	NLM
Orkney	/	3	NLM, GNM
Skara Brae	Neolithic	1	GNM
Star Carr	Mesolithic	1	NLM
Stonehenge	Neolithic/ Bronze Age	19	SVC, NLM, TQ, WP, GNM
White Horse Hill	Bronze Age	1	TQ

Table 4.3. Summary of prehistoric sites/ areas mentioned in responses across the case studies from 24 respondents.

Overall, out of the 24 site-based responses, 17 sites/ areas with high concentrations of prehistoric sites were mentioned. The majority of sites referenced are Neolithic in date, whilst 5 are Bronze Age, only 1 is dated to the Mesolithic and 3 are attributed to the Palaeolithic and none of the sites mentioned are Iron Age. Visitors at NLM seem to have a greater awareness of prehistoric sites than visitors at the other museums, with 9 respondents naming prehistoric sites (nearly 10% of respondents) and referencing a diversity of sites, some of which are not even mentioned at any of the other case studies. Sites mentioned which are not prehistoric were not included in the table but came up just as frequently in responses to question 3. These sites from later periods exemplify the types of anachronistic responses that are so pervasive within the sample of respondents and demonstrate the temporal confusion that the term 'prehistory' seems to produce. The 9 responses that referenced sites that are not prehistoric, included the '*Roman baths', 'the Pyramids', 'Easter Island* statues', '*Herculaneum*' and '*Pompeii*'. These sites are associated with the ancient civilisations previously discussed and are frequently referenced by respondents trying to relate prehistory to periods in the past that are within their frame of reference. These responses further illustrate respondent's temporal confusion and anachronistic conceptualisation of the period, as these respondents were not explicitly trying to compare prehistory with these civilisations but accidentally equated these civilisations with prehistory.

The few responses that specified prehistoric objects were also highly variable, some respondents referenced jewellery, others specified types of vessels and flint tools and some even mentioned types of weaponry and currency. The diverse types of prehistoric objects referenced further demonstrates the variety of ways visitors conceptualise the period and what material culture they attribute to this distant period. From these initial analyses of responses there certainly does not appear to be a consistent shared concept of 'prehistory', or the sites and materials encapsulated by the term, reflecting the public unfamiliarity associated with prehistory highlighted in previous surveys discussed in section 2.2.

4.5 Analysis of initial pre-display preconceptions of prehistory

To address the first research question and gain an initial impression of the broad associations visitors attribute to prehistory the responses to question 3 *'What does prehistory mean to you?'* were quantitatively analysed. This was achieved by inputting the transcribed responses into a word cloud generator to calculate the frequency of words used by respondents to articulate their understanding of prehistory using word count frequencies, as outlined in section 3.5.2 and the results of this word quantification are illustrated in figure 4.8. From 285 responses to question 3, a total of 2,248 words were input into the word cloud generator and 2,805 words were excluded[12]. The larger words represent words mentioned more frequently in the responses and they decrease in size with less frequency. To further explore the popularity of certain words in association with prehistory the 20 most frequently mentioned words in the sample are also summarised in table 4.4. There are more than 20 words in this table as certain words were mentioned the same amount of times in the sample and so these are listed under the same ranking. In total there are 45 words that represent the 20 most frequently mentioned words in the sample. During the ranking process to gain an accurate reflection of commonly used words that visitors utilise to articulate their understanding of prehistory, words which did not present a topic/ theme were excluded. These words that were excluded, included ones which repeated parts of the question such as *'means'* and '*knowledge'*, as well as filler words such as '*etc', 'don't'* and *'much'* which do not convey any meaningful associations on their own.

[12]Words mentioned once and stop words such as 'the', 'and' and 'a'.

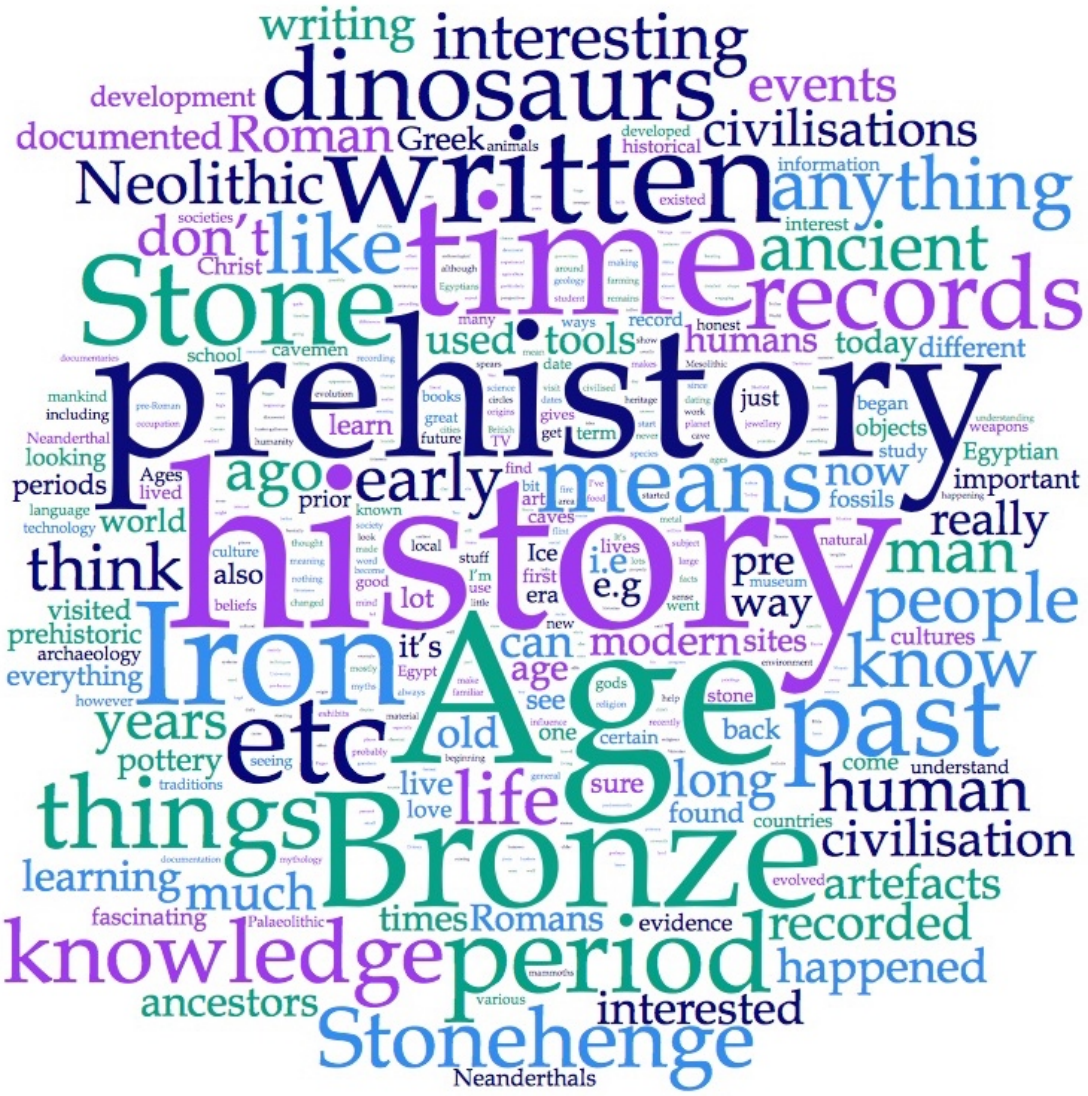


Figure 4.8. Word cloud demonstrating the popularity of words used in responses to question 3 from 285 respondents.

Ranking	No.	%	Word(s)
1	98	34	history
2	85	33	Age[13]
3	39	14	time
4	37	13	Bronze
5	32	11	Iron
6	30	11	written
7	28	10	Stone
8	26	9	past
9	25	9	period
10	23	8	dinosaurs, records
11	19	7	Stonehenge
12	17	6	life
13	16	6	ancient, people
14	15	5	interesting, early, human, man
15	14	5	Neolithic, ago
16	13	5	years
17	12	4	civilisations, civilisation, recorded, Roman, long
18	11	4	interested, artefacts, happened, writing, events
19	10	4	ancestors, learning, modern, tools, used, pre, old, now
20	9	3	documented, humans, Romans, times, age

Table 4.4. Summary of the 20 most frequently mentioned words from the 285 respondents.

Table 4.4 further reinforces the popularity of the Three Age system within visitor conceptions of prehistory, as '*Age*' is mentioned 85 times, whilst '*Bronze', 'Iron'* and '*Stone'* are mentioned 37, 32 and 28 times respectively. The sub-divisions of the Stone Age are not as widely known, yet rather unpredictably *'Neolithic'* was the 15th most popular word. This word was, however, only mentioned 14 times out of all of the 285 responses, even at SVC, only 6 respondents referred to the '*Neolithic*'. '*History'* was the most popular word across the sample, with most respondents either defining prehistory in relation to history or using the term synonymously with prehistory. Some of the words that are ranked in the 20 most frequently mentioned are only mentioned 10 or 9 times in total out of the 285 responses. It is thus apparent that some of the 'most frequently' mentioned words are not actually mentioned that

[13] Age is capitalised because when respondents used this word they were referencing one of the Three Ages.

many times in the overall sample. Out of 285 responses only the words '*history*' and '*Age'* are mentioned more than fifty times, whilst some of the other more popular words are only mentioned 9 times in total. Such low frequencies of words within the responses further reflects the lack of shared common words and terms that visitors use to convey their conceptions of prehistory highlighting the diversity of understanding that exists and the variability of articulating this knowledge.

To understand how these responses fit within the thus far limited evaluation of public perceptions of prehistory requires a comparison of these responses with the analogous visitor research undertaken by Wood and Cotton (1999). Their visitor evaluation undertaken at the MoL, as discussed in section 2.2 revealed that visitors are generally unfamiliar with prehistory and most frequently referenced '*cavemen'* and *'dinosaurs'* when asked what they associated with the word prehistoric. A comparison between my own findings in table 4.4 and Wood and Cotton's findings reveals a shift away from viewing prehistory in association with '*dinosaurs*' and '*cavemen*'. The use of the androcentric term *'cavemen'* was not mentioned frequently enough in my sample of 285 respondents to be ranked in the top 20 most popular words. The word '*dinosaurs*', however, was referenced 23 times in my sample. To put this in perspective, the references to '*dinosaurs'* despite ranking as the 10th most popular word, only account for 8% of responses, as opposed to 28.7% in Wood and Cotton's (1999:43) survey.

The popularity of the Three Age system also appears to have changed in the intervening years between the surveys. In Wood and Cotton's (1999) survey '*Stone Age'* was the most frequently mentioned period but these references only represented 4% of overall responses in this survey, whilst '*Bronze Age'* and '*Iron Age'* were mentioned by less than 1% of respondents. In contrast my data collection demonstrates the popularity of these ages, particularly the '*Bronze Age'* which is referenced by 13% of respondents. In both surveys the concept of prehistory preceding writing is very clear, although it is a less popular response at the MoL where only 5.7% of the 1,186 respondents referenced this concept (Wood and Cotton, 1999:43). Since phrases were not included in the quantification of popular

words across my data set, the popularity of this concept was based on the usage of various words associated with this literary division including, '*written', 'recorded'* and '*writing'.* These words ranked in the 20 most popular words and consequently demonstrate the popularity of the concept of prehistory preceding written records. Intriguingly '*Stonehenge*' was the only prehistoric site referenced in the MoL data set and was the only site referenced amongst the 20 most popular words referenced in my data set, despite the increased media exposure for sites such as Skara Brae and the Ness of Brodgar in recent years. It thus appears that these sites have either not filtered down into the contemporary public consciousness or they are simply not associated with prehistory. Tools and weapons were also popular concepts referenced by respondents at MoL but do not feature as prominently in my data set. These differences could partially be accounted for based on terminological differences, as the word '*prehistoric*' as opposed to '*prehistory*' conveys different impressions to the visitor. However, the differences between the surveys most likely highlights the changes in public conceptions of the period between 1992 and 2017/ 18.

To further explore how visitor preconceptions vary across the case studies due to the different visitor profiles identified in section 4.3 the word frequencies were calculated separately for each museum. The results are summarised in table 4.5 and are illustrated in figure 4.9.

Word	BM	SVC	NLM	TQ	WP	GNM
Age	3	15	25	3	24	15
Bronze	2	6	12	2	11	4
civilisations	10	0	1	0	1	0
history	23	12	23	14	15	11
Iron	1	4	12	4	9	5

Table 4.5. The frequency of the most popular words across the case studies.

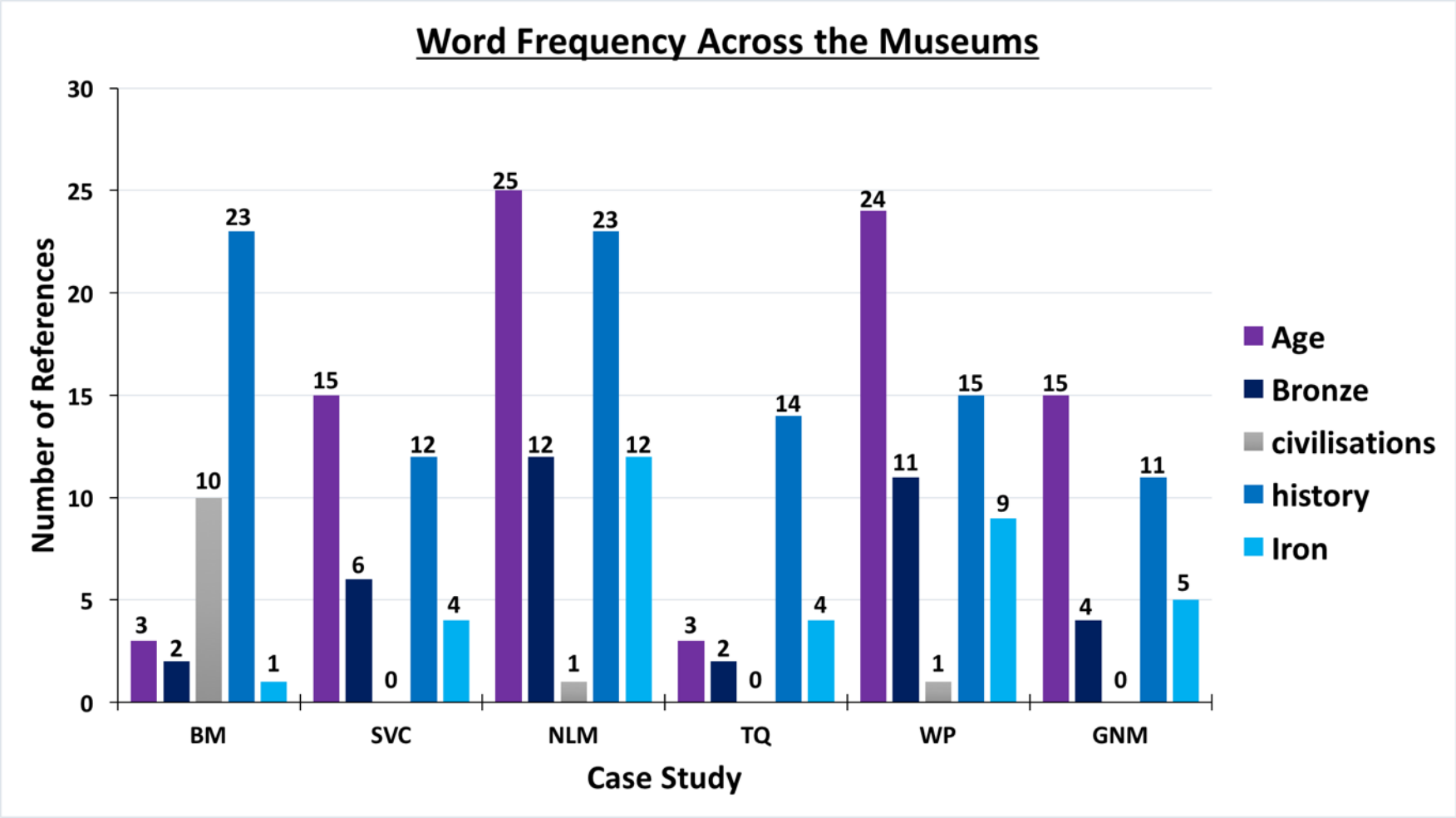


Figure 4.9. Frequency of the most popular words across the case studies.

Table 4.5 and figure 4.9 demonstrate that with the exception of the word *'civilisations'* the high frequency responses are similar across the case studies. At the BM '*civilisations*' is one of the more popular terms used by visitors to define prehistory and perhaps reflects the museum's global focus on cultures past and present. Several respondents appear to pick up on this narrative, as exemplified by respondents 11 and 30;

> *"It's fascinating to see the development of civilisations from their origin to present civilisations (e.g ancient Egypt to modern Egypt now) and seeing the parts of history that remain in the modern civilisations"*

> *"…I had a chance to see the mummies from British museum when they were in Mumbai for an exhibition and since then I always wanted to see the gallery on ancient civilisations here."*

'*Civilisations*' is a term usually utilised to refer to artificially isolated regions in the ancient world associated with the '*Greeks, 'Egyptians'* and '*Mesopotamians*' (Wengrow, 2010:13). These '*civilisations'* are commonly understood to represent large-scale political entities with monumental architecture, a system of writing and complex economic structure (Wengrow, 2010). However, in the context of visitor preconceptions of prehistory this term is not used to convey the idea that societies were advanced and sophisticated. Instead when it is associated with the deep past it is employed to convey the opposite, either conflating prehistory with history or presenting prehistoric societies as less-developed and more '*primitive*', demonstrated by respondent 33;

> *"…probably civilisations before Christianity or pagan like faiths around groups of gods versus singular."*

The term '*civilisations*' does not feature prominently in the responses at the other museums, highlighting a different visitor expectation at the BM. Many of the respondents have come to see the famous Rosetta Stone, Parthenon marbles and

Egyptian mummies, the remnants of prominent ancient civilisations and they have appropriated the language used to describe these distant historic periods to describe prehistory. For the most part visitors are not differentiating between the various galleries of the BM.

4.5.1 Quantification of preconception response nodes

To further address the first research aim of the thesis to '*Gain an understanding of public preconceptions of prehistory'* visitor responses were also analysed by categorising responses into thematic nodes, as outlined in section 3.5.2. The responses across the case studies were split into 40 identifiable content-based nodes and some responses were categorised into multiple thematic nodes depending on their content. A summary of the thematic nodes, the type of response they encapsulate using examples from the case studies and the percentage of responses attributed to each category is summarised in table 4.6. The frequency of these nodes varies between sites and the different representation of these nodes across the case studies is summarised in table 4.7.

Node	Definition	Example	% across sample (N=285)
Specific prehistoric period/ covers multiple periods	Responses that indicate that prehistory covers several periods or responses that explicitly name prehistoric periods.	*"…younger dryas'* *"…interested in the transition from Mesolithic to Neolithic.."*	24%
Before written records	Responses which suggest that prehistory can be defined as the period preceding writing.	*"The period that no histories have been written or recorded by human."* *"History before it was recorded properly, so the period before writing was invented."*	23%
Specific markers of time	Responses that try to define prehistory within certain parameters.	*"means some period long before our idea of primitive dwellings"* *"prehistory is the study of before AD (I think?)…"*	19%
Lack of knowledge/ Unfamiliarity	Responses which indicate no prior knowledge or minimal knowledge of prehistory.	*"To be honest, it is a term I was not familiar with prior to today"* *"Not really"*	13%
Specific types of material culture/ artefacts	Any references to 'artefacts' or types of material culture such as 'tools', 'weaponry', 'jewellery', 'cave art' etc.. as well as specific types of artefact such as 'Beaker pot', 'flint tool' or 'shield'.	*"have to use artefacts to try to understand and explain"* *"pottery"* *"…key objects used for dating are mainly pottery artefacts and metalworks such as weapons and tools"*	13%
Pre-human history	Responses that reference periods, sites or objects that pre-date the emergence of humans.	*"…dinosaurs.."* *"…anything that was on the planet before man…"*	12%

Node	Definition	Example	% across sample (N=285)
Notion of history/ idea everything is prehistory before now	Responses that do not differentiate between history and prehistory and treat them as synonymous.	*"…local history, world history – Tsar – Russian revolution…"* *"history from before current date"*	11%
Origins/ human evolution	Responses that make reference to the process of human evolution, our evolutionary origins or name specific hominin species.	*"I am interested in human origins and study archaeology as an amateur…"* *"…In this sense the Palaeolithic and Neolithic eras Proto –humans (Neanderthals, Australopithecines, etc) or even earlier dinosaurs, and anything else that existed before written records…"*	11%
Sense of ancientness/ time depth	Responses that emphasise the temporal distance of prehistory and how 'ancient' it is.	*"ancient civilisations"* *"history of ancient times before anything was properly documented"*	11%
Archaeological process/ trying to understand the past	Responses that reference trying to understand the past, some explicitly referencing archaeology and parts of the archaeological process such as 'excavation' and the use of scientific techniques.	*"…It required inference, seeking and making patterns. These connections between pasts and perspectives, often call us to be creative, interdisciplinary and fluid in our thinking."* *"have to use artefacts to try to understand and explain"*	9%
Historical civilisation/ period	Responses that talk about periods and civilisations that post-date the beginnings of writing in that particular region.	*"…Victorian, colonial, Roman, Greek, Egyptian"* *"World Wars, Roman, Egypt, Victorian, English Civil War"*	9%

Node	Definition	Example	% across sample (N=285)
Aspects/ activities of daily life	Responses that mention daily life in prehistory or aspects of daily life such as 'trade'.	*"daily life at this time"* *"…providing historians a view into parts of daily life at that time in a certain area"*	8%
Before Christ	Responses which explicitly define prehistory as before Jesus or write BC.	"*A period before Jesus"* *"Anything BC"*	8%
Named prehistoric sites/ areas	Responses that explicitly name prehistoric sites or areas with a high concentration of prehistoric sites such as 'Orkney' or 'Brittany'.	*"…I recently visited Kents Cavern and have visited Avebury, Stonehenge and more recently White Horse Hill, Dartmoor."* *"been to Orkney lots, Skara Brae"*	8%
Androcentric terms	Use of androcentric terms such as 'mankind', 'caveman' and 'early man'.	"*prehistory is defined as history before modern men, meaning people that had existed before 10000 years ago, people like the Neanderthal man and animals like sabre-tooth, mammoth roamed the grasslands"* *"…before man arrived?"*	7%
Animals/ environment	A variety of responses that refer to animals or the environment such as animal-human relations, types/ species of animal present in the period, types of environment human's experienced and relationships with the environment.	*"…worked with their environment"* *"…how Torbay is famous for its amazing history/ environment, tigers in Torbay"*	7%

Node	Definition	Example	% across sample (N=285)
Reference to civilisation	Any responses which describe prehistory in relation to the term civilisation.	*"Prehistory to me is events that would have occurred long ago, for instance anything that pre-dates any civilisations that may have documented histories, such as the Egyptians or Babylonians"* *"…undiscovered civilisations and cities under the oceans of the world including the Mediterranean Sea and Indian Ocean…"*	7%
Development/ named developments	Responses that name a specific development such as the development of 'language' or 'fire' or responses that write more generally about developments through time.	*"…developed language, and technology."* *"…development of speech and written communication."*	6%
Historic sites/ artefacts/ events/ individuals	Responses that mention sites, artefacts, events or individuals that post-date prehistory.	*"…for example in 1917 shields were added for snipers so they don't get killed the problem was they were too heavy to carry and they couldn't stop high calibre rounds"* *"…Statues of Easter Island.."*	6%
Types of prehistoric site	Responses that specify types of prehistoric site such as 'hill forts', 'stone circles', 'dolmens' etc…	*"…hunebedden"* *"visit stone circles etc, wonder what for, what it was like in that time, how they used technology to move large objects"*	6%

Node	Definition	Example	% across sample (N=285)
Usefulness/ importance to future	Philosophical responses that reference how important learning or knowing about prehistory is for helping us in the future.	*"learning about the past teaches us about our future and although things change how we handle them stays the same."* *"the past help to show you the future, helps to find who you are"*	6%
General interest	Responses that indicate the respondent's interest in prehistory.	*"it's fascinating to see what life was like before the modern era"* *"…found very interesting"*	5%
Hunting and subsistence	Responses that discuss hunting or subsistence strategies such as 'hunter-gatherers' and 'farming'.	*"small communities of hunter-gatherers and the beginning of agriculture"* *"hunters, gatherers.."*	5%
Religion/ belief	Responses that mention elements of prehistoric religion or beliefs.	*"…prehistory is the foundations of humanity, religion, art, craft and politics stem from the lives of our early ancestors, hunters, amphorae, coins/ treasure, gods, theology…"* *"…mostly religious driven and superstitious beliefs…"*	5%
Humans/ how they experienced	More abstract styles of response that discuss how humans experienced the past and the world around them.	*"prehistory is a period of existence that shows how humans fundamentally experienced the world…"* *"…it's the human history we all should know what's happened in the past."*	4%

Node	Definition	Example	% across sample (N=285)
Willingness to learn	Responses that indicate an eagerness to learn more about prehistory.	*"I'm not sure, but like to learn new things and will go home and follow this up"*	4%
Museum displays/ named museums	Responses that reference specific prehistory displays or mention museums they have visited in the past.	*"I feel prehistory is a bit unapproachable and often the exhibits in museum are 'fusty' we went to the Baltic states last summer and enjoyed engaging with the prehistory of the countries"* *"… I had a chance to see the mummies from British museum when they were in Mumbai for an exhibition and since then I always wanted to see the gallery on ancient civilisations here"*	3%
Special interest/ specialist knowledge of/ work in	Responses that reference their own experience and knowledge in relation to prehistory. Some respondents may mention that they work with prehistory or have an academic interest in it or study it.	*"I am interested in human origins and study archaeology as an amateur…"* *"I am very interested in history having time just in the last 10 years since I have become a metal detectorist having found artefacts and coins I have never seen or knew existed"* *"I have to say I now instruct my siblings to look more into our history covering all ages"*	3%
Specific date	Any responses that include a specific date to define the period of prehistory.	*"anything before 2000 years ago"* *"before 4000 BC…"*	3%

Node	Definition	Example	% across sample (N=285)
Value/ importance	Responses that indicate the importance and value of prehistory to the respondent or to others.	*"…all of it is so important and amazing* *"the past is of interest because it makes you realise how important we are in the shape of things."*	3%
Cultures/ movement of people	Responses that mention either cultures or the movement of people during prehistory.	*"the time period before any written accounts and records have been found of however other items and remnants might have been found of various people and cultures, indicating some form of customs or traditions…"* *"…migrations…"*	2%
Media representations/ documentaries	Responses that discuss documentaries/ name specific programmes/ films or other popular media representations of prehistory.	*"…I love to read and watch documentaries about new things they find out."* *"apart from the 'Flintstones'…"*	2%
Named countries/ areas	Responses that name countries or particular geographic regions.	*"…first evidence of man in Africa…"* *"…Easter Islands"*	2%
Named individuals	Responses that name specific hominins, researchers or collectors.	*"…Lucy, age of ice, the past"* *"…geologists: James Hutton – father of geology and Hugh Miller…"*	2%
Skill of past peoples	Responses that reference the skills or sophistication of prehistoric people.	*"…Sometimes it is not at all old but the way, people have solved their problems is almost modern, as indeed some of the techniques used i.e making jewellery are quite wonderful and …. gold."* *"the sophistication and intelligence – very inventive…"*	2%

Node	Definition	Example	% across sample (N=285)
Tool production/ technology	Responses that discuss the production of tools or types of tool technology.	*"fascination with how we discovered how to make tools…"* *"…making spears out of rocks…"*	2%
Visited a range of sites	Responses that make reference to visiting multiple prehistory sites.	*"…have visited some bone caves near home"* *"…I have visited a lot of British prehistory sites"*	2%
Ambiguity of definition	Responses that critique the concept of 'prehistory' and highlight the ambiguity involved in defining it.	*"prehistory for me is a misnomer, it is history before the written word was used to record history, it is the study of and interpretation of what we think might of happened before there were written primary sources of evidence, at times the evidence that can be studied in landscapes, the built environment and artefacts can help us try to understand how people lived and interacted with their world in the past, this tangible material cultural evidence is one historical source, the tangible can sometimes be better understood through intangible cultural heritage like oral traditions, myths, spoken language, music, songs, dance, etc"* *"it can mean a variety of things…"*	1%
Christian history	Responses that define prehistory in relation to Christian theology.	*"information from the Bible because I'm a student of the Bible"* *"…old testament history/ myths"*	1%

Node	Definition	Example	% across sample (N=285)
Continuity through time	Responses that mention how concepts, ideas or developments from prehistory continue through time or how things stay the same.	*"…seeing the way that some traditions have continued and developed i.e burials, currency, precious metals, tools and food."* *"…all history demonstrates continuity of the human species however and to divide it into history and 'prehistory' is an entirely artificial academic construct."*	1%
Different to today	Responses that emphasise the differences between prehistoric life and life today.	*"…the differences to our way of life…"* *"life back in the ages and how the world has progressed"*	1%
Frustration/ disinterest in prehistory	Responses that indicate a lack of interest in the period	*"…not very interested"* *"things that happened when there was no records made so it is hard to piece together what was happening at this time.*	1%
Geology/ geologists	Responses that relate to geology and geologists.	*"…Silurian…"* *"Geopark status…"*	1%
Lack of intelligence/ skill	Responses that reference the lack of skills of prehistoric people and emphasise their 'primitiveness'	*"…primitive life"* *"…mostly sites in different countries that don't have a very sophisticated social and economic system…"*	1%
Learnt about in school	Responses that discuss how they learned about prehistory in school.	*"only from school initially, over the years various periods from books, TV series on history etc"*	1%

Node	Definition	Example	% across sample (N=285)
Unknown	Responses that refer to prehistory as a sense of the unknown.	*"…what we still don't know…"* *"the period of time we cannot be certain of"*	1%
Construction of sites	Responses that discuss the construction of sites.	*"…building of henges…"*	0%[14]
Idealism	Responses that reflect an idealistic and romanticised view of the past.	*"…historical cultures with minimum amount of being tainted by a specific agenda by author or for receiver."*	0%
Non-European prehistoric group	Responses that refer to a non-European prehistoric group.	*"…Pueblos…"*	0%
Prehistoric groups	Responses that name specific European prehistoric groups.	*"…Celts."*	0%
Warfare/ violence	Responses that emphasise conflict in prehistory.	*"…most of my knowledge of prehistory has come from TV documentaries, e.g wars…"*	0%

Table 4.6. Summary of thematic nodes utilised to categorise responses to question 3.

[14] Responses that were referenced by 0% of the sample represent one individual, equating to less than 1% of the 285 responses. These nodes referenced by 0% of respondents were included within the table to highlight the unpopular responses to question 3.

Node	BM (N=48)	SVC (N=49)	NLM (N=45)	TQ (N=47)	WP (N=48)	GNM (N=48)	All (N= 285)
Specific prehistoric period/ covers multiple periods	17%	29%	36%	9%	29%	23%	24%
Before written records	29%	35%	22%	11%	21%	21%	23%
Specific markers of time	21%	10%	16%	15%	29%	23%	19%
Lack of knowledge/ unfamiliarity	13%	24%	13%	19%	8%	2%	13%
Specific types of material culture/ artefacts	23%	6%	18%	4%	19%	10%	13%
Pre-human history	10%	6%	13%	15%	17%	13%	12%
Notion of history/ idea everything is prehistory before now	19%	0%	13%	17%	2%	15%	11%
Origins/ human evolution	10%	12%	9%	19%	8%	8%	11%
Sense of ancientness/ time depth	21%	4%	18%	6%	10%	6%	11%
Archaeological process/ trying to understand the past	13%	2%	13%	11%	4%	13%	9%
Historical civilisation/ period	13%	2%	4%	13%	13%	8%	9%
Aspects/ activities of daily life	2%	0%	9%	9%	8%	19%	8%
Before Christ	15%	12%	4%	4%	6%	6%	8%
Named prehistoric sites/ areas	2%	6%	20%	11%	4%	8%	8%
Androcentric terms	4%	6%	2%	9%	13%	10%	7%
Animals/ environment	6%	2%	0%	6%	17%	8%	7%
Reference to civilisation	15%	4%	4%	0%	15%	6%	7%

Node	BM (N=48)	SVC (N=49)	NLM (N=45)	TQ (N=47)	WP (N=48)	GNM (N=48)	All (N= 285)
Development/ named developments	8%	2%	9%	0%	6%	10%	6%
Historic sites/ artefacts/ events/ individuals	2%	8%	9%	6%	2%	6%	6%
Types of prehistoric site	0%	2%	11%	11%	4%	6%	6%
Usefulness/ importance to future	6%	4%	7%	4%	13%	0%	6%
General interest	8%	4%	4%	4%	2%	6%	5%
Hunting and subsistence	2%	0%	7%	4%	4%	10%	5%
Religion/ belief	8%	4%	7%	0%	2%	8%	5%
Humans/ how they experienced	6%	2%	2%	2%	4%	4%	4%
Willingness to learn	2%	2%	4%	4%	4%	4%	4%
Museum displays/ named museums	2%	2%	4%	0%	2%	6%	3%
Special interest/ specialist knowledge of/ work in	0%	4%	4%	4%	2%	4%	3%
Specific date	0%	4%	2%	4%	4%	2%	3%
Value/ importance	24%	2%	2%	2%	6%	2%	3%
Cultures/ movement of people	2%	0%	2%	0%	4%	2%	2%
Media representations/ documentaries	2%	0%	9%	0%	0%	2%	2%
Named countries/ areas	0%	0%	2%	4%	0%	4%	2%
Named individuals	2%	0%	11%	0%	0%	0%	2%
Skill of past peoples	4%	2%	2%	2%	0%	0%	2%
Tool production/ technology	0%	0%	4%	0%	0%	8%	2%
Visited a range of sites	0%	4%	4%	2%	0%	4%	2%
Ambiguity of definition	4%	0%	0%	0%	0%	4%	1%
Christian history	2%	0%	2%	0%	2%	0%	1%

Node	BM (N=48)	SVC (N=49)	NLM (N=45)	TQ (N=47)	WP (N=48)	GNM (N=48)	All (N= 285)
Continuity through time	4%	2%	0%	0%	0%	0%	1%
Different to today	0%	0%	2%	4%	0%	2%	1%
Frustration/ disinterest in prehistory	0%	2%	0%	4%	0%	0%	1%
Geology/ geologists	0%	0%	2%	4%	0%	0%	1%
Lack of intelligence/ skill	2%	0%	0%	0%	0%	2%	1%
Learnt in school	0%	0%	2%	0%	0%	2%	1%
Unknown	2%	2%	0%	2%	2%	0%	1%
Construction of sites	0%	0%	0%	0%	0%	2%	0%
Idealism	2%	0%	0%	0%	0%	0%	0%
Non-European prehistoric group	0%	2%	0%	0%	0%	0%	0%
Prehistoric groups	0%	0%	0%	0%	0%	2%	0%
Warfare/ violence	0%	0%	2%	0%	0%	0%	0%

Table 4.7. Percentage of responses in each thematic node across the case studies.

Across all 285 responses to question 3 '*What does prehistory mean to you?*', the most popular responses were encompassed by the thematic nodes, '*Before written records'*, '*Specific prehistoric period/ covers multiple periods'* and '*Specific markers of time'*. At all case studies except TQ, 19-35% of respondents define prehistory as preceding written records demonstrating a general understanding of how the period is commonly conceptualised. However, as previously discussed there is still confusion over the temporality of this development. The difficulty respondents encountered when attempting to define prehistory in relation to time is further demonstrated by the markers of time they utilise to define the temporal scope of the period in their own relational terms. These markers are listed in Appendix 14 and are highly variable including parameters such as, *"After hunter-gatherers", "Dinosaurs onwards*" and "*Until settlements*". The markers of time '*Before written records'* and '*Before Christ'* were assessed separately as their own nodes due to the high number of respondents that included these particular markers of time in their definitions of prehistory.

Out of the 58 markers of time referenced by respondents to provide the parameters for delineating prehistory from other periods, 45 of them frame prehistory as

preceding a development or event such as "*Before man arrived", "Before modern civilisation"* or *"Before hieroglyphs"*. In contrast only 9 of the markers utilised to convey the timeframe of the period defined prehistory as the beginnings of a particular development, exemplified by the markers; "*Foundations of humanity", "Beginnings of civilisation"* and "*Beginnings of language"* and only 2 markers – "*Post Christ"* and *"After hunter-gatherers"* - referenced by respondents defined prehistory as post-dating an important event. These various definitions of prehistory situating the period in relation to certain key developmental parameters convey a linear understanding of the past as a series of cultural and technological developments in which prehistory is predominantly ascribed to a more '*primitive*' and less advanced preceding period. This concept of time is perhaps influenced by the representation of prehistory in museums which Wood and Cotton (1999) and Ballard (2007)[15] have critiqued for presenting prehistory in linear displays of technological evolution. Whether this type of representation is still prevalent within museums will be explored in the Chapter 5. These responses may also stem from the word '*prehistory*' itself which indicates a period preceding *'history'* and what we associate as *'modernity',* linguistically placing prehistory in opposition to modern life and complex advanced societies. This linear understanding of the past is also likely influenced by the text utilised in museum displays (see section 5.4.7), as well as the restrictive 'Three Age' system that is so widely acknowledged by respondents yet reduces prehistory to the seemingly linear development of metal technologies. The influence of this linear narrative punctuated by developments is further indicated by the 6% of respondents that define prehistory in relation to specific named developments. These developments referenced often relate to markers of modernity, such as the development of: *"cities", "the modern world", "civilisations", "languages", "agriculture", "fire" and "technology"*. Yet this type of developmental narrative is not mentioned as frequently in the sample of 285 responses, reinforcing the lack of respondents that associate prehistory with perceived 'modern' developments. Furthermore, the parameters of prehistory articulated by the visitors imply that

[15] Discussed in further detail in section 2.3.

prehistory pre-dates these developments, placing the period at the bottom of any developmental narrative.

The most popular marker of time utilised to define prehistory across all case studies was '*Before/ Pre Roman'*. This concept of prehistory pre-dating the arrival of the Romans was also mentioned in the MoL survey data (see table 2.1 in section 2.2), where the term *'Pre-Roman'* was referenced by 31 of the respondents (Wood and Cotton, 1999:43). This concept is far more popular in my data set in which this temporal parameter represents 16% of the markers of time referenced in the sample. Furthermore, '*Before/ Pre Roman*' was mentioned in 50% of the boundary-based responses at NLM. In NLM's displays, time periods are clearly delineated by changes in the colour and the architecture of the gallery to emphasise the shift from prehistory to the Roman period and this differentiation has perhaps influenced the perceptions of repeat visitors at this site who are recognising the transition from prehistory to the Romans. Respondents at NLM that define prehistory as the preceding period to the Roman period convey a broad understanding of the parameters and chronology of British prehistory.

Across the case studies visitors recognise that prehistory is generally defined as pre-writing or pre-Roman yet they also have a tendency to reference civilisations with a written record including the Romans in answer to the following questions in the survey. There is thus an apparent contradiction between an understanding of how the period is broadly defined and how it is understood. This could perhaps be partially explained by a lack of questions explicitly referencing prehistory. However, in my verbal instructions I frequently indicated that these questions relate specifically to prehistory and the prehistory on display, even pointing out which displays these included in museums where later periods are also on display in the same room. Furthermore, this focus on prehistory is reinforced by the wording of questions 3,4, 5, 6, 8 and 9. The only question which does not have prehistory in it is question 7, but its position alongside the other questions clearly relates to the same prehistory displays. Yet respondents still defined prehistory as pre-Roman and then later contradict these definitions in the follow up questions in part 2 of the questionnaire.

This type of contradictory response is exemplified by respondent 29 at WP who defines prehistory as, *"human history before the Roman period"* but then goes on to answer question 9 by suggesting they have learnt that, *"cabbage is Roman".* Question 9 explicitly refers to prehistory and despite this respondent's self-definition of prehistory excluding the Roman period their answer still includes it. Perhaps such contradictions occur as the visitor is preoccupied. In the case of respondent 29 for example, they were observed chasing after their child so were unlikely to be focused on the wording of the questions. This lack of attentiveness is a trend widely observed in visitor research (Nichols, 1999) as visitors have a tendency to rush questions to complete the questionnaires and consequently do not always fully read and retain the questions/ directions. This trend was observed in my own research by respondent's answers to question 4 in which the question specified that respondents should circle one option and yet 43% of people circled multiple options demonstrating a lack of attentiveness. However, this contradiction of responses observed in the questionnaires further supports the temporal uncertainty that respondents seem to encounter when conceptualising what prehistory represents. These responses which combine knowledge of prehistory with references to later irrelevant periods are common across all case studies, even those whose displays present prehistory separately to later periods of time.

The representation of visitor responses in each of the thematic nodes across the case studies differ slightly, at the BM for example 24% of respondents attach a sense of value and importance to prehistory in their responses. Whereas far fewer respondents express such sentiments at the other museums where this node represents 6% or less of their respondents. The high number of respondents attaching such value to prehistory at the BM may reflect the visitor profiles interest in nationally important collections. Perhaps further demonstrated by the high number of respondents that discuss artefacts and specific types of material culture in their responses. Overseas tourists are expecting to see 'star' objects and 19% of respondents do not differentiate prehistory from the more popular later time periods and by extension their associated 'star' objects displayed in the museum.

The high number of responses classified under the node '*Specific prehistoric period/ covers multiple periods',* further highlights the popularity of the Three Ages as previously discussed. The popularity of these periods is most notably observed at the GNM, SVC, NLM and WP museum. However, the specific prehistoric periods mentioned differ between the museums and these differences are illustrated in figure 4.10. At NLM, WP, SVC and GNM the Three Ages are referenced almost equally at the museums, yet some periods are mentioned slightly more. The Bronze Age is the most frequently mentioned period at NLM and WP, whilst the Iron Age is mentioned slightly more frequently at the GNM and the Neolithic at SVC. At both the BM and TQ very few respondents specified a prehistoric period perhaps reflecting an audience with less prior knowledge about prehistory. International tourists visiting the BM are less likely to have a concept of British prehistory unlike the international visitors at SVC who have visited specifically to see a British prehistoric site. At TQ most visitors are British tourists who have visited primarily to see the Agatha Christie gallery or for something to do on a rainy day rather than any prior interest in prehistory. This lack of period-based prehistory knowledge demonstrated at TQ is further reinforced by the 19% of respondents that express a *'Lack of knowledge/ Unfamiliarity'* in their responses, as well as the 17% of respondents that conflated prehistory with history.

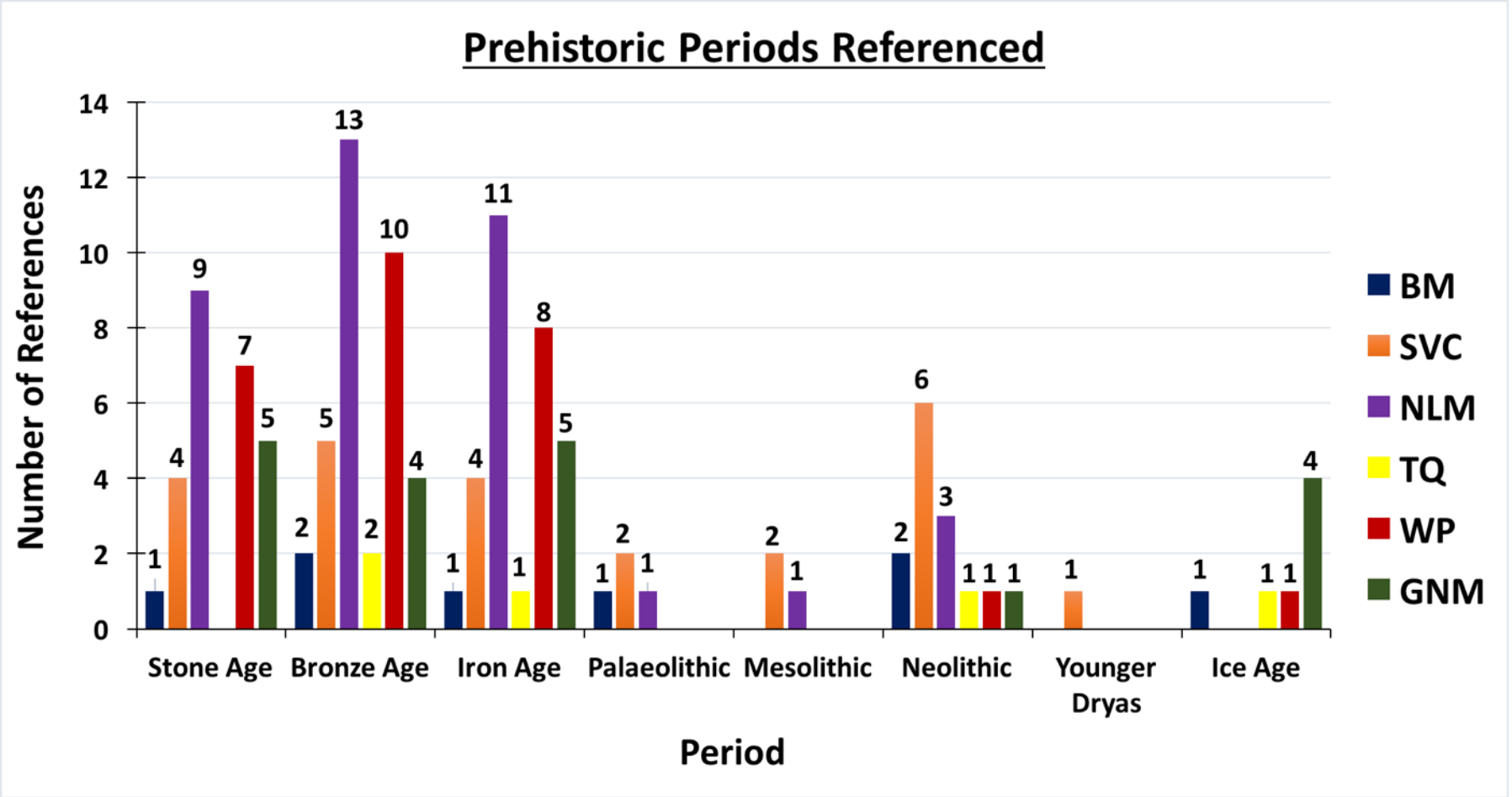


Figure 4.10. Number of respondents across the case studies that specify prehistoric periods.

The time depth of prehistory was articulated by 11% of respondents that described prehistory in terms of its temporal distance and ancientness. However, very few respondents specify the three sub-divisions of the Stone Age. The Neolithic is mentioned at least once at all case studies, whereas the Palaeolithic and Mesolithic are not mentioned at all by the 143 respondents at TQ, WP or GNM. Even though this question was given to visitors before they looked at displays it was expected that the different displays at each of the museums may slightly influence the answers visitors provided as they were given the questions as they entered the gallery so were surrounded by the displays and may have previously viewed the displays in a prior visit. Yet despite the composition of the prehistory displays at TQ, which are primarily composed of Stone Age material, particularly Palaeolithic artefacts, not one respondent mentioned these periods. The lack of acknowledgement that these early periods receive at TQ reflects the expectations and interests of visitors who are not visiting for the nationally important Palaeolithic collections but to see the Agatha Christie gallery (table 4.2). However, 9 respondents did demonstrate some understanding of this more distant period of prehistory by referencing human evolution in their responses, although they are not situating this topic within its temporal context. The highest number of respondents specifying the Neolithic come from SVC, yet they only represent 6 respondents out of 49. There is even a respondent at SVC who demonstrates more specialist knowledge by referencing the specific late Pleistocene period of the Younger Dryas. Furthermore, even though SVC has a few more 'informed' respondents, 24% still express a lack of knowledge about prehistory. Thus across all case studies representing different visitor profiles the responses demonstrate a general lack of familiarity with the sub-divisions of the Stone Age.

The thematic node '*Androcentric terms'* was included in the analysis to account for the gendering of language that has traditionally been associated with prehistory. Scholars such as Moser (1992, 1999) and Sørensen (1999) have highlighted the persistent use of old-fashioned and androcentric language in museum prehistory displays, as discussed in section 2.3.2 and its contemporary usage in museums will be explored in Chapter 5. This node was accounted for to explore the influence of

such gendered conceptions of the past on visitor expressions of understanding. Overall in response to question 3 there were only 21 respondents across the case studies that utilised such androcentric language in the formulation of their responses. The most popular phrases included; "*Cavemen", "early man", "mankind"* and "*man"* or "*men*", which were utilised in different contexts. The responses do not appear to be specific to either men or women as 9 of the responses came from men and 11 came from women and 1 was unclassified. These conceptions do not appear to be related to a respondent's sex but rather their previous exposure to prehistory, particularly representations in the media. For example, even in 2018 the new Aardman animation about fictional events in prehistory was entitled '*Early man'*, adopting similar androcentric language. On balance, however, this language is not as pervasive as it was during Wood and Cotton's 1992 survey (see table 2.1 in section 2.2) in which "*cavemen"* was the second most popular association with prehistory. The lack of respondents utilising this gendered language perhaps conveys the limited impact of this androcentric language employed in the media and some museums on contemporary public perceptions of prehistory.

Very few respondents referenced any prehistoric events due to the lack of prehistoric events that would resonate with the public in the same way as historical events such as, the 'English Civil Wars' or 'the Battle of Hastings'. The majority of respondents that specified what was happening in prehistory wrote about aspects of human evolution and some even specified hominin species. It therefore seems that respondents either refer to historical civilisations or the distant and earliest stages of prehistory. These responses certainly represent two extremes and reflect perhaps two different ways of conceptualising the past based on an individual's prior experiences. Across all museums the node '*Human origins/ evolution'* is represented by 11% of respondents and is most popular at TQ where 9 of the 47 responses to question 3 reference human evolution. This number is surprising considering that no respondents referenced the Stone Age or Palaeolithic in their responses yet the topics they articulate date to this period. Again, such an apparent contradiction conveys an awareness of prehistoric events but an inability to relate such events to a timeframe. The most popular hominin species referenced are "*Neanderthals"*

whilst "*Australopithecines*" are only mentioned once. This slight popularity of Neanderthals within responses perhaps reflects the influence of the media on visitor's knowledge. There are also a couple of phrases which more ambiguously relate to hominins in which they are more colloquially referred to as "*proto-humans"* and "*sub-types of humans"* indicating a lack of a shared language of evolution. To explore how visitors conceptualise evolution and the development of our species the ideas they reference and ways of expressing such concepts are summarised in table 4.8.

Concept	Expression	No. of mentions	% of responses in node (N=32)
Hominins	Lucy	1	56%
	Australopithecines	1	
	Neanderthals	9	
	Proto-humans	1	
	Homininds	1	
	Cro-magnon	1	
	Nutcracker man	1	
	Different sub-types of humans	1	
	1st evidence of man found in Africa	1	
	Early humans	1	
Ancestors		7	22%
Evolution	Evolution	3	19%
	Development of our species	2	
	Changing humans	1	
Origins	Human origins	2	19%
	Where we come from	3	
	Earliest human activities	1	

Table 4.8. Summary of concepts used to articulate respondent's understanding of human evolution and origins and the frequency of such terms across the 32 human evolution/ hominin responses.

In addition to specifying prehistoric periods, named sites and referencing human evolution, responses that referenced types of prehistoric sites can also indicate the general level of prior knowledge visitors possess. Types of prehistoric sites were only mentioned by 6% of respondents and the types of site are summarised in table 4.9.

A variety of types of site are represented in the few responses that specify types of prehistoric monument and the majority of those cited are Neolithic/ Bronze Age in date. It was expected that at SVC due to the proximity of the exhibition to the famous stone circle and visitor motivations at the site, that respondents would refer to henges or stone circles in response to question 3. However, rather unexpectedly only one respondent referenced a type of prehistoric site and they didn't mention a henge or stone circle but instead referenced *"long barrows".* These few responses categorised under the node '*Types of prehistoric site'*, further demonstrate the lack of prehistoric knowledge that is filtered into the public consciousness. All of the examples given represent a good understanding of what types of site/ monument are encompassed under the broad classification of prehistoric, yet they are mostly only mentioned once or twice within the 285 responses, again highlighting the lack of a shared common understanding of the period.

Type of site	Period	No. of mentions
Barrows	Neolithic/ Bronze Age	2
Bone caves	Palaeolithic- Iron Age	3
Chalk symbols	/	1
Dolmens/ Hunebedden	Neolithic	2
Earthworks	/	1
Flint mines	Neolithic	1
Henges	Neolithic	1
Hill forts	Iron Age	2
Huts	/	1
Roundhouses	Bronze Age/ Iron Age	2
Standing stones	Neolithic/ Bronze Age	2
Stone circles	Neolithic/ Bronze Age	3

Table 4.9. Summary of types of prehistoric sites referenced across the case studies.

Responses to question 3 also appear to conflate prehistory with archaeology. Despite the lack of respondents that explicitly refer to '*archaeology'*, 9% of respondents provide answers that elude to the archaeological process and how it can be used to understand the past. Out of the 26 responses that refer to archaeology, 21 of them implicitly refer to archaeology with responses that describe the process of

interpretation and deduction archaeology utilises to understand the past. This type of implicit response is exemplified by respondent 4 at the BM who describes the meaning of prehistory;

> *"It means considering the artefacts and events of times before we had reliable dates of the past. It required inference, seeking and making patterns. These connections between pasts and perspectives, often call us to be creative, interdisciplinary and fluid in our thinking."*

This respondent has provided a good description of archaeology in their response whilst attempting to describe prehistory demonstrating the conflation of the two concepts. This is perhaps influenced by the representation of prehistory in museums, as it is often presented synonymously with archaeology, as highlighted by Wood and Cotton (1999). In contrast to the implicit references to '*archaeology'* only 5 respondents explicitly referenced *"archaeology".* Two of the explicit references cited archaeology in relation to their personal experience of prehistory as an Archaeology MA student and as the sibling of an archaeologist.

There also appears to be a trend for respondents to relate their understanding of prehistory to a focus on people and their lives in the past. These types of responses represent 8% of responses. The majority use the term "*daily life"* to express their knowledge of the people of the past, whilst a small number of these responses focused more on the aspects and activities of these lives, such as past traditions, the role of women and the production of art. This interest in daily life as discussed in section 2.2.3 further reflects the findings of Wood and Cotton in their 1992 survey, in which they concluded;

> *"Visitors of all ages want to know about people, about daily life and about social constructs in so far as they might have affected the social and domestic life of individuals like themselves." (Wood and Cotton, 1999:36)*

To understand the extent to which visitors are familiar with prehistory all responses that explicitly stated their unfamiliarity with the topic or confused it with later and earlier periods/ events/ sites were calculated across the case studies. An example of such a response is demonstrated by respondent 2 at TQ who references modern war history to describe prehistory;

> *"prehistory is events that have happened before in time. For example in 1917 shields were added for snipers so they don't get killed the problem was they were too heavy to carry and they couldn't stop high calibre rounds."*

The percentage of responses that conveyed either a misunderstanding of what prehistory represents or a lack of knowledge about prehistory are illustrated in figure 4.11. Out of the 285 responses 41% conveyed a sense of uncertainty/ lack of familiarity with prehistory, yet 59% of these responses also included references to relevant concepts and prehistoric sites/ periods indicating a general confusion about the period and how to delineate which parts of their knowledge relate to prehistory and which parts do not. TQ has the highest number of respondents that are unsure about the topic with just over half of respondents expressing a lack of awareness of the topic and confusing it with other periods. In contrast SVC and WP represent the fewest number of respondents that express such uncertainty, yet even at these sites over 30% of respondents find it confusing.

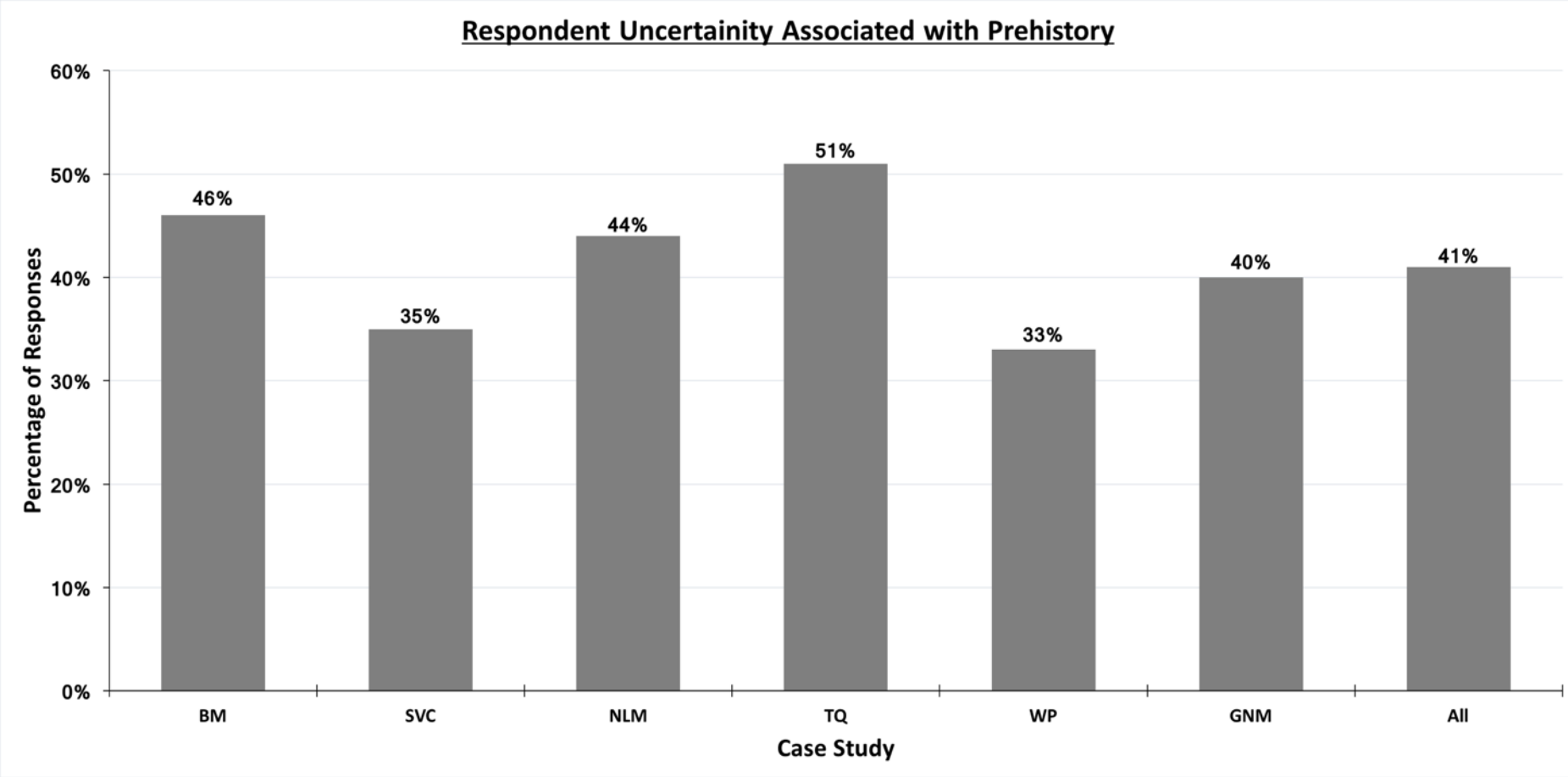


Figure 4.11. Percentage of respondents that demonstrate a misunderstanding/ uncertainty about what prehistory represents from the 285 responses to question 3.

To further explore the apparent confusion that respondents conveyed in their conceptualisations of prehistory the responses that expressed such uncertainty were divided into responses that only expressed uncertainty (explicitly and implicitly) and responses that expressed partial uncertainty. The responses that demonstrate a mixture of unfamiliarity and familiarity are exemplified by respondent 17 at WP who defines prehistory as;

> *"not sure, dinosaurs, Jurassic, early man maybe? flint weapons?"*

This respondent includes a geological epoch and group of reptiles that precede human history seemingly demonstrating a lack of understanding as to what human prehistory represents. They also, however, reference early humans and their technology conveying a general understanding of some prehistory. The uncertainty of this respondent as to what constitutes prehistory is also clear from their use of question marks and reinforced by the questioning adverb *"maybe*". Such a mixed response is further demonstrated by respondent 33 at the BM who states;

> *"prehistory is not a term I am familiar with but I assume its BC timeline, probably civilisations before Christianity or pagan like faiths around groups of gods versus singular"*

This respondent begins by expressing their unfamiliarity but then goes on to indicate their awareness of the temporality of prehistory, placing it before Christ and relating it to religion. This response further reflects the uncertainty respondents encounter when attempting to define the period.

The results of the comparison of wholly uncertain versus partially uncertain responses are illustrated in figure 4.12 which shows that at all case studies except TQ, more responses convey a partial uncertainty than responses that convey complete uncertainty/ unfamiliarity. NLM and WP again demonstrate the lowest number of respondents that only express unfamiliarity with the period with 11% and 10% of respondents respectively indicating such uncertainty in their responses. In

contrast 32% of respondents at TQ indicate a lack of knowledge/ uncertainty further reinforcing the idea that visitors to this museum have less prior knowledge and are not expecting/ intending to view the prehistory displays as previously suggested (table 4.2).

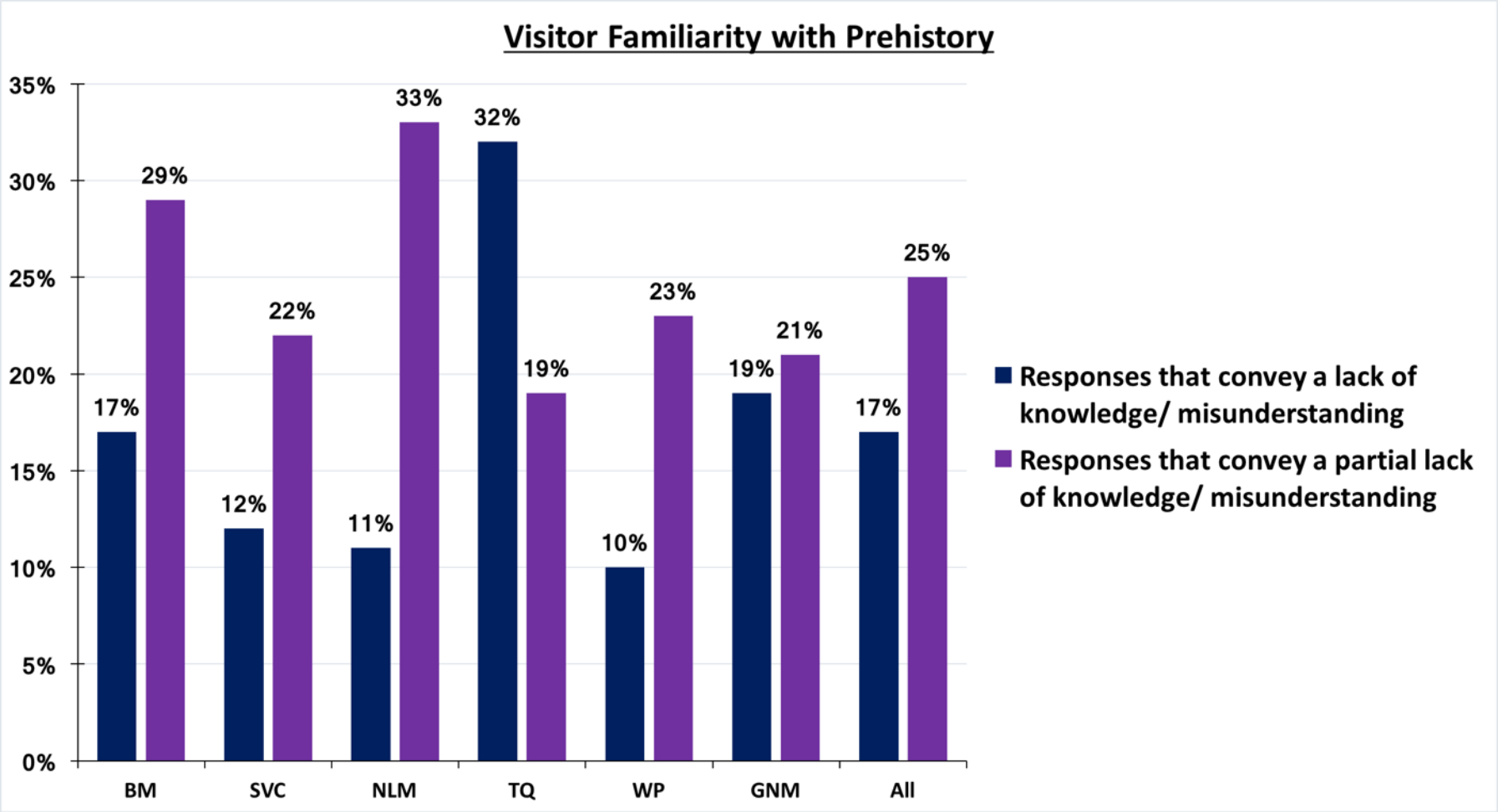


Figure 4.12. Percentage of responses that convey a lack of knowledge/ misunderstanding compared to the percentage of responses that convey a partial unfamiliarity/ misunderstanding of prehistory from the 285 responses to question 3.

Overall, the quantification of responses to question 3 into thematic nodes revealed that apart from a general awareness that prehistory pre-dates writing systems and can be divided into Three Ages most respondents express a lack of knowledge in relation to the period. Across the case studies 13% explicitly state that they are unfamiliar with the period, 12% of responses refer to things that pre-date prehistory, 9% refer to historical periods, 6% to historic sites, events and material culture and 11% cannot differentiate prehistory from contemporary notions of history. There were no significant differences between the different visitor profiles represented apart from a greater lack of understanding demonstrated by respondents at TQ. Furthermore, the outdated primitive caveman stereotype recognised by Wood and Cotton (1999) does not appear to still be pervasive within the public consciousness as these concepts were rarely referenced in the sample of 285 respondents.

4.6 Visitor interests in prehistory

To address research question 1c, *'What do they find most/ least interesting about the concept of prehistory?'* and further explore visitor expectations and understanding of prehistory, respondents were also explicitly asked about their interests associated with prehistory before viewing the displays. The responses to these questions were quantitatively analysed utilising word quantification and thematic node categorisation to indicate visitor appetites for prehistory. Firstly, the most frequent words utilised by respondents to express these preferences were quantified and the results are presented in figures 4.13 and 4.14.

Figure 4.13. Word cloud produced from the 275 responses to the question 'What do you find <u>most</u> interesting about prehistory?'

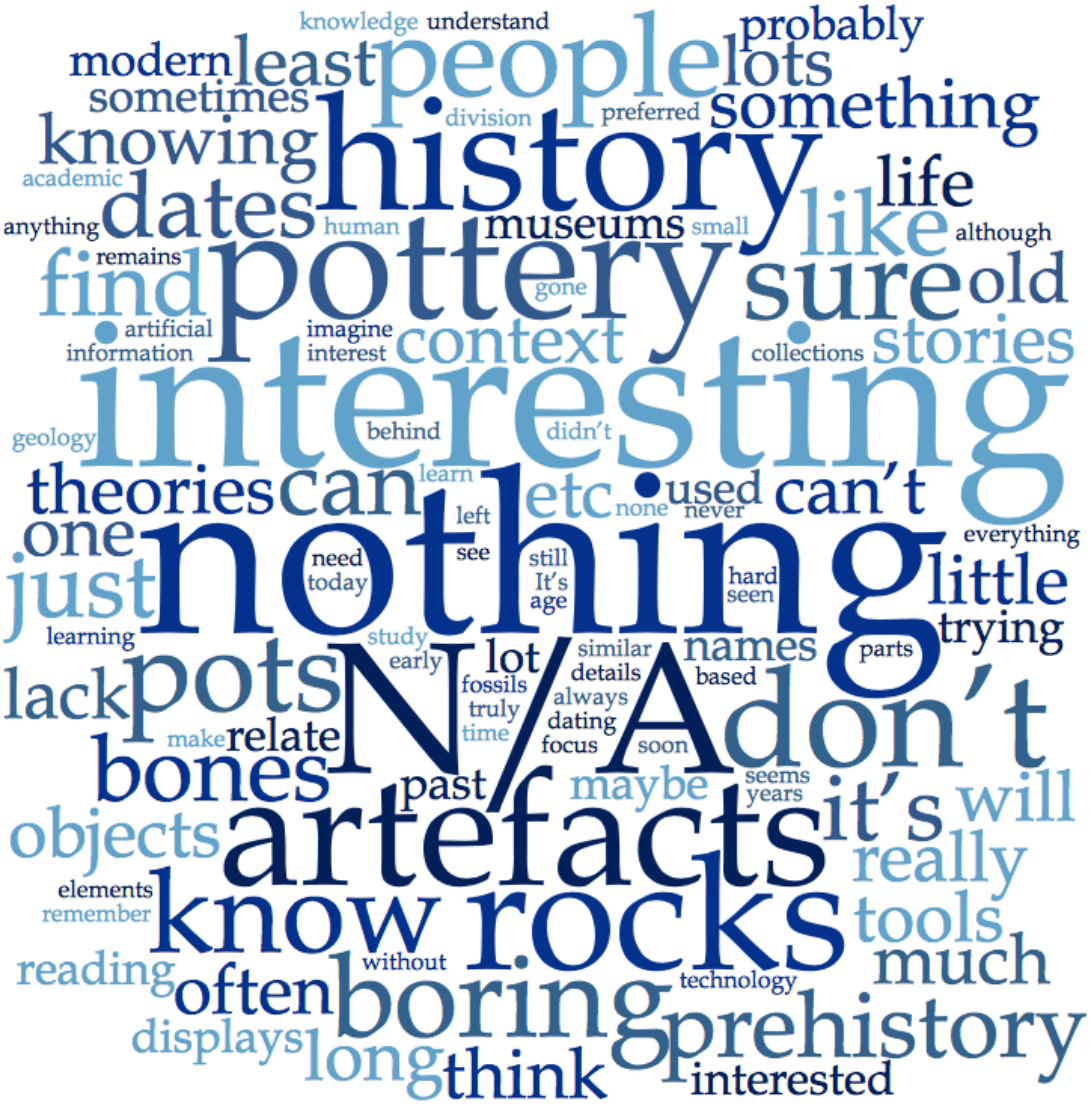


Figure 4.14. Word cloud produced from the 197 respondents to the question 'What do you find <u>least</u> interesting about prehistory?'

From the two word clouds presented it is apparent that respondents are quite interested in prehistory as very few respondents articulated any negative associations with prehistory. In figure 4.13 the three most popular words used to describe respondent's interests were *"people", "life"* and "*lived"'*, further reflecting the trend highlighted by previous scholars (see 2.2.3) for visitors to engage with the daily lives of people in the past. These interests are fuelled by a curiosity to understand what life was like for people like themselves. The comparative nature of these responses is also conveyed by the fourth most popular word, "*different*". The conflation of prehistory and history is, however, still evident in these responses as "*history*" is mentioned 17 times in the sample of respondents describing what they find most interesting about prehistory. The 5 most frequently mentioned words utilised to articulate visitor interests in prehistory are summarised in table 4.10.

Ranking	Number of References	Word(s)
1	47	people
2	26	life
3	23	lived
4	18	different, time
5	17	history

Table 4.10. The 5 most frequently used words in responses to 'What do you find most interesting about prehistory?'.

Figure 4.14 further demonstrates respondent's interest in prehistory even though the question asks respondents to reflect on what they are least interested in. The most popular words utilised to articulate respondent's lack of interest convey an overwhelmingly positive response. The popularity of the words, "*nothing", "N/A"* and "*interesting*" are used to contradict the question. The word *"interesting*" was usually preceded by *"all"* or *"its very"* and was never situated in a more critical context as the question intended. This ostensible enthusiasm of respondents is further indicated by the number of respondents answering these questions. Out of the 300 respondents across all 6 case studies 275 of them answered the most interested part, yet only 197 respondents (66%) answered the least interested second part. Furthermore, of these few respondents that answered the second part, 22% provided positive uncritical responses, expressing their interest in prehistory

and lack of negative associations with the period. Excluding neutral and mixed responses, only 71% of the few responses to this negatively phrased question conveyed any critiques or topics they found less interesting. These relatively positive responses in combination with the lack of respondents attempting this question produces a 'false positive'. It appears that respondents do not wish to answer negatively because they have nothing antagonistic to discuss. Yet it is misleading to take such responses at face value as they may simply reflect respondent's reluctance to appear critical and be judged for their response. This type of 'false positive' is a widely observed phenomenon in visitor studies, and is often produced in response to negatively phrased questions, particularly in a face-to-face style of survey collection (Nichols, 1999:9; Davies and Heath, 2013; Allison, 2014). Respondents are reticent to answer negatively and this reluctance stems from respondents wanting to appear polite and uncritical. Efforts were made to minimise the influence of this type of behaviour from affecting responses by giving respondents privacy to fill in their questionnaires. However, it still seems that visitor politeness has impacted the responses to part two of question 5, as highlighted by the most popular responses, summarised in table 4.11.

Rank	Number of References	Word(s)
1	34	nothing
2	14	interesting
3	9	N/A
4	8	artefacts, pottery, history, rocks
5	6	boring, people, pots

Table 4.11. Summary of the 5 most popular words utilised in response to 'What do you find <u>least</u> interesting about prehistory?'

In addition to the 9 respondents that wrote the shorthand for '*not applicable'* in their responses, 20 respondents simply drew a line through the question, expressing the same sentiment. Those respondents who explicitly wrote "*N/A"* or drew a line further demonstrate the reticence visitors have for answering such negatively phrased questions. In comparison only at GNM did any respondents draw a line

through or write *"N/A"* in response to the positively phrased question '*what do you find <u>most</u> interesting about prehistory?*'.

The continued conflation of history and prehistory was again observed in responses to the more negatively phrased part of question 5 with *"history"* representing the 4th most popular word, alongside the words "*pottery", "artefacts"* and "*rocks"*. The meaning of the word *"rocks"* is rather ambiguous as it is not clear whether respondents were referring to the lithics and hand axes commonly associated with prehistory or an alternative way of describing megalithic structures or even more simply referring to rocks as the solid mass of minerals that dominate the landscape. There is a widely held perception that pottery in a prehistory context is seen as 'boring' and uninteresting by the visitor and a small number of respondents appear to support this concept. In contrast to "*people*" ranking as the most popular word for what respondents find most interesting, it is ranked 5th most popular in response to what visitors find least interesting. In this context the word "*people"* is utilised to critique the interpretation of archaeological evidence and the period as illuminated by respondent 36 at NLM;

> *"…it seems like they can come up with a whole theory about why **<u>people</u>** in the past did something based on very little"*

Respondent 25 critiques academic engagement with their response;

> *"academics making no effort with lay **<u>people</u>**"*

Respondent 5 at WP, however, refers to the daily lives of past people but in a derogatory way in opposition to the majority of responses to the first part of question 5;

> *"Life of these **<u>people</u>** seems boring"*

Out of the few responses to '*What do you find least interesting about prehistory?*' most respondents either have nothing critical to articulate or they focus on pottery and how they perceive prehistoric daily life.

4.6.1 Quantification of visitor interests into thematic nodes

To explore the themes and concepts that visitors are intrigued by in more depth the responses to both parts of question 5 were categorised into thematic nodes. There is a tendency for similar topics to occur in response to both parts of question 5 and there is also some overlap with the nodes referenced in response to question 3. To aid comparisons between responses classified into each thematic node the similar nodes represented in responses to different questions were given the same title. Responses to part one of question 5 were categorised into 41 thematic nodes based on the topics presented in responses and a summary of these nodes, how they are defined and examples of such responses are provided in table 4.12.

Node	Definition	Example	% across the sample (N=275)
Aspects/ activities of daily life	Responses that mention daily life in prehistory or aspects of daily life such as 'trade'.	*"…how people lived"* *"How people lived and the customs and traditions of their lives…"*	**22%**
Origins/ human evolution	Responses that make reference to the process of human evolution, our evolutionary origins or name specific hominin species.	*"human evolution, climate evolution"* *"how life always found a way to evolve, adapt and survive in various ways"*	**12%**
Skill of past peoples	Responses that reference the skills or sophistication of prehistoric people.	***"****The ingenuity that went into creating and inventing tools etc"* *"How people survived and adapted in such different environments from today"*	**12%**
Animals/ environment	A variety of responses that refer to animals or the environment such as animal-human relations, types/ species of animal present in the period, types of environment human's experienced and relationships with the environment.	***"…****why do the animals like mammoth, sabre-tooth, disappear"* *"different creatures that were around then"*	**11%**
Development/ named developments	Responses that name a specific development such as the development of 'language' or 'fire' and/ or responses that write more generally about developments through time.	***"****development of the daily life improvements that they made, innovations"* *"linguistics"*	**10%**

Node	Definition	Example	% across the sample (N=275)
Archaeological process/ trying to understand the past	Responses that reference trying to understand the past, some explicitly referencing archaeology and parts of the archaeological process such as 'excavation' and the use of scientific techniques.	*"the research and new theories"* *"seeing treasure dug up in places I am familiar with…"*	**9%**
Specific types of material culture/ artefacts	Any references to 'artefacts' or types of material culture such as 'tools', 'weaponry', 'jewellery', 'cave art' etc.. as well as specific types of artefact such as 'Beaker pot', 'flint tool' or 'shield'.	*"the artefacts"* *"…coins and items people wore"*	**9%**
The unknown/ lack of information	Responses that indicate an interest in the lack of surviving material/ knowledge/ the unknown elements of prehistory.	*"the unknown culture…"* *"the unknowns"*	**8%**
Cultures/ movement of people	Responses that mention either cultures or the movement of people/ migrations during prehistory.	*"the ways all ancient cultures are interconnected"* *"similarities in cultures…"*	**7%**
Religion/ belief	Responses that mention elements of prehistoric religion or beliefs.	*"how varied it was across the world many different religions/ ideas/ theories"* *"ideas regarding beliefs and behaviour"*	**7%**
Historic	Responses that refer to later periods/ sites/ individuals/ events or material culture.	*"learning about Medieval period and being able to see artefacts which are hundreds of years old, Battle of Hastings, the Romans"* *"mummies"*	**5%**

Node	Definition	Example	% across the sample (N=275)
Humans/ how they experienced	More abstract styles of response that discuss how humans experienced the past and the world around them.	*"the ways of looking at the world, experiencing, use of materials to engage with the world"* *"human inside caves with fire"*	**5%**
Construction of sites	Responses that discuss the construction of sites.	***"**how they created sites like Stonehenge"* *"how they created tools and structures"*	**4%**
Everything is interesting	Responses that convey an interest in all aspects of prehistory or a lack of preference for a particular part of prehistory.	***"**I was a history major during my undergraduate, so I'd say almost all of prehistory is interesting"* *"I don't have one thing that interests me about prehistory, I find it all extremely fascinating"*	**4%**
Museum displays	Responses that reference specific prehistory displays or mention museums they have visited in the past.	***"**objects you can see at museums"* *"A display should be set in its natural environment so that one can get a better idea what life was like"*	**4%**
Pre-human history	Responses that reference periods, sites or objects that pre-date the emergence of humans.	*"…dinosaurs"* *"how large the dinosaurs were"*	**4%**
Sense of ancientness/ time depth	Responses that emphasise the temporal distance of prehistory and how 'ancient' it is.	***"…**to see old things"* *"The most interesting thing about prehistory is that it keeps going further back in time."*	**4%**
Tool production/ technology	Responses that discuss the production of tools or types of tool technology.	***"**metal working…"* *"how people were developing tools they were using"*	**4%**

Node	Definition	Example	% across the sample (N=275)
Willingness to learn	Responses that indicate an eagerness to learn more about prehistory.	*"finding out stuff in the past and sharing it with my child"* *"learning where we come from seeing the way people pulled together even in times of struggle, not like today"*	**4%**
Change through time	Responses that indicate a type of change through time or since prehistory	***"…**how cultures have influenced each other throughout time, how we as a society have evolved"* ***"…**how humans have changed over the years…"*	**3%**
Different to today	Responses that emphasise the differences between prehistoric life and life today.	***"**It's so different to modern life, the lack of concrete details makes it exciting"* *"…distinctions from our living now…"*	**3%**
Notion of history/ idea everything is prehistory before now	Responses that do not differentiate between history and prehistory and treat them as synonymous.	*"…how even with knowledge of past behaviours modern cultures continually repeat history…"* *"Egyptian history, Asian history"*	**3%**
Reference to civilisation	Any responses which describe prehistory in relation to the term civilisation.	*"the birth of civilisation"* *"interested in understanding how ancient civilisations lives…"*	**3%**

Node	Definition	Example	% across the sample (N=275)
Usefulness/ importance to future	Philosophical responses that reference how important learning or knowing about prehistory is for helping us in the future.	*"how it explains the divergent paths of different peoples and cultures which retains relevance to understanding how geography, environment, migration et al thousands of years ago are contributorily relevant to the relative advantages the descendants of these people have today"* ***"…**how they existed and how it affected the future"*	**3%**
Geology	Responses that relate to geology.	*"geology"* *"…fossils…"*	**2%**
Narrative tools	Responses that include references to past narratives such as 'Stories' and 'legends'.	*"stories, myths, legends"* *"the storytelling aspect to understand those who came before me"*	**2%**
Preservation of material	Responses that indicate interest in prehistoric material due to its good preservation.	*"…distinctions from our living now, how preservation has lasted so long"* *"How artefacts and cities have survived"*	**2%**
Types of site	Responses that specify types of prehistoric site such as 'hill forts', 'stone circles', 'dolmens' etc…	***"**the preserved burial sites – long barrows, stone circles etc"* ***"…**henges !"*	**2%**

Node	Definition	Example	% across the sample (N=275)
Androcentric terms	Use of androcentric terms such as 'mankind', 'caveman' and 'early man'.	*"what's does the early men looked like and how they lived…"* *"the evolution of man…"*	**1%**
Christian history	Responses that discuss their interest in prehistory in relation to Christian theology.	*"fulfilment of Bible prophecies"* *"the biblical period…"*	**1%**
Connection to the past	Responses that emphasise their personal relationship to the past or people's general relationship to the past	*"just the sense of connection to the people, craftsmen etc…"* *"where we live we can still see evidence of where people lived so, although it was a very long time ago you still feel the connection"*	**1%**
Hunting/ subsistence	Responses that discuss hunting or subsistence strategies such as 'hunter-gatherers' and 'farming'.	*"…worked with their environment they were farmers, potters, and hunters"* *"…what they ate…"*	**1%**
Idealism	Responses that reflect an idealistic and romanticised view of the past.	*"It's purity of form"* *"more peaceful way of life"*	**1%**
Lack of intelligence/ skill	Responses that reference the lack of skills of prehistoric people and emphasise their 'primitiveness'	*"although the ancient communities lacked of technology"* *"primitive mechanical devices"*	**1%**
Named prehistoric site	Responses that explicitly name prehistoric sites.	*"…interested in theories about how ancient monuments (such as Stonehenge) were built and what they were used for"* *"cave paintings (Lascaux, Altamira)"*	**1%**

Node	Definition	Example	% across the sample (N=275)
Not sure	Responses that convey uncertainty about their interests in prehistory.	*"I'm not sure what it is"* *"not enough knowledge to comment"*	**1%**
Specific prehistoric periods/ groups	Responses that explicitly name prehistoric periods or European prehistoric groups such as 'Celts'.	***"****Iron Age and Celtic and all of it"* ***"****how they adapted during Ice Ages…"*	**1%**
Warfare/ violence	Responses that emphasise conflict in prehistory.	***"****wars and the little information that we know"* *"living structures, houses, warfare…"*	**1%**
General interest	Responses that indicate the respondent's interest in prehistory.	*"generally interested"*	**0%**
Media representations/ documentaries	Responses that discuss documentaries/ name specific programmes/ films or other popular media representations of prehistory.	***"****I like to see models or documentary movies which describe the life of people who lived a long time ago, it's interesting to see how different life they had"*	**0%**

Table 4.12. Summary of the thematic nodes utilised to categorise responses to the first part of question 5 and the frequency of these nodes across the 275 responses analysed.

The node analysis of responses across the case studies supports the word cloud data that indicates the popularity of daily life in prehistory, with 22% of respondents referring to '*Aspects/ activities of daily life'*. This fascination with past people is also conveyed by the 12% of respondents that refer to the '*skill of past people'*. Concepts such as "*ingenuity", "craftsmenship"* and "*survivalism*" are all encompassed in this category which is most popular at the BM. Respondent number 2 at the BM nicely illustrates a typical response emphasising such fascination with the skill of past people;

"*The ingenuity that went into creating and inventing tools etc*".

Respondents also conveyed an interest in animals and the environment possibly influenced by the tendency for prehistory displays to focus on the natural world, often showcasing Pleistocene fauna alongside archaeological material. The node '*Animal's/ Environment*' accounts for 11% of responses with 19 respondents referring to the environment and 14 referring to animals. The majority of respondents that mention animals simply refer rather ambiguously to "*animals"*, whilst 3 respondents specify their interest in the extinction of animals. Respondents that referred to past landscapes were particularly interested in how they differ from today, how humans survived in them and past human relationships with them. Only 2 responses referenced "*climate change"*, even though it is becoming more popular to frame prehistory alongside debates on climate change to increase the relevance and interest in the period. This type of display is exemplified by the newly opened prehistory displays at the Museum of Liverpool which include a text panel entitled "*Global warming- in the past and future"'* at the beginning of the displays to capture visitor interest.

The node '*Developments/ Named development*' was utilised to categorise certain responses to question 5, as well as question 3. Yet the types of developments referenced in response to question 5 are substantially more focused than the few respondents that referenced developments in answer to question 3. The developments cited in question 3 were highly variable but with an emphasis on

aspects relating to the development of civilisations. Out of the 10% of respondents referencing developments as interesting in response to question 5, the majority of respondents either referenced the development of society through changes in social organisation and the increased complexity of settlement or the development of technology, specifically tools. These responses are less diverse than those given in answer to question 3 and indicate a general interest in the achievements of humans in prehistory further demonstrating a preoccupation with people of the past. These responses are also possibly influenced by the linear narrative of prehistory displays that delineate time by developments in technology and society.

Visitor interest in the daily lives of people in prehistory was further explored by calculating the percentage of respondents that provided people-centric responses to part one of question 5. The total number of responses that were categorised under one or more of the following nodes were calculated across the case studies; '*Aspects/ activities of daily life', 'Skill of past peoples', 'Reference to civilisation', Cultures/ movement of people', 'Humans/ how they experienced', 'Hunting/ subsistence'* and '*Tool technology/ production'*. Even though the latter two nodes could be categorised under the node '*Aspects/ activities of daily life'* since hunting, gathering, preparing food, creating and using tools are all activities of everyday life, they were analysed as separate nodes due to the prevalence of responses citing these specific activities. Across all 275 responses 44% of them made some type of reference to their interest in humans and their lives in the distant past. The greatest prevalence of such responses was observed at NLM where 61% of responses provided people-orientated interests in prehistory. At both SVC and WP 50% of respondents conveyed such interests and the lowest interest in past human activities was presented at TQ and the GNM with only 32% and 33% of respondents expressing such interests. Intriguingly any references to civilisations in answer to part one of question 5 were positive and associated prehistory with the beginnings and developments of sophisticated civilisations. Such positive responses contrast with the references to civilisations in question 3, in which most of the responses were quite derogatory and presented prehistory as the period preceding such complex societal organisation.

Additionally, responses to question 5 expressed less confusion over the temporality of prehistory with only 13% of responses referencing later/ earlier time periods or conflating prehistory with history. These responses categorised into the nodes '*Historic', 'Geology', 'Pre-human history', 'Notion of history/ everything before now is history'* or '*Christian history'* were quite infrequent in the 275 responses. At SVC only 1 response demonstrated the confusion that was so prevalent in response to question 3 and this response which mentioned the historic concept of "*Dynasties"* also referenced astronomy and megalithic engineering reflecting an awareness of the interpretation of alignments at Stonehenge. Perhaps this greater clarity expressed in responses to question 5 reflects the more direct nature of this question which does not question an individual's understanding of prehistory but assumes a certain level of pre-existing knowledge, which does not therefore require clarification from the respondent in the form of an explanation or definition of prehistory. However, of these responses that convey confusion about the temporality of prehistory, only 33% of them combine their responses with concepts that also convey some understanding of prehistory. Unlike, the responses to question 3 that conveyed a lack of understanding, where 59% of these responses also demonstrated some knowledge of prehistory (see figure 4.12). Thus, although less respondents referenced non-prehistoric concepts, those that did demonstrated less of a general understanding of what prehistory represents than respondents to question 3 who combined such concepts.

To explore the frequency of thematic nodes represented by responses to part one of question 5, '*What do you find <u>most</u> interesting about prehistory?*' across the case studies the nodes were analysed separately across the museums and the results are summarised in table 4.13.

Node	BM (N=48)	SVC (N=46)	NLM (N=46)	TQ (N=47)	WP (N=46)	GNM (N=42)	All (N=275)
Aspects/ activities of daily life	8%	24%	35%	19%	24%	21%	22%
Origins/ human evolution	13%	15%	15%	13%	9%	7%	12%
Skill of past peoples	21%	13%	15%	2%	11%	10%	12%
Animals/ environment	8%	4%	17%	6%	9%	24%	11%
Development/ named developments	8%	2%	9%	6%	17%	17%	10%
Archaeological process/ trying to understand the past	8%	22%	11%	2%	9%	2%	9%
Specific types of material culture/ artefacts	13%	4%	15%	9%	9%	7%	9%
The unknown/ lack of information	13%	13%	2%	11%	4%	2%	8%
Cultures/ movement of people	17%	9%	7%	4%	4%	2%	7%
Religion/ belief	6%	7%	7%	4%	11%	5%	7%
Historic	10%	2%	2%	4%	7%	5%	5%
Humans/ how they experienced	6%	9%	2%	2%	7%	2%	5%
Construction of sites	0%	15%	2%	4%	2%	2%	4%
Everything is interesting	6%	0%	2%	6%	2%	5%	4%
Museum displays	6%	0%	2%	4%	4%	5%	4%
Pre-human history	2%	0%	0%	2%	2%	17%	4%
Sense of ancientness/ time depth	2%	2%	2%	11%	2%	5%	4%
Tool production/ technology	2%	4%	11%	0%	4%	0%	4%
Willingness to learn	0%	4%	0%	4%	11%	7%	4%
Change through time	2%	0%	2%	2%	4%	5%	3%
Different to today	6%	0%	7%	0%	2%	2%	3%
Notion of history/ idea everything is prehistory before now	4%	0%	7%	4%	4%	0%	3%
Reference to civilisation	0%	2%	4%	6%	4%	0%	3%

Node	BM (N=48)	SVC (N=46)	NLM (N=46)	TQ (N=47)	WP (N=46)	GNM (N=42)	All (N=275)
Usefulness/ importance to future	4%	2%	2%	4%	7%	0%	3%
Geology	0	2%	2%	6%	0%	0%	2%
Narrative tools	2%	4%	2%	0%	2%	2%	2%
Preservation of material	4%	2%	0%	4%	0%	0%	2%
Types of site	0%	0%	9%	2%	0%	2%	2%
Androcentric terms	2%	0%	0%	0%	2%	0%	1%
Christian history	2%	0%	0%	0%	0%	2%	1%
Connection to the past	2%	2%	2%	2%	0%	0%	1%
Hunting/ subsistence	0%	4%	4%	0%	0%	0%	1%
Idealism	2%	2%	0%	0%	2%	2%	1%
Lack of intelligence/ skill	0%	0%	0%	0%	4%	0%	1%
Named prehistoric site	0%	0%	0%	2%	0%	2%	1%
Not sure	0%	0%	0%	4%	0%	0%	1%
Specific prehistoric periods/ groups	0%	0%	4%	0%	0%	0%	1%
Warfare/ violence	2%	0%	0%	0%	0%	2%	1%
General interest	2%	0%	0%	0%	0%	0%	0%
Media representations/ documentaries	0%	0%	0%	0%	2%	0%	0%

Table 4.13. Percentage of responses in each thematic node across the case studies.

The BM is the only museum where daily life does not feature prominently among respondent's interests in prehistory. Only 8% of the respondents at the BM cite any interest in the more mundane aspects of prehistoric life. Instead many respondents referenced the ingenuity and skill of people, as well as cultures and migrations. The respondents at the BM seem more interested in the global context of prehistory and the 'bigger picture' with a particular focus on the sophistication of people. These interests seem to reflect the mission of the BM which markets itself as a 'global museum' that presents the wider cross-cultural context of history through an

emphasis on 'star' objects. These objects including the Mold gold cape and Ringlemere cup are utilised to aesthetically demonstrate the great skill and craftsmanship involved in producing them. It thus appears that the BM's mission meets the interests and expectations of its touristic visitor profile (table 4.2).

A similar correspondence between visitor expectations and interests with the aims of the museum is also witnessed at SVC where 15% of respondents expressed an interest in the construction of sites, particularly of Stonehenge itself, which is the focus of the museum. The gallery attempts to explain how Stonehenge was constructed which demonstrates an understanding of visitor needs and interests. Such interests were identified in the front-end evaluation undertaken in advance of the display's creation during the planning stages so that such interests could be identified and addressed (Appendix 1). The touristic visitor profiles (table 4.2) represented at SVC are intending to visit the monument itself and unsurprisingly a large portion of them want to know more about it. This is further reflected by the 13% of respondents expressing an interest in the skill of prehistoric people and a fascination in *'the unknown'*. Therefore, at SVC monumentality, the creation of the site and discovery is most important rather than the associated material culture of the time. Unsurprisingly 15% of respondents expressed interests in the engineering of prehistoric sites without modern technology, particularly how and why Stonehenge was built. Reflecting the expectations of visitors to this infamous prehistoric engineering enigma who have come to see this example of megalithic architecture and better understand it. In contrast, certain types of material culture, particularly art and stone tools, as opposed to prehistoric sites feature more prominently amongst visitor interests at the other museums.

The topic of human evolution was also quite popular across all case studies, particularly at NLM, the BM and TQ where over 10% of respondents expressed an interest in the topic. Unlike responses referring to human development in response to question 3 which named specific hominin species, particularly Neanderthals, no responses to question 5 referenced any specific hominins species and only two respondents vaguely alluded to the concept of hominins by referring to "*different*

species of human". The concept of '*Origins/ where we come from'* was of great interest across the case studies with many respondents indicating a strong personal connection to the deep past bound in this concept of a shared ancestry. Human adaptations were also a recurring interest in these responses that referenced human evolution. This interest was often expressed in association with an interest in the survival of early humans and indicates the link that visitors see between survival and adaptation. The relationship between these two concepts is widely communicated in the media and school curriculums where evolution is framed through Herbert Spencer's notion of 'survival of the fittest'. This rather reductive association gives the problematic impression that only the most physically fit animals will survive but adaptation is much more complex and nuanced than this and does not necessarily relate to the physically fittest. Furthermore, this narrative places *Homo sapiens*, the only extant member of the genus *Homo* as the 'fittest', the pinnacle of human evolution able to out-compete other hominin species due to their more advantageous adaptations.

References to understanding the past and archaeology were prevalent at the BM, SVC, NLM and WP with many respondents utilising scientific language such as "*evidence", "dating", "theories"* and even *"stratigraphies"* to describe their interests in archaeology. Some respondents expressed a general interest in "*artefacts"* without specifying any particular types of artefact.

There was also a focus on discovery and the ambiguity involved in interpreting prehistoric evidence highlighted by the 8% of respondents citing an interest in the '*mystery*' of the period. This sense of the unknown was a source of great interest for respondents at the BM and TQ, such fascination with the lack of concrete facts that characterise the study of prehistory is exemplified by respondents 27 and 29 at TQ who describe their intrigue with the deep past as; "*the mysteries remaining…"* and "*the unknown".* Such responses further reinforce the visitor interests in the 'mystery' of prehistory that were identified by previous visitor studies and discussed in section 2.2.3.

At both WP and the GNM respondents expressed an interest in learning more about prehistory. This greater educational interest possibly reflects the university student visitor profiles (table 4.2) at these two museums, which are in close proximity to universities and consequently cater towards students.

This analysis of visitor interests has partially resolved research question 1c by revealing certain common interests between the different visitor profiles represented across the museums. The responses clearly indicate visitor interests in people, daily life, human evolution, human skill, the animals/ environment of the time and the 'unknown'. Conversely to explore what respondents found least interesting about prehistory responses to the negatively-phrased part of question 5, '*What do you find least interesting about prehistory?*', were also categorised into thematic nodes. The 32 thematic nodes utilised to categorise responses are summarised in table 4.14 with descriptions and examples of each node as well as the overall frequency of each node across the museums.

Node	Definition	Example	% across the sample (N=197)
Nothing/ like it all	Responses that express a strong interest in prehistory or state that they have no disinterests.	*"it was all interesting"* *"nothing in particular"*	23%
Specific types of material culture/ artefacts	Any references to 'artefacts' or types of material culture such as 'tools', 'weaponry', 'jewellery', 'cave art' etc.. as well as specific types of artefact such as 'Beaker pot', 'flint tool' or 'shield'.	*"artefacts – pots etc"* *"tools or pottery"*	15%
Frustration at lack of information/ speculation/ process of interpretation involved	Responses that convey frustration with the lack of concrete facts, the ambiguity of prehistoric material and interpretation.	*"conjecture"* *"Too less information and most of the statements cannot be proved."*	14%
Scientific methods used/ technicalities/ explanations of how things work	Responses that indicate a disinterest in the scientific methods utilised to study prehistory or the technical explanations of such techniques.	*"how things were dated or finding out about the methods used to date"* *"scientific analysis specifics – just show me"*	7%
Not sure	Responses that convey uncertainty about what they find uninteresting.	*"can't think of anything"* *"don't know"*	6%
Critique of museums/ displays	Responses that critique specific museum displays or types of display.	*"…exhibitions in old-fashioned museums"* *"…inanimate objects in sterile cases not interesting anymore"*	5%
Aspects/ activities of daily life	Responses that mention daily life in prehistory and/ or aspects of daily life such as 'trade'.	*"village life/ agriculture"* *"life of these people seems really boring"*	4%

Node	Definition	Example	% across the sample (N=197)
Process of learning/ remembering	Responses that convey frustration at trying to learn about prehistory and difficulty remembering it.	*"it generally involves a lot of reading"* *"names and years they are hard to remember"*	4%
Religion/ belief	Responses that mention elements of prehistoric religion or beliefs.	*"probably early people's religious beliefs"* *"cosmology"*	4%
Animals/ environment	A variety of responses that refer to animals or the environment such as animal-human relations, types/ species of animal present in the period, types of environment human's experienced and relationships with the environment.	*"mammals"* *"…possibly…prehistoric plants"*	3%
Difficulty connecting with it/ find it boring	Responses that convey frustration with prehistory due to issues trying to understand it.	*"It's harder to imagine/ relate back to a period before civilization"* *"…trying to relate the remains of it and understanding the remains, trying to imagine what it would have looked like"*	3%
Restricted focus	Responses that critique the study or display of prehistory for being too restricted in focus.	*"Lack of focus on non-European prehistory"* *"just learning about England's history…"*	3%
Difficulty connecting with academics	Responses that convey frustration with academics and their influence on the subject.	*"academic elitism"* *"academic gatekeeping"*	2%
Geology	Responses that relate to geology.	*"geology"* *"fossils"*	2%

Node	Definition	Example	% across the sample (N=197)
Historic	Responses that refer to later periods/ sites/ individuals/ events or material culture.	*"the Middle Age in Europe (maybe because we had it too often in school)"* *"scripture"*	2%
Lack of modernism/ primitiveness	Responses that convey frustration with the lack of skill and intelligence of past people.	*"there was none of the modern hi-tech as we have today"* *"non progressive in technology and modern thoughts"*	2%
Media representations/ documentaries	Responses that discuss documentaries/ name specific programmes/ films or other popular media representations of prehistory.	*"when people say "aliens did it", just because they don't know the truth or because they erase other ethnic groups (non-EU)"* *"videos"*	2%
Specific types of history	Responses that refer to a specific type of history.	*"earth's history"* *"…the subject that holds my focus the least is maybe some political history"*	2%
Warfare/ violence	Responses that emphasise conflict in prehistory.	*"the part where we killed each other for stupid reasons."* *"tribal wars"*	2%
Archaeological process/ trying to understand the past	Responses that reference trying to understand the past, some explicitly referencing archaeology and parts of the archaeological process such as 'excavation' and the use of scientific techniques.	*"archaeological digs"* *"study of artefacts, dating and figures"*	1%

Node	Definition	Example	% across the sample (N=197)
Artificial division of prehistory	Responses that critique the definition of prehistory.	*"the artificial division between prehistory and history, this may not be the least interesting but can be the most disturbing as the division is an artificial dominant western epistemological construct"*	1%
Cultures/ movement of people	Responses that mention either cultures or the movement of people or migrations during prehistory.	*"cultures"* *"the limit of cultures"*	1%
Ethical issues	Responses that raise ethical issues.	*"bones – not entirely sure of the ethics of moving bones from their burial site"*	1%
Irrelevant	Responses that do not relate to prehistory or what the respondent understands as prehistory.	*"filling up forms like this – sorry"*	1%
Origins/ human evolution	Responses that make reference to the process of human evolution, our evolutionary origins or name specific hominin species.	*"how the human race started or evolved"*	1%
Prefer other periods	Responses that indicate a preference for other periods of history.	*"I always preferred more modern history with clearer stories about people and events"*	1%
Previously interested	Responses that state a previous interest in prehistory but a change in these interests.	*"I have been interested in prehistory from 12 years old (1957) so my interest has waned in fossils and reading and over the last half century my intended has moved to history…"*	1%

Node	Definition	Example	% across the sample (N=197)
The age	Responses that indicate a disinterest in the time depth of prehistory.	*"the age – a long time"*	1%
Types of site	Responses that specify types of prehistoric site such as 'hill forts', 'stone circles', 'dolmens' etc…	*"…quarrys"*	1%
Uninteresting objects	Responses that are frustrated with artefacts or objects which they perceive as uninteresting.	*"boring flint arrowheads"* *"pots, dry artefacts"*	1%
Use of androcentric terms	Use of androcentric terms such as 'mankind', 'caveman' and 'early man'.	*"cavemen"* *"…the mundane life of early men"*	1%

Table 4.14. Summary of the thematic nodes utilised to categorise responses to part two of question 5 and their frequency across the 197 responses analysed.

Out of the 197 responses to the negatively phrased part of question 5, '*What do you find <u>least</u> interesting about prehistory?*', the majority of responses provided a false positive response. This type of positive response either stated that the individual found everything interesting or that there was nothing they found uninteresting. The prevalence of positive responses resulted in a limited number of responses that did convey an individual's lack of interest. Of those responses that did reflect on what they found least interesting, the second most popular response involved references to prehistoric material culture, particularly pottery and ceramics, which account for 8% of all responses. Prehistoric pottery is often fragmentary, brown and dull with little aesthetic value. Pottery is often utilised in displays to facilitate the interpretation of the daily domestic activities of prehistoric people. Across the museums 22% of visitors expressed an interest in learning about the daily lives of everyday people in the distant past, yet there is a contradiction here since they also stated their lack of interest in the material culture associated with the daily lives of prehistoric people. Perhaps there is a difference in expectation between what respondents expect to see that conveys daily life and what actually is currently used to present such themes in the displays. Furthermore, numerous respondents that cited their lack of interest in material culture also frequently referenced "*rocks",* which as previously explored is a rather ambiguous term which may refer to lithics or mineral compositions. It may even simply represent an awareness of the main material that survives from this period of our most distant past. Respondent 14 at TQ for example states, "*least interesting rocks, quarrys"* by associating rocks with quarries they seem to be conflating prehistory with geology and referring to mineral compositions. However, they could equally be referring to Neolithic flint mines where flint was extracted for tools and weaponry or even referring to Palaeolithic finds from quarries in the 18th/ 19th century. Respondent 29 at SVC on the other hand seems to be more explicitly relating the term "*rocks"* with lithics in their response; "*old bones and bits of rocks*" reminiscent of the 'stone and bone' characterisation of prehistory proposed by Pratt (2015:60).

Respondents also expressed less interest in the ambiguity of evidence and interpretation that characterises the study of prehistory, as well as the lack of

contextual information that would facilitate a greater understanding of the period. They conveyed frustration in what they perceived as the guesswork and speculation involved in interpretation and a sense of distrust towards academics and their representations of the period on this basis as highlighted by respondents 35 and 36 at NLM;

> *"often guessing what something is etc and then changing mind later"*

> *"it can often seem like there are a lot of crazy theories and wild guesswork, when watching a TV documentary, it seems like they can come up with a whole theory about why people in the past did something based on very little"*

These types of responses account for 14% of the 197 responses and indicate a strong sense of disillusionment in the process of interpretation and presentation of the period. This scepticism is further reinforced by the 2% of respondents that cite difficulty in connecting with the period due to perceived academic gatekeeping, yet in contrast, 8% of respondents to the positively phrased part of the question expressed a strong interest in the lack of context and 'mystery' associated with prehistory. It therefore seems that the fragmentary and ambiguous evidence and how it is interpreted and presented to the public can either be more or less interesting depending on how it is framed.

The responses to part two of question 5, *'What do you find <u>least</u> interesting about prehistory?*', were so few and variable that most thematic nodes were only mentioned once or twice. Thus to further understand the common themes the nodes were also analysed separately at each case study and the results are summarised in table 4.15.

Node	BM (N=38)	SVC (N=33)	NLM (N=29)	TQ (N=30)	WP (N=35)	GNM (N=32)	All (N=197)
Nothing/ like it all	11%	24%	31%	27%	20%	31%	23%
Specific types of material culture/ artefacts	21%	12%	28%	17%	0%	16%	15%
Frustration at lack of information/ speculation/ process of interpretation involved	16%	24%	17%	7%	9%	13%	14%
Scientific methods used/ technicalities/ explanations of how things work	5%	15%	3%	10%	6%	0%	7%
Not sure	8%	9%	3%	7%	6%	3%	6%
Critique of museums/ displays	0%	0%	17%	3%	9%	0%	5%
Aspects/ activities of daily life	5%	0%	0%	0%	9%	6%	4%
Process of learning/ remembering	11%	6%	0%	0%	3%	0%	4%
Religion/ belief	0%	0%	0%	0%	0%	6%	4%
Animals/ environment	0%	0%	0%	3%	0%	13%	3%
Difficulty connecting with it/ find it boring	5%	6%	0%	3%	0%	3%	3%
Restricted focus	3%	0%	0%	0%	11%	3%	3%
Difficulty connecting with academics	0%	6%	3%	0%	0%	0%	2%
Geology	0%	3%	0%	3%	0%	6%	2%
Historic	5%	0%	3%	0%	0%	0%	2%
Lack of modernism/ primitiveness	5%	0%	0%	3%	3%	0%	2%

Node	BM (N=38)	SVC (N=33)	NLM (N=29)	TQ (N=30)	WP (N=35)	GNM (N=32)	All (N=197)
Media representations/ documentaries	0%	0%	3%	3%	3%	0%	2%
Specific types of history	0%	0%	3%	0%	3%	3%	2%
Warfare/ violence	3%	3%	0%	3%	0%	0%	2%
Archaeological process/ trying to understand the past	0%	0%	0%	3%	3%	0%	1%
Artificial division of prehistory	0%	0%	0%	0%	0%	3%	1%
Cultures/ movement of people	0%	0%	0%	3%	3%	0%	1%
Ethical issues	0%	0%	0%	3%	0%	0%	1%
Irrelevant	0%	0%	0%	3%	0%	0%	1%
Origins/ human evolution	0%	0%	0%	0%	0%	3%	1%
Prefer other periods	0%	0%	0%	0%	3%	0%	1%
Previously interested	0%	0%	0%	3%	0%	0%	1%
The age	3%	0%	0%	0%	0%	0%	1%
Types of site	0%	0%	0%	3%	0%	0%	1%
Uninteresting objects	3%	0%	0%	0%	3%	0%	1%
Use of androcentric terms	3%	0%	0%	3%	0%	0%	1%
Pre-human history	0%	0%	0%	0%	0%	0%	0%

Table 4.15. Percentage of responses in each thematic node across the case studies.

Respondents at certain museums were more positive in their responses than others. For example, only 11% of respondents at the BM stated a lack of interest in prehistory, whilst 31% of respondents at NLM and the GNM, 27% of respondents at TQ, 24% of respondents at SVC and 20% of respondents at WP cited their lack of interest in prehistory. The few responses provided at the BM were, however,

comparatively more negative than at the other case studies with 21% of respondents referring to prehistoric material culture, 16% referring to the speculation involved and lack of information and 11% of respondents expressing a lack of interest in learning about it/ trying to remember it.

Scientific techniques and the more technical details utilised in archaeology to understand the past was a popular topic respondents were less interested in with 15% of respondents at SVC referring to scientific techniques as less interesting. Most of these responses cited dating methods, scientific analysis and explanations of how technology works, exemplified by respondents 15, 16 and 17;

"technology – from a structural position i.e the mechanics."

"scientific analysis specifics – just show me"

"how things were dated or finding out about the methods used to date"

These responses convey an impatience with the details of prehistory that are viewed as more tedious and unexciting. Respondents aren't as engaged with the 'how things work' or 'how we know' questions used to interrogate the past. At NLM a few respondents critiqued types of museum displays as well as a small number of respondents at WP perhaps reflecting a confusion with the question. It initially appears that these respondents misinterpreted the question and are discussing what they found least interesting about the prehistory displays as opposed to the topic of prehistory in general. This misinterpretation may stem from the instructions given to the respondents in which I indicted that the questions in the second part relate to the prehistory on display. However, of those respondents at NLM who critiqued museum displays, most of these critiques were generalised and not museum-specific. Only one respondent explicitly indicated their misinterpretation by writing '*see question 5'* in their response to question 7 in part 2 and only 1 respondent missed part 2. The rest of the respondents that provided these museums-orientated responses completed sections 2 with different responses, conveying a general lack of

interest in the presentation of prehistory in museums rather than a lack of interest in the displays where they were. The most common of these critiques is a lack of interest associated with the presentation of numerous small and seemingly similar artefacts. This type of response is also observed at WP where museums are critiqued for unengaging displays of similar objects and these responses were very different to those focused on the museum itself.

At WP a small number of respondents cited the lack of focus on prehistory outside of the UK/ Europe and the broader context of the subject as less interesting. It was thought that perhaps these responses might reflect the nationality of respondents, under the assumption that respondents from outside the UK or individuals with non-British nationalities are less likely to respond to prehistory displays that exclude material geographically relevant to them. However, the respondents that articulated these lack of interests were all British and UK-based. Furthermore, three of them were young students and one was a lecturer, perhaps reflecting a more academic content-based critique in which the prevalent narrative of prehistory is perceived as restricted and Eurocentric. Highlighted by respondents 3, 11 and 18;

> *"just learning about England's history, I prefer learning about the prehistory of other countries"*
>
> *"Lack of focus on non-European prehistory"*
>
> *"Large amounts of detail without recourse to broader context"*

These responses appear to reflect the visitor profiles of young professionals and students who visit the museum for academic enrichment and expect a deeper level of context in museum displays (table 4.2).

The general confusion that seems to be apparent in most of the questionnaire responses was again observed in responses to part two of question 5. This time it seemed to be expressed by respondents avoiding a negative response by instead

stating *"I don't know*" or "*not sure*". This response was most prevalent at SVC where the majority of respondents were visiting the site due to a vested interest in prehistory and were consequently less inclined to respond negatively about the subject.

The trends and variables highlighted here fulfil research question 1a but they must be treated with caution due to the low number of respondents. Consequently, thematic nodes were so infrequent that they are not representative of the interests of the sample population. For example, at the GNM 13% of respondents expressed less interest in '*Animals/ the environment'* but these responses only account for 4 respondents out of the small sample that answered this question. Thus trying to determine themes that visitors find less interesting is quite problematic. In general, the thematic nodes that are mentioned the most frequently, when excluding the '*Nothing/ like it all*' node are; '*Specific types of material culture/ artefacts'* and '*Frustration at lack of information/ speculation/ process of interpretation involved*'. These nodes, however, represent less than 20% of all respondents, 30 respondents specified a lack of interest in types of material culture, 28 expressed their frustration with the speculation involved/ lack of information, 13 referenced a lack of interest in the scientific techniques utilised to interpret the past and 12 expressed confusion. All other nodes were mentioned by less than 10 respondents out of the restricted sample of 197 respondents that answered this part of the question.

4.7 Insights from part 1 of the questionnaire

From part 1 of the questionnaire it is clear that there are certain preconceptions that are prevalent across the 6 case studies and shared between the different visitor profiles represented across the museums. These common themes and ideas utilised to articulate respondent's knowledge and interests in prehistory can be grouped under broader themes by collating the responses to questions 3 and both parts of question 5. The representation of these popular broader themes across all the case studies is summarised below in figure 4.15, which further illustrates the high level of confusion/ unfamiliarity expressed by respondents. Figure 4.15 also demonstrates

respondent's preoccupation with people of the past. To further explore the representation of these broader trends across the case studies they were separately calculated for every case study, illustrated in figure 4.16 to further elucidate the trends and variables governing visitor preconceptions, addressing research question 1a.

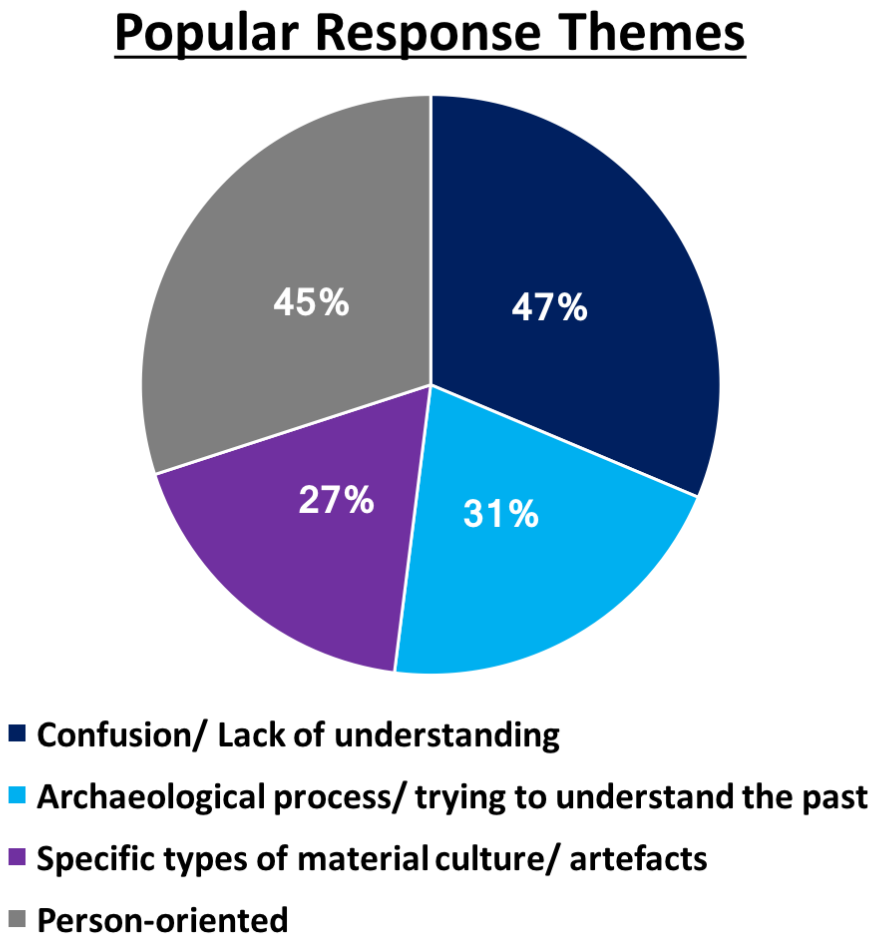


Figure 4.15. Pie chart illustrating the representation of broader response themes identified in the 757 responses to questions 3 and 5 that were analysed.

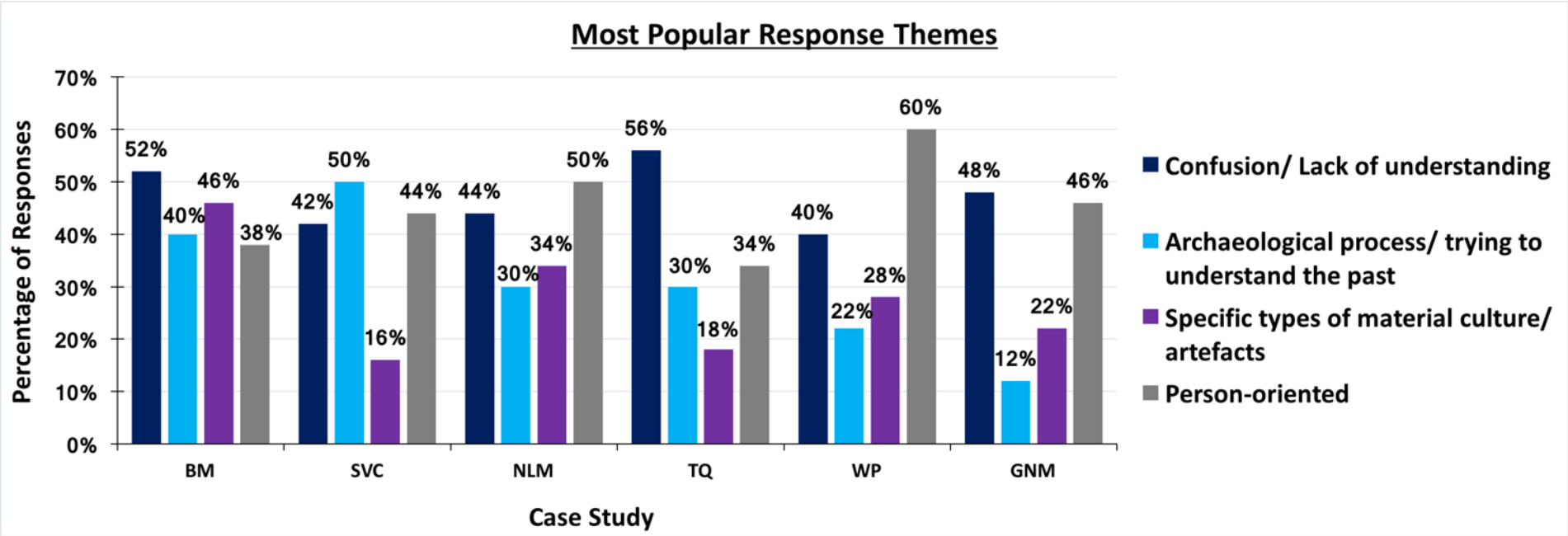


Figure 4.16. Graph illustrating the most common response themes across the case studies in response to questions 3 and 5 from the 757 responses analysed.

The common pre-display preconceptions revealed in responses to questions 3 and 5 and illustrated in figures 4.15 and 4.16 include references to types of prehistoric material culture, a focus on archaeology/ trying to understand the past through it's material remains and people-centric responses. In addition to these common themes, 47% of all the respondents demonstrate a lack of understanding of what prehistory represents with some respondents expressing no knowledge of the subject whilst others refer to material/ events that pre and post-date prehistory. This confusion is most pervasive at TQ where 56% of respondents express a lack of understanding in their responses to the questions centred on prehistory. This lack of knowledge at TQ most likely reflects the visitor profiles represented at the museum, composed of local residents and British tourists who are not particularly interested in prehistory. Often respondents expressed this confusion in conjunction with other themes as they are not mutually exclusive. These mixed answers that encompass both relevant and irrelevant references further reflect the confusion visitors encounter when attempting to articulate their understanding of prehistory.

It is apparent from figure 4.15 that after '*Confusion/ lack of understanding'* the most popular form of response is focused on the daily lives and activities of people of the past. This type of person-centric response is most popular at WP where 60% of respondents make reference to their interests in people's daily lives and their ability to survive in the deep past. Many of these responses also utilise androcentric language to convey this understanding and conceptualisation of a people-focused prehistory. TQ demonstrates the least number of responses that focus specifically on people further reflecting the lack of visitors interested in prehistory.

Many respondents associate prehistory with specific objects and types of artefact, influenced by their exposure to the material culture of prehistory conveyed through the media and presented in museum displays. To explore the frequency with which these specific objects are referenced the number of references for each object type in Part 1 of the questionnaire were calculated and are illustrated in figure 4.17. It is clear that the majority of such references associate prehistory with domestic categories of artefacts such as pottery and tools. The most popular type of material

culture referenced was pottery, which was mentioned 36 times across the responses. This material is recognisably prehistoric due to the greater preservation of ceramics in the archaeological record and prominence of pottery in prehistory collections, particularly fragments of Beakers and Iron Age pottery. The prevalent association of pottery with prehistory demonstrates the taphonomic effect of museum collections on the preconceptions of visitors.

To further understand how visitors relate to the different objects and materials suggested in responses, the total number of references for each object category where divided by question and are illustrated in figure 4.18. Consequently, it is possible to observe whether certain materials were referenced more frequently in response to certain questions.

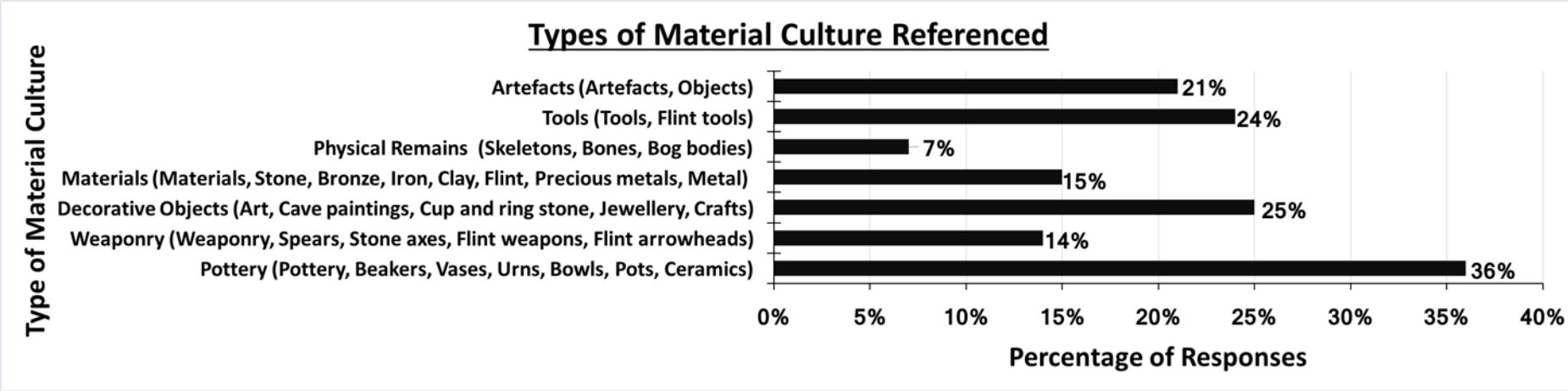


Figure 4.17. Graph illustrating the types of material culture referenced across the 757 responses to questions 3 and both parts of question 5.

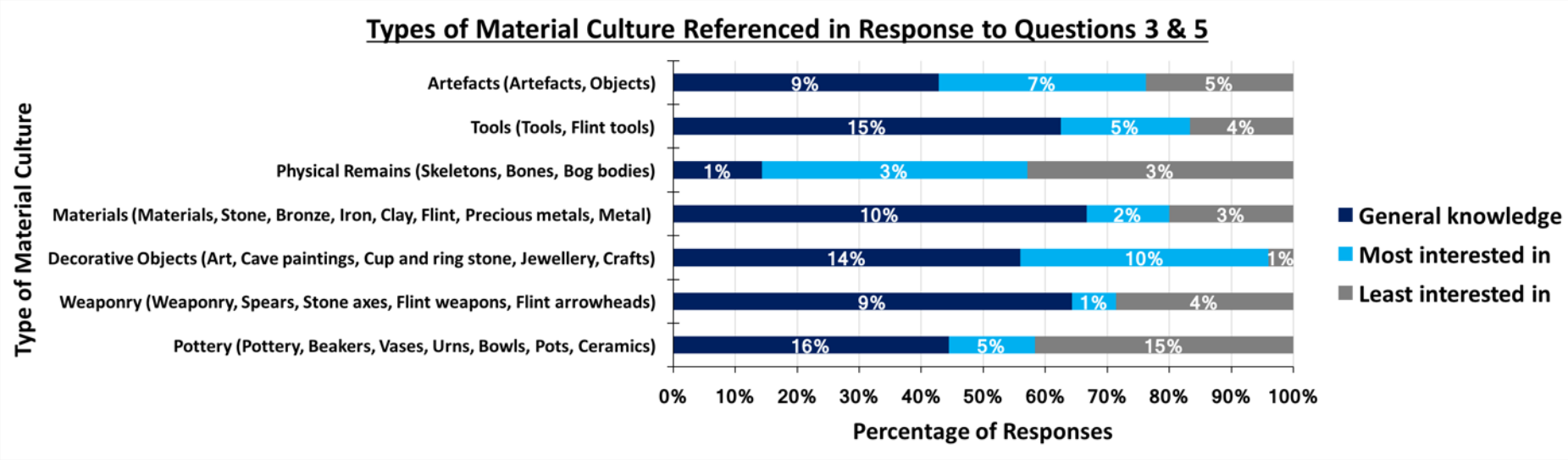


Figure 4.18. Graph illustrating the types of material culture referenced across the 757 responses, highlighting which question the different object types are referenced in.

Figure 4.18 demonstrates that the "*pottery"* frequently mentioned in responses, is referenced most frequently in response to '*What does prehistory mean to you?*' and '*What do you find <u>least</u> interesting about prehistory?*'. Thus it appears that pottery is a common material type that visitors associate with prehistory but it is also often cited as less interesting, only 5 respondents refer to pottery as interesting. Such lack of interest in pottery as a category of material is highlighted by respondent 28 at NLM, *"lots of similar pottery vessels"* and respondent 49 at WP *"seeing old bowls in displays".*

Fragments of prehistoric pottery and vessels are often small, dull, dark brown in colour, sometimes quite crudely designed and often presented de-contextualised within static glass cases alongside other examples of the same type of pottery. It is difficult to present pottery in a stimulating eye-catching way and consequently such vessels appear to visitors to possess little observable aesthetic value giving the impression that these static objects are unexciting and irrelevant. Furthermore, the tendency to present complete vessels in high-density encyclopaedic styles of displays exacerbates these presentational issues and conveys a monotonous dull impression of prehistory that is neither engaging nor relatable and this will be further emphasised in Chapter 5.

Decorative object categories were mentioned frequently by visitors in response to both questions '*What does prehistory mean to you?*' and '*What do you find <u>most</u> interesting about prehistory?* and were mentioned 25 times overall across the sample. This category includes general references to art as a medium as well as personal ornamentation such as jewellery and art forms specific to certain periods such as cave paintings and cup and ring stones. The medium of art itself was mentioned the most frequently with 8 references, whilst both the decorative categories of cave paintings and jewellery were mentioned 7 times each. This category is unsurprisingly a more popular interest compared to pottery due to the greater visual value attributed to it. Such categories do, however, overlap as there are numerous examples of prehistoric vessel types with incised decoration as well as decorative motifs incised on metal weapons that could be encompassed under the

category '*art'*. It is, however, difficult to determine what type of art respondents are specifically referring to when they cite "*art"* in their responses. Do such references convey a general interest in decoration of all forms and material types or a more specific interest in cave paintings for example? The more visual aspects of prehistoric life are often given greater prominence in the media, particularly parietal art which is perhaps why this type of art is so prevalent in respondent conceptions of prehistoric art.

The category of materials encompasses all generalised references to material types such as *"Bronze", "Clay"* and "*Metal"*. These types of responses were most common in answer to question 3, '*What does prehistory mean to you?*', where the material composition of objects were utilised to convey an individual's knowledge of prehistory. The object category of weaponry was also more frequently referenced in response to question 3 and does not appear to be either a source of more or less interest for visitors. Respondents are aware of these types of prehistoric material culture but appear rather ambivalent towards them. In contrast references to physical remains appear rather polarising with an equal number of respondents more and less interested in them. Physical remains were categorised as an object category and include references to bog bodies and the ambiguous responses *"bones"* and "*skeletons"* which could refer to either humans or animals. This category was, however, rather infrequently referenced as it was only represented by 7 references in the entire repertoire of responses. More generalised references to *"artefacts"* and "*objects*" were more popular and were referenced 21 times, mostly in responses articulating a respondent's understanding of prehistory which relies on interpreting and articulating the past through material remains. However, these references to certain types of object appear relatively frequently in comparison to other previously discussed nodes such as types of prehistoric site or named prehistoric sites, yet no category of material is referenced more than 10 times out of the 300 respondents. Thus such references are still quite low, further exemplifying the lack of shared knowledge and interests in prehistory exhibited by respondents.

Interpreting and understanding prehistory is bound up in an understanding of archaeology and the processes of interpretation and techniques utilised to recreate the past. Thus, references to understanding the past and more specifically to archaeological practices and concepts were very common in visitor responses. Such responses were articulated in a variety of ways, some respondents referred to archaeology in their responses to question 3 whilst others more inadvertently and implicitly referred to archaeology in question 5 by discussing the lack of material available and sense of unknown that characterises prehistory and some respondents expressed their frustration with academics and the scientific technicalities associated with archaeology. For example, the focus on "*artefacts"* as a generic category of material - a term for archaeological objects - could also convey a conflation of prehistory with archaeology. Overall archaeology was referenced either explicitly or implicitly a total of 92 times, mostly in association with the ambiguity of evidence and sense of unknown that the archaeological record, differential preservation and lack of written accounts produces. Most of the responses were focused on the lack of context and material remains that were either viewed as interesting or less interesting.

Across the case studies and responses to questions 3 and 5 the use of androcentric language was relatively low with only 23 respondents out of 300 utilising such language to express their interests and associations with prehistory. However, despite the relatively low number of respondents using such language there are some trends in how the androcentrism is expressed. The terms "*cavemen/ caveman"* and "*early man"* were the most common forms of such androcentric language and convey the traditional preconceptions that some visitors still possess. The limited examples of androcentric language demonstrated in my visitor responses do not appear to illustrate any differences in language usage between sexes. The 23 respondents employing this language are composed of 10 men, 12 women and 2 unclassified individuals. There is an almost equal split with either group just as likely to employ androcentric language in their conceptions of prehistory. It was predicted that these responses may demonstrate a difference in preconceptions based on age, with older age groups more likely to use such language due to the prevalence of such

terms in the recent past. These responses, however, do not seem associated with age group either as all age groups are represented by the 23 respondents utilising androcentric language and although the most represented age group was 51-60, it was only represented by 6 respondents, whilst the 21-30 age group was represented by 5 respondents and in general the number of respondents was variable across the age categories. In comparison to the assertions of previous scholars (Moser, 1992, 1999; Wood and Cotton, 1999) it therefore appears that although still present, this '*primitive caveman'* stereotype is less pervasive in the public consciousness than it used to be which indicates that to a certain extent more nuanced understandings of prehistory are filtering through into the public consciousness.

To further demonstrate the common preconceptions shared between respondents all of the responses across all case studies to questions 3 and both parts of question 5 were collated and entered into a word cloud generator to quantify the frequency of certain words, illustrated in figure 4.19. The word frequency was also quantified and the 20 most frequently mentioned words are presented in table 4.16. The confusion respondents encountered when discussing their understanding and interests in prehistory are again clearly demonstrated by this visualisation of responses.

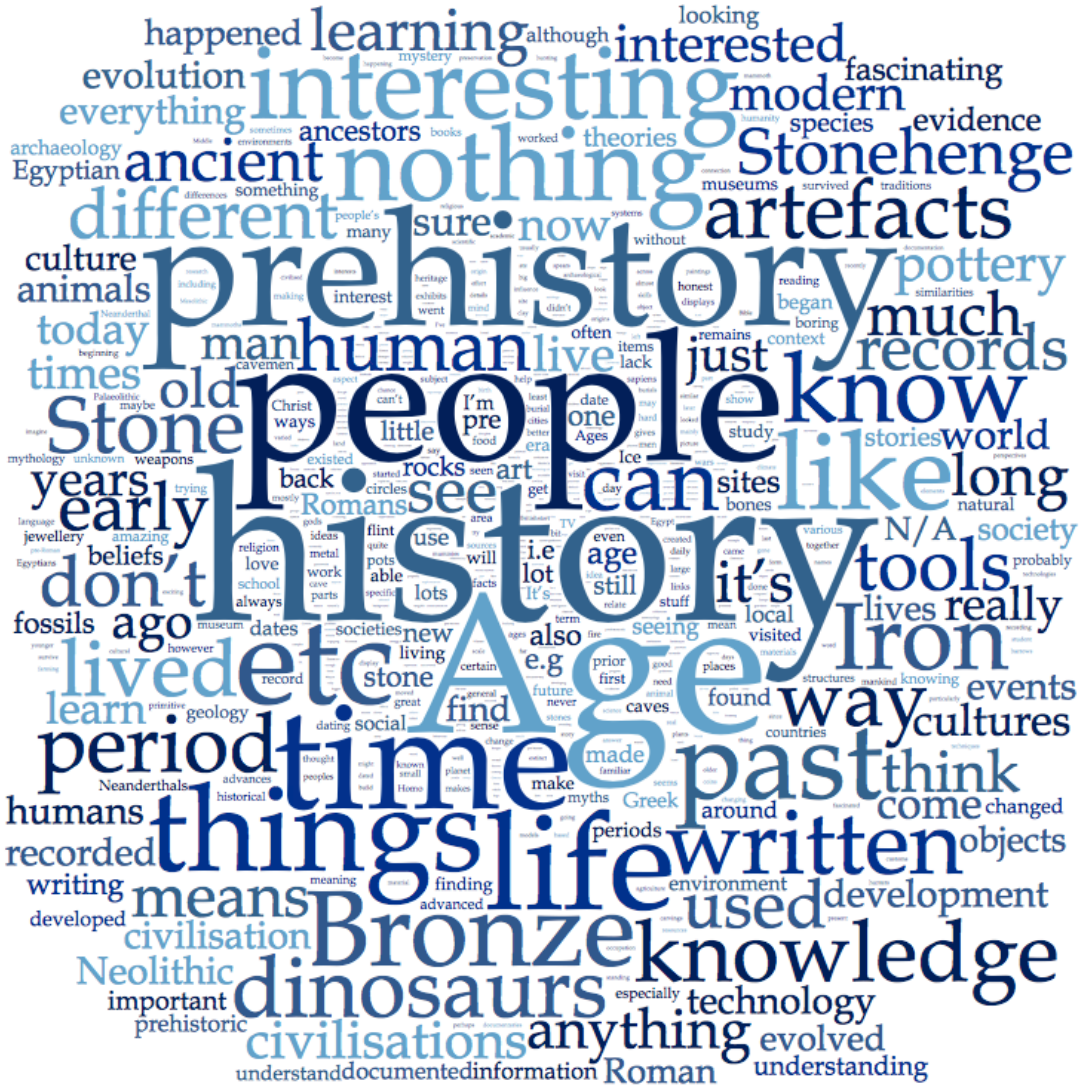


Figure 4.19. Word cloud produced from the 757 responses to questions 3 and 5.

Ranking	Word(s)	Number of references
1	history	123
2	Age	87
3	people	69
4	prehistory	68
5	time	59
6	life	47
7	past	39
8	nothing, Bronze	37
9	interesting	36
10	Iron	33
11	written	31
12	dinosaurs, knowledge	30
13	artefacts, period	29
14	Stone, lived	28
15	human, tools	26
16	different	25
17	early	24
18	Stonehenge, records	23
19	ancient	22
20	old	20

Table 4.16. Frequency of the 20 most popular words mentioned in the 757 responses to question 3 and both parts of question 5.

There were 123 references to "*history"* and 30 references to *"dinosaurs",* whilst the time depth of prehistory was very prevalent with 59 references to "*time*", 39 to the "*past*", 29 to "*period"*, 24 to "*early"*, 22 to "*ancient"'* and 20 to *"old"*. Furthermore, the popularity of person-centric conceptions of prehistory are again highlighted by the 69 references to "*people",* 47 to *"life"* and 26 to "*human"*.

4.8 Summary

Overall this Chapter has addressed the first aim of the thesis by resolving research questions 1-1c;

1. *What preconceptions do the public have about prehistory before viewing the displays?*
    a) *What are the trends and variables?*
    b) *Where does this knowledge come from?*

c) What do they find most/ least interesting about the concept of prehistory?

The trends highlighted by these research questions identified visitor preconceptions of prehistory before viewing the displays. Most notably that visitor's understandings of prehistory are highly anachronistic. Visitors cannot conceptualise the temporality or chronology of the period with many respondents discussing topics that either pre or post-date prehistory. Although many sites, objects and periods that are relevant to prehistory were referenced, they were only referenced once or twice in the entire sample of respondents. This variability in preconceptions reflects the wider trend of confusion surrounding the concept of prehistory. Visitors demonstrated the lack of a shared language to discuss the period or a shared frame of reference to understand it. Not even traditional stereotypical derogatory views of *'primitive cavemen'* living alongside dinosaurs seemed to be prevalent. Visitors demonstrated a general acknowledgement that prehistory predates writing and is composed of Three Ages defined by metal technologies but placing dates and sites into this understanding was limited. Often the preconceptions presented were entangled within archaeological concepts highlighting the conflation of prehistory with the techniques utilised to interpret the subject. Prehistory suffers from this conflation in particular, due to its lack of written records and consequently alternative methods of interpretation.

In terms of visitor interests in prehistory, the most popular topics related to the daily lives of people like them in the past, human evolution, the skill of past people, animals and the environment, as well as the innate '*mystery*' of the subject. Conversely, of the few respondents that expressed their lack of interest associated with prehistory it was this same ambiguity of evidence and interpretation that was viewed negatively as mere *"guesswork"*. Expectations and interests varied between sites but overall visitor understanding was comparably variable and interests in aspects of prehistoric daily life were similar across all of the museums and visitor profiles. The influence of contemporary prehistory displays in museums across England on these preconceptions will be explored in the following Chapter 5, which will utilise the 13 variables of display to analyse prehistory displays and identify current trends in displays.

Chapter 5: The representation of prehistory in museum displays across England

5.1 Introduction

This Chapter will address the second research question of the thesis, *'How is prehistory presented in different types of museum across England?*' by undertaking a visual analysis of the macro-scale data collected across the 173 museums in England. To contextualise the broad data set this Chapter will firstly outline the geographic representation of the prehistory displays recorded, highlighting the distribution of period-specific displays. This Chapter will then outline different types of museum recorded in the museum visits database (Appendix B) to provide an initial impression of the scope of the data. This Chapter will then compare the representation and expression of each of the 13 variables of display outlined in Chapter 3, between the museums recorded to identify the trends and variables influencing the presentation of prehistory in museums displays across England. This analysis will facilitate the second research objective of the thesis to *'Produce and analyse a comprehensive database of prehistory displays in England*' and consequently achieve the second research aim of the thesis to '*Identify common themes and trends in how prehistory is presented in diverse museums across England'.*

5.2 Geographic distribution of period-specific displays

The geographic distribution of the 173 prehistory displays recorded in the museum visits database (Appendix B) were outlined in section 3.2.4 with a focus on the regional distribution of the prehistory displays. Due to historical bias the majority of museums representing each period are concentrated in the South West, South East and East of England. Despite the period of prehistory on display these regions consistently account for the majority of period-specific displays. In contrast the West Midlands, East Midlands, North East and North West consistently display very small amounts of each period, particularly the West Midlands. This trend is illustrated in figure 5.1 which highlights that most prehistoric periods are represented in areas

with a higher density of museums. For example, as seen in figure 5.1, 27% of all Palaeolithic displays recorded were found in the South East, whilst only 2% were found in the West Midlands, 3% in the North East and 4% in the North West. Similarly, 25% of all Iron Age displays recorded were also found in the South East, only 4% in the West Midlands and North East and 5% in the East Midlands. This graph highlights that despite the differences in regional distribution of sites for each of these periods they are represented almost equally in each region, within one to two percentage points. There are slight observable differences between the representation of each period in each region but these are very slight. Overall, the percentage of museums representing each period were highly consistent in each region demonstrating that the sample bias to museums in the South and East of England produces a greater influence on the representation of periods than other factors such as the distribution of archaeological sites or history of excavation in each region. Thus to understand the differences in how these periods are represented in museums across England the following sections will focus on identifying general trends in how each period is represented across England rather than attempting to expose regionally-specific trends that may merely reflect the sample bias discussed above.

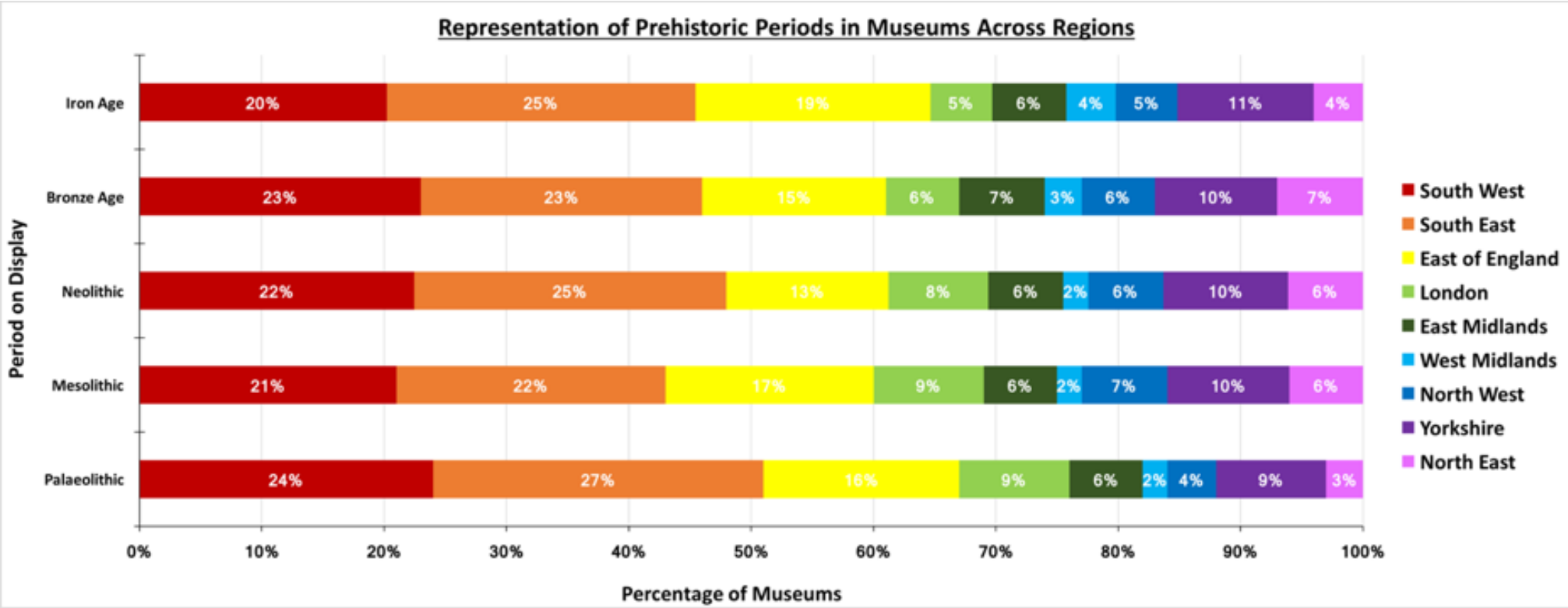


Figure 5.1. Graph illustrating the percentage of period-specific displays in each region.

5.3 Types of museums with prehistory displays

There are a diversity of types and sizes of museum represented in the museum visits database (Appendix B) and these various types of museums will greatly affect display conventions, the composition of the collections, narratives presented, opportunities for funding displays, curatorial expertise and types of interpretation utilised to present prehistory. To account for these differences the 173 museums recorded were categorised based upon the 6 types of museum recognised by the Arts Council Accreditation scheme (2020) and the representation of these museum types is illustrated in figure 5.2.

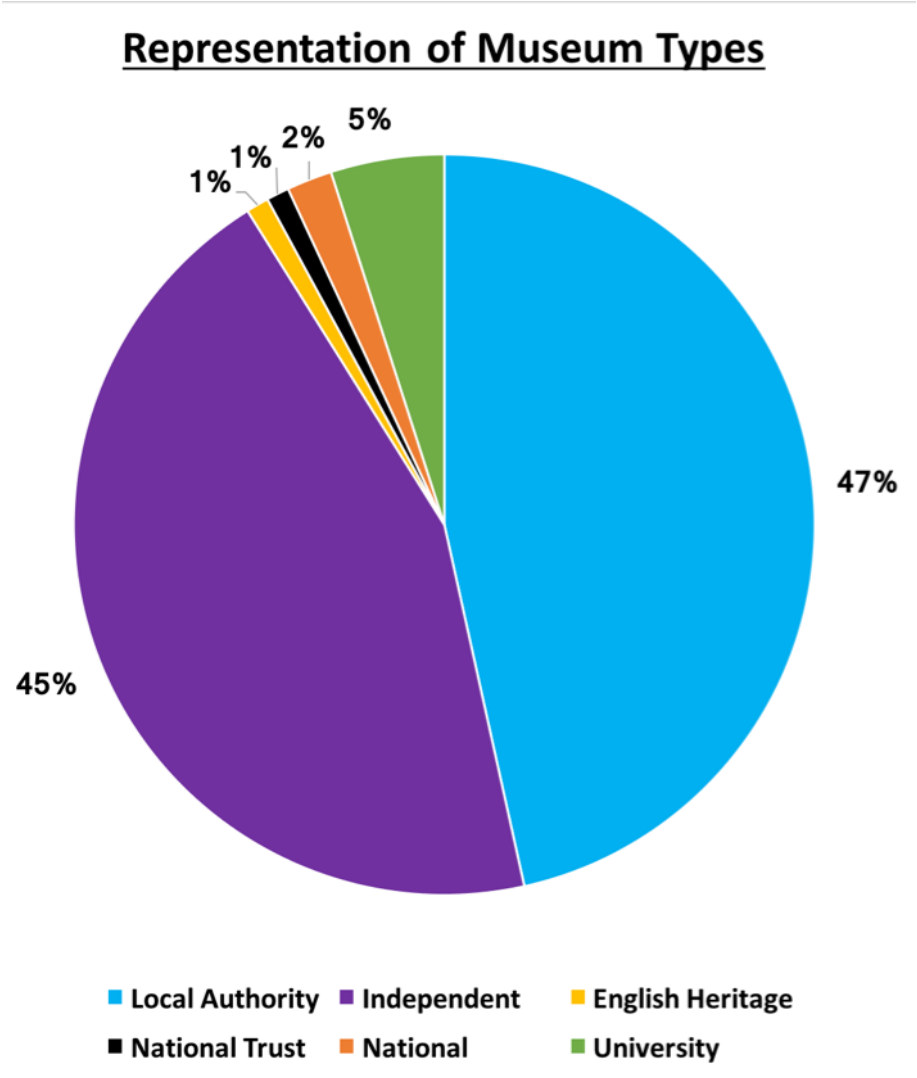


Figure 5.2. Pie chart illustrating the percentage of each type of museum within the sample of 173 museums recorded.

There are almost an equal number of local authority and independent museums represented in the sample of museums recorded. The category 'independent' museums is, however, quite homogenising, encompassing a multitude of different types of museum from entirely volunteer-run small institutions open a few days a week with low visitor figures like Callington Heritage Centre to site-based prehistory museums with high visitor figures, paid staff, open most days of the week such as Cheddar Gorge Museum of Prehistory. These categories are consequently not useful for interpreting differences in presentational trends. Furthermore, due to the prevalence of independent and local authority museums over other types of museum in England, and consequently within my sample of 173 museums, it was not possible to compare prehistory display trends between different types of museum. Instead the 13 variables of display will be utilised to identify the trends and variables governing the representation of prehistory across, rather than between different types and sizes of museum.

5.4 Representation of the 13 variables of display

To address research question 2a and identify the '*trends and variables'* governing the presentation of prehistory in museum displays across England the representation of the 13 variables of display were analysed. These variables were outlined in section 3.2.3 and were used to objectively record details for each of the 173 prehistory displays within the museum visits database (Appendix B). These variables can greatly influence an individual's museum experience and perception of prehistory as they dictate the aesthetics associated with the period and supporting interpretation used to convey prehistory, as well as mediating the viewing relationships between the visitor and the display. The representation of these variables across different types and sizes of museum will be analysed in this section to highlight trends in how design features, types of interpretation and objects selected for display are employed within the museum space to communicate prehistory to the public. The 13 variables of display employed in this visual analysis are summarised in table 5.1.

No.	Type of Variable	Variable description	Sub-section addressed in
1	**Pre-display variables**	Name of prehistory gallery/ section	**5.4.1**
2		Age of displays	**5.4.2**
3	**Design variables**	Amount on display	**5.4.3**
4		Type of material on display	**5.4.4**
5		Colour scheme	**5.4.5**
6		Type of lighting	
7		Display furniture	**5.4.6**
8		Spatial relationships between objects	
9		Text panels	**5.4.7**
10		Additional interpretation	**5.4.8**
11	**Holistic variables**	Representation of gender	**5.4.9**
12		Presentation of human remains	**5.4.10**
13		Overarching display narratives	**5.4.11**

Table 5.1. Summary of the 13 variables of display that will facilitate the identification of representational trends within prehistory displays.

5.4.1 Name of prehistory displays

The name of the galleries and gallery sub-sections that display prehistory can greatly influence how the period is perceived by visitors as they enter the gallery. The name of a gallery/ sub-section is used to convey the contents of the displays within a short name so that visitors know what is on display and can preferentially visit certain galleries over others. Capturing the nature of prehistory displays in a brief title that can simultaneously convey the contents of displays by using relatable language whilst also intriguing the interest of visitors to encourage them to visit the gallery is quite a challenge. Firstly, as already highlighted in Chapter 4, there is a lack of a shared language for understanding prehistory that museums can tap into. Furthermore, whichever words are used to capture the essence of the gallery, some words will be

quite loaded and already be associated with certain visitor assumptions and preconceptions. In this sense the terminology used in such gallery names sets visitor expectations before they encounter the displays and can either frame prehistory as an unrelatable distant and irrelevant period or a period that is an integral part of our identity and an important part of our collective past.

The term '*prehistory*' itself as previously highlighted by the visitor preconceptions discussed in the preceding chapter can carry with it rather negative connotations of a primitive distant period '*pre*' civilisation. Consequently, any galleries that explicitly refer to their displays as a *'prehistory gallery'* may serve to inadvertently prejudice their visitors adversely against prehistory. A more ambiguous framing may conversely intrigue the visitor and captivate their interest in the innate 'mystery' of prehistory, a topic of great visitor interest highlighted in sections 2.2.3 and 4.6. The phrasing and terminology that prehistory galleries utilise to frame the subject serve to mediate potential visitor interactions and interests in the period. To interpret what initial impressions gallery titles in contemporary museums convey requires an initial exploration of how the museums in the sample are framing their displays.

Within the sample of 173 museums recorded, 96 of the museums had identifiable gallery/ sub-section names that encapsulated the focus of the displays. These gallery/ sub-section names range from the names of individuals who have previously been involved/ had a great influence upon a museum such as '*The Balch Gallery*' at Wells and Mendip Museum named after the museum's founder, to simple explicit titles providing the geographical focus and a timeframe for the displays such as, *'European prehistory to AD 100'* at The Ashmolean, to captivating thematic tabloid-style headlines such as '*Stone axe, blood axe, conquest'* at the Dock Museum. Due to the range of terminology and words used in such gallery/ sub-section titles it was not appropriate to quantify the frequency of words used in these titles. Instead, to understand the common framing of the galleries the various titles were categorised based on the types of references they included into a series of thematic nodes. The percentage of museums in each of these thematic nodes across the 96 museums were then quantified and the results of this are summarised in figure 5.3.

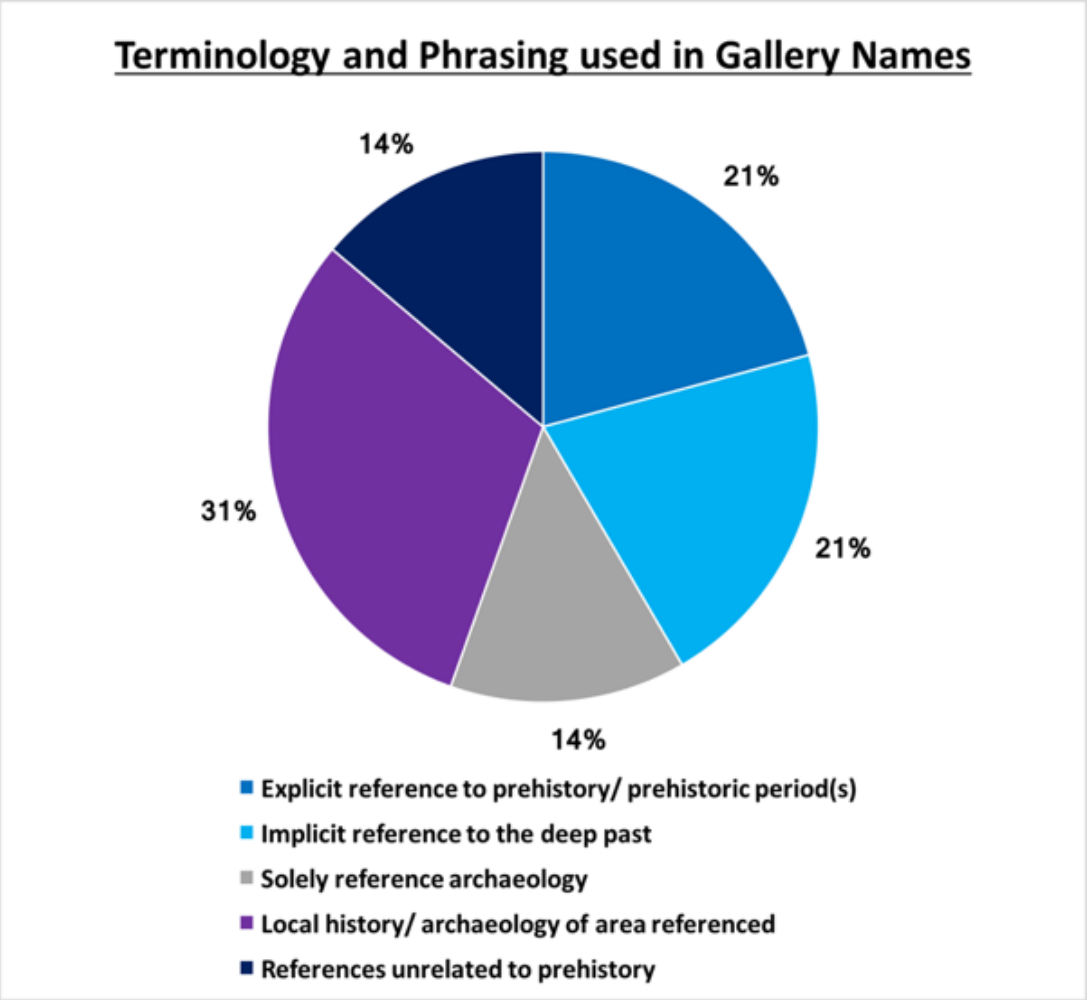


Figure 5.3. Pie chart illustrating the percentage of museums using prehistory gallery titles in each of the thematic nodes out of the 96 museums analysed.

Out of the 96 museums, 42% utilised some form of reference to prehistory in the title of their galleries/ sub-sections that present prehistory. An equal percentage of these references were either explicit, referring to the period, specific prehistoric periods or prehistoric sites or implicit, insinuating that the displays present our deepest past without referencing prehistory explicitly. In addition, 31% of titles referred less specifically to prehistory and focused more generally on the history/ archaeology of the local area, with titles such as '*Archaeology in Abingdon', 'Hove history'* and '*Tales of Tameside'*. These titles serve to situate the displays within their local geographical context and utilise this framing to relate the displays to visitor's interests/ understanding of their local area. Other museums were even less descriptive in their gallery/ sub-section titles providing an even wider scope by focusing on 'archaeology'

without specifying the geographical or temporal parameters of the displays with titles such as '*The archaeology room'* and '*Beneath your feet'.* An equal number of museums in the sample did not situate their displays within a historical or archaeological framing and provided named galleries that do not reveal anything about the contents of the room. There is thus great variability as to how prehistory can be framed in a museum context but the prevalence of 'archaeology' focused gallery titles serves to conflate prehistory with archaeology, an issue previously highlighted by Wood and Cotton (1999) and discussed in section 2.3.

5.4.2 The age of displays

The age of displays as highlighted in section 3.2.3 is a 'pre-display variable' that can dictate the presentation of prehistory as the design variables of display are subjected to changing tastes, curatorial trends, funding opportunities and archaeological theory through time. Before the design variables are analysed and trends in display styles are discussed it is therefore important to first understand the age of the displays in the sample of recorded museums. The various years of display creation and significant interventions were grouped into discrete age categories and each display was assigned one of these age categories to facilitate a quantification of its age. Some museum displays have had significant interventions in more recent times and consequently different parts of their displays date to different periods of time, which were accounted for. A summary of the number of displays in each age category are presented in figure 5.23.

Out of the 173 museums recorded, the date the displays were created were recorded for 135 of these museums. Within these 135 museums, 10 of them present a palimpsest of displays with some/ most of the interpretation dating to one period of time with extra additions/ interventions occurring more recently. There seems to be a lack of museums with older displays and this is perhaps partly due to sampling bias, as museums with less funding for staff and gallery refurbishments were less likely to respond to the enquiries made when selecting museums. Alternatively, the displays

may be outside of working memory, dating to before the current museum staff, there is not always an awareness or record of specifically when museum displays are created and consequently some museums were unsure when their displays were created and instead provided me with a general decade. The influence of National Lottery Heritage Funding (NLHF) in recent years on the expansion and development of museums is nicely illustrated by figure 5.4. The majority of prehistory displays with recorded dates were created relatively recently with over 50% created either between 2010-2014 or within the last 5 years. Only a very small proportion of the sample date to before the 1990s, a contrast to the assumption that prehistory displays are rarely updated and somehow more vulnerable to the static effects of museum displays than other periods. Perhaps this image of prehistory displays as outdated and archaic stems more from the tropes and design features utilised to situate the period and present it to the public, as emphasised by Moser (1998, 1999) and discussed in section 2.3. To further explore what messages these displays are portraying to the visitor the narratives of the displays themselves will be analysed through the discussion of the design variables and holistic variables recorded across the 173 museums.

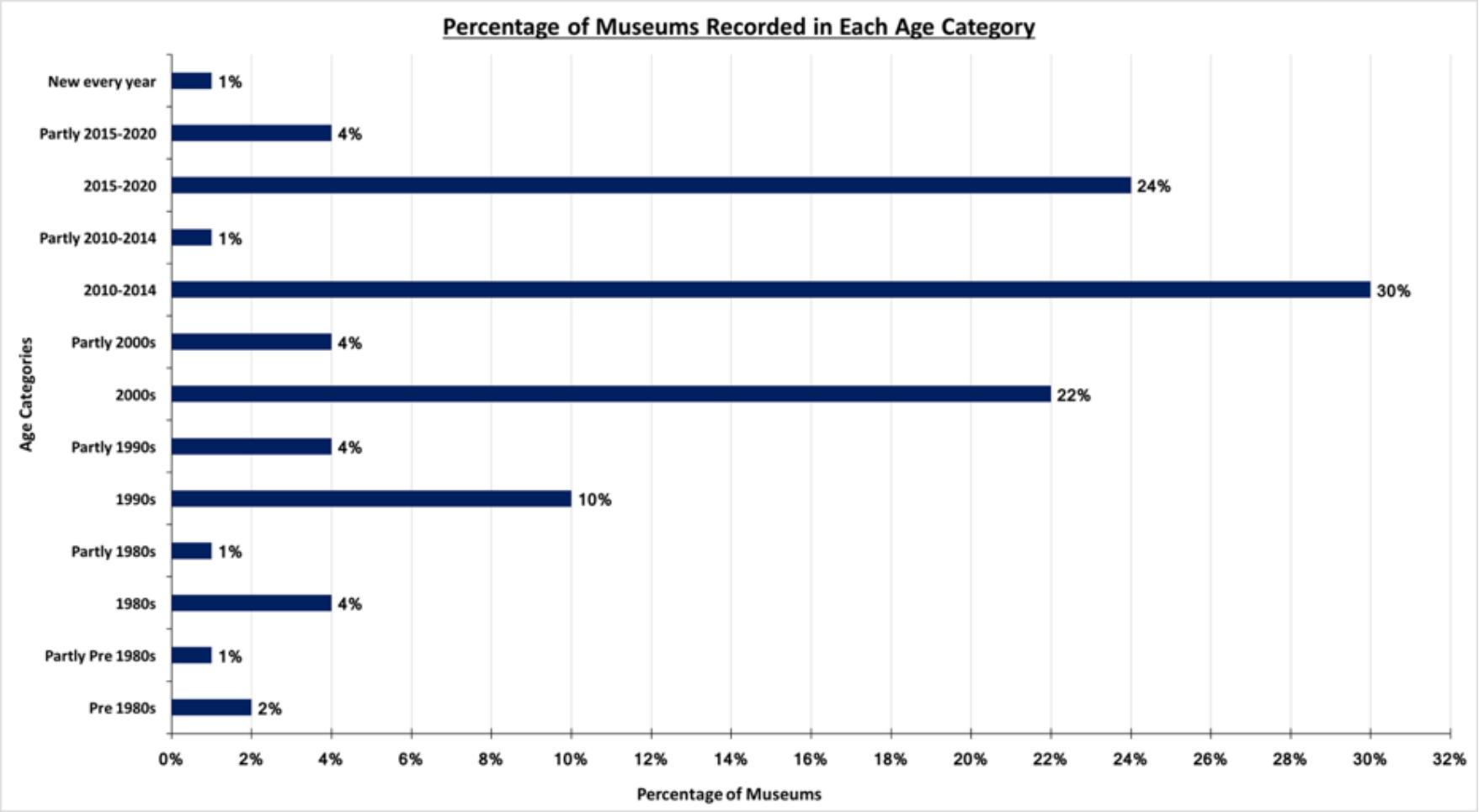


Figure 5.4. The percentage of museums recorded with prehistory displays in each age category from 135 museums with recorded dates.

5.4.3 The amount on display

The amount of prehistory on display greatly influences the amount of attention that visitors give to displays. After all the less material that is displayed, the less opportunities there are to engage with the period. Furthermore, if a museum selects to only present a case or less of prehistory and preferentially displays more cases of later historical periods it gives the visitor the misleading impression that this period is not as important as later periods. It can also be rather confusing to understand the temporality of prehistory if the displays take up less space relative to shorter time periods. Wood and Cotton (1999) have previously suggested that prehistory displays are generally given the least amount of display space and this section will explore whether such an inverse relationship between the time represented and amount on display exists. To interpret the amount of space devoted to prehistory the amount of cases/ rooms that display prehistory were calculated for each museum and a summary of the amounts on display are presented in figure 5.5. These categories of space were further analysed by grouping these various amounts into 4 quantity judgements based on the amount of space dedicated to the period. Displays which took up anywhere from most of a room to the entire museum itself were classified as presenting a 'high amount' of prehistory, whilst displays which took up 4-5 cases to half a room were classified as a 'medium amount', 2-3 cases as a 'low amount' and 1 case or less as a 'very low amount'.

From the 164 museums where information pertaining to the amount of prehistory on display was recorded the most frequent amount on display was '2-3 cases' worth of prehistoric material. This category is encompassed under the quantity judgement of a 'low amount' reflecting the expected trend for displays with prehistory to take up less space than other periods. This trend is further supported by the prevalence of displays that could be classified as presenting 'very low amounts' of prehistory, as 35% of the museum displays were categorised under this quantity judgement. Only 14% of museums could be classified as presenting a 'high amount' of prehistory.

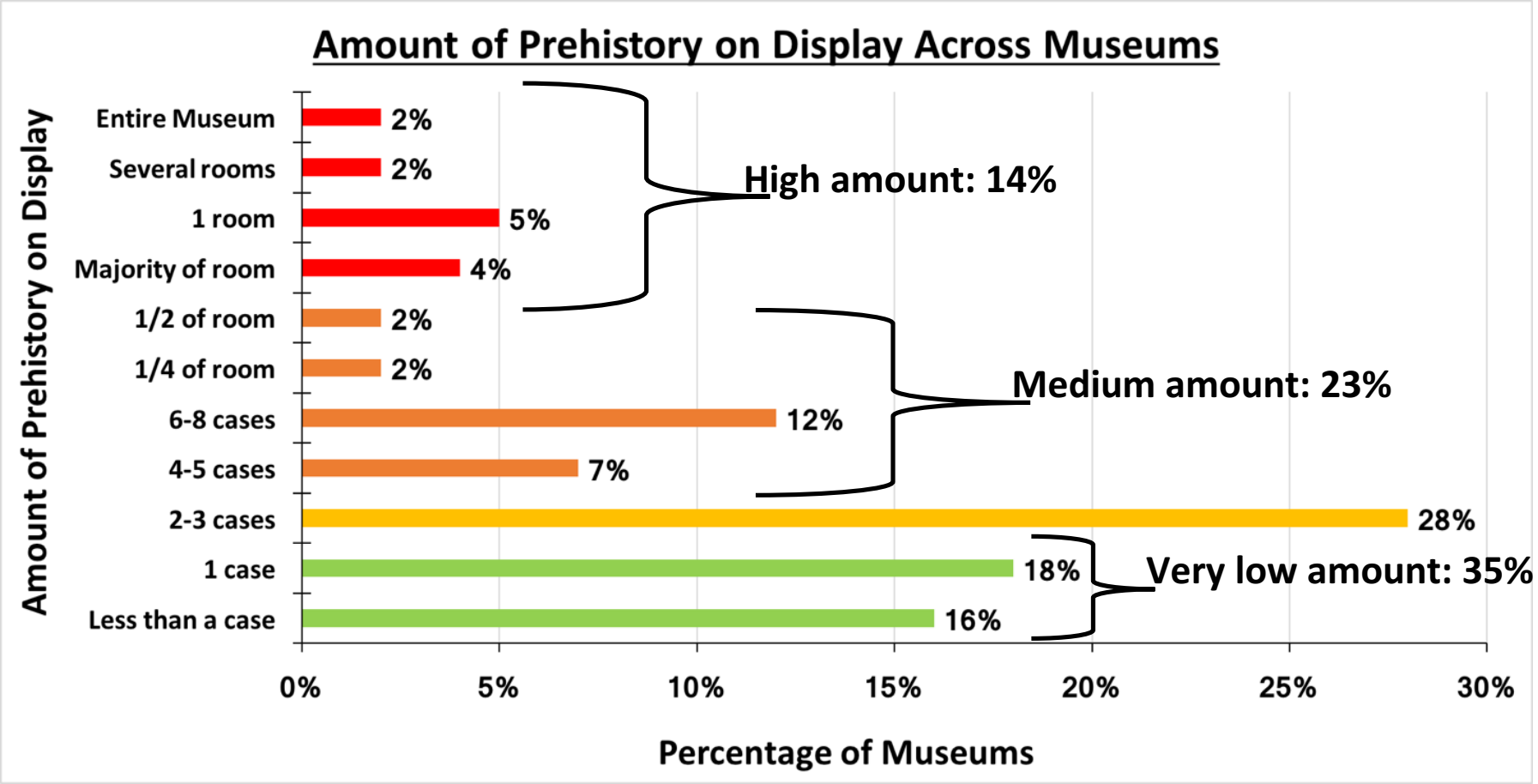


Figure 5.5. Annotated summary of the amount of prehistory on display across the 164 museums recorded.

To further understand the amount of prehistory on display the number of museums displaying each period were recorded and are summarised in table 5.2.

Period	Number of museums presenting the period
Palaeolithic	100
Mesolithic	100
Neolithic	139
Bronze Age	138
Iron Age	114

Table 5.2. Summary of the number of museums representing each period out of the 173 museums recorded.

The earliest periods of prehistory, the Palaeolithic and the Mesolithic are less frequently represented in museums than later periods and are both present in 100 of the 173 museums recorded. These figures further reinforce the geographical distribution of these periods in museum displays across England, outlined in section 5.2. The most well represented time period is the Neolithic which is present in 139 of the prehistory displays recorded, the Bronze Age is similarly pervasive and is displayed in 138 of the museums recorded, whilst the latest period of prehistory, the Iron Age is not as well represented as the Neolithic or Bronze Age, present in 114 museums within the sample. These displays do not, however, exist in a vacuum and are often incorporated into wider thematic displays. Overall across the 173 museums, 31% present prehistoric objects in cases alongside other archaeological material, 35% in general prehistory displays where the periods are not differentiated from one another and 3% alongside other archaeological objects with a focus on the Portable Antiquities Scheme and the 1996 Treasure Act. To highlight the associations often made between different periods within displays a summary of the number of these associations and their representation across the museums is provided in table 5.3.

Period	No. of museums presenting the period in cases alongside other periods	Details of multi-period displays
Palaeolithic	16	4 Palaeolithic/ Neolithic 12 Palaeolithic/ Mesolithic
Mesolithic	19	7 Mesolithic/ Neolithic 12 Palaeolithic/ Mesolithic
Neolithic	37	7 Mesolithic/ Neolithic 4 Palaeolithic/ Neolithic 26 Neolithic/ Bronze Age 1 Treasure Focus
Bronze Age	44	26 Neolithic/ Bronze Age 13 Bronze Age/ Iron Age 5 Treasure Focus
Iron Age	16	13 Bronze Age/ Iron Age 3 Treasure Focus

Table 5.3. The number of museums that present prehistoric periods in association with other periods and the relationships between these multi-period displays.

Palaeolithic objects are often presented alongside lithics from other prehistoric periods or within Stone Age focused displays alongside Mesolithic and Neolithic material and quite often the Palaeolithic is displayed in association with the succeeding Mesolithic period. The Palaeolithic is presented alongside the Mesolithic in 12 of the museums recorded, whilst 4 museums present the Palaeolithic in association with the Neolithic and an uncalculatable number of museums present Palaeolithic objects in ambiguous displays of prehistoric lithics with no associated contextual interpretation. In 19 museums the Mesolithic is presented alongside other periods, primarily treating it as a transitionary period that cannot be

differentiated from other Stone Age periods. Many museums did not even differentiate the Mesolithic objects on display from later time periods and ethnographic objects, presenting it within general prehistory displays, archaeology displays and lithic displays. Consequently, in the majority of museums the Mesolithic does not possess an individual identity and is often subsumed within broader narratives. A focus on displaying key transitions is also demonstrated by the 26 museums that present the Neolithic in association with the Bronze Age. To further explore the space dedicated to different prehistoric periods, the number [16]of cases used to present each period were calculated and are illustrated in figure 5.6.

[16]Cases were only included if they exclusively presented a particular period of prehistory. Many museums present periods together and these cases could not be included in the quantitative analysis of period representation.

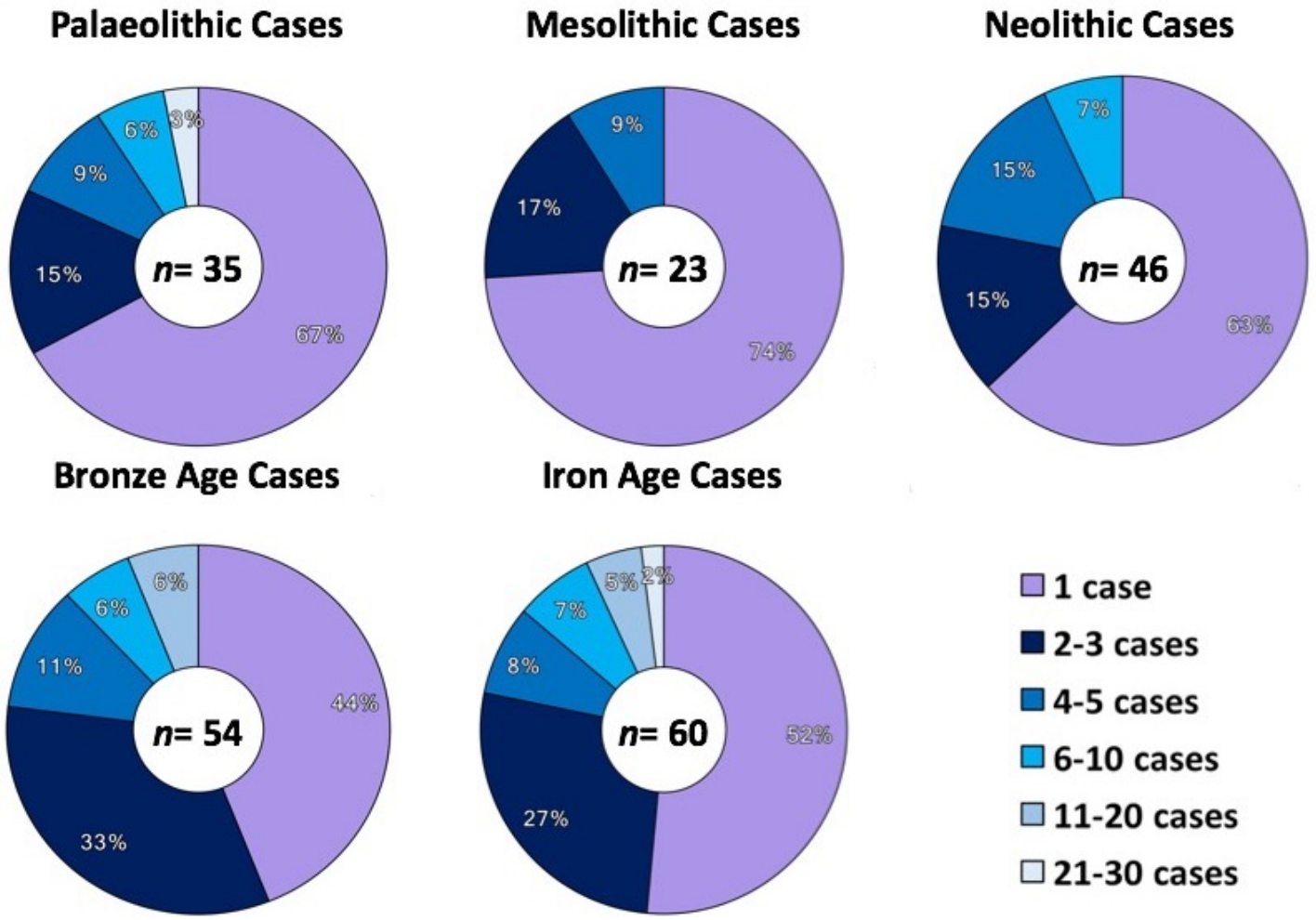


Figure 5.6. Pie charts illustrating the number of cases used to present each period of prehistory across the sample of museums that present each period individually.

For all periods, 1 case is the most popular amount of space dedicated to presenting the period, particularly for cases focusing exclusively on the periods of the Stone Age, with 63-74% of the museums analysed only using 1 case to present these periods, despite them encompassing the temporally greatest periods of time. In contrast only 44% of museums with cases focusing exclusively on the Bronze Age and only 52% of museums with cases focusing exclusively on the Iron Age use only 1 case. For both of these later periods 27-33% of museums use 2-3 cases and 22-23% use 4 or more cases, representing a far greater proportion of museums using a greater number of cases to present the Bronze Age and Iron Age than those presenting the Palaeolithic, Mesolithic and Neolithic. Placing a spatially determined pre-eminence on the prehistoric metal ages, imbuing the displays with a greater emphasis on the development and use of metal technology over stone technology that may convey to the visitor that these periods are more important than those characterised by their association with stone. Illustrating an inverse relationship between the amount of time represented and the amount of space used to present the period. The linear developmental narrative commonly used to present prehistory in conjunction with this imbalance in the amount of space dedicated to each period serves to place a greater developmental value on later prehistoric periods reminiscent of the linear colonial narratives used to present the evolution of human cultures that framed certain cultures at the bottom of this narrative as 'primitive' in contrast to the sophisticated and complex culture of Western society framed as the pinnacle of civilisation. This problematic narrative is being adopted to frame earlier prehistoric cultures as the 'primitive' cultures, 'othering' our deepest past and reducing it to a simplistic and unrepresentative stereotype. The extent to which such narratives are reinforced by the other design variables will also be analysed to address research question 2a and identify the trends and variables influencing the presentation of prehistory in museum displays.

5.4.4 Types of material on display

The selection and display of certain objects over others conveys a particular visual impression of prehistory to the visitor. The immediate visual response that visitors

engage in with museum displays is mediated by their own expectations and preconceptions and how these relate to the objects they are presented with on display. The grouping of particular types of materials and types of objects across different types of museums creates a version of prehistoric material culture that is perceived to be representative of the period. The nuances of archaeological evidence and the fragmentary nature of the archaeological record are difficult concepts to convey through the medium of display, consequently any object types or materials not present within displays are assumed to have not existed at this time. Visitor studies (Serrell, 1997, 1998; Davies and Heath, 2013) have emphasised that few visitors read text panels and consequently their perceptions of prehistory are primarily communicated visually and thereby influenced by the presence/ absence of certain objects in displays. Furthermore, the predominance of certain objects types and materials over others indicates to the visitor that these objects were the prevailing objects used in prehistory. In Chapter 4 it was revealed that the objects/ materials that respondents most frequently associate with prehistory include; rocks, stone, cave paintings, jewellery, tools, weaponry and pottery. Of these objects respondents expressly indicated an interest in cave paintings and jewellery, whilst they conveyed a lack of interest in pottery. The extent to which these associations are shaped by the predominant forms of prehistoric material culture presented in museum displays and whether these displays meet visitor interests will be analysed in this section.

To deconstruct the materially-situated version of prehistory currently presented in museums, the most prevalent objects/ materials presented in the sample of 173 prehistory displays were identified and grouped into object types. The percentage of museums presenting each of these object types identified were then calculated and it was revealed that 14 types of object were present in 10% or more of the prehistory displays analysed and the percentage of museums displaying each of these popular object types is illustrated in figure 5.7.

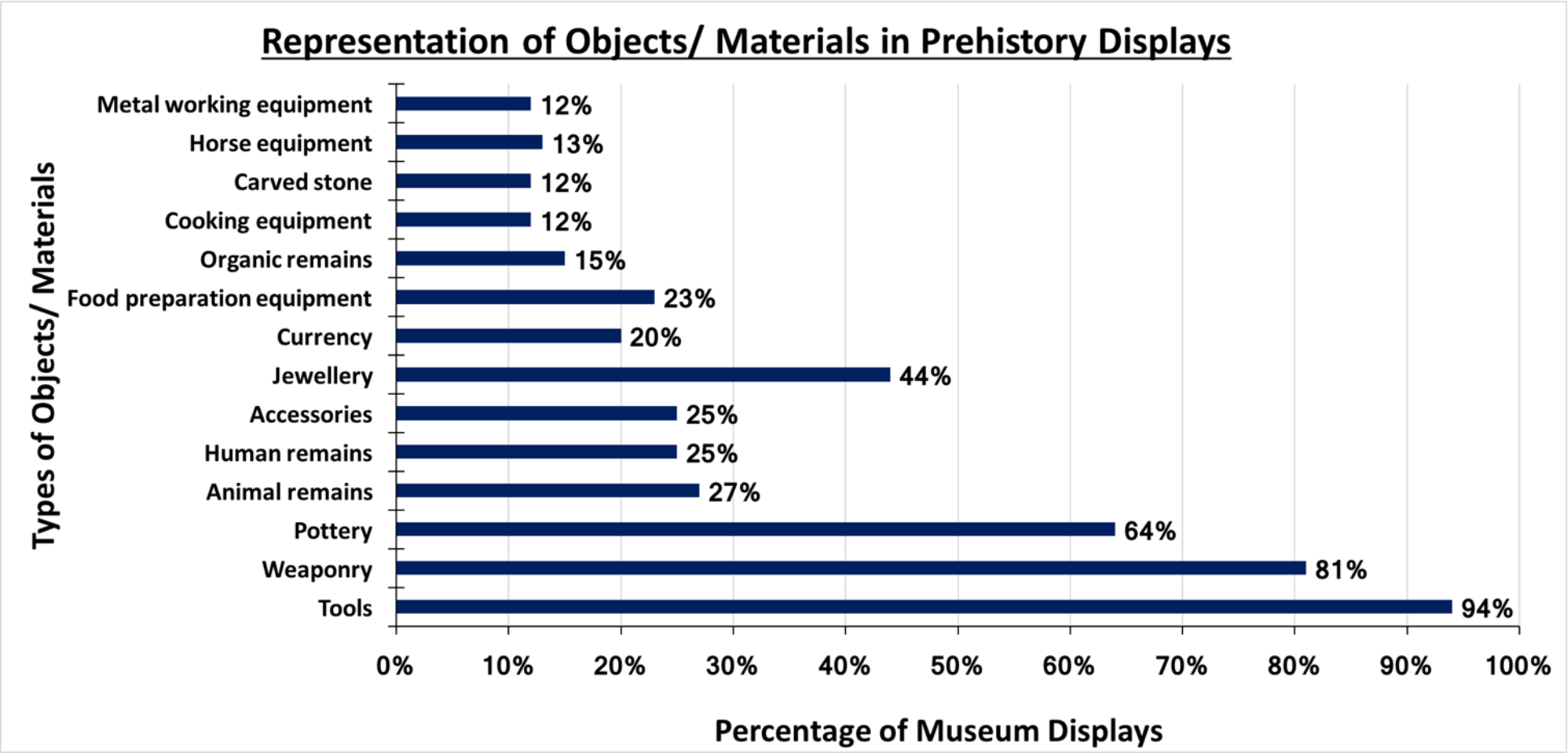


Figure 5.7. Graph illustrating the percentage of museum displays presenting different types of prehistoric objects/ materials from the 173 displays analysed.

Overwhelmingly the most prevalent type of prehistoric object on display in museums across England are 'tools'. This category was present in 94% of the museum displays analysed and includes everyday tools such as hand axes, specialist textile working tools, as well as agricultural tools. Considering the ubiquitous nature of such a broad spectrum of objects within the archaeological record the high number of displays presenting such objects is not surprising. The presentation of the ambiguously broad category of 'tools', also reflects the popular visitor associations of prehistory with 'tools' highlighted in Chapter 4. Weaponry, another popular preconceived object association with prehistory is also frequently presented in the museum displays analysed, reflecting a correspondence between preconceived associations and the material presented in displays. Perhaps indicating the influential role of these displays upon the public consciousness and expectations. This correspondence between visitor associations and the objects presented in displays is further supported by the 64% of displays presenting pottery and 44% presenting jewellery, two other object types that were frequently referenced by respondents in the first part of the questionnaire. Furthermore, the majority of these objects on display are made of stone, further reinforcing visitor associations of prehistory with 'stone/ rocks'.

The displays analysed thus appear to meet visitor expectations as to what a prehistory display looks like. Yet the extent to which the displays meet visitor interests is debateable as many museums present jewellery, accessories and carved stone appealing to visitor interests in decorative objects. Over half of the sample present pottery which the majority of visitors referenced as the least interesting type of prehistoric object. The taphonomically-driven pre-eminence placed upon stone, particularly in displays of earlier prehistoric material culture reinforces the widespread association that prehistory is characterised by stone. The diverse material repertoire of prehistory is presented in the displays analysed, particularly in displays focused on later prehistoric periods but objects made of stone and bone vastly outnumber these other materials of base metals, precious metals, wood, antler, ivory, shell, jet, amber, textile and leather, within the displays. The material culture associated with prehistory is therefore predominantly presented as a

homogenised materially-restricted repertoire that technologically, rarely goes beyond stone and bone.

To further expand on the predominant forms of material culture associated with prehistory identified, the prevalent types of objects/ materials used to convey each prehistoric period were also analysed. Within the sample of 173 museums recorded, 100 Palaeolithic museum displays, 99 Mesolithic museum displays, 139 Neolithic museum displays, 136 Bronze Age museum displays and 107 Iron Age museum displays could be visually analysed. To illustrate the prevalent types of objects/ materials associated with each period of prehistory the percentage of museums presenting different types of objects were categorised by period and are summarised in figures 5.8 and 5.9. The materiality of these objects was also calculated to understand the visual impression conveyed by these displays and the representation of these materials are provided in figure 5.10.

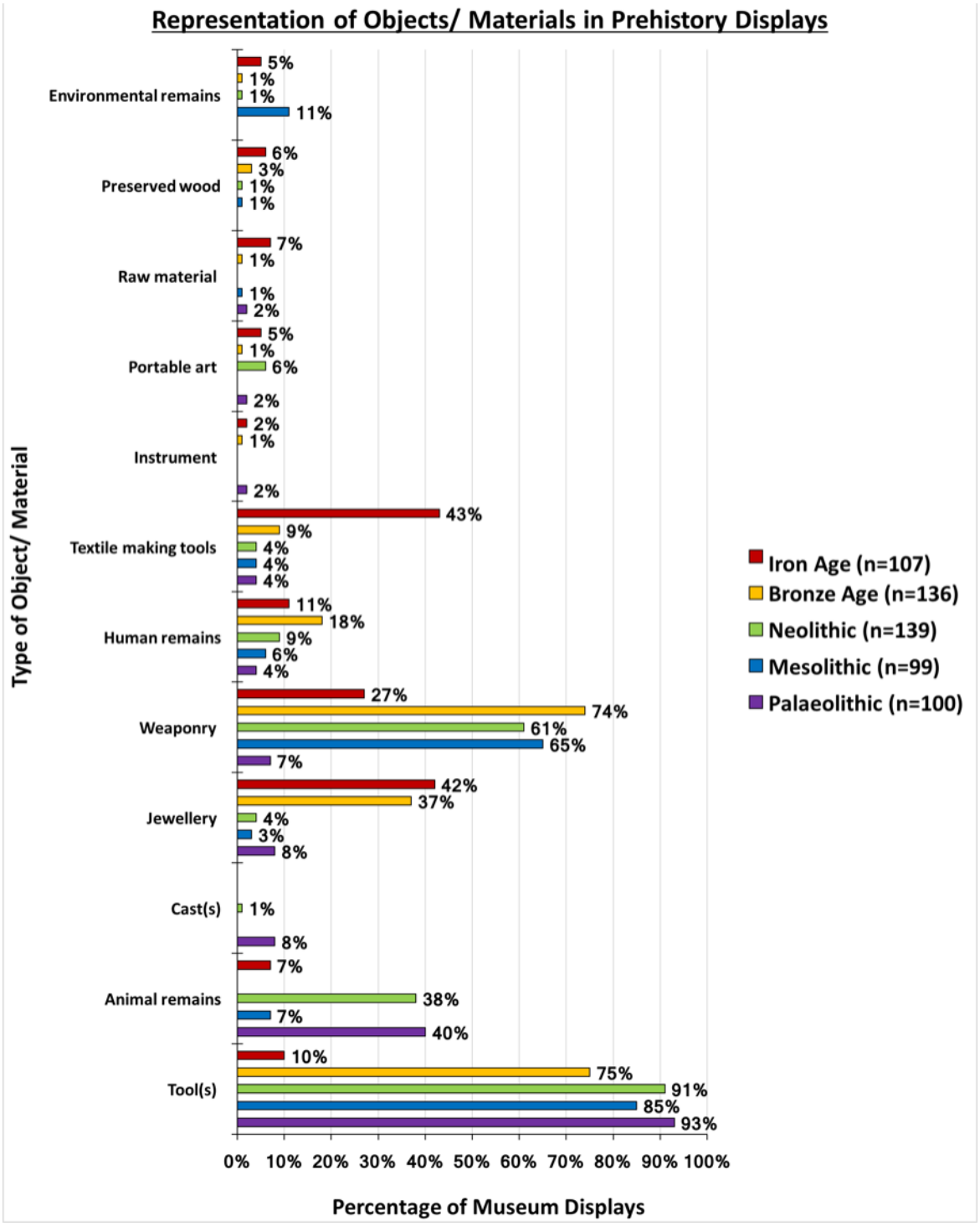


Figure 5.8. Graph illustrating the percentage of museum displays presenting different types of prehistoric objects/ materials divided by period.

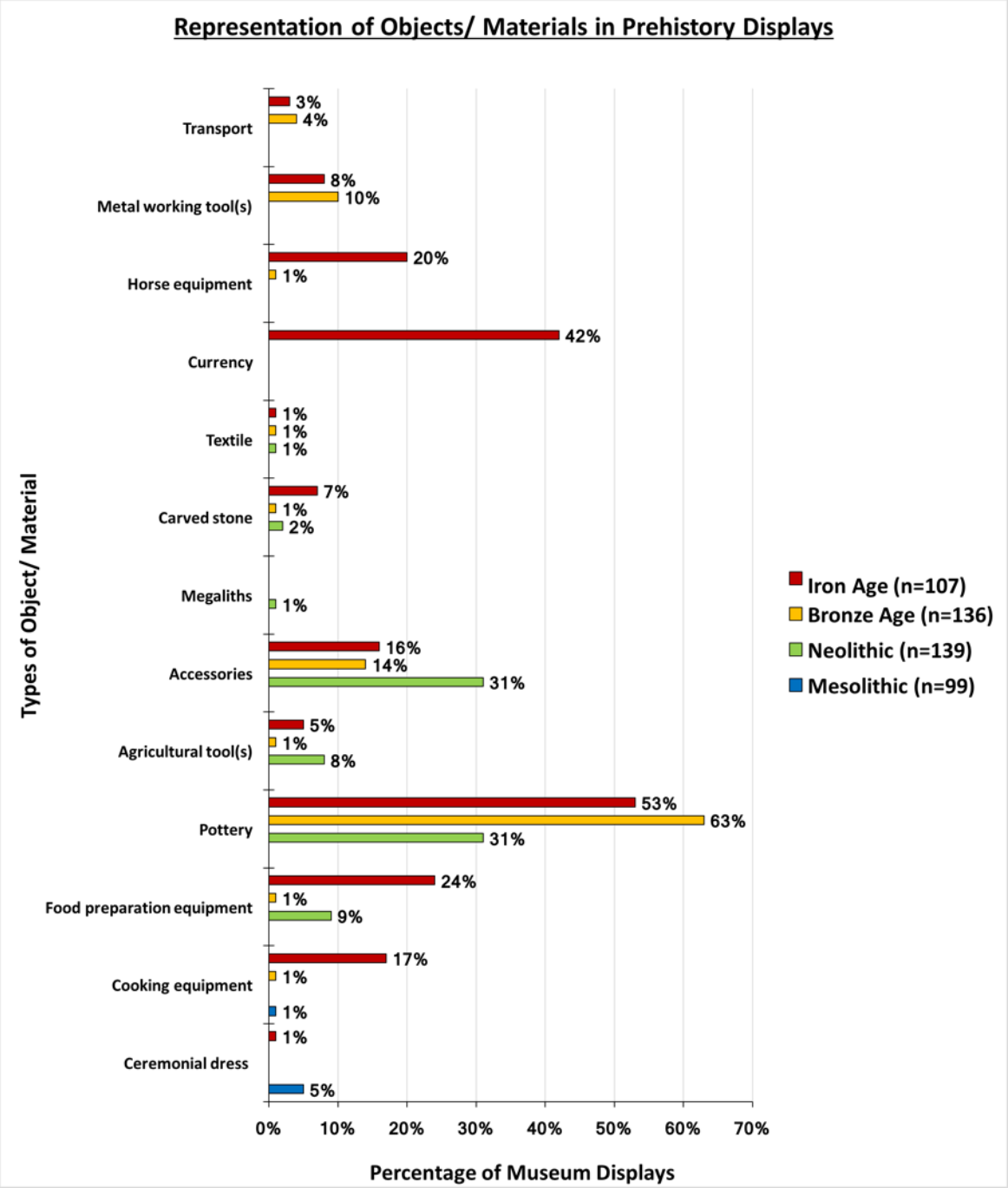


Figure 5.9. Graph illustrating the percentage of museum displays presenting different types of prehistoric objects/ materials, divided by period.

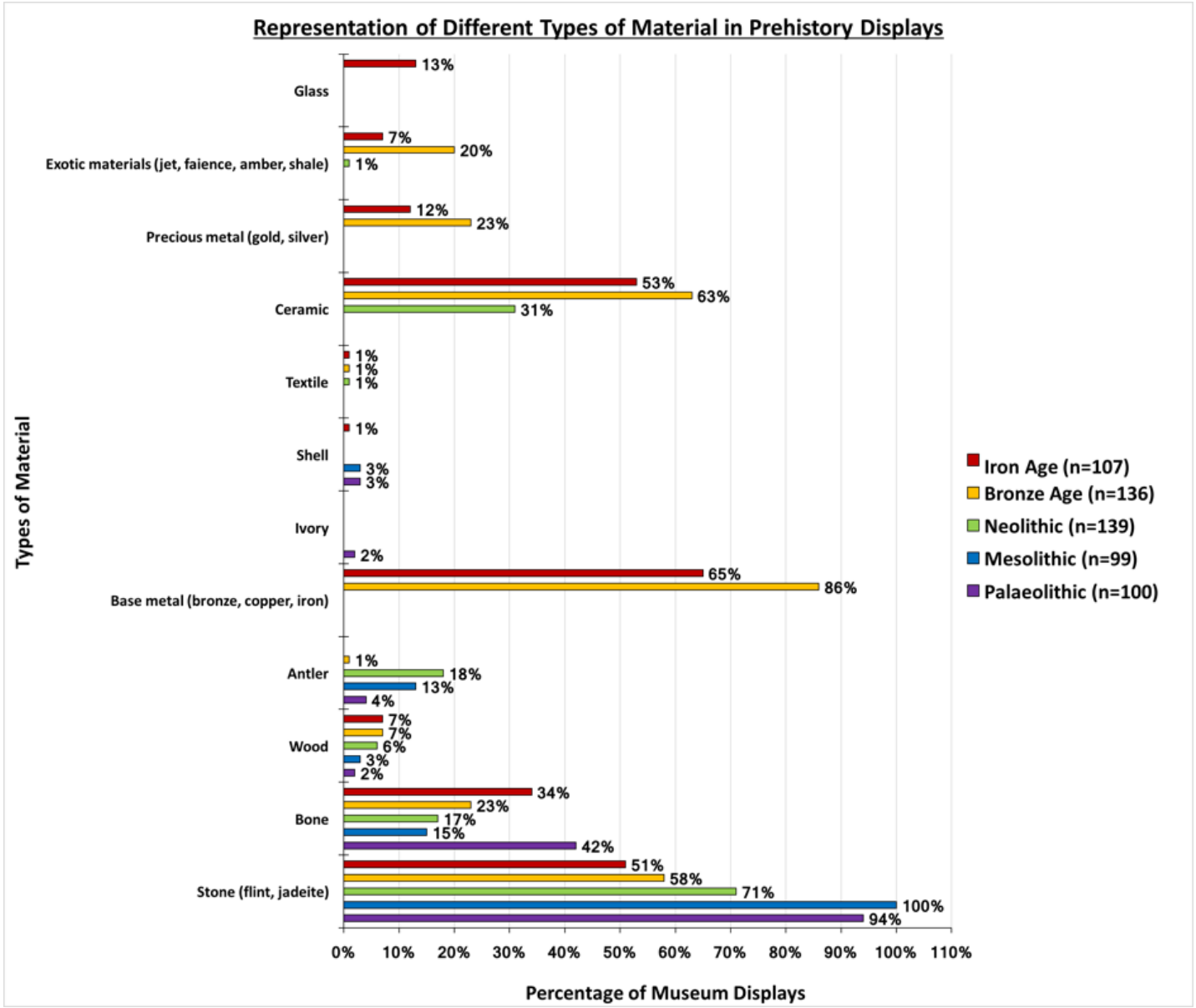


Figure 5.10. Graph illustrating the percentage of museum displays presenting different types of material, divided by period.

The most pervasive type of object presented across all period displays, except the Iron Age, are general use 'tools', particularly in displays focused on the periods of the Stone Age in which stone axes are a central feature of displays, creating a visual emphasis on stone that fulfils the linguistic expectations of the Stone Age. This stone tool is characteristic of the period and due to its materiality survives better within the archaeological record than organic tools which are far less frequent in museum displays. The hand axe is often viewed as synonymous with the Palaeolithic and chance finds of hand axes are often presented in museums without other Palaeolithic collections or in areas that were covered by ice, consequently hand axes were identified in 82% of all the Palaeolithic displays recorded. The overall frequency of stone tools further reinforces the technology focused narratives developed in the Palaeolithic displays and indicates technological continuity through time. Providing a consistent material focus on stone axes from the Palaeolithic through to the Neolithic. This technology driven narrative is further developed within Bronze Age displays which emphasise the greater reliance on bronze technology by displaying bronze axes in 74% of the displays. The Iron Age in contrast is less represented by general use tools and instead the focus shifts more to specialist tools such as textile making tools that are present in 43% of Iron Age displays, usually represented by weaving combs, spindle whorls and loom weights. The predominance of these objects in Iron Age displays also expands the material focus of displays with a greater proportion of bone objects on display, particularly bone weaving combs used in textile making, alongside stone objects particularly spindle whorls and quern stones, as well as base metals and ceramics. The greater diversity of the material repertoire associated with the Iron Age in displays is therefore perceived as representing a technologically more complex society, further reinforcing linear evolutionary narratives of prehistory.

Pottery as expected, was a popular feature in Neolithic, Bronze Age and Iron Age displays, most prominently presented in Bronze Age displays focused on the Beaker culture and changes in burial practices and tool technology. The material culture on display shifts from an emphasis on everyday tools in Stone Age displays to a greater focus on more elite objects such as jewellery and accessories made of precious metal

and exotic materials in the metal ages. Jewellery is rarely seen in Palaeolithic, Mesolithic or Neolithic displays but is present in 37% of Bronze Age displays and 42% of Iron Age displays. The greater focus on such decorative items in later prehistory further reinforces the spatially determined pre-eminence placed upon the metal ages as more 'sophisticated' periods. This greater emphasis on elite items is also indirectly demonstrated by the greater proportion of Bronze Age and Iron Age displays, presenting human remains which are usually framed within the context of elite burials and prestigious grave goods. Furthermore, the diversity of Iron Age objects in displays presents more aspects of daily life than the other periods. It is only in Iron Age displays that cooking equipment, horse equipment, currency, carved stones and food preparation equipment become popular features of displays. These objects present a more complete image of life in prehistory compared to the simplistic looking tools associated with the Palaeolithic and Mesolithic.

Weaponry is most prevalent in Bronze Age displays, representing 74% of displays due to the greater focus on technological complexity and development of metal tool technology that characterise such displays. Weaponry is also, a popular feature in Mesolithic and Neolithic displays due to the pervasive nature of microliths and arrowheads in most museum collections. Microliths in particular are present in 80% of the Mesolithic weaponry displays, as they are the characteristic tool of the Mesolithic their presence was expected to be quite high within the displays. Unusually, organic remains were slightly more prominent in the sample of Mesolithic displays due to the better preservation of certain key sites such as Howick, and the waterlogged sites of Star Carr and Blick Mead where organic remains including birch-bark rolls and hazelnut shells have survived and contributed to several museum collections and their displays. These objects also feed into the narrative of hunting and gathering that is often used to convey the Mesolithic.

Animal remains are popular in both Palaeolithic and Neolithic displays with Palaeolithic displays focusing on Pleistocene faunal remains and Neolithic displays focusing on domestication. Pleistocene faunal remains in Palaeolithic displays are often framed within the natural world alongside or within natural history displays.

There are only 4 museums that present human remains from the Palaeolithic and this lack of physical human presence in combination with the lack of museums using casts/ 3D prints of hominins and the comparatively larger number of museums displaying animal remains serves to dehumanise this period of our earliest history, framing it within the natural world, emphasising an animalistic 'primitive' version of our past. Such an impression undermines everything we know about this important and expansive period of time. Despite the supporting textual interpretation used in these displays that convey the complex nature of tool production and strategic hunting practices employed by Palaeolithic humans the initial visual impression visitors receive from the objects on display is a contrasting image. It does not, however, appear to influence their preconceptions as discussed in Chapter 4, the primitive caveman stereotype is less apparent in visitor understandings of prehistory but animals and the environment feature prominently in visitor preconceptions, perhaps influenced by these nature-oriented representations of the Palaeolithic and Mesolithic.

Apart from tools and animal remains there are not any other seemingly popular objects that are used in more than 10% of the Palaeolithic displays presenting a rather restricted repertoire of Palaeolithic material culture. There are a small number of museums that use casts of hominin skulls or even occasionally full skeletons to enable them to present an evolutionary narrative despite a lack of fossil human remains in their own collections or sometimes alongside fossil human remains if they happen to have some in their collection such as the Natural History Museum (NHM) and TQ which present both replica remains alongside original remains. The material repertoire associated with the Mesolithic is equally restricted to a focus on tools, weaponry and environmental remains. The materially restricted Palaeolithic and Mesolithic displays further situate these periods at the bottom of the prevailing linear narratives used to convey prehistory, visually communicating a traditional primitive stereotype of the deep past.

Unsurprisingly, stone, particularly flint represents the predominant material type presented in Stone Age displays, particularly Mesolithic and Palaeolithic displays

where this material is presented in 100% and 94% of displays respectively. The prevalence of stone objects was expected due to its durability through time and reliance on stone tool technology that characterises the periods. Bone is also quite a popular material on display, mostly animal bones as previously highlighted. A very small percentage of other organic materials are represented in Palaeolithic displays with only 2% of Palaeolithic museum displays presenting wooden objects such as wooden spears and only 4% displaying antler objects including incised reindeer antler and antler projectiles. Such material would have been more pervasive in Palaeolithic material culture but due to preservational issues rarely survives in the archaeological record. Despite the predominance of lithic tool assemblages in museum collections it is still possible to incorporate broader narratives into displays utilising audio-visual forms of interpretation. The use of additional forms of interpretation such as 3D printing enable museums to display organic objects, objects of art that are only present in specific museums whilst paintings, illustrations and photographs can be utilised to provide the richer contextual information of life in our deepest past. It is therefore possible to present more complex narratives of prehistory that go beyond a focus on tool technology, developing in complexity through time.

5.4.5 Colour scheme and lighting

Museums are inherently visual arenas that mediate the exchange of ocular information between the viewer and displays, consequently colour plays a vital role in these visual experiences. Colours have a powerful emotional and subconscious effect on our perceptions of our environment and thus the prevalent colours utilised to present prehistory can greatly influence visitor perceptions and associations with the period. The psychological process of synaesthesia imbues certain colours with certain emotions, feelings, memories and associations (Walker and Chaplin, 1997:18). These colours can be enhanced and heightened with the use of different types of lighting and consequently both design variables of colour scheme and types of lighting will be analysed in this section.

Colour scheme

The background colours of cases, supporting text panels and the walls of the space can either enhance the innate colour of objects on display or overwhelm the objects. According to colour theory, colours at opposite sides of the colour wheel when situated together are complementary and give the appearance that the colours are brighter. If colours are situated close together within the spectrum then the overall visual effect is far more subdued. The concept of complementary colours could be applied to our understanding of visitor attention in museums and perhaps explain why certain colours are more captivating than others. Due to the nature of prehistoric materials, their preservation and the taphonomic effects of the environment, most objects are either dark green, dark brown, russet or dark grey/ blue in colour. To heighten the chromatic contrast with these predominantly warm earthy colours would require museum displays to employ cooler colours of purple, blue and aquamarine in displays. Figure 5.11 illustrates some of the general colours associated with common types of prehistoric materials and the opposing colours that could be utilised in displays to enhance the aesthetic qualities of materials.

Furthermore, every colour has its own associations within the context of display and the effect of colour on the framing and reception of objects is further enhanced or muted through the use of lighting so the interplay between these variables of display need to be considered together. Firstly, to understand which colours are most often associated with the past and colouring visitor perceptions, the predominant colours used on the walls framing prehistory displays and the colours used within the cases were identified and the representation of these colours across the museums are summarised in figures 5.12 and 5.13.

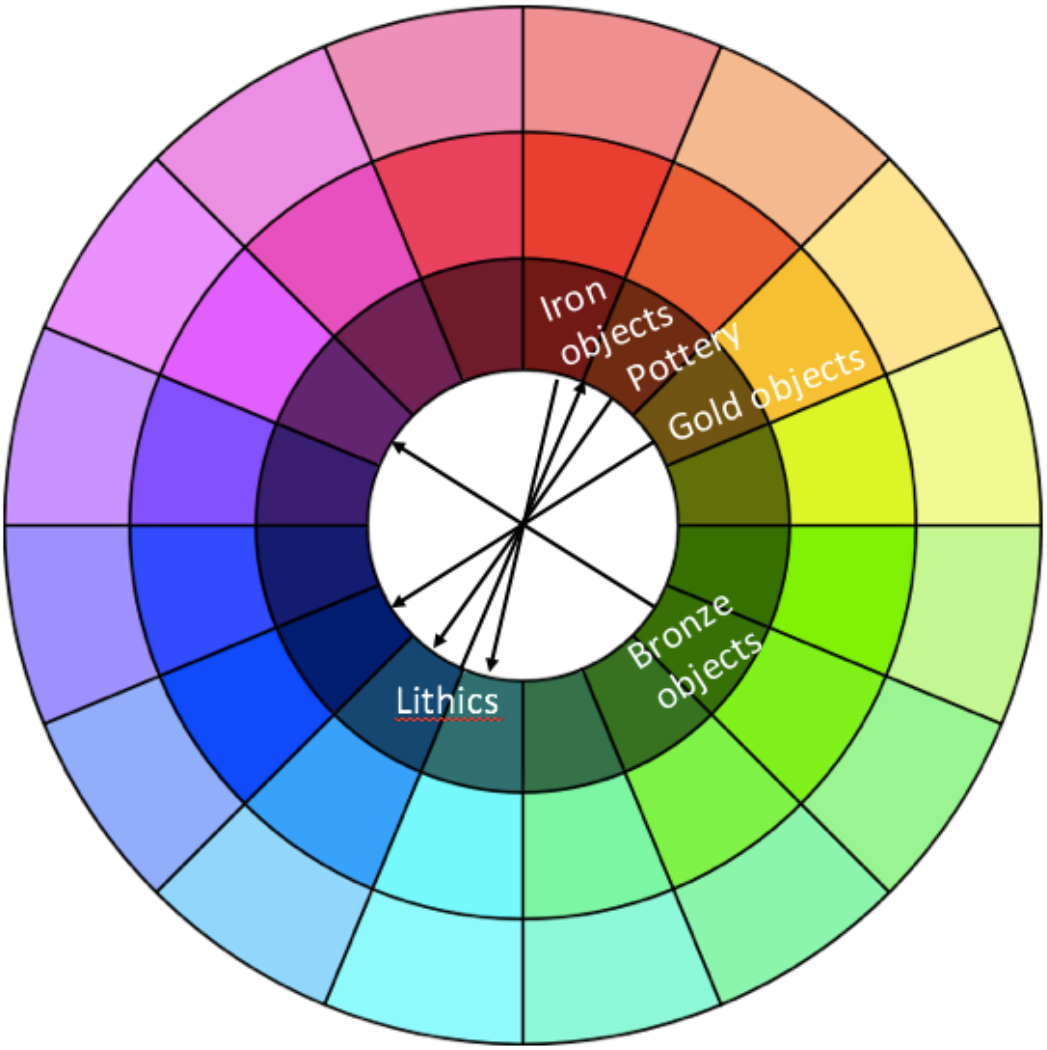


Figure 5.11. Colour wheel annotated to highlight the predominant colours of prehistoric material and their corresponding complementary colours.

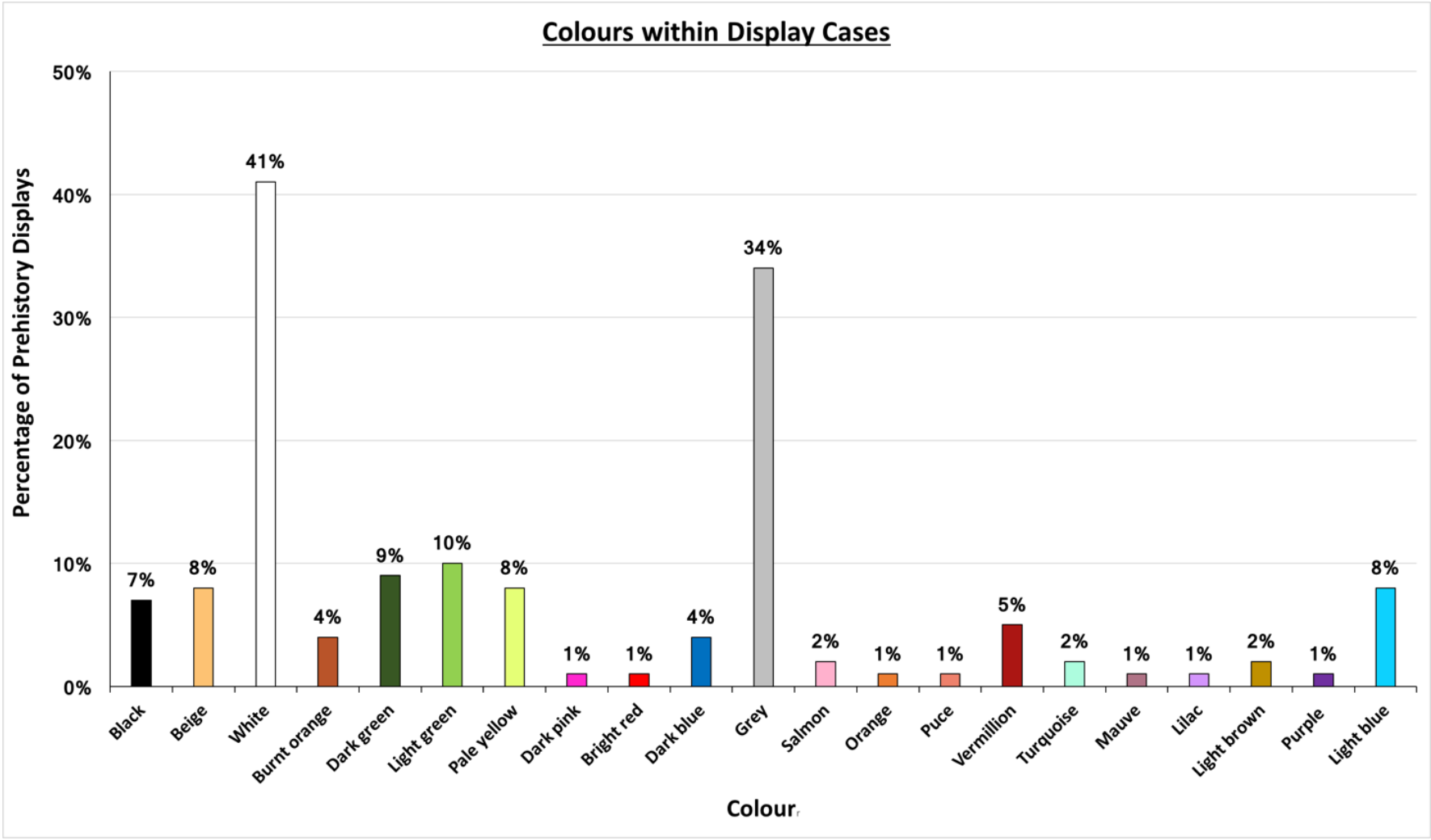


Figure 5.12. The representation of colours within prehistory display cases across the 166 museums with colours recorded.

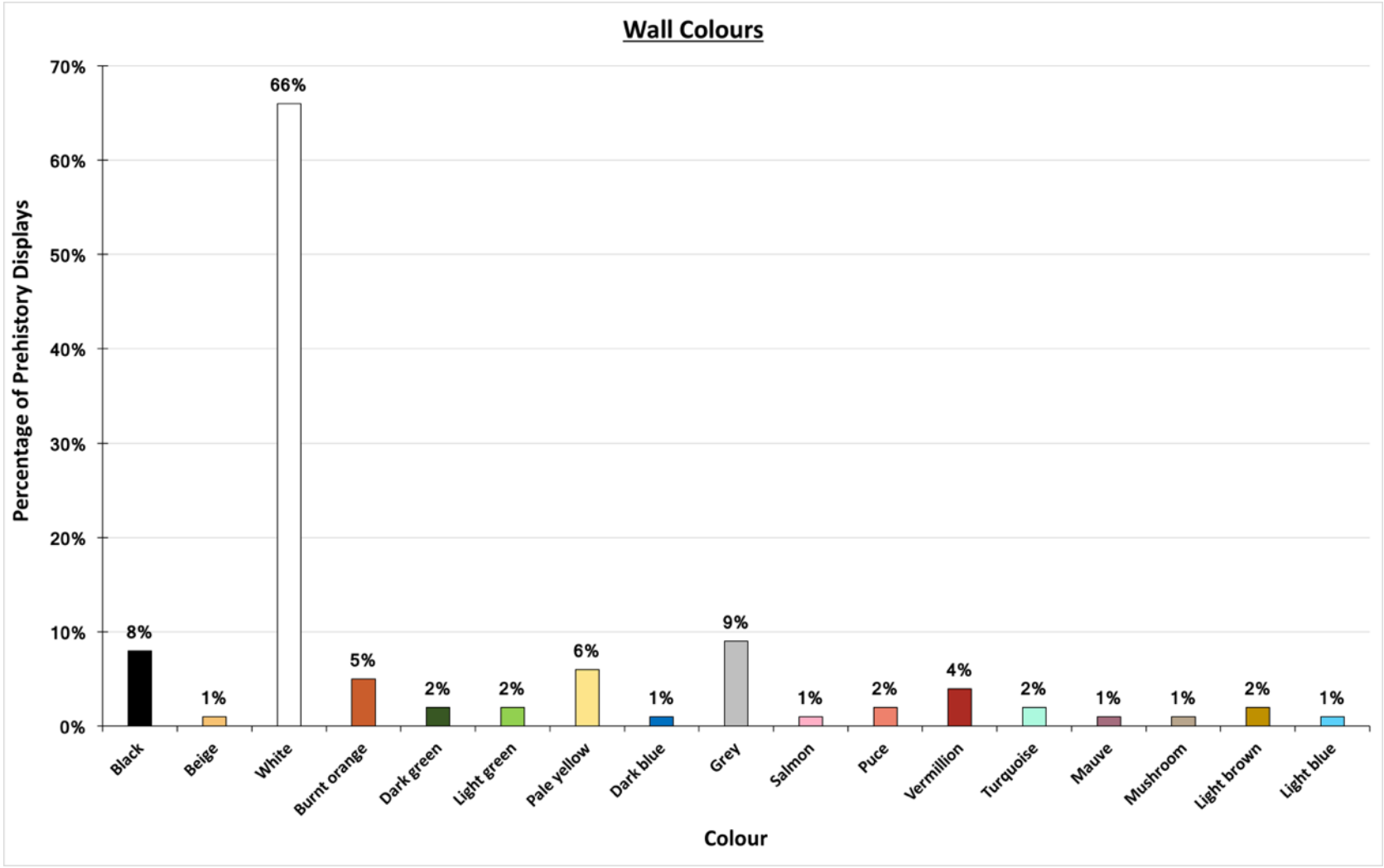


Figure 5.13. The representation of colours utilised on the walls of prehistory displays across the 126 museums with colours recorded.

The most prevalent colour used both inside and outside of cases is the rather neutral colour white which is often employed to emphasise the colour of objects and to enhance the brightness of displays, particularly in museums with a greater reliance upon artificial light sources. Only 9 of the museums with white displays possessed a source of natural light and consequently it appears that the majority of museums in the sample are monopolising the brightening effects of the colour to enhance the vibrance of their displays. White is also used frequently in association with the colours brown and green reinforcing a very nature-oriented aesthetic. Grey is the second most popular colour employed both within and around prehistory cases and performs a similar role to white creating a neutral backing colour that features more prominently within display cases than on the walls of a gallery. From figure 5.13 it is also quite apparent that wall colours are fairly conservative and rarely utilise more vibrant and pigment-rich colours. Within display cases, although 75% of the backing materials and boards used in cases are either white or grey, there are quite a few earthy colours also utilised that feature less prominently within the sample. Green is present in 19% of the sample with both light and dark shades of equal popularity, whilst beige/ yellow colours are present in 16% of the prehistory displays. These colours are often associated with nature and are frequently present alongside supporting audio-visuals focusing on the environment. Out of 49 museums with green-based displays, 32 of these displays were associated with landscape-oriented visuals reflecting the 'garden of Eden' trope, historically used to frame prehistory as highlighted by Moser and Gamble (1997) in their critique of prehistory dioramas discussed in Chapter 2. Furthermore, as highlighted by figure 5.11, it is difficult for the muted often brown or grey objects that characterise most prehistory collections to stand out against such a colour. The British Museum uses green to differentiate the Iron Age displays from the preceding Neolithic/ Bronze Age displays and as highlighted in figure 5.14 when used as a background colour for Iron swords does little to visually capture the visitor's attention. One of the Iron Age displays, however, instead of a forest green utilises the complementary colour blue as the background colour. This lighter and brighter colour is used to present the shiny gold Snettisham torcs and serves to heighten the colour contrast so the objects stand out and appear brighter. The effect of the backing colour behind objects can clearly be seen in the

comparison between figure 5.15 and figure 5.16 where gold torcs are presented against a dark green background, as well as a light blue background

Figure 5.14. Photograph of a display of Iron Age swords presented against a green background at the British Museum (McDowall, 2017).

Left; Figure 5.15. Photograph of gold torcs against a green background on display at the British Museum (McDowall, 2017).

Right; Figure 5.16. Photograph of gold torcs against a brighter blue background on display at the British Museum (McDowall, 2017).

Figures 5.14 and 5.15 clearly demonstrate how objects can almost get 'lost' amongst the colour used as the background, even though the objects on display are themselves naturally quite shiny their setting can still subdue their visual impact. However, even with prehistoric material that is rather muted in colour utilising brighter colours in displays doesn't necessarily negate this effect, as exemplified by the use of yellow displays at NLM and Lawrence House (figures 5.17 and 5.18). From figure 5.17 it is apparent that the bluey/ green bronze artefacts and particularly the beige pottery are rather subdued set against the bright yellowy/ orange backdrop. At Lawrence House (figure 5.18) the beige Bronze Age cremation urn is rather camouflaged against the pale yellow walls in the gallery. The annotated colour wheel (figure 5.11) further illustrates that yellow is too close to beige and bluey/ green in the colour wheel to act as a complementary colour for these objects.

Figure 5.17. Photograph of the Bronze Age display at North Lincolnshire Museum (McDowall, 2018).

Figure 5.18. Photograph of the Bronze Age display at Lawrence House Museum (McDowall, 2017).

Blue can also be a popular choice of colour in prehistory displays with 14% of museums using the cold colours of turquoise and blue to contrast with the relatively warm colours of prehistoric objects. The visually enhancing power that this colour can facilitate is exemplified by figure 5.19 which depicts the MoL's brightly-lit blue river wall. The combination of directed spotlights and the light colour blue as a background serves to highlight the bronze weaponry in such a way that certain objects look like they are glowing.

Figure 5.19. Photograph of part of the River Wall display of prehistoric weaponry found in the Thames in the Museum of London (McDowall, 2017).

Types of lighting

To further understand the visual impression that prehistory displays convey to visitors requires an exploration of the types of lighting used alongside displays. In combination with the predominant colours in the gallery, lighting can serve to highlight certain objects/ cases or direct visitor attention to certain objects/ details of objects by providing dramatic contrasts between the illumination of certain objects and darkness of the rest of the space. This style of dramatic lighting can be seen at Tullie House Museum where the rock art on display is lit by spotlights to highlight the motifs against the generally dark space (figure 5.20). At Norwich Castle Museum contrasting lighting is used to enhance the visual impact of the shiny gold jewellery on display (figure 5.21). Lighting can also enhance the brightness and visibility of displays or serve to obscure displays within darkness decreasing the readability of text panels. The impact of overly dark displays was experienced in the Barn gallery at the Alexander Keiller Museum (figure 5.22) where the area itself was dark in colour with minimal lighting as bats live in the space. This darkness was further exacerbated by the lack of working lights and consequently text panels were very difficult to read in certain areas.

Figure 5.20. Photograph of the lighting contrast provided by directed spotlights and surrounding darkness at Tullie House Museum (McDowall, 2019).

Figure 5.21. Photograph of the contrasting lighting used to highlight the shiny gold jewellery on display at Norwich Castle Museum (McDowall, 2017).

Figure 5.22. Photograph of the dark Barn gallery at the Alexander Keiller Museum (McDowall, 2017).

Within the sample of 173 recorded museums the types of lighting at only 82 (47%) of the recorded museums could be established. The types of lighting could be categorised into 5 broad categories of lighting type including; 'natural lighting' provided by windows, 'in-case lighting' provided usually by either in-case spotlights or lit panels above, below or along the sides of the case, 'backlit photographs', 'spotlights in the ceiling' and 'general room lighting' which encompasses all types of ceiling/ wall lights that are not directed spotlights. Due to conservation requirements for certain materials it was expected that there would be a greater reliance upon sources of artificial light that can be controlled and this certainly seems to be the case. Across the 82 museums with lighting types recorded 76% of the museums utilised only artificial sources of light, in contrast 23% of museums utilise a combination of natural and artificial light sources and just 1% rely solely on natural light to brighten their displays. The representation of the different types of lighting are further summarised in figure 5.23.

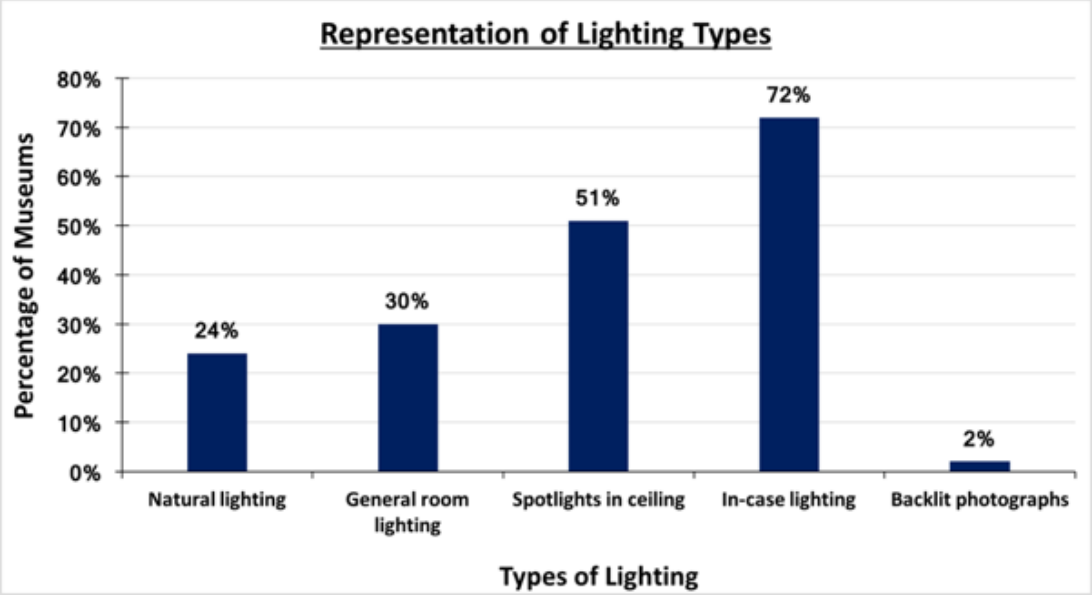


Figure 5.23. Summary of the representation of lighting types across the 82 museums with recorded lighting types.

The most popular type of lighting are forms of in-case lighting which account for 72% of the types of lighting recorded. The use of spotlights in the ceiling are also quite pervasive with 51% of museums using pointed spotlights to further direct visitor's

attention to certain displays. To further analyse the visual impression communicated to visitors the representation of the design variables of display furniture and spatial relationships between objects were also evaluated across the museums.

5.4.6 Display furniture and spatial relationships between objects

To further investigate the trends and variables governing the presentation of prehistory in museum displays across England and fulfil the second research aim of the thesis requires an analysis of the overall aesthetic of the prehistory on display. This aesthetic, as previously emphasised in section 3.2.3 is produced through a combination of display variables, the space dedicated to prehistory, material on display, colour schemes and types of lighting utilised all impact upon visitor's visual perceptions and have already been discussed in the preceding sections. The design variables of display furniture and spatial relationships also dictate the visual impression communicated to the visitor and will be analysed in this section. The types of display furniture chosen to highlight certain objects and frame the objects in the cases influence the spatial relationships between objects, whilst the visually apparent density of material on display also affects the spatial relationships between objects and how the material culture of prehistory is perceived. To understand the visual impression that visitors get when they see prehistory displays the types of furniture employed across the museums will be analysed first.

Display furniture

There are a variety of different presentational tools used to frame, support and highlight objects in displays that influence the overall visual impression for the visitor. To address the influence of these design features the different types of furniture and their corresponding materials utilised to display prehistory across the museums were identified. A summary of the various 75 types of display furniture identified across the museums can be found in Appendix 15. The representation of each type of display furniture across the sample of 170 museums was calculated and all types of

furniture present in 5% of museums or more are illustrated in figure 5.24 along with how frequently they are represented in the sample.

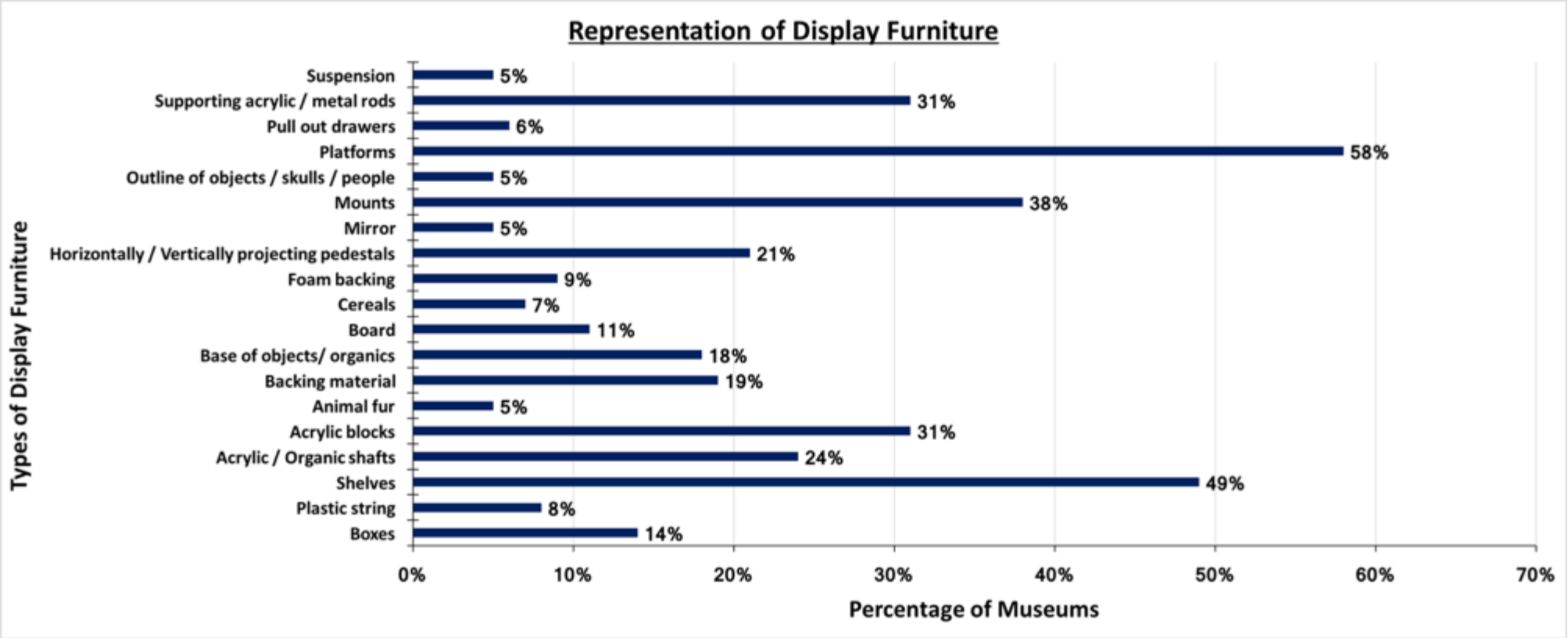


Figure 5.24. Graph summarising the percentage of museums utilising different types of display furniture identified in the sample of 170 museums.

The most popular forms of display furniture include platforms, shelves, mounts and supporting acrylic/ metal rods. These types of display furniture reflect current display/ conservation trends used to present a variety of archaeological, ethnographic and artistic collections across different types of museums. However, it is notable that there seem to be certain types of material and furniture used to frame objects that are unique to prehistory displays. Within the sample of museums 7% of museums utilised 'cereals' to associate agricultural tools with the beginnings of farming and relate tools to their function in an attempt to convey their relevance and engage visitors, as seen in figure 5.25. Similarly, nearly a quarter of museums recreated organic shafts for prehistoric tools and weapons with contemporary organic materials and acrylic to indicate how they were used and originally looked like when they were complete, as demonstrated by figure 5.26. Animal furs were also often incorporated alongside and underneath objects to contextualise the use of the objects on display for butchery and textile production. In fact, most of the unique forms of display furniture are used to situate prehistoric objects in displays and to try and relate them to modern frames of reference relying on organic materials to convey the usefulness of these materials that were a pivotal part of prehistoric daily life that are not often preserved in their collections, as discussed in section 5.4.4.

Figure 5.25. Photograph of cereals covering the bottom of the Iron Age case in Andover Museum (McDowall, 2018).

Figure 5.26. Photograph of a recreated wooden shaft used to present a Bronze Age axe on display at Brighton Museum (McDowall, 2019).

It was also common for museums to place other prehistoric objects from their collections along the bottom of cases, acting as the base for the displays rather than the focus for the visitor. These objects thus acted to simultaneously frame the other artefacts showcased, convey their quantity and emphasise their ubiquitous nature in prehistoric material culture. This use of objects as display furniture is most common with lithics, as debitatge, cores, unworked flakes, fragmentary flint collections or unidentified lithics are abundant in museum collections. Consequently, using such

collections as furniture provides the museums with an opportunity to convey a sense of the wider landscape within the museum and enhance the overall aesthetics of the displays. This style of display furniture is utilised at the Museum of Archaeology and Anthropology in Cambridge (figure 5.27) where overlapping and overflowing lithics along the bottom of stacked boxes are used to contrast with the 'star' objects projected above them on metal pedestals. The use of lithics as display furniture in this instance serves to emphasise the differentiation between lithics used in daily life and lithics that are produced using exotic materials that appear to perform a more symbolic role. A narrative that is further supported by the corresponding interpretation along the side of the tabletop case. A similar use of lithic collections is also demonstrated by the displays of Bronze Age weaponry at Yorkshire Museum (figure 5.28).

Figure 5.27. Photograph of the prehistoric lithics display at the Museum of Archaeology and Anthropology, Cambridge (McDowall, 2019).

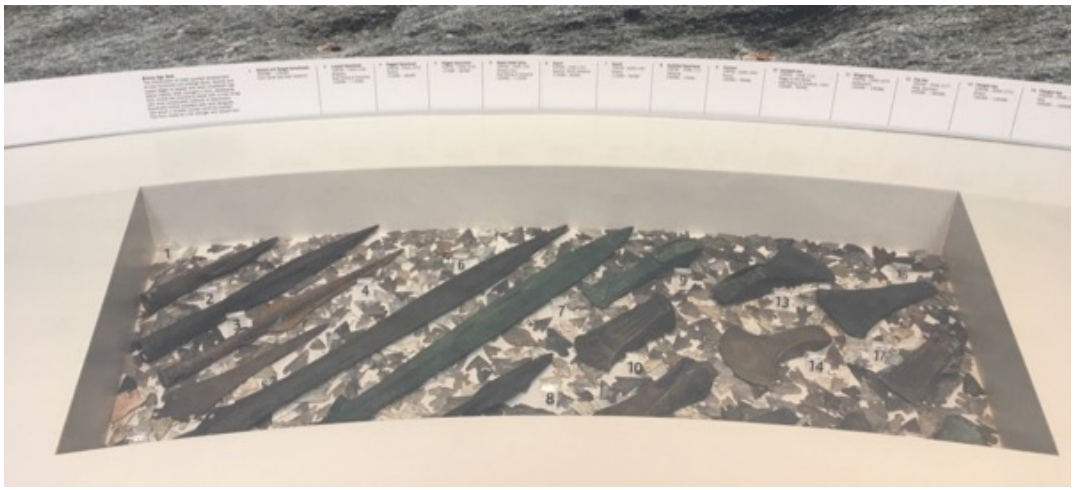


Figure 5.28. Photograph of flint arrowheads used to frame a selection of Bronze Age weapons on display at Yorkshire Museum (McDowall, 2017).

Spatial relationships between objects

To further understand the visual impression of prehistory displays the density of displays were categorised as either 'low', 'medium' or 'high' based on the amount of objects on display and space between objects in the cases. Displays were categorised as having a low density of material on display when there were only a handful of objects presented or when there were large spaces between the objects on display. Examples of displays categorised as low density are illustrated at Canterbury Roman Museum (figure 5.29) where only a handful of Iron Age objects are on display as a preamble to the Roman displays and the Museum of Barnstaple and North Devon (figure 5.30) where a few objects are affixed to a text panel timeline running along the bottom of the case.

Figure 5.29. Photograph of the handful of Iron Age objects on display in Canterbury Roman Museum (McDowall, 2018).

Figure 5.30. Photograph of the few objects affixed to the bottom timeline panel in the Museum of Barnstaple and North Devon (McDowall, 2017).

A display with a medium density of prehistoric objects on display is characterised by a roughly intermediate density between the binary extremes of low and high. This middle ground is represented by displays at the Museum of Liverpool (figure 5.31)

and North Lincolnshire Museum (figure 5.32) where displays are neither overcrowded nor sparse.

Figure 5.31. Photograph of the medium density of Iron Age objects presented in the embedded timeline display at the Museum of Liverpool (McDowall, 2019).

Figure 5.32. Photograph of the Mesolithic display at North Lincolnshire Museum highlighting the medium density of material on display (McDowall, 2017).

In contrast to the preceding figures a high density of material on display is characterised by a lack of empty space in the case, a large amount of material on display and an overall crowded appearance. These high density displays were very popular at the turn of the 20th century but have fallen out of favour in previous years. Some of these displays, however, still persist in contemporary museums that present the past through a historiographical perspective, maintaining the antiquated appearance of their displays and capitalising on the unique aesthetic quality this provides as observed at Spalding Gentleman's Society (figure 5.33) and Whitby Museum (figure 5.34). These high density displays are usually utilised to present the overwhelming quantity of certain objects and their associated typologies. Within the museums recorded for example most high density displays either presented lithic typologies or comprehensive collections of Beaker pots.

Figure 5.33. Photograph of the rather crowded display of prehistoric lithics at Spalding Gentleman's Society (Spalding Gentleman's Society, 2019).

Figure 5.34. Photograph of part of one of the high density displays of prehistoric lithics at Whitby Museum (McDowall, 2017).

In many of the museums there are a mixture of cases presenting a high density of material in combination with cases that isolate one or two objects on their own that could consequently be classified as low density. These museums which can be categorised into multiple density categories were accounted for by classifying them based on the lowest to the highest density represented. Hull and East Riding Museum, for example was categorised as displaying a 'medium-high' density of material as most cases presented an average amount of material (figure 5.35) whilst certain cases such as the Mortimer Wheeler case (figure 5.36) presented a large quantity of pottery to emphasise the scale of the collection and highlight how the pots used to be displayed in Wheeler's museum.

Figure 5.35. Photograph of one of the characteristic medium density cases on display in Hull and East Riding Museum (McDowall, 2017).

Figure 5.36. The high density Mortimer Museum display of pottery in Hull and East Riding Museum (McDowall, 2017).

A summary of the density of prehistoric material on display across the 165 museums where this information could be recorded are summarised in figure 5.37. This graph clearly illustrates the popularity of low density displays which is perhaps unsurprising considering that as discussed in section 5.4.3, the majority of museums within the sample only present a case or less of prehistoric objects. Museums with less prehistoric objects in their collections are inevitably restricted as to how much they can display. There are, however, a considerable number of museums with displays that can be characterised as medium density, further reflecting the relationship between the amount of prehistory on display and the density of the available objects. After all the second most popular amount of prehistory on display was classified as a 'medium' amount of prehistory and the graph demonstrates that the second most popular density of material at 36% was also a medium amount.

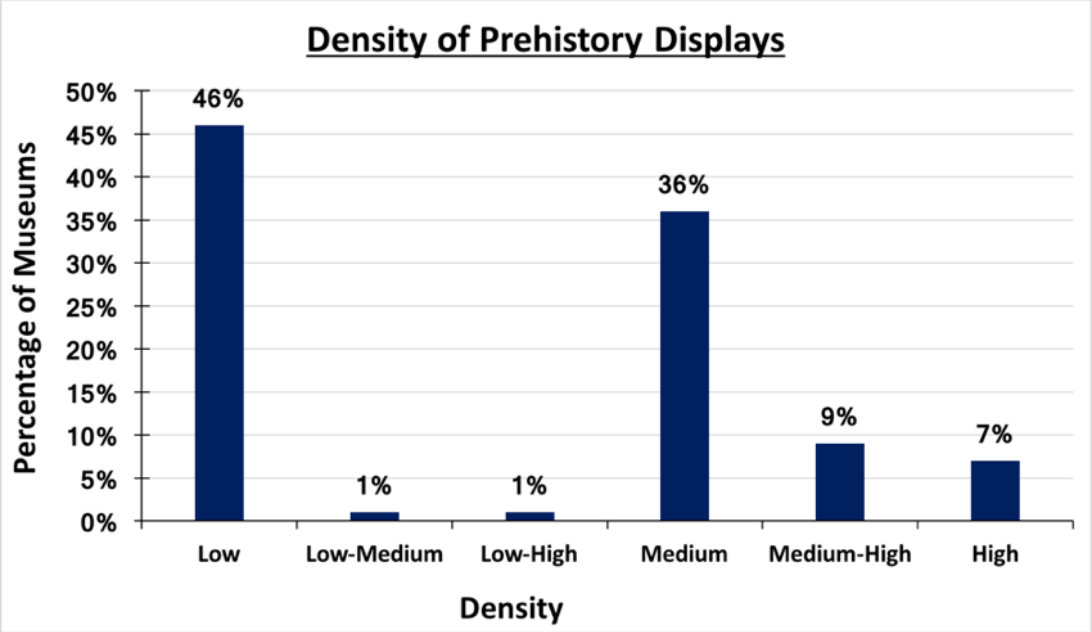


Figure 5.37. Graph demonstrating the density of prehistory displays across the 165 museums recorded.

The quantity of objects on display and how densely packed they are greatly influences the spatial relationships between such materials. To explore these relationships further the spatial relationships between the objects in the prehistory displays were categorised based on their organisation within the cases, whether they were overlapping with other objects, touching, well-spaced apart, spaced apart by a

few cms, grouped closely together or presented separately. In most museums a variety of these different spatial relationships are represented and the popularity of these different styles of spatial patterning of prehistory displays across the 166 museums where this information was recorded are summarised in figure 5.38. It is apparent that placing objects far apart or apart by a few cms are the most popular spatial patterns across the museums. These spatial relationships appear to further reflect the display conventions dictated by the low-medium density of displays that are either widely spaced within cases or positioned closer together but due to lack of material, rarely touching or overlapping. However, there are not necessarily always direct relationships between the density of displays and the spatial layout of objects within these displays. To analyse the impact of display density on the types of spatial relationships observed in these displays the representation of each type of spatial layout were calculated for each display density[17], except the low-medium and low-high density categories and the results are visually summarised in figure 5.39.

[17] The low-medium and low-high categories densities were not included in this analysis as they only represent 4 museums out of the sample of 166 museums.

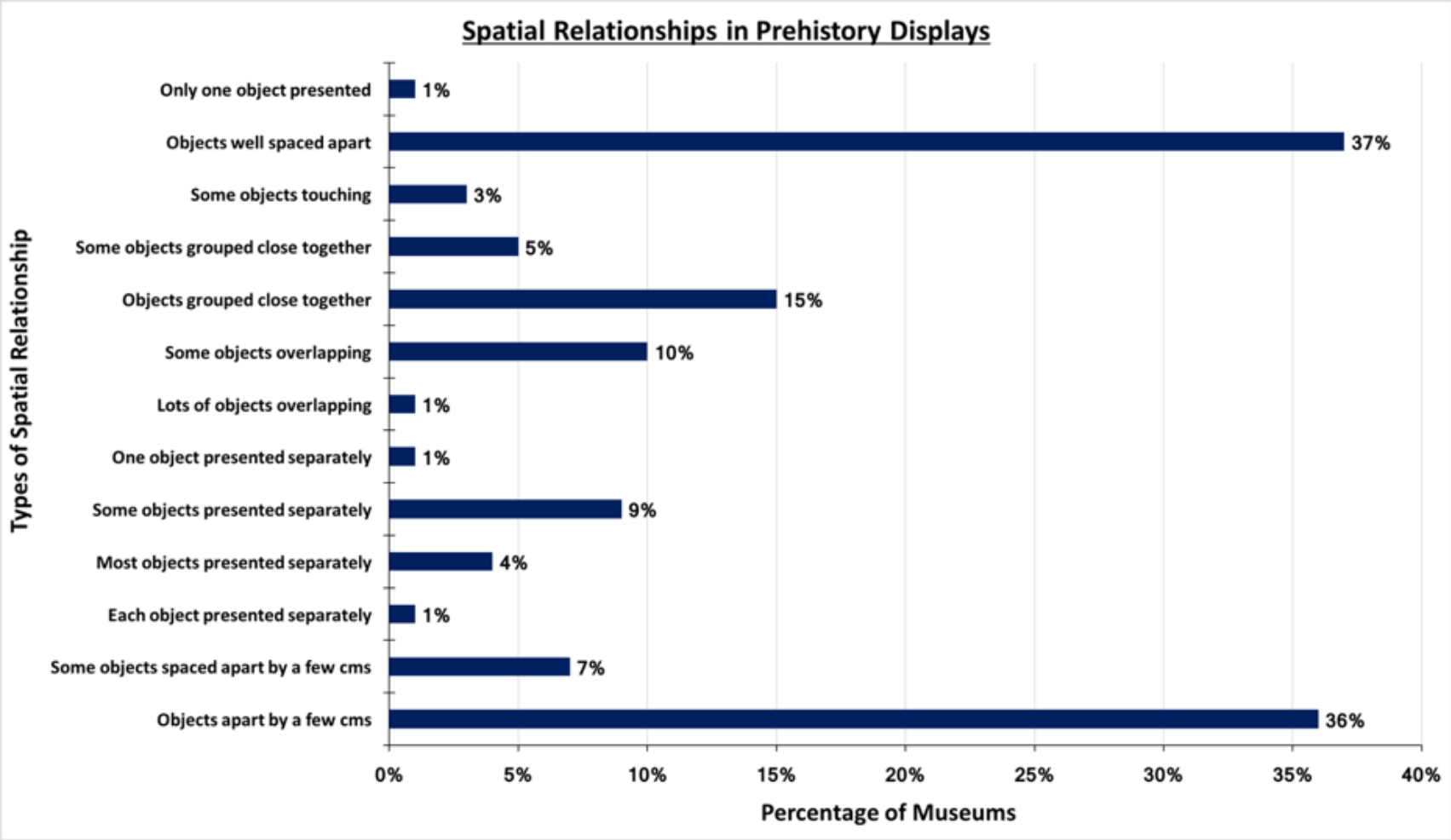


Figure 5.38. Graph demonstrating the percentage of museums utilising different types of spatial relationships in their prehistory displays from the 166 museums in the sample.

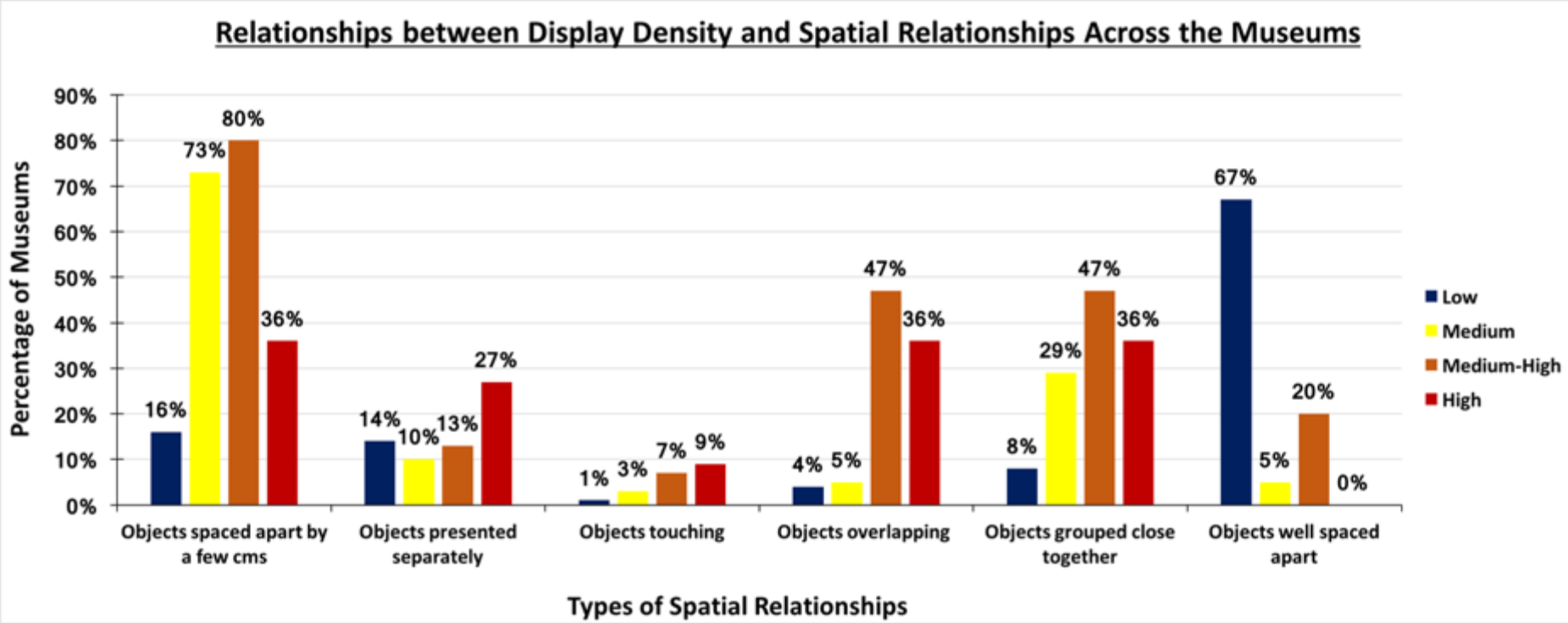


Figure 5.39. Graph demonstrating the display densities associated with different spatial relationships across the 162 museums.

In general figure 5.39 highlights that object density often influences the spatial relationships of objects in displays. The spatial layouts usually associated with higher density overcrowded displays including objects overlapping, touching and grouped closely together are more often represented in prehistory displays with a medium-high density of material on display. The medium density displays that often occupy a middle ground, in which objects are not positioned too close together nor too far away are rather intermediately situated. Across the medium density displays 73%/ 80% present objects spaced apart by a few cms. Furthermore, the sparsely populated displays expected within lower density displays are demonstrated by the 67% of museums with low density prehistory displays that place the objects well-spaced apart. There are of course exceptions to these general trends also highlighted by figure 5.39, for example 27% of museums with a high density of prehistory on display also present some of these objects separately as well as within overlapping crowded displays. After all a museum with a high density of prehistory on display may be rather spacious offering opportunities to display the vast majority of objects in close proximity and a few 'star' objects in isolation. However, these apparent associations between higher density displays and certain spatial layouts must be treated cautiously due to the small sample of high density displays represented in the sample which may over-inflate the significance of the correlations outlined.

In addition to the types of spatial relationships discussed certain museums also present their objects in patterns ranging from simple radiating lines to more complex compositions of curvilinear or arrow-shaped patterns, sometimes used to reflect the shape of the objects on display. Out of the 166 museums where the layout of objects could be ascertained, 14% of these displays presented prehistoric objects in patterns. Presenting weaponry, particularly arrowheads in radiating lines as seen in figures 5.40 and 5.41, whilst circular patterns used to group objects from the same assemblage together were also quite popular as seen in figure 5.42. These linear designs are reminiscent of the traditional typological displays of the early 20th century but instead of comparative or evolutionary narratives these displays are driven by primarily aesthetic values.

Figure 5.40. Photograph of Bronze Age daggers and axe heads presented in radiating lines in Wiltshire Museum (McDowall, 2017).

Figure 5.41. Photograph of variety of Stone Age tools presented radiating in to the centre of the display at Leeds City Museum (McDowall, 2017).

Figure 5.42. Photograph of Bronze Age hoards grouped together in circular clusters to differentiate the assemblages in the Museum of Somerset (McDowall, 2017).

5.4.7 Text panels

Text panels are utilised in museum displays to provide supporting interpretation of the archaeological material on display. These panels of contextual information are particularly essential in prehistory displays due to the lack of supporting written records to facilitate the interpretation of objects. The panels are consequently employed to fill in the gaps of the archaeological record to provide a coherent narrative and to relate the displays to the visitor's level of understanding and frame of reference. However, due to the myriad learning styles that govern how we absorb, process, understand and remember information, as well as differences in the amount of detail we want to obtain from text panels it is impossible to cater for all visitors within a restricted word count and on a small number of text panels. Consequently, most panels tend to focus on providing only the key information about trends/ changes through time and focus more on the details of objects in separate object descriptions and provide further information in forms of additional interpretation. It was not within the scope of this methodology as outlined in Chapter 3 to assess the level of text/ tone of the text panels utilised in prehistory displays due to the subjective nature of such an analysis. Instead, to understand how prehistory is predominantly conveyed within primary sources of text in prehistory displays the number of text panels used at each case study were calculated and the narratives such panels convey were explored through the quantification of thematic nodes from the headline text/ titles of panels.

Across the museums recorded the number of text panels could be calculated for 161 museums. From this sample 148 museums were found to use at least one text panel to support their prehistory displays and across the sample a total of 1,201 text panels were recorded. An average, of 7 text panels were used at each of the museums with interpretive text panels and a summary of the number of museums relative to the number of text panels is provided in figure 5.43.

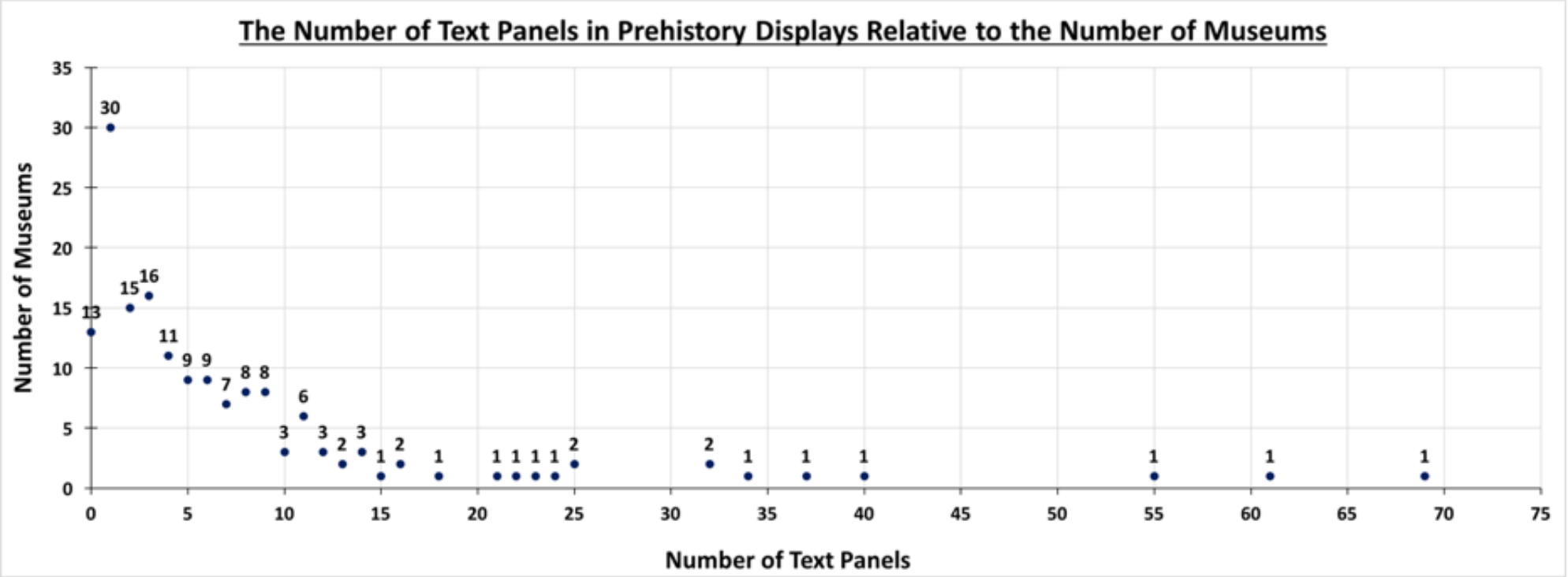


Figure 5.43. Graph summarising the number of text panels associated with the prehistory displays across the sample of 161 museums where this information was identifiable.

Over half of the museums analysed use 4 text panels or less to convey a coherent narrative of prehistory, 27% utilise 5-10 text panels to support displays and 20% use 11 text panels or more. Very few museums use more than 15 text panels to present prehistory, the majority of museums that use lots of text panels use several rooms to present prehistory or possess a rich prehistoric collection. To further understand the relationship between the number of text panels and display cases across the museums, the number of cases were plotted against the number of text panels on a scatter graph (figure 5.44).

It was expected that there would be a positive relationship between the quantity of cases versus text panels as more material on display requires more interpretation. From figure 5.44 there does seem to be a relatively positive relationship between the number of cases and text panels but it is not clear to see due to the low quantity of text panels and display cases at the majority of museums. 126 of the museums have text panels of 10 or less and display cases of 10 or less, as highlighted in the yellow box on figure 5.44. There are 17 museums where the positive relationship between the large number of text panels associated with a large number of cases is clearer and the museums with the highest numbers of these text panels are named on figure 5.44.

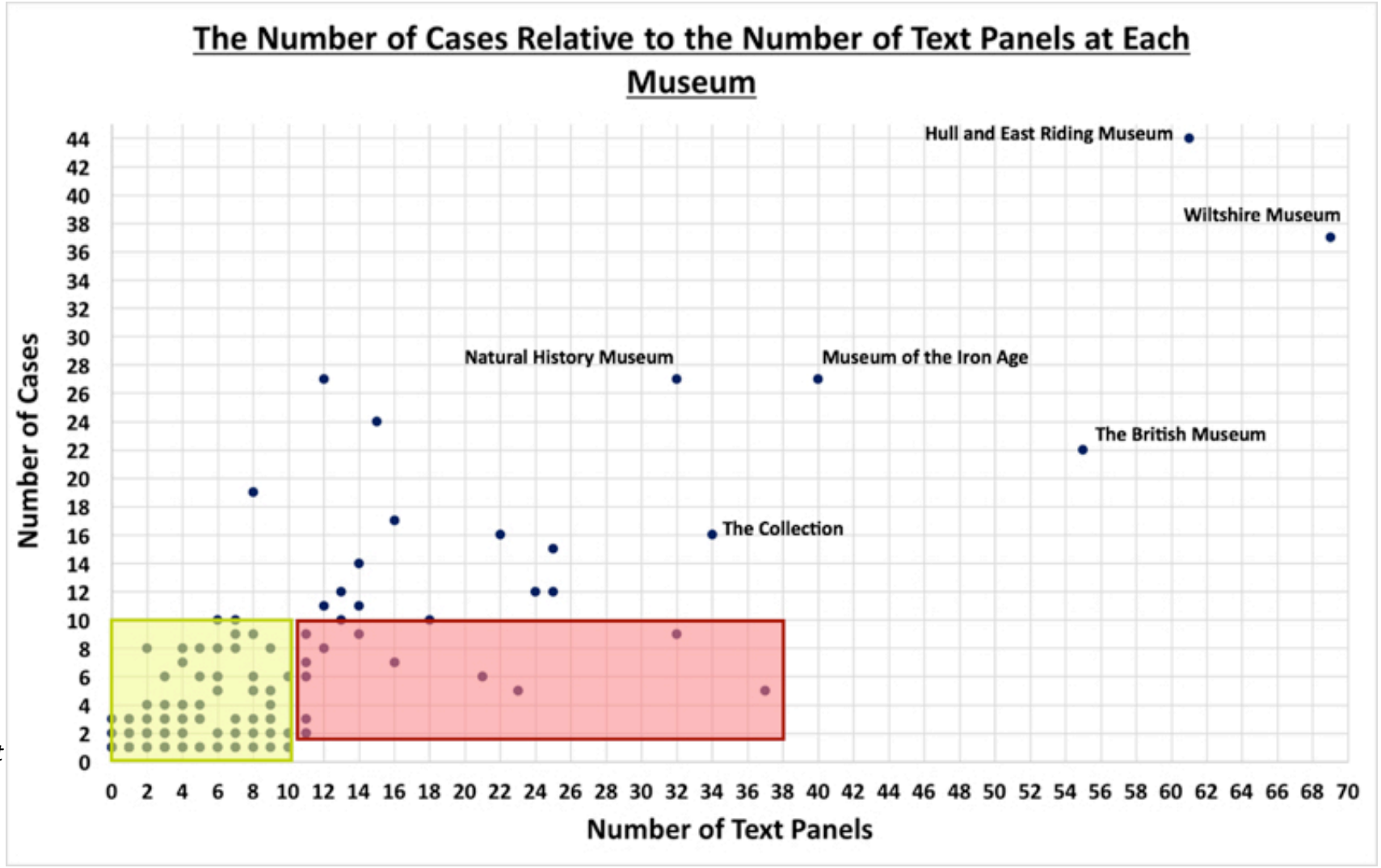


Figure 5.44. Scatter graph highlighting the relationship between the number of cases and number of text panels from the sample of 159 museums where this information was available. The yellow box highlights the majority of museums, whilst the red box highlights the anomalous museums where there was an inverse relationship between the number of text panels and display cases.

To further explore the relationships between the number of cases and number of text panels outlined in figure 5.44, the number of panels and cases for each period of prehistory were calculated and are summarised in figure 5.45. Figure 5.45 illustrates a tendency for most museums to utilise between 1-3 cases or text panels to convey each period of prehistory and as previously highlighted in section 5.4.3 there is a tendency for later prehistoric periods to be provided with a greater number of display cases and text panels. Such an inverse relationship between the amount of time presented and displayed reinforces the 'invisibility' of earlier prehistory and places a greater importance on the metal ages.

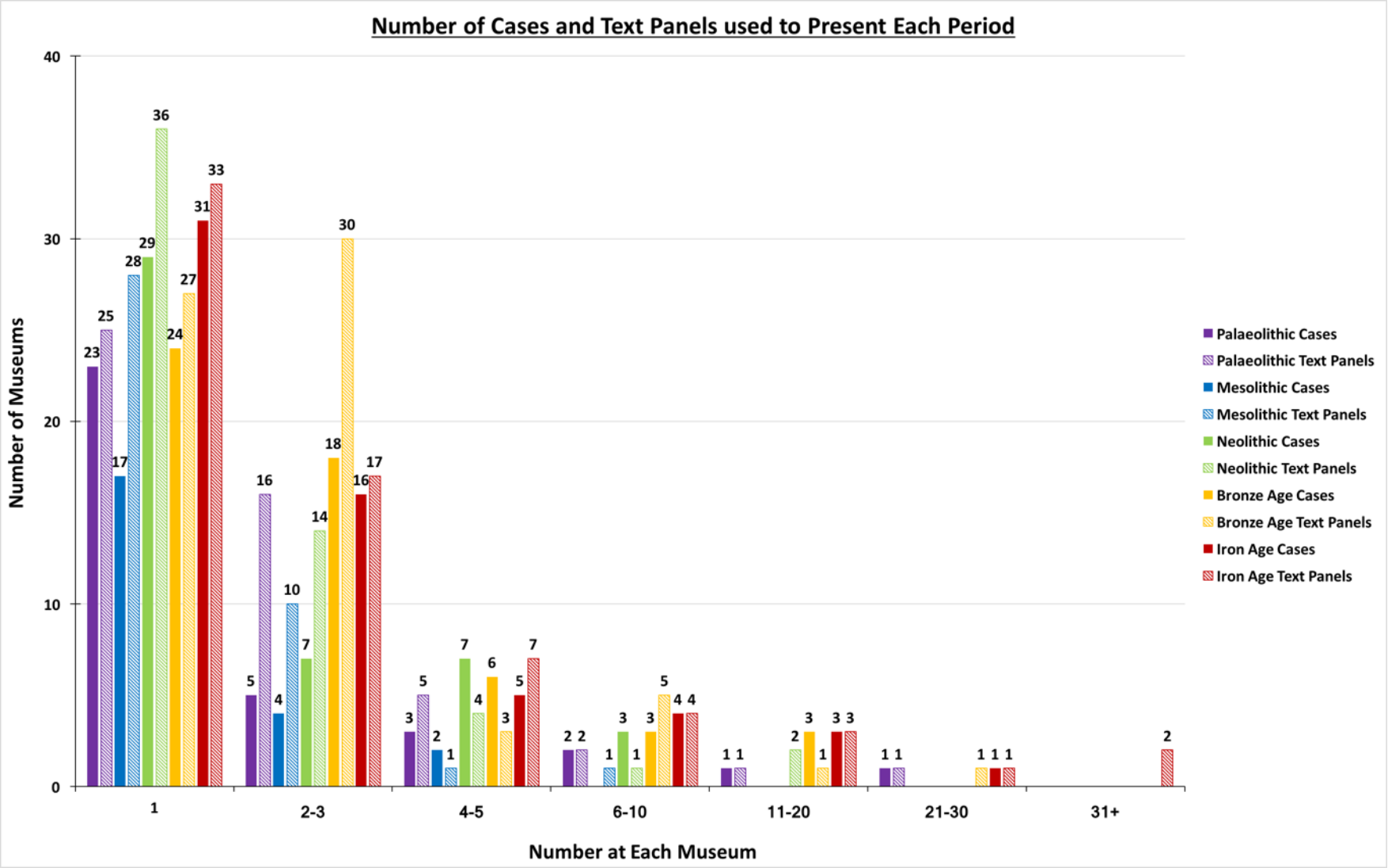


Figure 5.45. Graph illustrating the number of museums presenting each period of prehistory in cases and text panels and how many cases and text panels are used to convey these periods.

The 1,201 text panels identified across the 148 museums with text panels were categorised based upon the thematic content of the panel and the percentage of panels within each thematic node is presented in figure 5.46. The majority of panels focus on the specific periods of prehistory and how each of these periods is articulated will be further explored. There are also quite a few panels that focus on prehistory and archaeology more generally, as well as specific archaeological sites. To further understand the messages that these interpretative panels convey to the visitor, all of the text panels across the 148 museums were transcribed and input into a word cloud generator to highlight which words were most frequently used to describe prehistory (figure 5.47).

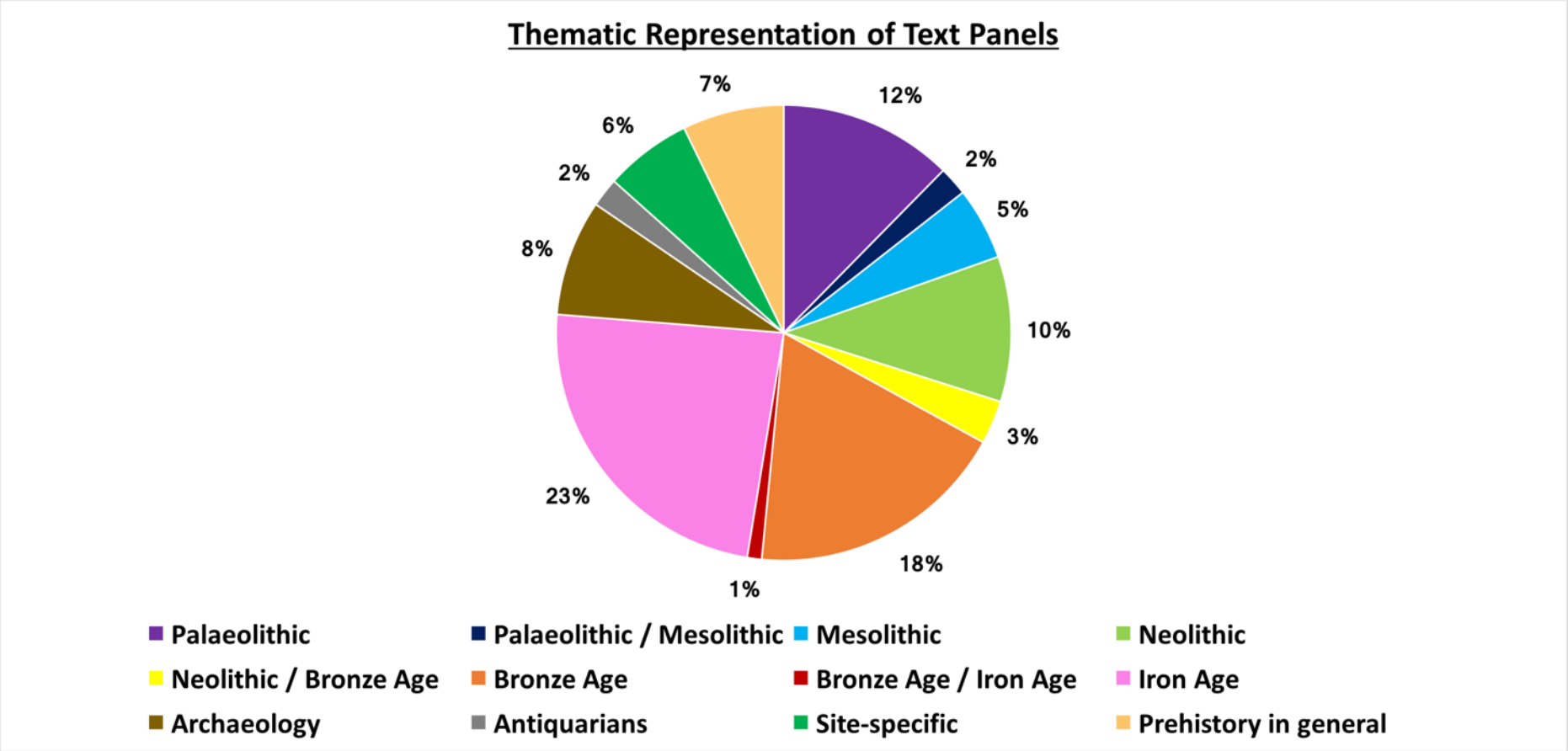


Figure 5.46. Pie cart illustrating the representation of different themes within the 1, 201 panels analysed.

Figure 5.47. Word cloud highlighting the most frequently used words in the 1,201 text panels analysed from the sample of 148 museums.

To further explore the frequency of certain words in relation to others a summary of the 20 most frequently used words in the text panels and their frequency within the sample are summarised in table 5.4.

Ranking	Total no. of references	Percentage of text panels (N= 1,201)	Word(s)
1	205	17%	Age
2	89	7%	Iron
3	74	6%	Bronze
4	48	4%	first
5	43	4%	Neolithic
6	37	3%	early
7	29	2%	stone[18]
8	28	2%	people, Stone
9	27	2%	Mesolithic
10	23	2%	life
11	22	2%	burial
12	20	2%	archaeology, farmers
13	19	2%	prehistoric
14	18	1%	Ice
15	17	1%	landscape, new
16	16	1%	Stonehenge, years
17	15	1%	tools
18	14	1%	Celtic, flint, Palaeolithic
19	13	1%	age, Britain, hoard, humans, prehistory
20	12	1%	ago, bronze, Europe, farming, land, making

Table 5.4. Summary of the 20 most frequently used words in the 1,201 prehistory text panels analysed.

Figure 5.66 and table 5.4 highlight that the majority of text panels are utilised to anchor prehistory displays within a temporal chronological framework as '*Age*' is the most frequently used word referenced 205 times within the 1,201 panels. This word is usually employed in conjunction with the words '*Iron', 'Bronze', 'Stone'* or '*Ice'* to provide a chronological narrative around the Three Age system. The various periods referenced are, however, present in different frequencies, the most popular periods are the Iron Age referenced 89 times and Bronze Age referenced 74 times. In contrast, the Stone Age is only referenced 28 times and Ice Age only 18 times and the earliest subdivisions of the Stone Age, the Mesolithic and Palaeolithic are referenced

[18] Certain words such as 'stone' appear twice in the table in a capitalised and a non-capitalised form that represent the different usage of the words. For example, 'Stone' capitalised comes from panels that reference the 'Stone Age' whilst stone not capitalised represents any other uses of the word for example a panel discussing 'the stone axe trade'.

27 times and 14 times respectively. Yet, despite the infrequency of references to the early Stone Age periods, the later Stone Age period of the Neolithic is the 5th most frequent word in the sample, referenced 43 times. There certainly appears to be a pre-eminence placed upon later prehistory, particularly the metal ages in the supporting text panel interpretation in displays. The tendency for prehistory displays to be presented within linear chronological narratives is further reinforced by the high frequency of interpretive panels using the word '*first'* to delineate the changes between periods. Such language situates the displays within an overarching evolutionary narrative consisting of the first people, first farmers, first use of bronze and first use of iron.

People also seem to be quite central to narratives of prehistory as they are explicitly referenced in 28 of the text panels. A few of the words within the 20 most frequently referenced also include words associated with the stereotypical prehistory display themes as outlined by James (1999) and Wood and Cotton (1999) that were discussed in section 2.3.1, that include '*burial', 'farming', 'tools',* and '*making*'. The other usual themes highlighted by James (1999) and Wood and Cotton (1999) of '*hunting'* and '*trade'* are; however, not pervasive within the sample as they are only referenced 2 times and 8 times respectively within the sample. Furthermore, it must be noted that the words ranked from 7th-20th most popular in the table are still relatively infrequently referenced considering that they represent around 1-2% of all the text panels analysed.

The narratives communicated to visitors were further analysed by quantifying the thematic nodes used in the headline information of period-specific text panels. The headline information, rather than the text itself was analysed as visitors rarely read every single text panel (Serrell, 1997, 1998; Davies and Heath, 2013) and consequently their conceptions are often reliant on the immediately visible headline information. It is these headlines that are intended to engage the visitor's attention and encourage them to read the full text panel and are therefore utilised to present the overarching display narratives by focusing on certain compelling key themes. To identify these period-specific narrative themes, each text panel was categorised by

period then into period-specific thematic categories. During this categorisation process it was revealed that there is some overlap in the themes conveyed to visitors in the panels for different prehistoric periods and these overlapping themes are summarised in table 5.5. These themes primarily relate to aspects of daily life such as housing, burial, pottery, farming, diet and trade. Yet, despite their presence in textual interpretation for different periods they are not consistently well-represented between the periods, with most themes rarely seen in more than 15% of period-specific text panels. Despite these themes relating to key aspects of prehistoric life their general lack of presence within the textual interpretation analysed indicates a disparity between visitor interests in learning about daily life in prehistory, emphasised in Chapter 4 and the contextual information they are provided with in displays.

To situate visitors within the temporal framework of the displays they are presented with, the majority of headline text explicitly incorporates the name of the specific period. The proportion of period-specific text panels that are explicitly named, however, varies between periods with a tendency for more panels to explicitly name later periods of prehistory than earlier periods (table 5.2). The 'Neolithic', 'Bronze Age' and 'Iron Age' are more familiar periods in the public consciousness as highlighted in Chapter 4 and are more frequently referenced in textual interpretation than the lesser known 'Palaeolithic' which is only referenced in 16% of Palaeolithic text panels.

The diversity of themes associated with each period varies considerably between periods, with a tendency for a greater diversity of themes to be employed in panels relating to later periods. To highlight this trend the number of narrative themes associated with each period are also presented in table 5.5. Of all the periods, textual interpretation associated with the Iron Age represents the greatest diversity of themes, with 56 narrative themes identified in the 67 museums with Iron Age panels analysed. The increasing diversification of themes used to articulate later periods, further expands the narrative opportunities utilised to frame the archaeological material of the metal ages in contrast to the more restricted themes utilised to frame

earlier prehistoric material culture; thereby further reinforcing the impression conveyed by the disproportionate amount of space dedicated to each period, emphasised in section 5.4.3.

Overlapping themes	Palaeolithic (N=50)	Mesolithic (N=40)	Neolithic (N=57)	Bronze Age (N=68)	Iron Age (N=67)
Technology	14%	8%	21%	7%	N/A
Diet/ food	2%	5%	4%	1%	3%
Religion/ beliefs	2%	N/A	9%	10%	13%
Site-based	N/A	5%	N/A	9%	16%
Daily life	28%	N/A	2%	N/A	7%
Farming	N/A	N/A	21%	6%	12%
Altering the landscape	N/A	10%	12%	6%	N/A
Housing	N/A	5%	14%	3%	10%
Burial	4%	N/A	5%	24%	12%
Trade	N/A	N/A	11%	1%	7%
Pottery	N/A	N/A	14%	6%	4%
Explicitly named period	16%	45%	42%	59%	67%
Total number of themes identified	23	18	22	33	56

Table 5.5. Summary of the percentage of overlapping narrative themes conveyed by period-specific text panels, as well as the total number of themes identified in all period-specific text panels

To analyse which narratives are the most predominant across the displays recorded the headline information on text panels for each period were transcribed and input into a word cloud generator to calculate the most prevalent words used to articulate each period. The resulting word clouds are presented in figures 5.48, 5.50, 5.52, 5.54

and 5.56, whilst the corresponding word frequencies are presented in tables 5.6-5.10. These panels were also separately analysed to reveal which popular narrative themes are articulated in 10% or more of period-specific textual interpretation across the museums.

The Palaeolithic

Figure 5.48. Word cloud produced from the 147 Palaeolithic focused text panels analysed.

Ranking	Total number of references	Word(s)
1	20	first
2	18	Age
3	15	Ice
4	11	humans, people
5	9	Palaeolithic

Table 5.6. The 5 most frequently used words in the sample of 147 Palaeolithic text panels analysed.

The Palaeolithic is the first period of prehistory and consequently it is primarily described in relation to the '*first people'*, as illustrated in figure 5.48 and table 5.6. Such language serves to situate the period within its temporal context and the words used to convey the period are often people-centric to indicate that this is the beginning of the human story. Very few text panels explicitly use the term *'Palaeolithic'* and focus instead on relating this period to the first people and the Ice Age, adopting a period that is pervasive within the public consciousness to situate them within the chronology of prehistory. To further explore the predominant narratives used to convey the period, the headlines were categorised into key narrative themes. Across the 50 museums analysed, 23 narrative themes were identified and the most popular themes alongside the percentage of panels they represent are illustrated in figure 5.49.

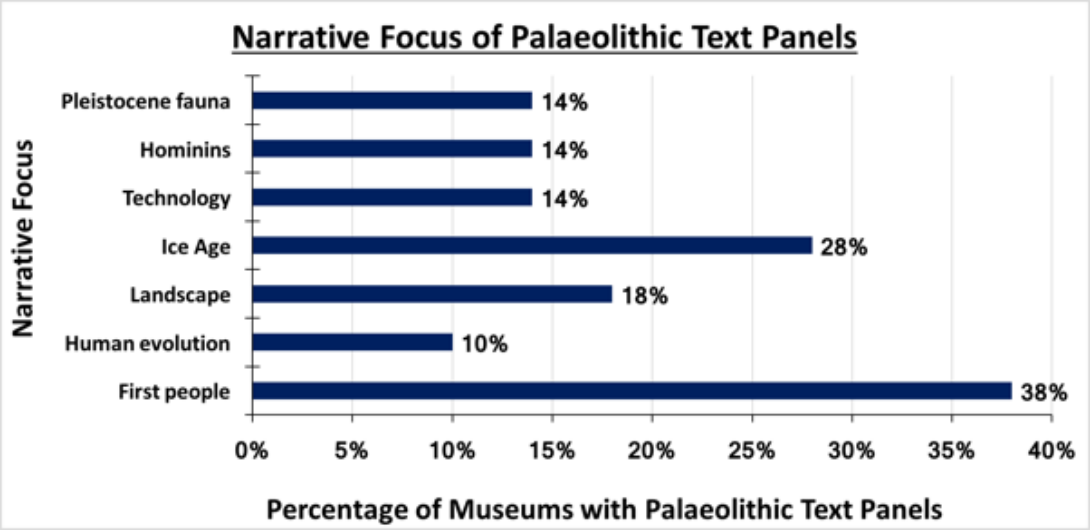


Figure 5.49. Graph illustrating the percentage of text panels focusing on each of the 7 most prevalent Palaeolithic narrative themes out of the 50 museums with Palaeolithic text panels analysed.

The categorisation of prevalent narrative themes further reinforces the tendency for museum displays to frame the Palaeolithic in relation to '*first people'*, conveying an innate chronological pre-eminence to engage visitors. Furthermore, the focus on the Ice Age is further highlighted by figure 5.49, in which text panels focusing on the Ice Age represent 28% of the panels analysed. Both of these prominent themes serve to attach a chronological significance to the period to enhance its relevance to contemporary audiences. By creating such context these headlines thus demonstrate an awareness that visitors may not be familiar with the temporal context of the deepest period of prehistory. Furthermore, to appeal to visitor interests in learning about people, many of the panels also focus on human evolution and our evolutionary relationships to other species of *Homo*, particularly Neanderthals. Presenting a human-orientated view of the past linking in to the poplar topic of evolution which is often presented in the media's representations of the past. Despite the prevalence of hand axes in most museum's Palaeolithic displays, an explicit focus on technology is only present in 14% of the panels, indicating that such objects are more often used in association with narratives about *'first people'* rather than technological skill. In contrast to the superiority placed upon the human story there are also quite a lot of panels that focus more on the local landscape and how

that has changed through time, as well as Pleistocene fauna serving to contextualise the wealth of Pleistocene faunal remains in displays.

Overall, the narratives used to convey the Palaeolithic are quite restricted with most panels focusing on the traditional narrative of first people living in the Ice Age and the landscapes they inhabited. Other aspects of daily life are selectively excluded indicating to the visitor that they are simply either not important enough to be included within the headline information or that these aspects did not exist. The androcentrism that was prevalent in Palaeolithic displays as discussed in section 2.3.2, appears to be less visible in the displays analysed, as only two text panels contained androcentric language in their headline information. Traditional narratives of hunting also appear to be absent with only two museums focusing on hunting in their text panels.

The lack of diverse or behaviourally complex narrative themes associated with the Palaeolithic further reinforces the perceived 'invisibility' of this period. Only 2 text panels conveyed the theme of burial, 1 conveyed the theme of religion, 1 conveyed the theme of culture, 1 conveyed the theme of diet and 1 conveyed the theme of art. These aspects were of course present in Palaeolithic life and although the evidence may be more ambiguous, for the most part these areas of daily life can be interpreted and displayed in the museum but currently only rarely. Interpretation focusing on these areas would certainly appeal to visitor interests in daily life, human evolution and the skill of past people as explicitly referenced in respondent's questionnaires (see 4.6).

It is possible for museums to present a richer more compelling narrative with a lack of organic remains and context without over-exoticising this period through a wider focus on daily life. Focusing on the features of daily life simultaneously highlights the complexity of early humans and their skills. The expansive time depth of the Palaeolithic creates many interpretational and presentational issues yet it is also an asset that museums can capitalise on. Narratives are not restricted by textual sources, and the ambiguity that characterises the interpretation of this period offers

a unique opportunity to present our past in an innovative non-didactic, immersive, tactile and engaging manner that can intrigue the curiosity of the visitor, as highlighted by Wood and Cotton (1999:30).

The Mesolithic

Across the 102 museums presenting the Mesolithic, 40 of these museums possess text panels that exclusively focus on presenting the Mesolithic. From these 40 museums, 60 text panels with Mesolithic focused headline text were utilised to create a word cloud (figure 5.50) highlighting the most prevalent terms used to frame this period. The frequency of words used in the headline text were calculated and it is apparent from these calculations summarised in table 5.7 that there is a lack of a shared vocabulary for conveying the Mesolithic, with few words appearing consistently within the sample analysed. The majority of these panels explicitly articulate the chronology of the period and consequently 22 panels used the specialist term *'Mesolithic'* in their text.

Figure 5.50. Word cloud produced from the 60 Mesolithic text panels analysed.

Ranking	Total number of references	Word(s)
1	22	Mesolithic
2	8	Age
3	5	hunter-gatherers
4	4	Middle, Stone
5	3	first, period

Table 5.7. The 5 most popular words used to describe the Mesolithic in the 60 text panels analysed.

To gain a more comprehensive understanding of the narratives conveyed by the 40 museums with Mesolithic text panels, the headline text of the 60 text panels were analysed and 18 narrative themes were identified. The 4 most pervasive of these narrative themes and the percentage of panels conveying each of these themes is summarised in figure 5.51.

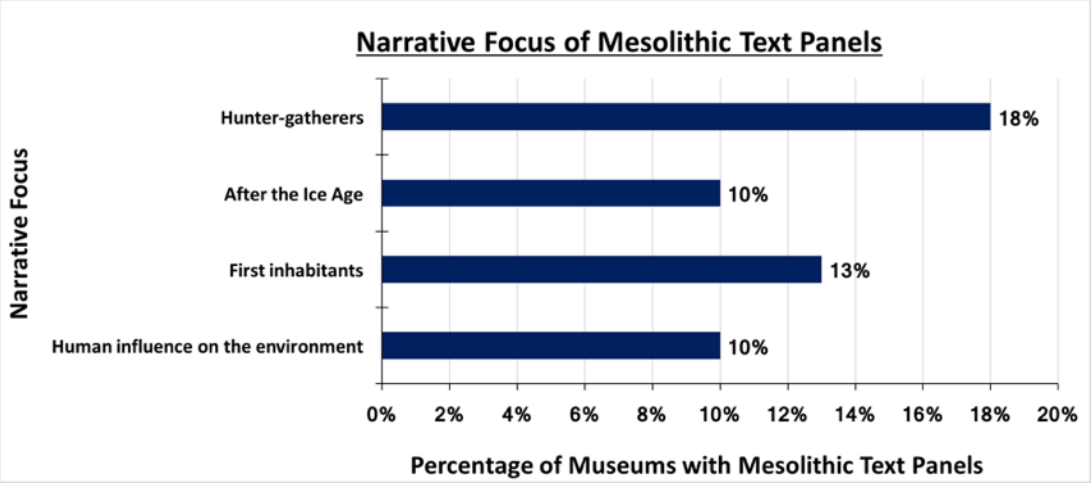


Figure 5.51. Graph illustrating the 4 most pervasive narrative themes conveyed by the text panels at the 40 museums with Mesolithic text panels.

The most popular narrative themes used to convey the Mesolithic are rather restricted in comparison to those used to articulate key aspects of the Palaeolithic and present a rather reductive view of Mesolithic life. Overwhelmingly the focus of most museum panels centre around Mesolithic subsistence strategies, characterised by a hunter-gatherer lifestyle. The later occupation of certain areas after the last Ice

Age is emphasised by the 13% of panels that frame the period in relation to first inhabitants, enhancing the relatability of the period to contemporary audiences and their sense of local/ regional identity. 10% of panels provide the temporal parameters used to define the period by describing this as the period '*after the Ice Age'* which altered human behaviours and landscapes and consequently led to a greater *'human influence on the environment'*, a theme also conveyed by 10% of the panels. Overall the narrative impression of the period conveyed by these panels is one of a survivalist lifestyle utilising and adapting to the landscape and its natural resources as more of the environment became more habitable. The term '*hunter-gatherer*' due to its historical connotations for binary gender-based task division may inadvertently create an androcentric view of Mesolithic life unrepresentative of the nuanced aspects of living in a changing environment. Only 5% of the questionnaire respondents (see 4.5.1), however, referenced hunter-gatherers when articulating their preconceptions of prehistory, so perhaps this outdated stereotype is not as prevalent within the contemporary public consciousness as previously assumed. In any case, such task-based language should be used with caution so as not to simplify the complexity of Mesolithic life into two aspects of food procurement. Although based upon a very small sample of displays, the reductive narratives associated with the Mesolithic have previously been emphasised by Henson (2016) and discussed in section 2.3.3. This analysis of the textual interpretation of 40 Mesolithic displays further reinforces Henson's (2016) findings and demonstrates the lack of agency attributed to Mesolithic museum displays.

The Neolithic

Out of the 123 Neolithic text panels analysed across the 57 museums with Neolithic focused textual interpretation a word cloud was produced (figure 5.52) and the frequency of the most popular words is provided in table 5.8. This word cloud illustrates that the most commonly associated words used to articulate the difference in lifestyle from the preceding Mesolithic are related to the development of farming. Table 5.9 further highlights these association, as *'farmers'* and '*first*' feature as two of the most popular words used in Neolithic panels.

Figure 5.52. Word cloud produced from the 123 Neolithic text panels analysed.

Ranking	Total number of References	Word(s)
1	35	Neolithic
2	16	farmers
3	13	first
4	9	Age
5	7	Stone

Table 5.8. The 5 most popular words used to describe the Neolithic in the 123 text panels analysed.

To further deconstruct the prevailing narratives used to convey the Neolithic, the 7 most popular narrative themes conveyed by the Neolithic focused text panels are presented in figure 5.53. The frequency of each theme within the 57 museums is also provided to illustrate which themes are more popular than others.

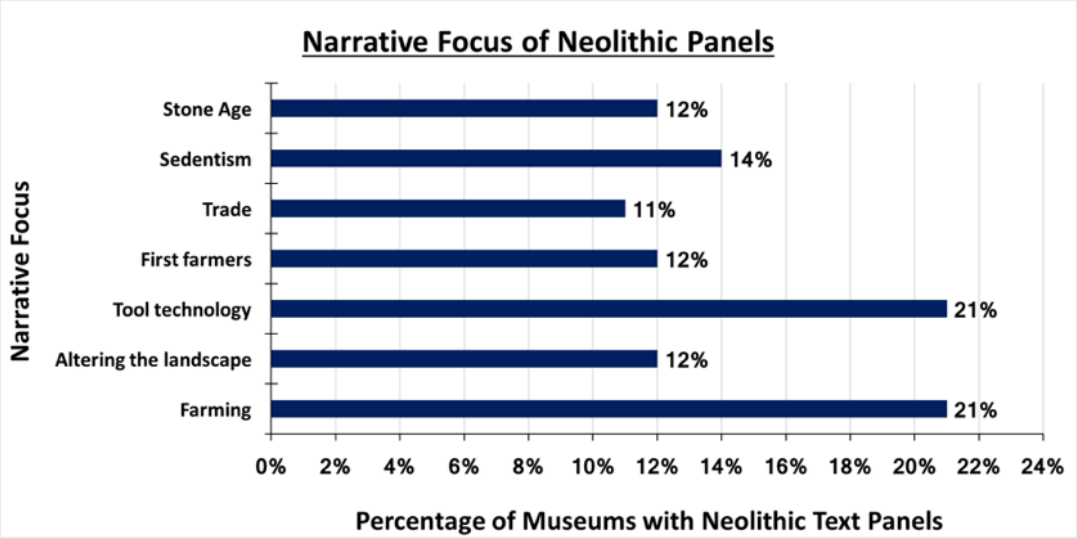


Figure 5.53. Graph illustrating the 7 most pervasive narrative themes conveyed by the text panels at the 57 museums with Neolithic text panels.

The most pervasive themes used to convey the changing lifestyle of Neolithic people are '*farming'* and *'tool technology'*, represented in 21% of the museums analysed. The focus on Neolithic people as the *'first farmers', 'altering the landscape'* for agricultural uses emphasises the key societal change that characterises the Neolithic and reinforces the linear developmental narrative of prehistory displays. Furthermore, the focus on different types of tool technology and the *'trade'* of these new forms of polished and ground stone axe heads also supports this technologically-driven narrative that has typified prehistory displays since their inception in 19th century evolutionary typology displays (Bennett, 2004; Trigger, 2008). This change in subsistence is also associated with greater *'sedentism'*, another key lifestyle change conveyed in 14% of Neolithic panels. The focus of Neolithic panels on stone tool technologies situates this period within the '*Stone Age'* whilst the focus on increasing complexity facilitated by the adoption of farming emphasises the 'newness' of the period to those before. The diversity of narratives associated with this period are still, however, comparatively restricted compared to the narratives associated with the metal ages.

The Bronze Age

A greater diversity of narrative themes are used to convey later prehistoric periods as highlighted by the diversity of words used to describe the Bronze Age in text panels and the low frequency of these words highlighted in figure 5.54 and table 5.9.

Figure 5.54. Word cloud produced from the 217 Bronze Age text panels analysed.

Ranking	Total number of references	Word(s)
1	64	Bronze
2	62	Age
3	11	boat
4	10	burial, early
5	9	bronze

Table 5.9. The 5 most popular words used to describe the Bronze Age in the 217 text panels analysed.

Ahead of explicit references to '*bronze*' technology, transport by water and changes in burial practices appear more frequently in the words used in Bronze Age focused panels with *'boat'* explicitly referenced 11 times and '*burial*' explicitly referenced 10 times. To further deconstruct the prevailing period-specific narratives, the 6 most popular themes are summarised in figure 5.55, along with the percentage of panels they represent.

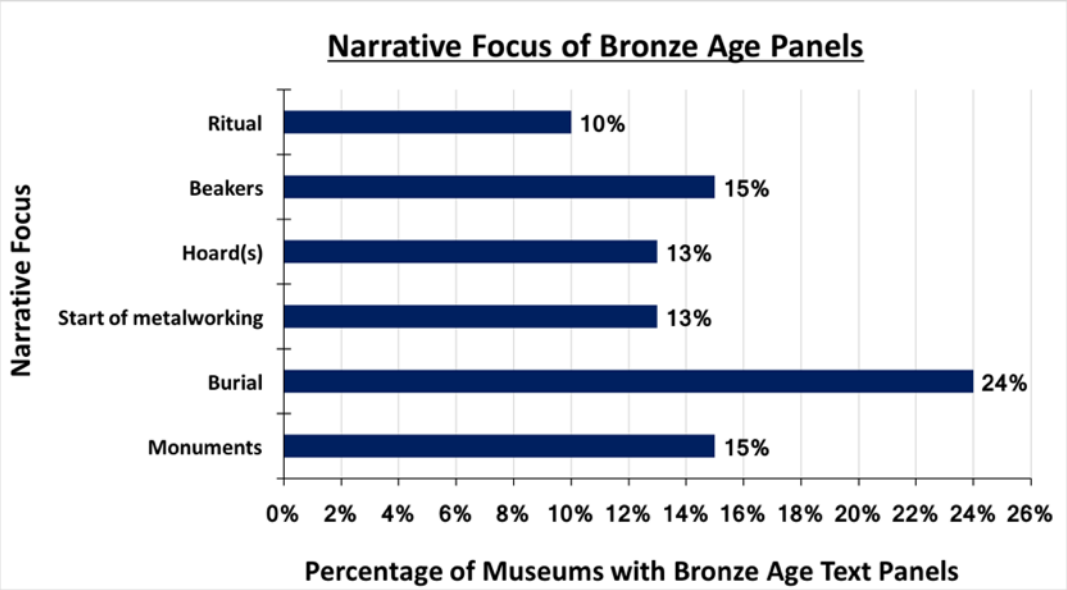


Figure 5.55. Graph illustrating the 6 most pervasive narrative themes conveyed by the text panels at the 68 museums with Bronze Age text panels.

Nearly a quarter of all Bronze Age text panels focus on the theme of burial, articulating the changing practices associated with the '*start of metalworking'*. This technological change that characterises the period continues the linear technology-driven narrative developed in early displays. This key change in Bronze Age life is also signposted by the introduction of '*beaker'* pottery and its associated 'package' of new *'rituals'* and beliefs. These changes in Bronze Age culture are further articulated by the development of '*monuments*' to practice these new beliefs and bury their dead according to new *'burial'* traditions, all aspects emphasised in the language of Bronze Age text panels. Another component of these lifestyle changes conveyed by the supporting textual interpretation is the practice of hoarding. The 13% of panels focusing on this theme perhaps reflects the influence of the 1996 Treasure Act upon the increasing presence of Bronze Age hoards in museum collections and consequently displays. Overall these period-specific panels present a society with new metal technology associated with changing beliefs and practices resulting in the monumentalisation of their landscapes and ritual depositions. The Bronze Age is therefore associated with greater societal and symbolic complexity not often afforded to the previous periods of the Stone Age. These narratives do, however,

present a rather 'exoticised' view of the Bronze Age focusing more on the ritual/ religious aspects of life than daily life.

The Iron Age

The Iron Age represents the final period of prehistory before the arrival of the Romans and so it was expected that references to the Romans would be pervasive within the panels used to articulate the temporal parameters of the period. The frequency of words used to articulate this period are summarised in figure 5.56 and table 5.10.

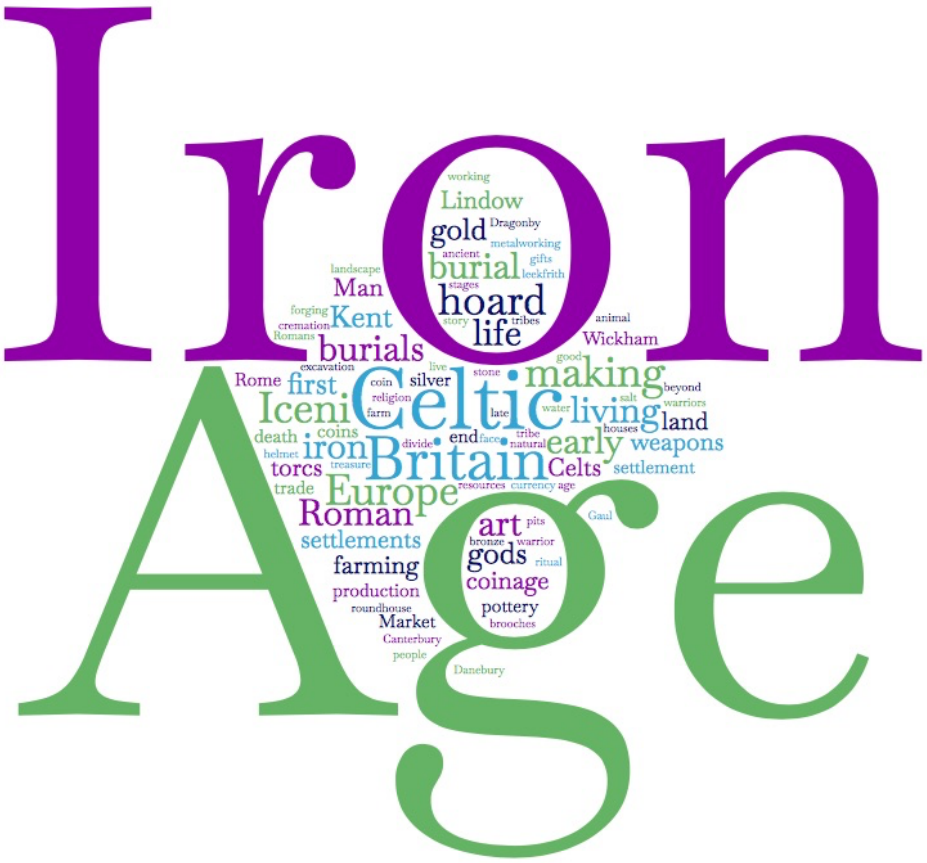


Figure 5.56. Word cloud produced from the 271 Iron Age text panels analysed.

Ranking	Total no. of references	Word(s)
1	82	Iron
2	81	Age
3	14	Celtic
4	10	Britain
5	7	Europe, hoard, Iceni, making

Table 5.10. The 5 most popular words used to describe the Iron Age in the 271 text panels analysed.

The panels used to articulate the Iron Age within the sample of 67 museums with Iron Age focused panels represent the greatest number of period-specific panels across the 173 museums analysed. Over 250 panels were identified that focused specifically on the Iron Age and the most prevalent word used to articulate the period, apart from *'Iron'* and *'Age'*, was *'Celtic',* referenced 10 times. Proportionately this word is not referenced in a significant number of the 271 text panels but does indicate that some panels are framing the period around the artificially constructed cultural identity and 17 panels appear to differentiate what is happening in Britain from Europe during the Iron Age and a greater emphasis is placed upon tribes such as the *'Iceni'*, hoarding practices and the processes of production and making in Iron Age daily life, as further exemplified by figure 5.57.

Across the 67 Iron Age panels analysed 7 narrative themes were present in 10% or more of the panels and these are illustrated in figure 5.57. A quarter of these panels make some form of reference to the '*Celts'* including references to *'Celtic places'*, *'Celtic art'* or *'Celtic tribes'*. This culture-based language is widely-assumed to be commonly associated with the Iron Age within the contemporary public consciousness. These assumptions are, however, being challenged by recent evaluative work. For example, as discussed in section 2.2.2 the British Museum's blockbuster exhibition '*Celts*' attempted to tap into these visitor preconceptions and deconstruct them, but during front-end evaluation, testing the familiarity of the concept '*Celts*' it was discovered that there was no shared understanding of the term or association with the Iron Age.

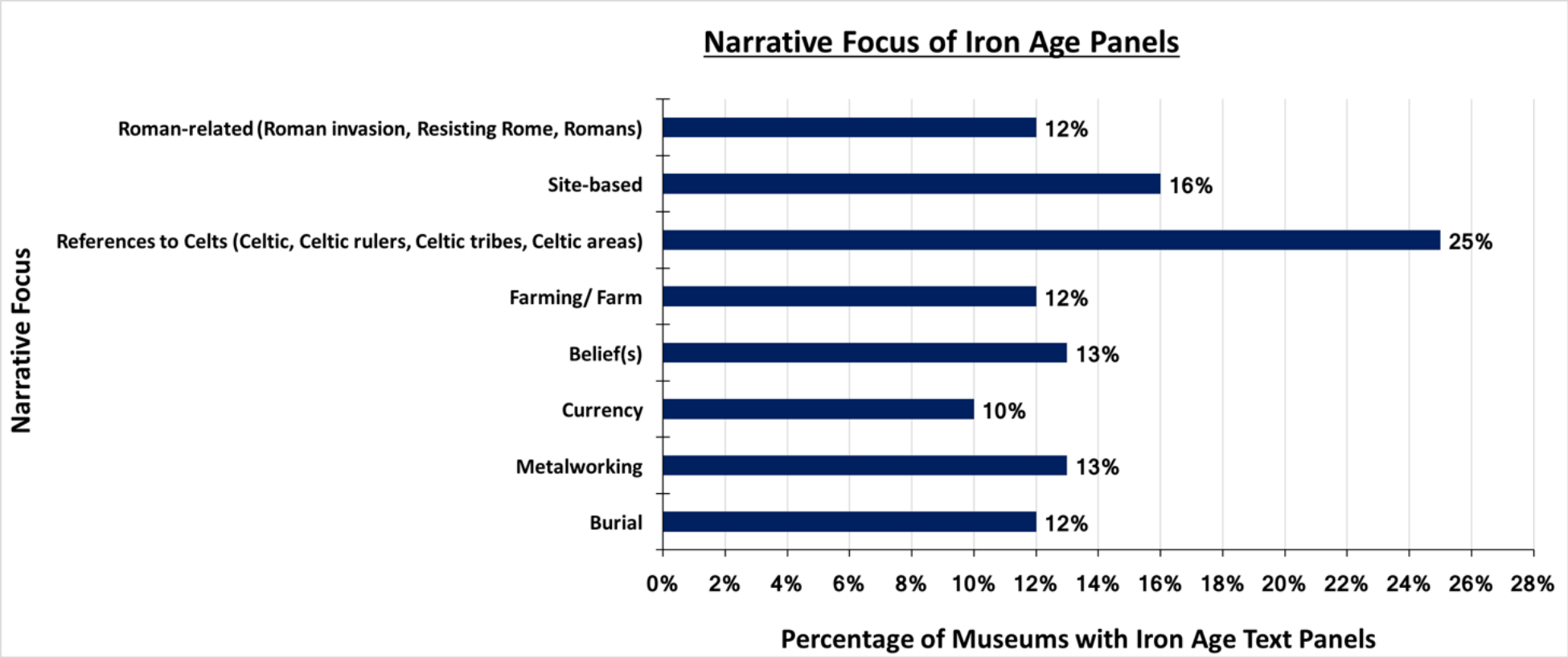


Figure 5.57. Graph illustrating the 8 most pervasive narrative themes conveyed by the text panels at the 67 museums with Iron Age text panels.

The general visitor unfamiliarity with the term 'Celts' was also exemplified by the 1 person out of 300 respondents that associated prehistory with the 'Celts' in part 1 of the questionnaire (section 4.5.1). This homogenising language associating geographically and culturally disparate Iron Age groups with contemporary notions of identity has been widely critiqued in the scholarship (Hill, 1989; Farley and Hunter, 2015; Pope, 2015) but still persists in text panels. Perhaps these panels are attempting to relate to visitors and their assumed understanding of the 'Celtic' past. This understanding within English museum visitors does not, however, appear to exist[19], providing museums with the opportunity to develop compelling narratives of Iron Age life that move beyond this reductive historical term.

To demarcate the end of the Iron Age and final phase of prehistory, as expected 12% of the period-specific text panels frame the period in relation to the Romans, either articulating narratives related to the Roman invasion, resisting the Romans or trading with the Romans. In contrast to the textual interpretation provided for earlier periods of prehistory the narratives associated with the Iron Age are far more diverse and encompass a greater range of daily life activities. Previously the Neolithic was framed with an almost singular focus on farming and the Bronze Age with a focus on metalworking, burial and associated beliefs, whilst the Iron Age is associated with all of these aspects of life as well as the development of coinage to differentiate it from earlier prehistoric periods. Overall, the narratives utilised to articulate the Iron Age present a more complete and complex vision of daily life, further reinforcing the linear technology driven narrative of prehistory, emphasising increasing complexity through time.

5.4.8 Types of additional interpretation

Due to the lack of written records and fragmentary often ambiguous nature of the archaeological record that characterises prehistory, additional forms of

[19] Such associations may be more prevalent within the 'Celtic' nations of Scotland, Wales and Ireland.

interpretation are essential for contextualising the period for museum visitors. Museums are thus reliant on supporting forms of interpretation such as the use of audio-visuals, interactives and text-based supplementary information in addition to text panels to further contextualise the physical remains in prehistory displays and dictate how visitors engage with the period. The following analysis accordingly seeks to identify which types of additional interpretation are employed in prehistory displays in England and which associated narratives they convey to further address the second research aim of the thesis. Across the 173 museums recorded it was possible to discern the types of additional interpretation utilised at 164 of the museums.

Audio-visual elements

Within the sample of 164 museums where additional interpretation could be identified 28 types of audio-visual interpretation were recognised and a full list of these types and sub-types of interpretation can be found in Appendix 16. A summary of the representation of these types of audio-visual interpretation across the 164 museums is provided in figure 5.58.

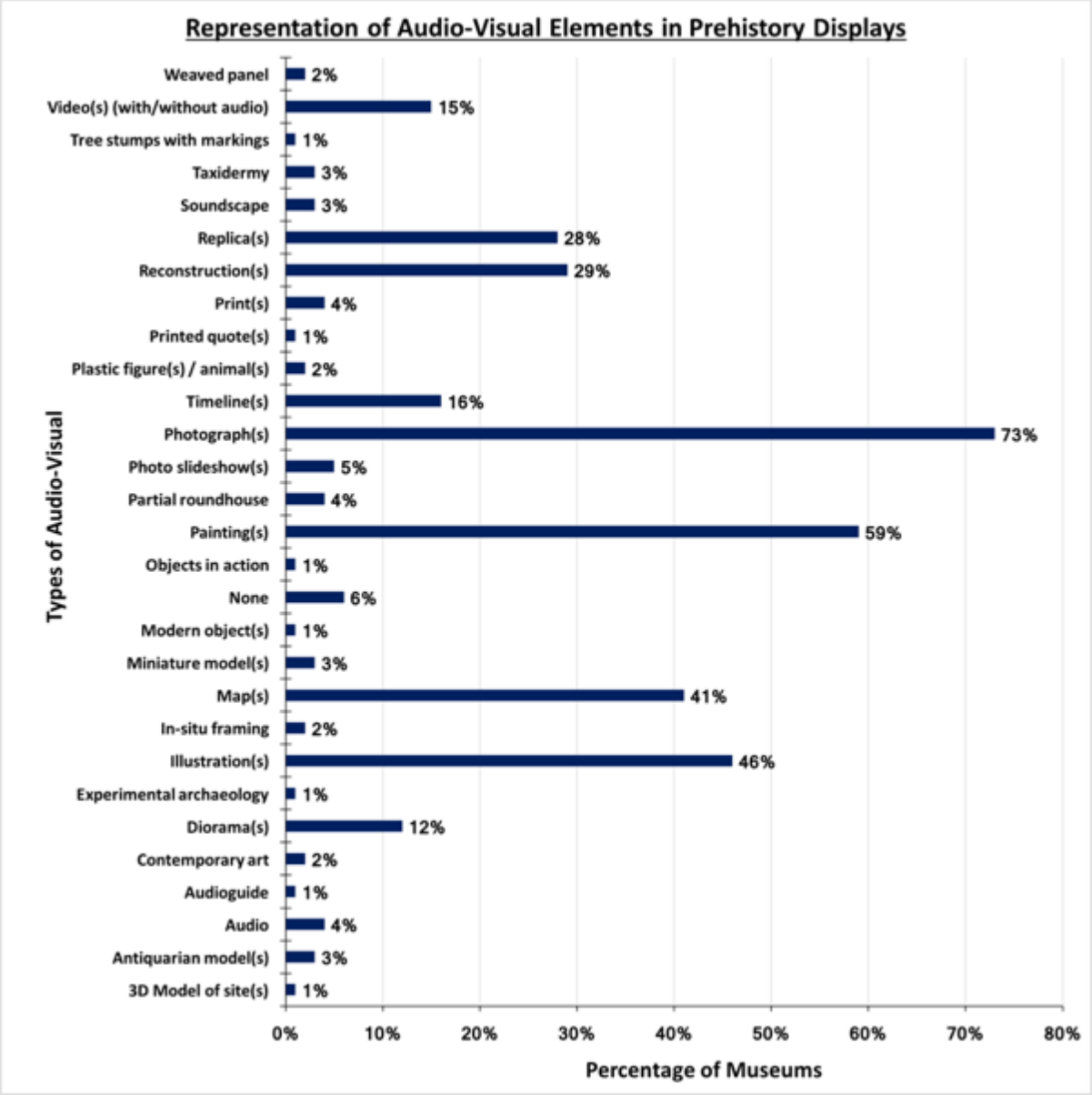


Figure 5.58. Graph illustrating the percentage of prehistory displays using different types of audio-visual interpretation from the sample of 164 museums analysed.

From the graph it is apparent that traditional two-dimensional visual forms are the most popular forms of audio-visual interpretation used within prehistory displays. The most popular of which are photographs, present in 73% of the prehistory displays analysed. Photographs are useful for representing objects that are not within a particular museum's collection, showing more detail of an object on display, invoking a sense of the landscape within the museum space, depicting the site where objects are from or even presenting reconstructed prehistoric people on display elsewhere. They are often perceived as authoritative objective images as they can only represent

what is physically present and for most museums they are relatively cheap and easy to create. Photographs are thus preferentially used to facilitate the interpretation of prehistory as an accessible and informative medium. They are, however, like all visual mediums subject to manipulation due to the selectivity of the content and framing that can present the museum's preferred narrative of the past. To further understand the narratives conveyed by this popular visual medium the themes communicated by the photographs were identified and the representation of these themes across the sample of 120 displays were calculated and are summarised in figure 5.59.

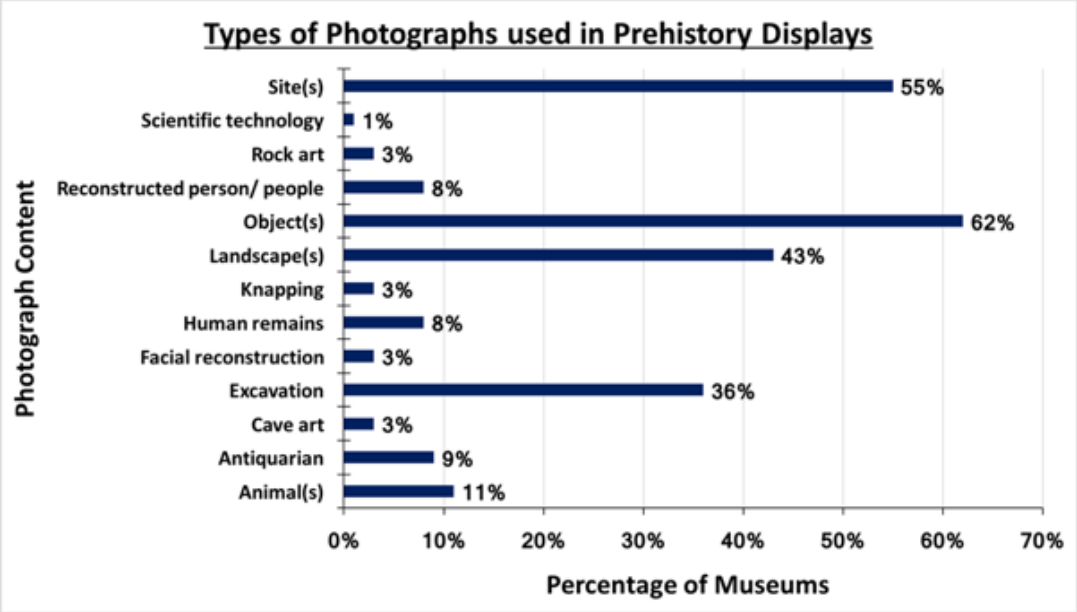


Figure 5.59. Graph summarising the percentage of displays using different types of photograph out of the 120 prehistory displays using photographs.

From figure 5.59 it is clear that the most popular content captured by photographs are objects, with 62% of the photographs depicting prehistoric objects themselves. Often photographs of similar objects are used for comparative purposes within displays or photographs of objects on display are used to highlight further detail of the objects. Photographs of objects not on display may also be used to decorate the space, yet simultaneously provide further context of the period. Other popular themes conveyed by photographs are quite landscape-centric focusing on archaeological sites and contemporary landscapes. This landscape focus is often further reinforced by the colour scheme as previously highlighted in section 5.4.5.

Paintings are also frequently used in prehistory displays and these visuals provide the opportunity to represent the past with greater artistic license enabling elements of the past not preserved in the archaeological record to be depicted. Consequently, this visual medium is inherently subjective as it is susceptible to the artist's/ curator's idea of the past and as previously highlighted by Moser (1998, 1999) and discussed in section 2.3, such depictions rely on a restricted set of stereotypes to fill in the gaps of the archaeological record and provide a face for the distant past. A summary of the content of paintings used in prehistory displays is provided in figure 5.60.

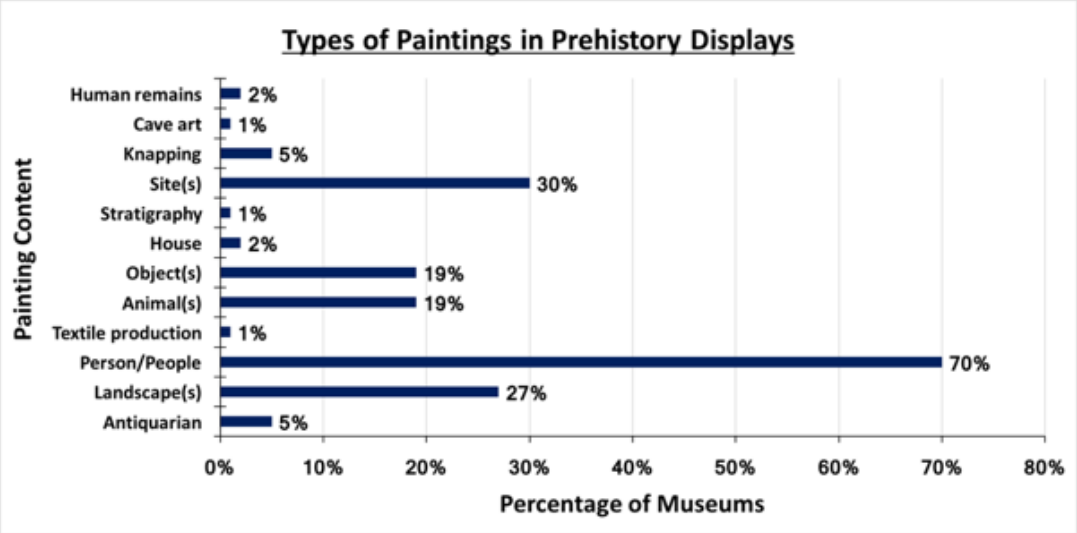


Figure 5.60. Graph summarising the percentage of paintings in each content category from the 96 displays using paintings.

In contrast to the object-focus provided by photographs in prehistory displays, paintings are primarily used to depict the people of the past. The landscape-centric theme conveyed by photographs is also reinforced by paintings with 30% of paintings used to depict how sites used to look/ were used and 27% reimagining past landscapes. Illustrations perform a similar more subjective role like paintings and are quite a popular audio-visual element, present in 46% of the prehistory displays. The content of illustrations and how many displays use such illustrations are summarised in figure 5.61.

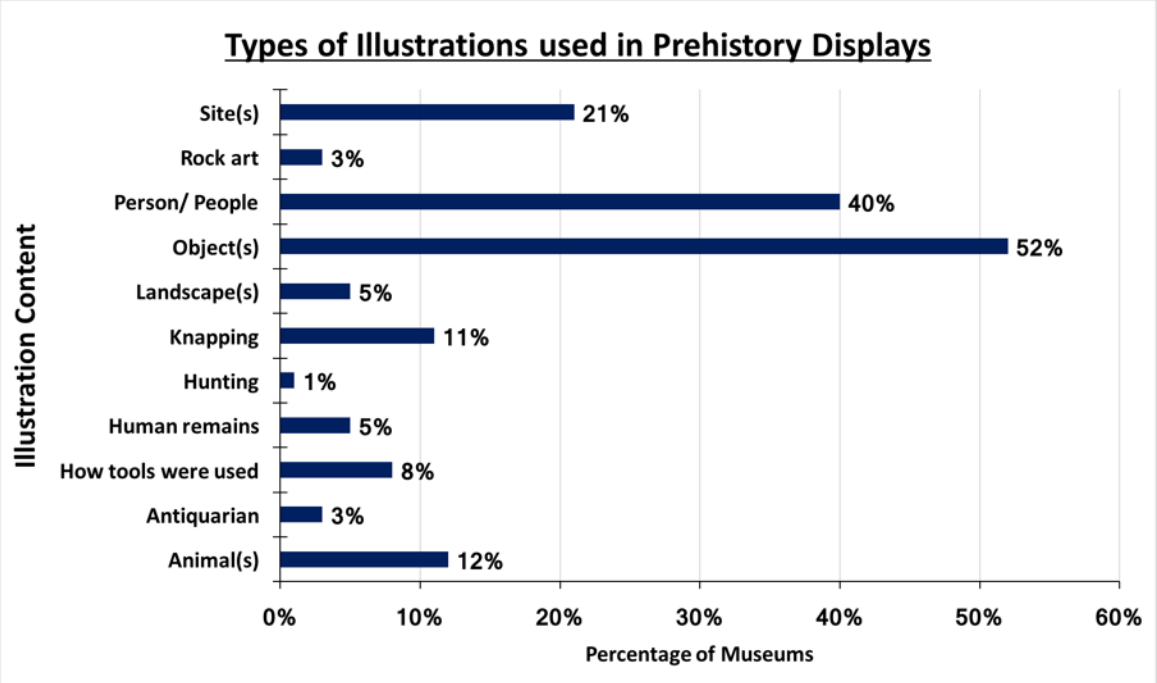


Figure 5.61. Graph summarising the percentage of museums using different types of illustrations out of 75 museums using illustrations in their prehistory displays.

The content of illustrations used in prehistory displays intersect and overlap with the themes conveyed in paintings and photographs. Just over half of the illustrations represent objects whilst nearly half of the illustrations depict people and just under a quarter of illustrations represent sites. Thus further reinforcing people-centric and landscape-centric narratives of prehistory. It is quite common for the illustrations used to either provide a detailed representation of an object, particularly Antiquarian illustrations presented alongside the objects depicted or to simplify the object into a more schematic representation used as a decorative feature against the back of a case or together in conjunction with object descriptions.

In addition to the traditional two-dimensional visuals utilised in prehistory displays videos are becoming increasingly popular as an additional form of visual interpretation that is not restricted by the static nature of an illustration, painting or photograph. Videos are uniquely positioned to provide a wealth of dynamic contextual information that can either be scientific or representational in nature that can also be accompanied by an audio. Despite their potential, however, within the sample of 164 prehistory displays only 24 use videos as an additional form of

interpretation. Within the sample of museums using videos some feature an archaeologist talking about an object or site in detail whilst others are used to summarise the timeline of an area composed of a variety of scenes and overlaid images, whilst others visually demonstrate changes through time in archaeological sites and landscapes. A summary of the content of such videos and how many displays use these videos is summarised in figure 5.62.

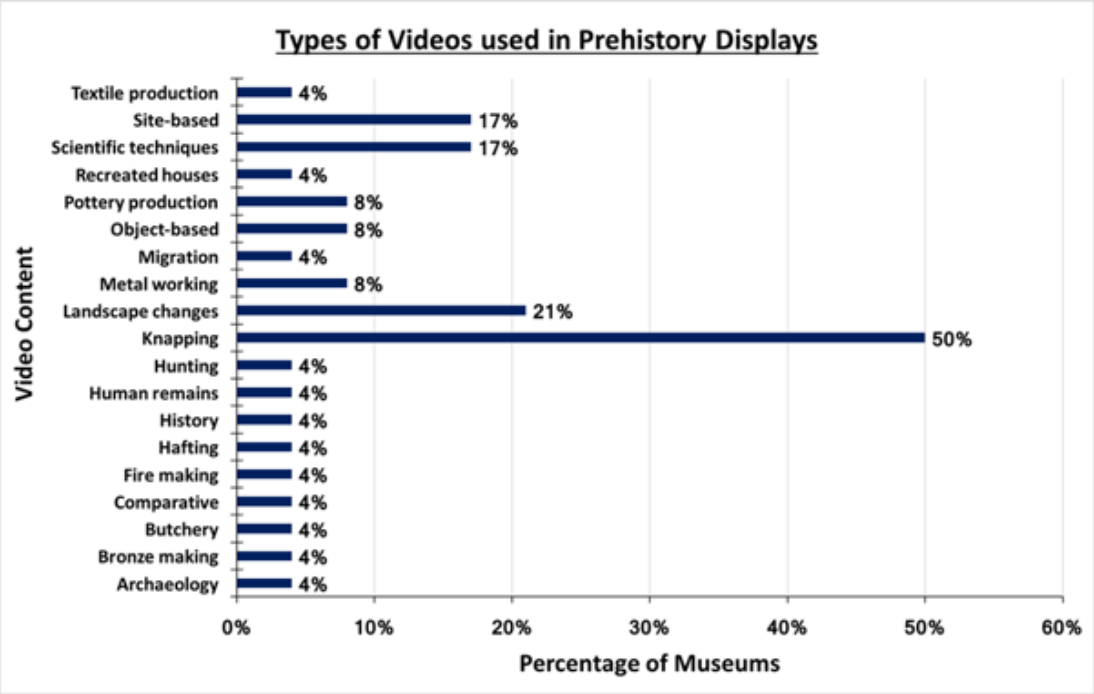


Figure 5.62. Graph summarising the percentage of videos within museum displays focusing on different topics within the sample of 24 museums using videos.

Half of the videos used to support prehistory displays visualise the knapping process in an attempt to make the process more relatable to visitors. Knapping is a vital process of lithic tool reduction and production that was used over thousands of years to create different types of tools. It is, however, a difficult process to convey and bring to life by merely describing the stages of production alongside two dimensional illustrations or descriptions associated with lithics behind a glass case. Visualising this dynamic process in videos therefore enables the museum to enliven their lithic collections. Some videos used in the displays are utilised to envisage how past landscapes change through time and are particularly useful for illustrating climatic fluctuations and how land masses changed and ice sheets retreated in the

Pleistocene. The overall low percentage of videos in each content category illustrated by figure 5.81 highlights that apart from a focus on knapping and landscape changes the uses of videos within prehistory displays are highly variable with only one or two videos associated with each category.

To further explore the intersection of key visual themes conveyed by the traditional three primary forms of visual communication and more recent dynamic visual medium of videos the representation of popular visual content within each type of medium is summarised in figure 5.63. From this graph it is clear that certain mediums are selectively chosen over others to present certain content within prehistory displays. Paintings in particular, as well as illustrations are preferentially selected to represent prehistoric people due to the creative opportunities they enable. Photographs are preferentially selected to capture object(s) and site(s) due to the accuracy and objectivity they are perceived to facilitate, although illustrations, particularly scientific ones are also valued for representing object(s). Videos are favoured above more traditional forms of visual interpretation to present the process of flint knapping as it is a motion-based activity that is difficult to convey using more static visuals such as photographs or illustrations of each stage in the process. Overall, the main content focus of the different visuals appear to relate primarily to either a people focused or landscape focused narrative theme as summarised in table 5.11.

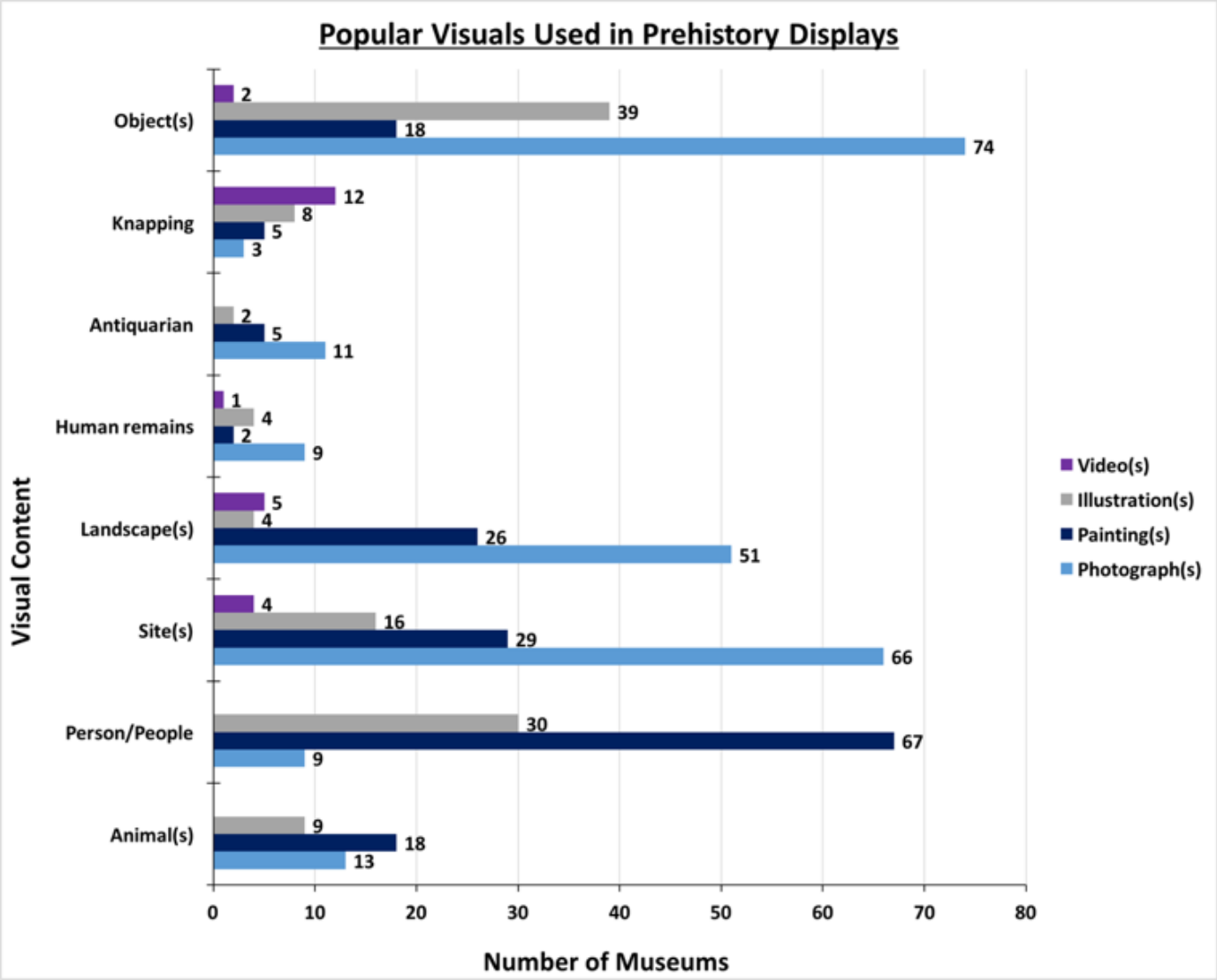


Figure 5.63. Graph demonstrating the representation of popular visual content within each type of visual medium.

People-centric	Landscape-centric
• Object(s) – Made by people • Knapping – Past human behaviour • Antiquarian- Image of an Antiquarian • Human remains- Physical remains of prehistoric people • Person/ People- Representation of a prehistoric person/ people	• Landscape(s)- Representations of past/ present landscape(s) • Site(s)- Representations of archaeological site(s) within the landscape. • Animal(s)- Representations of animals past/ present in their environmental context

Table 5.11. Summary of the people-centric versus the landscape-centric content represented in display visuals.

To further highlight the prevalence of both people focused and landscape focused themes conveyed by each visual medium, the three most popular types of content for each visual medium are further summarised in table 5.12.

Photograph(s)	Painting(s)	Illustration(s)	Video(s)	Overall
1 Object(s)	1 Person/ People	1 Object(s)	1 Knapping	1 Object(s)
2 Site(s)	2 Site(s)	2 Person/ People	2 Landscape changes	2 Site(s)
3 Landscape(s)	3 Landscape(s)	3 Site(s)	3 Site-based	3 Person/ People
			Scientific techniques	

Table 5.12. Colour-coded summary of the three most popular types of content for each of the 4 main visual mediums used in prehistory displays.

Across all visual mediums the key types of content represented in prehistory displays are object(s), person/ people, site(s) and landscape(s) which convey either a person-centric or landscape-centric narrative of the past. However, as highlighted by table 5.11, across all mediums the most popular types of content are associated with presenting a person-oriented narrative of the past by focusing on either the object(s) they made and used in their daily lives, the people themselves or how they produced their tools. The second/ third most popular types of content are usually associated with invoking a sense of the wider prehistoric landscape within the museum by representing landscapes and sites. Prehistory displays thus seem to be categorised into a narrative binary of person versus landscape. However, these themes are not mutually exclusive and a lot of displays present a combination of both themes or present both themes with a greater focus on one theme over the other. Furthermore, some visuals cannot easily be categorised into this narrative binary and are best encapsulated by the narrative theme of archaeology. Within table 5.13 for example visuals associated with 'scientific techniques' are used to convey the scientific processes involved in archaeological science, whilst, photographs of excavations and reconstructed stratigraphies also convey this archaeology focused narrative. A summary of the overarching narratives that all of the audio-visual elements contribute to at each museum is presented in figure 5.64.

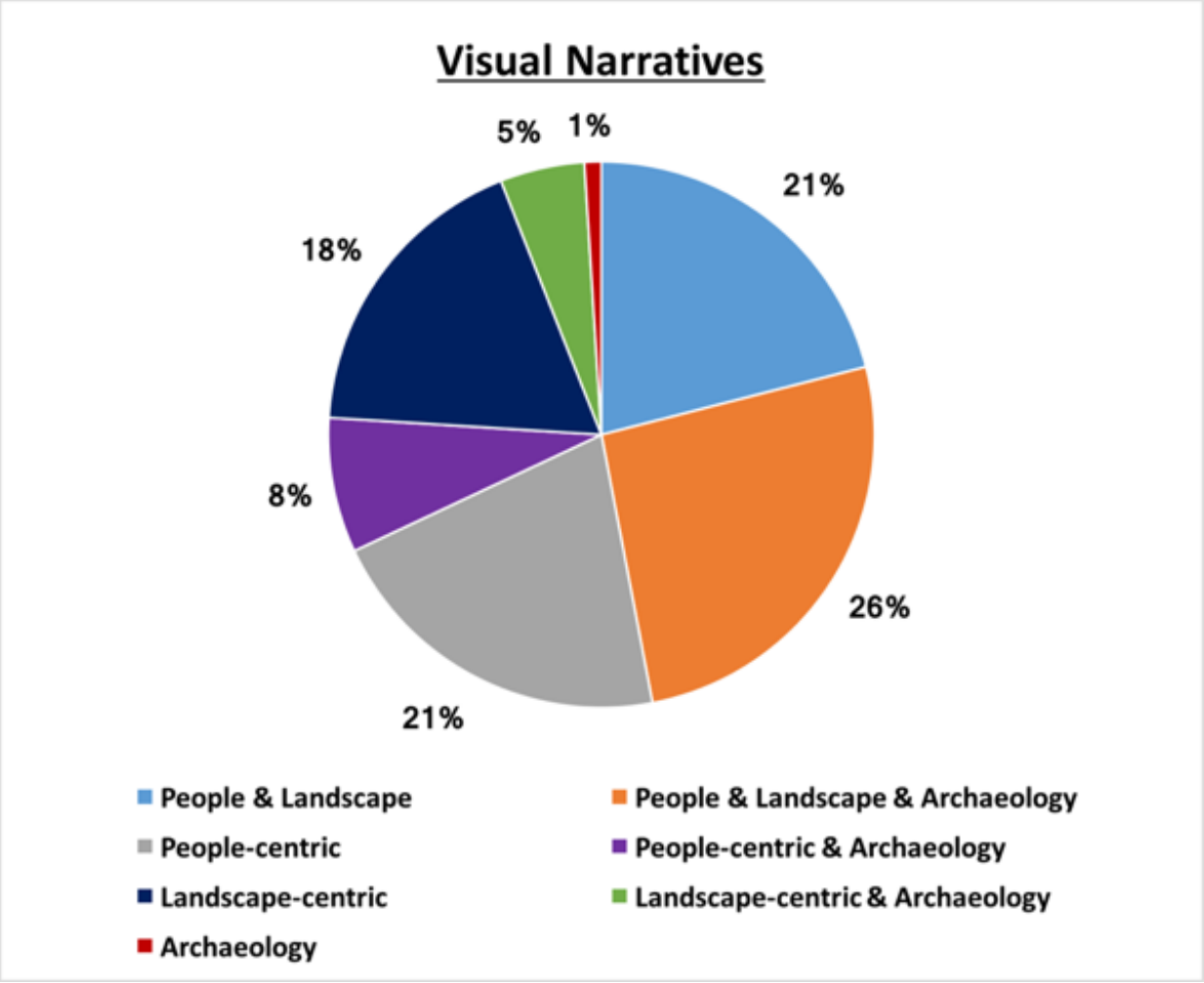


Figure 5.64. Pie chart reflecting the percentage of museum displays associated with each overarching visual narrative based on the visuals employed at 154 museums where such visuals could be categorised.

The prevalence of a combination of visual narratives used to present prehistory in museum displays is exemplified by figure 5.64. There does not appear to be a particular combination of narratives that is more popular than others as the 4 most popular narrative combinations are only separated by 8 percent. Just over a quarter of the displays categorised based on their visual content conveyed a combination of the three main themes, whilst at 21% an equal portion of museums conveyed a combined people and landscape focus and a singular person focus. A solely landscape-centric narrative was also very popular, represented by 18% of the sample. Very few museum displays solely focus on archaeology or archaeology in

combination with either a people or landscape focus. Instead most museums that utilise a focus on archaeology to frame their prehistory displays do not rely on audio-visual elements.

In addition to the visual mediums of photography, painting, illustrations and videos, the visual archaeological medium of maps are also frequently utilised in prehistory displays. Maps were present in 41% of the museums analysed and were used to highlight distributions of sites/ objects and the location of sites to contextualise the objects on display.

Chapter 4 highlighted that due to the breadth of time prehistory encompasses visitors cannot situate prehistory within its temporal context and consequently timelines are an essential tool for providing that temporality. Within the sample of 164 museums that were visually analysed, only 16% of the displays capitalised on the temporality that timelines can provide. Across these displays a variety of different types of timeline were utilised including pictorial timelines providing comparative photographs of sites/ objects in different places at different times and climatic timelines demonstrating the changing climate. At Brent Museum (figure 5.65) a schematic representation of a stratigraphy is overlaid onto a timeline of the town with objects embedded in the timeline, another example of a timeline using interpretation and objects embedded in the wall can be seen at the Museum of Liverpool (figure 5.66) and at the NHM (figure 5.67), where a timeline using hominin casts is employed to simultaneously convey when different hominins were around, as well as their phylogenetic relationships.

Figure 5.65. Photograph of the stratigraphy timeline with objects embedded used in the archaeology displays in Brent Museum (Harman, 2019).

Figure 5.66. Photograph of a section of the object-based timeline on display at the Museum of Liverpool (McDowall, 2019).

Figure 5.67. Photograph of the timeline at the Natural History Museum using casts of hominin skulls to convey evolutionary relationships through time (McDowall, 2017).

Despite the perceived popularity of dioramas in prehistory displays, which are often regarded as relics of outdated display styles as emphasised in section 2.3.1, this medium of display was only present within 12% of the displays. Similar three-dimensional creative representations of the past are still, however, popular within prehistory displays, as reconstructions and replicas are present in 29% and 28% of the displays respectively. Reconstructions as a visual category can be further categorised into sub-types of reconstruction which are listed in Appendix 16 and include; facial reconstructions, reconstructed sites and reconstructed people. A summary of the representation of these different types of reconstruction is presented in figure 5.68.

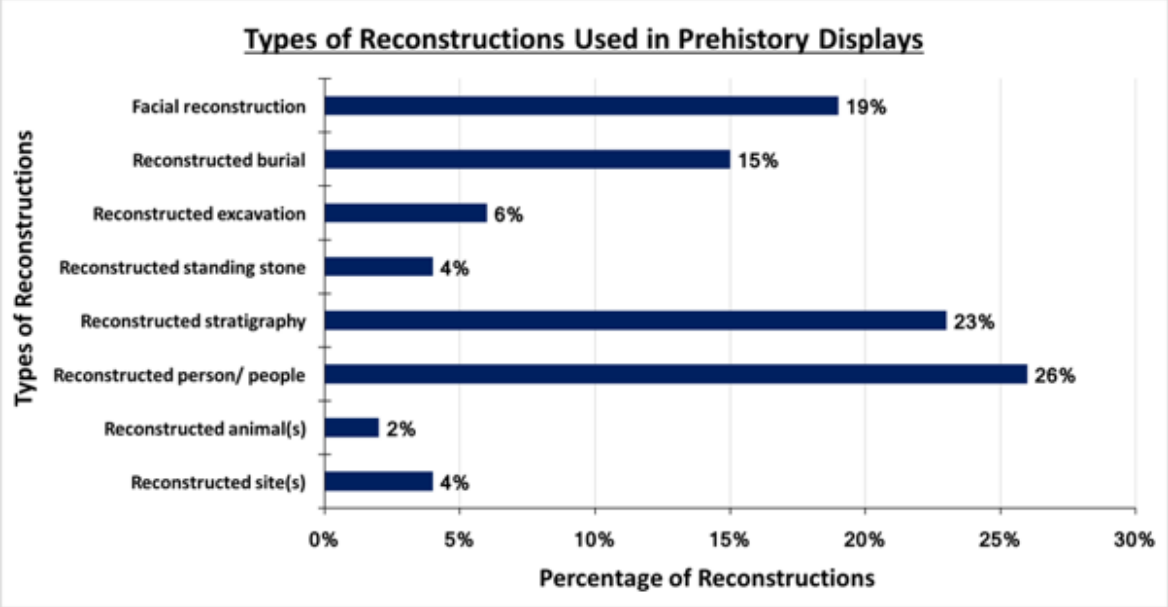


Figure 5.68. Graph demonstrating the representation of different types of reconstruction in the 47 prehistory displays that use reconstructions.

Out of the 47 reconstructions identified across the museums, the majority are used to imaginatively represent prehistoric people, particularly 'Celts' as seen at Doncaster Museum (figure 5.69) and Norwich Castle (figure 5.70). Reconstructed stratigraphies are also a popular form of reconstruction, utilised to convey an overarching archaeology-driven narrative as previously outlined. These stratigraphies are composed of replica or original objects embedded within a section of earth as if the visitor is looking at an in-situ stratigraphy, as seen at the Dorman Museum (figure 5.71) and Athelstan Museum (figure 5.72).

Figure 5.69. Photograph of a 'Celtic' couple on display at Doncaster Museum (McDowall, 2017).

Figure 5.70. Close-up photograph of a Roman soldier subduing a local 'Celt' on display at Norwich Castle Museum (McDowall, 2018).

Figure 5.71. Photograph of the reconstructed stratigraphy display at the Dorman Museum (McDowall, 2017).

Figure 5.72. Photograph of a reconstructed stratigraphy display with pull out drawers of archaeology on display at Athelstan Museum (Athelstan Museum, 2019).

Depending on how reconstructions are used within the museum and how visitors interact with them dictates whether a reconstruction is classified as an audio-visual element or interactive, as they can perform both roles. If for example, they were employed within an interactive context in which the visitor had the opportunity to touch and explore the reconstruction they were classified as an interactive. Conversely, if visitors could merely participate in a visual experience with the reconstruction because they were unable to touch or interact with the reconstruction then it was classified as an audio-visual element.

Replicas are used to portray objects/ materials that are not present but for which examples already exist so are objectively-situated in representing what does exist, in contrast to reconstructions which can represent what already exists, as well as representing parts of the past that are not preserved. Replicas are often utilised by museums to fill gaps in their collections or to represent objects found locally that are

on display in other museums. For example, a replica of the locally found Bronze Age Ringlemere gold cup is on display at Dover Museum (figure 5.73) as the original artefact is on display at the BM. Replicas thus offer unique opportunities for museums to present local/ national 'star' objects that are held within larger institutions. Furthermore, replicas occupy a peculiar position in museum displays as they simultaneously embody an aura of authenticity due to their public display within a scientific institution and often are not recognised as a replica yet they are physically an imitation of the original. They may not be made of the same materials as the original and consequently carry varying degrees of authenticity depending on the viewing context and relationships between material properties, aesthetics, viewer and the viewer's preconceptions and understanding of legitimacy. Replicas used in prehistory displays are not always replicas of objects but also include materials, textiles and even cave art as seen on display at The Prehistory Museum, Cheddar Gorge (figure 5.74).

Figure 5.73. Photograph of the replica Ringlemere Gold Cup on display at Dover Museum (McDowall, 2018).

Figure 5.74. Photograph of two of the replica cave art panels based on scenes at Lascaux on display along a corridor at the Museum of Prehistory, Cheddar Gorge (McDowall, 2018).

Overall the quantitative visual analysis of audio-visual forms of interpretation utilised in prehistory displays has revealed the propensity for museums to frame their displays around a focus on the people of the past, the landscapes they inhabited and how archaeologists interpret this past from the physical remains left behind. Museums are most reliant on photographs, paintings and illustrations to convey these key narratives but also rely on the use of replicas and reconstructions to visualise what is not always present or preserved.

Interactives

In addition to audio-visual forms of interpretation interactive forms of interpretation are also utilised to provide a more physically engaging experience with prehistory displays. Over the past twenty years there has been an increased awareness that museums need to engage visitors haptically and cater towards different, more proactive and kinaesthetic learning styles. Interactives engage with more of the senses and go beyond the traditional didactic experience with visuals, objects and text-based interpretation that have characterised the majority of museum interactions since the 19th century. Despite all of these potential added benefits of

including interactives alongside other forms of interpretation, they are often more susceptible to break through use, may become outdated quickly, particularly those which are reliant on computer-based technology and they are often more expensive to create and include within displays. Consequently, interactives are not as popular within the museum displays analysed as audio-visual elements. Within the sample, interactives only accounted for 58 prehistory displays and within those displays 28 types of interpretation were identified and their representation within the sample is summarised in figure 5.75.

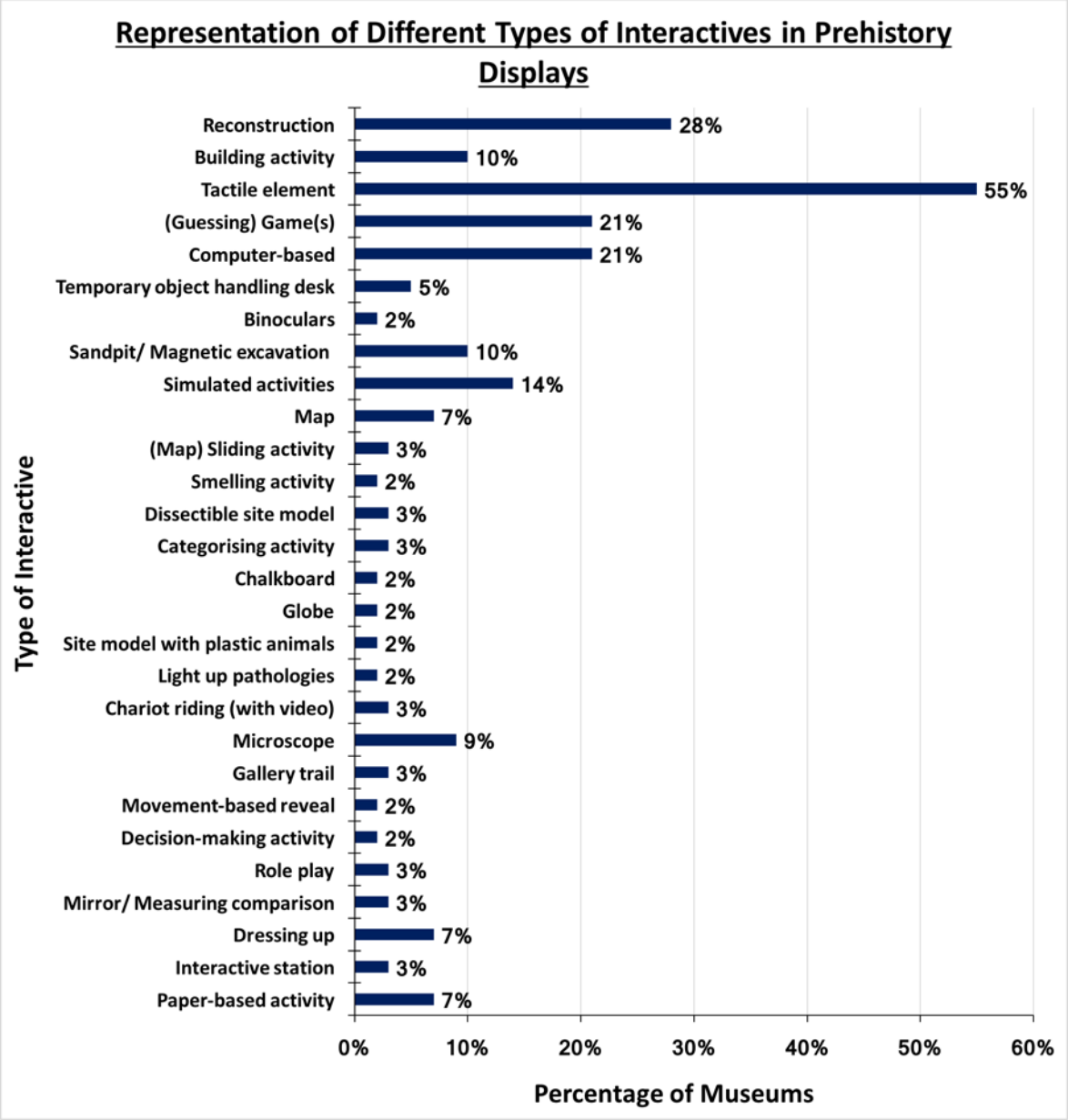


Figure 5.75. Graph summarising the percentage of museums displays with different types of interactive within the sample of 58 prehistory displays with interactives.

The most popular type of interactive utilised in prehistory displays are tactile elements represented by 55% of the interactives on display. These tactile elements are predominantly replica objects but also include original artefacts on open-display that visitors are encouraged to touch such as the woolly rhino skull on open-display at TQ (figure 5.76).

Figure 5.76. Photograph of the woolly rhino skull on display at Torquay Museum that visitors are encouraged to touch and interact with (McDowall, 2018).

Reconstructions that visitors can interact with, particularly reconstructed roundhouses that visitors can walk in are also quite popular, with roundhouses representing 10 of the 16 reconstructions used in the prehistory displays. Guessing games and computer-based interactives are mostly information-based and represented equally within the sample of interactive prehistory displays, but only represent 12 museums due to the lack of prehistory displays that are reliant on interactive features. Interactives are often championed for increasing visitor

engagements in museums, visitor interactions with them will be evaluated in the next Chapter.

Text-based supplementary information

In addition to text-panels and object descriptions, displays also utilise other forms of text-based supporting interpretation defined here as 'text-based supplementary information'. These forms of interpretation often rely on the discretion of the visitor to actively engage and make enquiries for further information. These text-based additional forms of interpretation include ringbinders of further information that are left alongside displays for visitors to pick up and leaf through, QR codes next to certain displays that link to additional text-based online resources and the inclusion of newspaper/ journal/ magazine articles pertaining to the objects/ topics on display. Across the displays, 13 forms of text-based supplementary information were identified across 47 museums and the representation of these mediums across the museums is summarised in figure 5.77.

In comparison to the representation of audio-visual elements, very few of the prehistory displays include additional text-based forms of interpretation. Out of the few museums that do include such further sources of information, booklets are the most popular type of additional information. Booklets are relatively cheap and easy to use and provide visitors with a non-intrusive opportunity to pursue further enquires and delve into more context than the object-descriptions and text panels provide. Gauging the level of context that a visitor is interested in is a difficult exercise as each individual prefers different levels of detail and has varying expectations about what information should be available within the displays. By providing detailed booklets, museums are thus able to cater to a wider variety of these interests and expectations without making interventions into the primary display text which may alter the accessibility of the text if pitched at a higher level with more detail. Text-based timelines are also relatively popular across the small sample of prehistory displays that use such text-based forms of interpretation. These timelines are more

reliant on textual information than visual elements for providing a temporal framework, as seen at Folkestone Museum (figure 5.78).

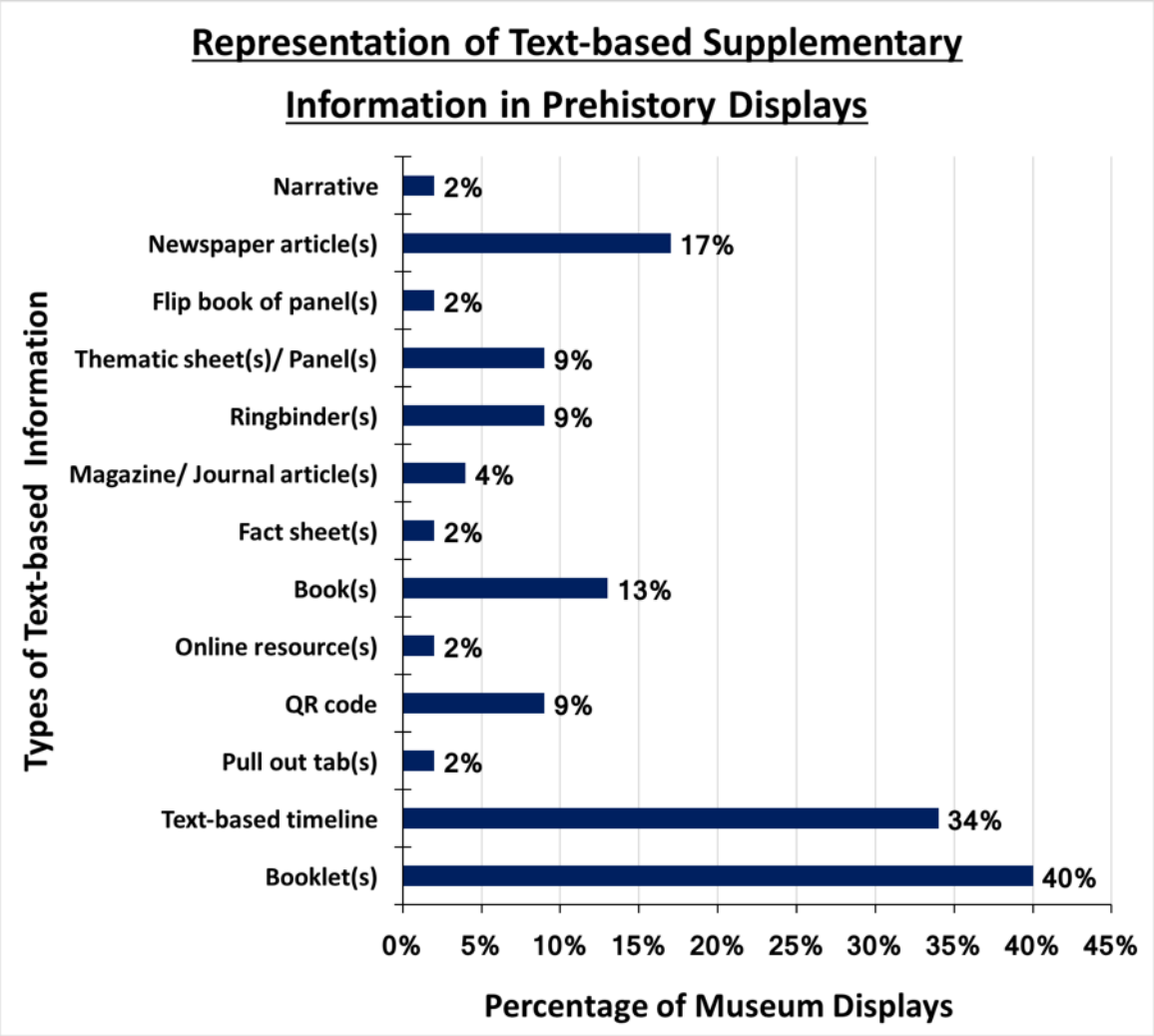


Figure 5.77. Graph summarising the percentage of museums utilising different types of text-based supplementary information out of the sample of 47 museums with such text-based forms of interpretation in displays.

Figure 5.78. Photograph of the text-based stratigraphic timeline used in the displays at Folkestone Museum (McDowall, 2018).

5.4.9 Representation of gender

In section 2.3.2 a historical misrepresentation of gender in museums was highlighted, that was particularly prevalent in prehistory displays due to the lack of written

records and fragmentary archaeological record heavily influenced by our own assumptions about gender. To explore whether the representation of gender has changed over the past thirty years since the scholarship first addressed these issues the visuals and text used to convey prehistory were analysed to identify how men and women of the past are represented. Prehistory displays do not present any other genders so this exploration focused on the binary genders of male and female as these are the only ones available to observe. The issues with how gender has been presented often also apply to the representation of children, elderly individuals and disabled people but it wasn't within the scope of the thesis to address the representation of these other groups.

To facilitate the categorisation of depictions of men and women in prehistory displays across the sample of museums firstly, the activities men and women are associated with in depictions were identified and these activities were then utilised to determine whether they are represented in stereotypical gender roles or represented in more nuanced roles. A summary of the activities both men and women are associated with in depictions across the museums is provided in Appendix 17. These activities were either associated with 'active' pursuits or the 'domestic' sphere and appear to reflect the traditional task differentiation based on sex that dictated representations of gender in displays of the 1990s (Gifford-Gonzalez, 1993; Porter, 1995; Butler, 1996; Cook, 1996; Wood, 1996; Sørensen, 1999; Moser, 1999). The active roles include going out hunting, farming, mining, tool making, metalworking, fighting and undertaking symbolic activities such as burial rituals or producing art, activities that were commonly associated with men in these older prehistory displays of the 1990s. In contrast, the domestic roles that include cooking, crafting, looking after children and making textiles were almost exclusively associated with women in the older prehistory displays. To understand the extent to which these associations have changed in the last thirty years, particularly with the recent developments of such displays in the last 10 years, emphasised in section 5.4.2 and with the influence of feminist archaeology on our interpretations of the past, the activities associated with men and women were analysed. Out of the 153 museums that utilise visuals to support the interpretation of prehistory, only 75 of these

museums depict gender in their displays, potentially indicating a reticence to represent people in displays. Firstly, to identify whether men are still primarily associated with 'active' roles in these representations of daily life, the percentage of museums depicting women in association with these roles, the percentage of men in association with these roles and the percentage of men and women represented undertaking these activities collaboratively were calculated across the 75 museums and are summarised in figure 5.79.

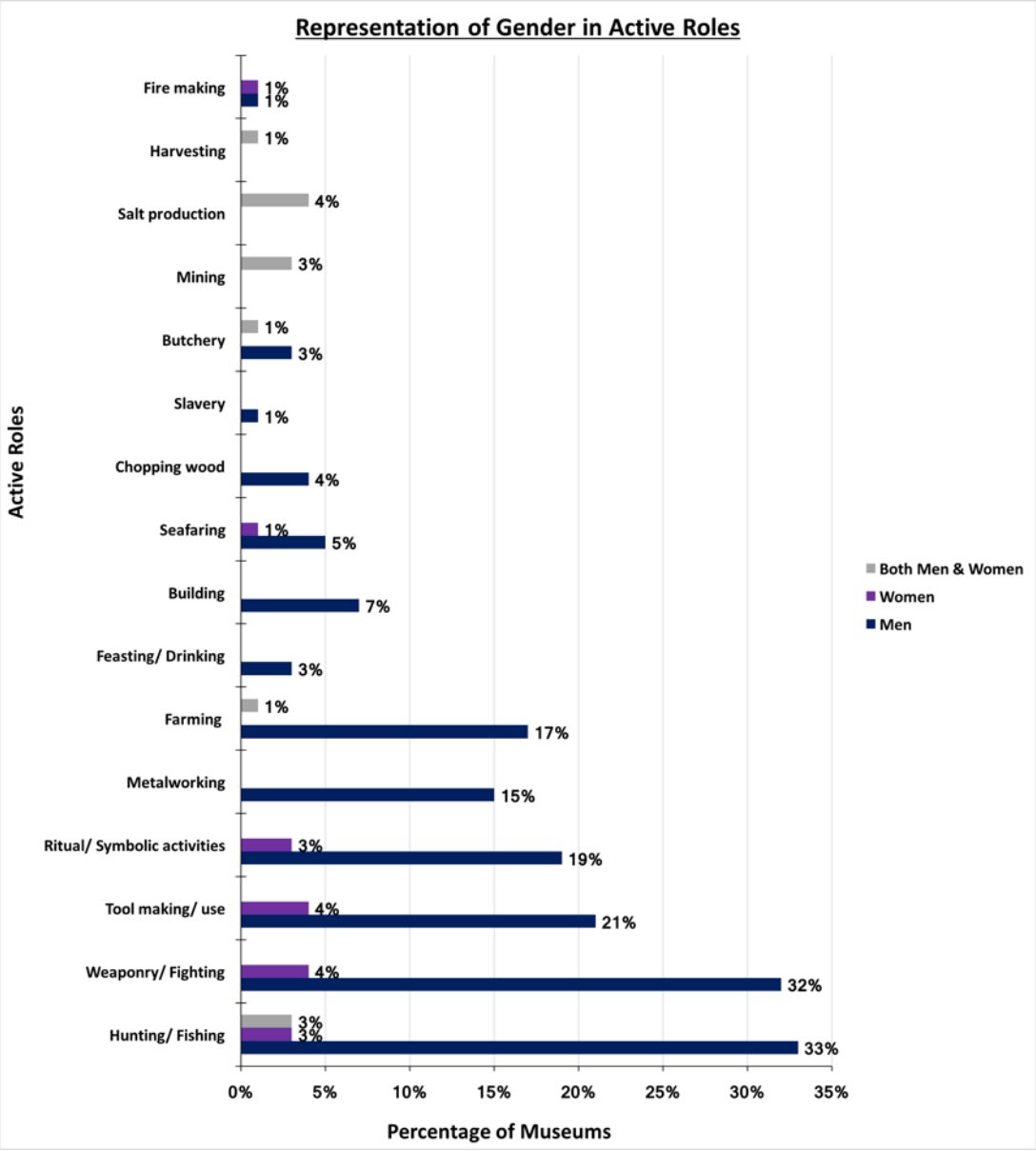


Figure 5.79. Graph summarising the representation of gender in association with 'active' roles in the 75 museums that represent gender.

Figure 5.79 clearly illustrates the static nature of visual tropes and stereotypes within prehistory displays, where the representation of gender has not changed for over 30 years. Men are still primarily represented in association with active and symbolic activities, whilst women are very rarely represented undertaking such activities despite the paucity of archaeological evidence to support such a gendered division of activities. When women are depicted undertaking such activities they are only represented undertaking such roles in 1-4% of the museums analysed. In contrast, 33% of these depictions represent men hunting or fishing as seen at the Rotunda Museum (figure 5.80) and Wells and Mendip Museum (figure 5.81), whilst 32% represent men in association with weaponry or fighting, particularly in Iron Age scenes, as seen at Colchester Castle (figure 5.82) and the Museum of the Iron Age (figure 5.83). Furthermore, men are also frequently associated with tool making/ use, ritual/ symbolic acts, farming and metalworking. Men and women are very rarely depicted undertaking such activities together and consequently these visuals continue to convey the male-centric image of prehistory, in which most activities were exclusively framed within the male domain.

Figure 5.80. Photograph of male dominated Mesolithic hunting display at the Rotunda Museum (McDowall, 2017).

Figure 5.81. Photograph of an all-male Neanderthal hunting scene image presented alongside a display of lithics in Wells and Mendip Museum (McDowall, 2018).

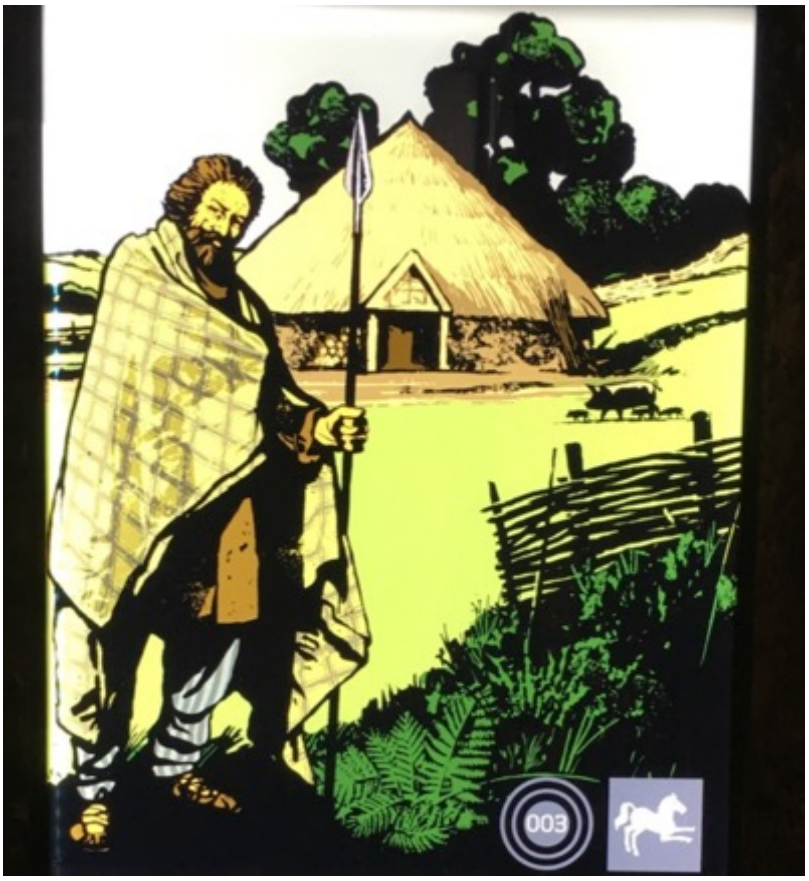


Figure 5.82. Photograph of part of the introductory text panel at Colchester Castle which depicts an Iron Age man with a spear (McDowall, 2017).

Figure 5.83. Photograph of Iron Age men fighting the Romans in The Museum of the Iron Age (McDowall, 2017).

To understand whether the representation of past peoples undertaking activities associated with the domestic realm are still predominantly female, the percentage of women, men and both genders working collaboratively in 'domestic' roles in the 75 displays were also analysed and are summarised in figure 5.84.

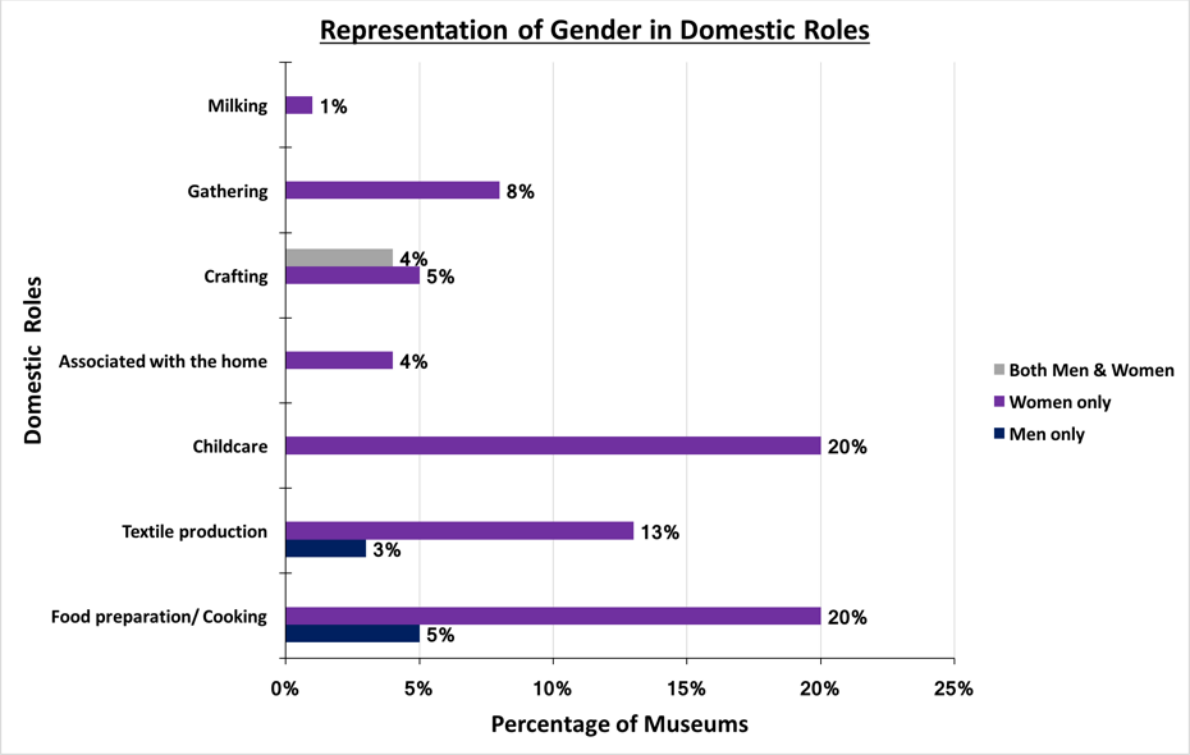


Figure 5.84. Graph illustrating the representation of gender in association with 'domestic' roles across the 75 museums.

Figure 5.84 illustrates far fewer roles than those represented in figure 5.79, reflecting the general trend in prehistory displays for a greater focus on active pursuits in supporting visuals over domestic activities. It is also immediately apparent from figure 5.84 that women are still primarily associated with the domestic sphere, with 20% of women depicted in museums associated exclusively with childcare/ breastfeeding, often in the periphery or in the background of scenes as seen at Peterborough Museum (figure 5.85), reducing them to their reproductive biology. This is not to say that childcare is an unimportant role but that the lack of visuals depicting women in other roles unnecessarily emphasises their role as 'mothers' and 'care-givers' over other aspects of their life not directly linked to their reproduction. In addition, 20% of women depicted are represented undertaking food preparation

activities such as grinding grain and cooking as illustrated by the visual employed at Whitby museum (figure 5.86). Crafting is the only activity that seems to be more balanced in its representation, with an almost equal number of women and men represented making pottery and undertaking other crafting activities. Perhaps this activity is viewed as more egalitarian because it can be just as active and time intensive as flint knapping and also requires certain skill placing it within the stereotypical male domain, whilst also being perceived as a more domestic activity associated with skills required for textile production and thus also within the female domain. Although the domestic activities depicted in museum displays are predominantly associated with women, the frequency of these images across the sample is still considerably lower than the representations of more active pursuits reflecting a bias towards presenting more active roles in daily life scenes and not depicting women as frequently as men.

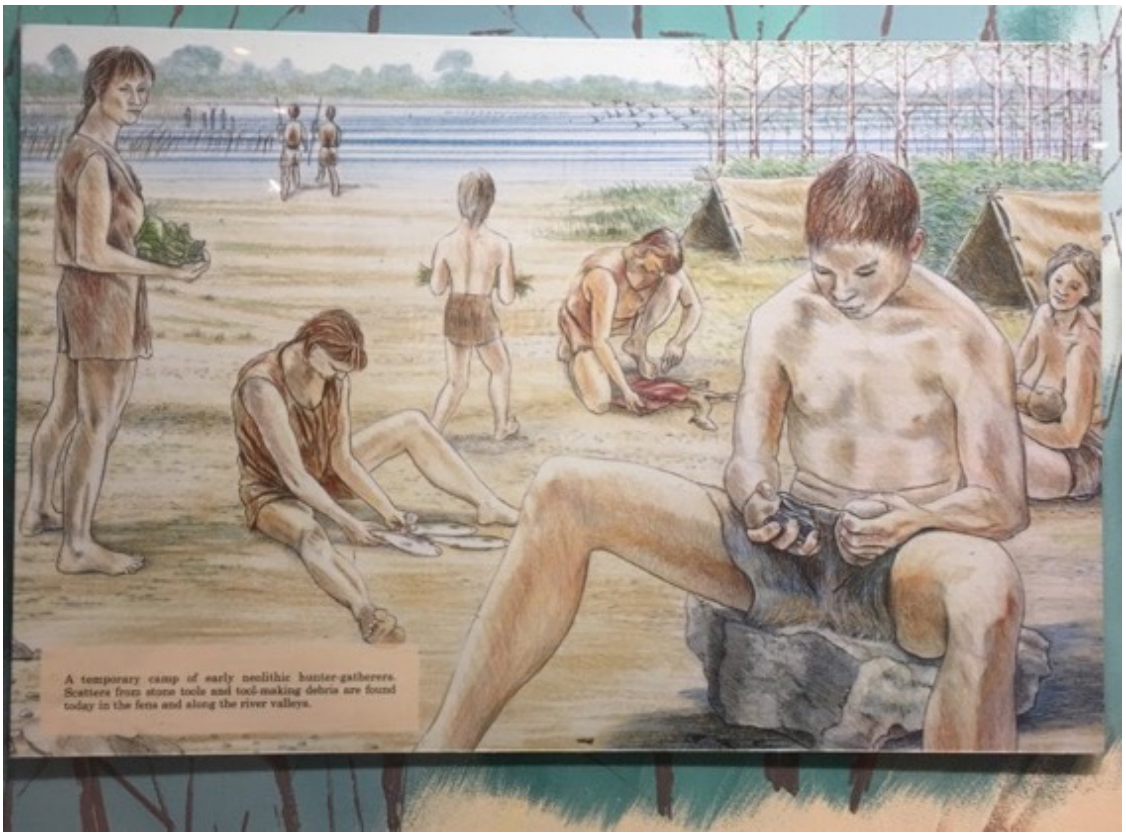


Figure 5.85. Photograph of a Stone Age scene with a woman positioned at the side breastfeeding on display at Peterborough Museum (McDowall, 2019).

Figure 5.86. Photograph of an image of prehistoric women grinding grain on display at Whitby Museum (McDowall, 2017).

The museums with visuals depicting gender often had more than one such visual and consequently some displays could reflect the stereotyped gender roles discussed as well as presenting more nuanced, egalitarian scenes with women and men working together or women depicted in a stereotypical male role such as making tools. Thus, to further explore the messages conveyed by such visuals the museums were also categorised based on whether they represented only men or only women, if they were only depicting stereotyped gender roles like the ones discussed or whether men and women were depicted in more nuanced roles that do not align with the stereotypes, whether a mixture of nuanced and stereotyped roles were conveyed together or whether men and women were depicted working together. The total

percentage of museums within each of these gender representation categories is summarised in figure 5.87.

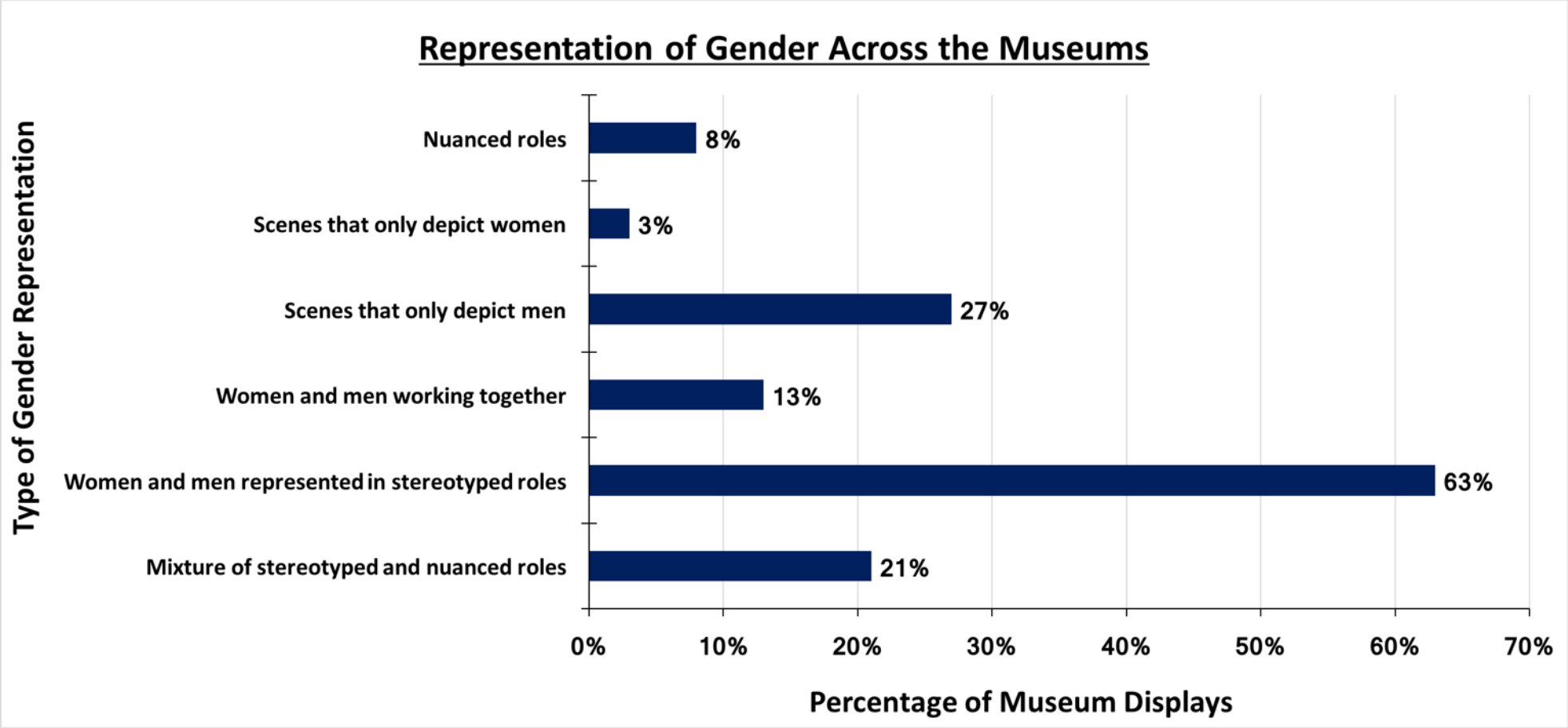


Figure 5.87. Graph demonstrating the percentage of museums within each gender representation category based on the visuals of 75 museums.

Figure 5.87 also highlights the pervasive nature of visuals utilising stereotyped gender roles to depict daily life in prehistory displays further reinforcing figures 5.79 and 5.84. Almost 50% of the museums in the sample represent gender in their prehistory displays and more than 50% of those depictions present stereotyped gender roles. Even when more nuanced depictions are represented in prehistory displays they are more often presented alongside stereotyped depictions in the same gallery rather than on their own, whilst, 27% of the museums displays utilise visuals that only represent men. The invisibility of women in prehistory displays has long been established yet it is surprising that this issue still persists despite the obvious presence of women in our past. In contrast to the abundance of exclusively male depictions, only 3% of the visuals analysed solely depicted women.

Overall, the visuals utilised in prehistory displays rarely represent women and when they are depicted it is often in stereotyped gender roles in which they are almost exclusively associated with the domestic sphere and with childcare conveying a 1950s housewife trope. These depictions result from assumptions about gendered activities and Eurocentric contemporary gender bias yet their framing in a museum gives them authority and power. These misrepresentative visuals are thus highly influential on visitor perceptions of prehistory and convey a problematic androcentric view of the past in which men were the accomplished and productive agents whilst women were merely peripheral passive characters, providing children, looking after the home and reduced to an ornamental role. As well as the individual gendered activities depicted it is also important to view the overall scene composition and interpret the message this presents to the visitor. In many museums the juxtaposition within individual scenes between women performing more domestic activities in direct contrast with men undertaking active roles further emphasises the engendered binary between male and female societal roles. This type of juxtaposition is illustrated by an image on a text panel on display at The Collection, Lincoln where an Iron Age family scene depicts a woman sat in the background making textiles whilst a man stands in front in an active pose, chopping wood (figure 5.88).

Figure 5.88. Photograph of an Iron Age scene on display at The Collection, Lincoln (McDowall, 2017).

The problematic misrepresentation of gender in prehistory displays can also be reinforced through the use of androcentric language in text panels and supporting textual interpretation. Across the museums in the sample, 14 museums explicitly utilised androcentric language in their prehistory displays and only one of these museums employing androcentric language was not associated with any depictions of gender. The types of language used to reinforce stereotyped roles are multifaceted, some texts use male-centric language to exclude women from the narrative entirely such as Ipswich Museum (figure 5.89), whilst others describe women as exclusively associated with certain domestic tasks, sometimes alongside rather belittling language, as observed at the Hull and East Riding Museum (figure 5.90). A text panel underneath a reconstructed female Mesolithic gatherer whose face is not visible describes the traditional interpretation of women as the 'gatherers'. Yet rather than contradict this outdated view the panel goes on to make a flippant joke about how that meant men must have had an easy life and thus serves to reinforce the outdated stereotype. Women are also exclusively associated with

the domestic activity of grinding grain in Whitby Museum (figure 5.91) where an illustration depicts three women using a quern, alongside a rotary quern and a piece of text associating women as the grain grinders in each household.

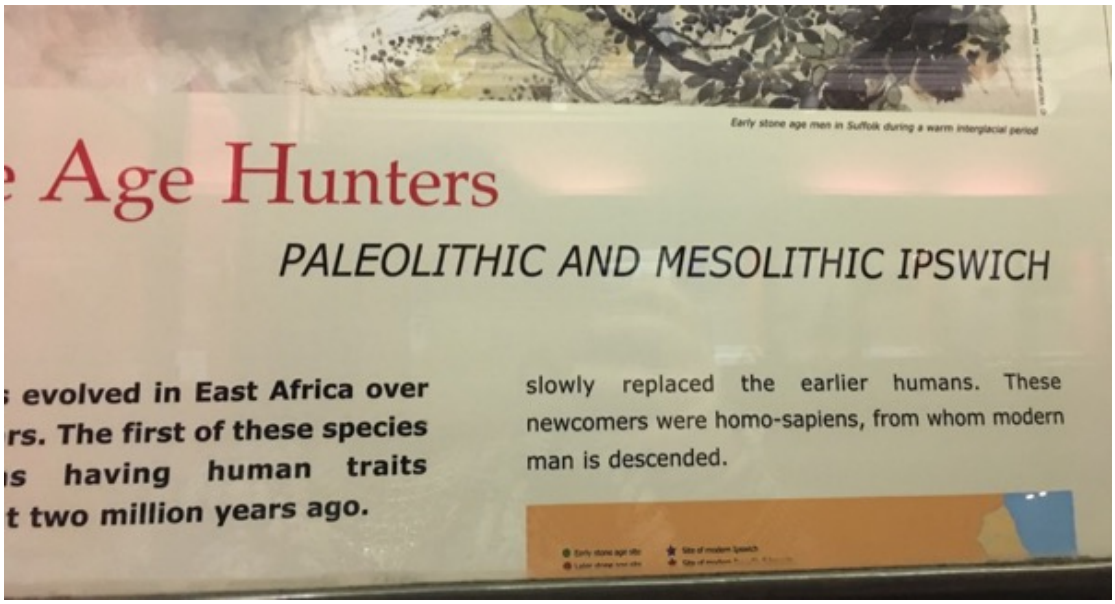


Figure 5.89. Photograph of part of the Stone Age Hunters text panel at Ipswich Museum using unnecessarily male-centric language to describe the past (McDowall, 2018).

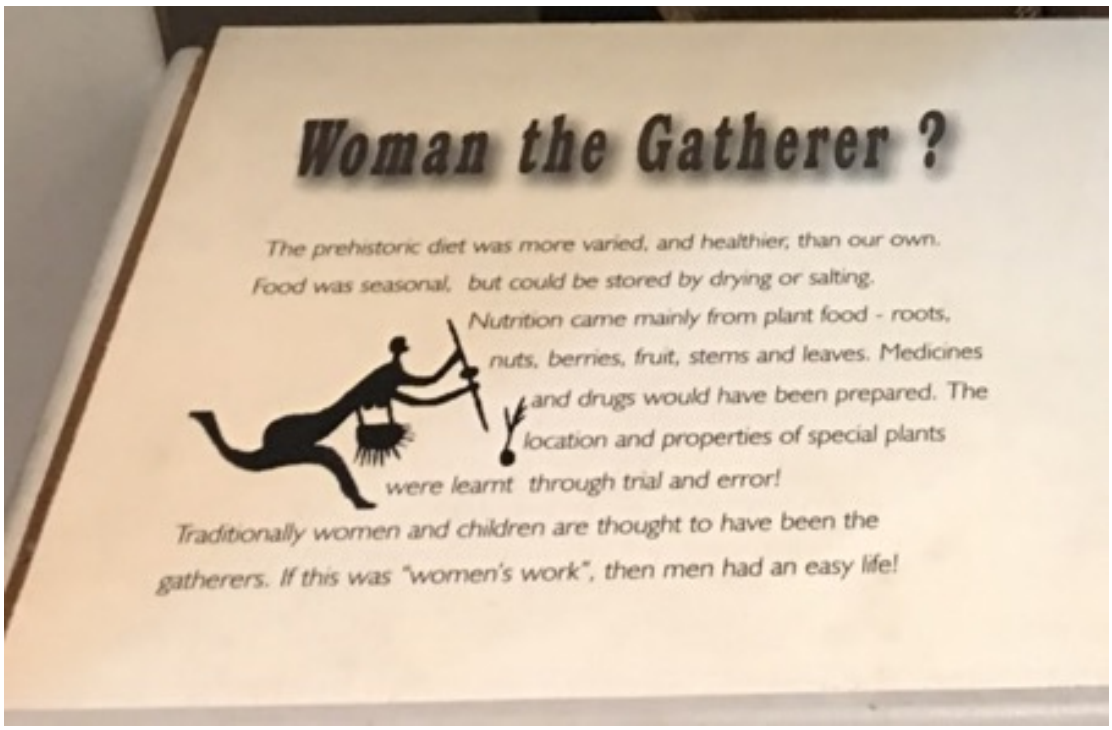


Figure 5.90. Photograph of the text panel at the Museum of Hull and East Riding that associates women exclusively with gathering (McDowall, 2017).

Figure 5.91. Photograph of the supporting text alongside a rotary quern at Whitby Museum associating women with food preparation (McDowall, 2017).

There are numerous types of museums represented across the sample and it was expected that these differences would result in distinct repertoires of visuals employed at each type of museum that may produce differences in how gender is represented in the displays. Yet these visuals were consistent across the museums highlighting the persistence of these outdated representations in contemporary prehistory displays.

5.4.10 Presentation of human remains

> *"How else do we catch the attention of a hopelessly jaded public? We could show them the most exquisite Ming vase, or a carved ivory screen from Persia, and they'd turn their backs and go straight for the human remains."* (Gerritsen, 2008:54)

Out of the 173 prehistory displays recorded, 51 of these display human remains, accounting for 29% of the displays, making up a substantial component of how

visitors consume prehistory. Displaying human remains in museums provides an opportunity to both humanise displays of archaeological, temporally distant objects and enhance the relatability of the content. After all, people engage with people as highlighted in Chapter 4, so providing a human element can be very important for engaging visitors with their past. Human remains are also very pervasive within prehistoric museum collections as bones are one of the few materials that survive. Yet, there is also a lot of academic debate surrounding the ethics of displaying human remains (Swain, 2002; Walter, 2004; BDRC, 2009; Thackray and Payne, 2009, 2010; Sayer, 2010; Brown, 2011; Fletcher *et al.*, 2014; Jenkins, 2014, 2016; Excell, 2016; Brown, 2016). Thus to understand the influence of human remains upon visitors and the variety of ways they can be presented requires an understanding of four factors; the types of human remains on display, their visibility within the space, any spatial associations between the remains and types of material culture on display and the level of associated context provided. The interplay between these factors dictate how human remains are experienced in displays and by analysing each of these factors across the museums can reveal general presentational trends in the display of human remains addressing research question 2a.

The level of preservation and amount of skeletal remains varies depending on the age of the remains and the method of deposition which is influenced by burial practices. Consequently, some collections contain preserved bodies from bog environments, whilst others possess fully articulated/ partially articulated remains preserved from inhumation burials or disarticulated remains/ isolated bones/ skulls from a variety of contexts including the remains of excarnation practices, as well as cremated fragmentary remains from cremations. The representation of these different types of remains across the 51 museums which display human remains were calculated and are summarised in figure 5.92.

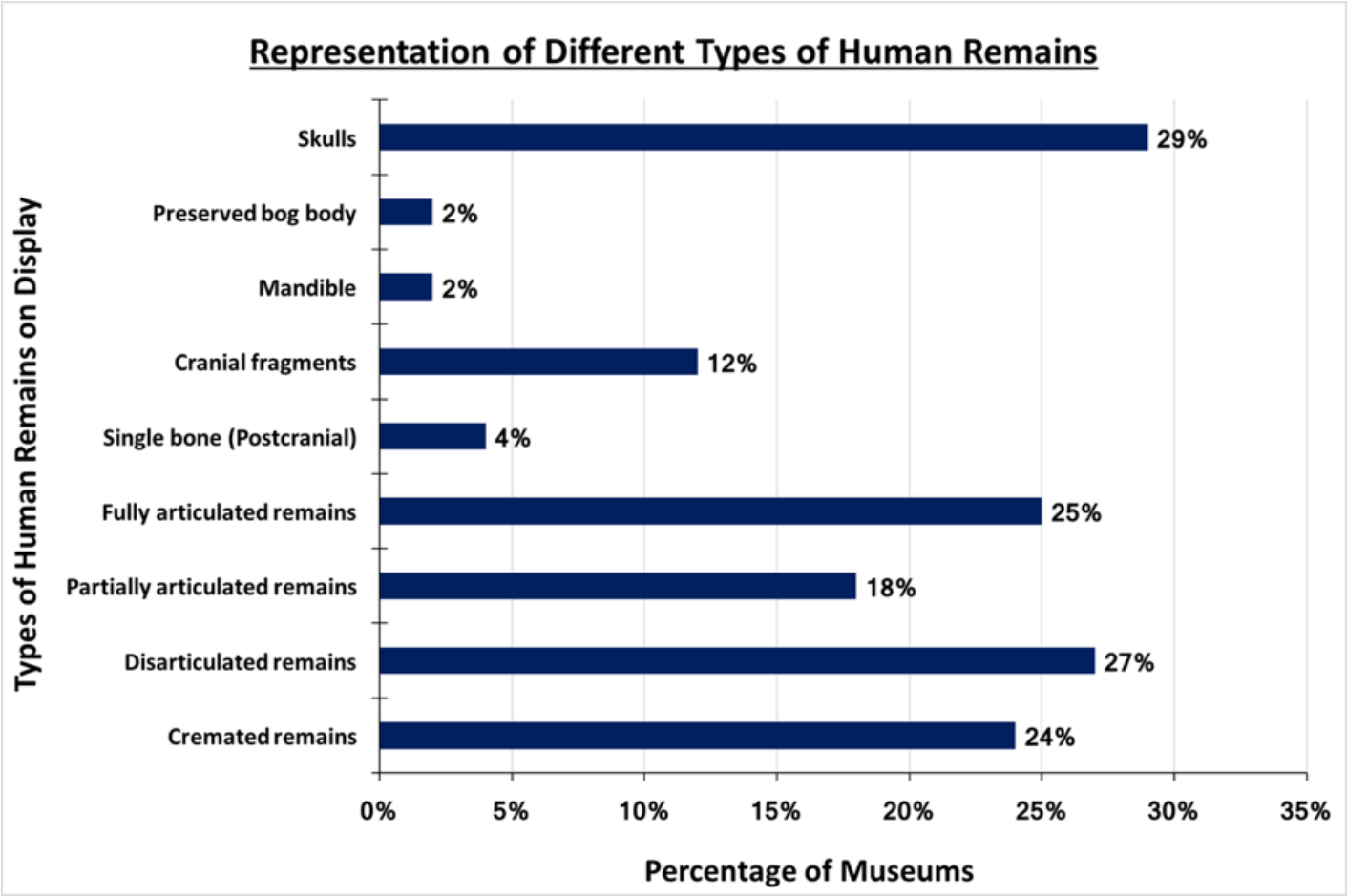


Figure 5.92. Graph demonstrating the percentage of prehistory displays with different types of human remains on display out of the 51 museums analysed.

Across the 51 displays with human remains presented, 29% of these are represented by skulls as seen at Padstow Museum (figure 5.93). Skulls are immediately recognisable to visitors and are thus perhaps selectively displayed over postcranial elements to visually meet visitor expectations to see people of the past. However, the less recognisable disarticulated and intermixed bones that are often found in abundance in the archaeological record in comparison to more complete remains account for 27% of the displays of human remains. It thus seems that many museums are not just selectively presenting more complete and recognisable remains but are also presenting the bones in their collections that are intermixed with archaeological objects. Cremated and fully articulated remains are almost equally represented in the sample by around a quarter of the displays. Cremated remains are often used to visualise the narrative of changing burial practices that is used to frame changes in material culture and practices through time. These displays are thus generally associated with later Bronze Age and Iron Age displays, whilst fully articulated remains are usually associated with displays about earlier Bronze Age and Neolithic inhumations in barrows and tombs. The representation of preserved bog bodies are unsurprisingly low due to the rarity of such remains, whilst single postcranial bones are also rather infrequently displayed due to taphonomical factors and the reticence to present single bones that usually lack any context.

The visibility of human remains within a gallery space is influenced by the institution's approach to displaying human remains, with some museums trying to be sensitive and respectful by either not displaying the remains in their collections or discreetly displaying them where visitors do not come across them unawares, as advised by the Department for Culture Media and Sport (DCMS) guidelines for the care of human remains in museums (2005:20). This type of approach can be seen at the Museum of Somerset (figure 5.94), whilst other museums may not have a standardised or specialist approach to displaying remains and consequently display them as they would any other object as seen at the MoL (figure 5.95). These different approaches to displaying human remains dictate the possible engagements that visitors can have with them, the more hidden they are, the less opportunities there are for such engagements. The visibility of human remains has been a contentious topic in

debates about museum ethics, particularly following the Native American Graves Protection and Repatriation Act of 1990 which facilitates the reclamation of more recent human remains where there is an identifiable link to contemporary indigenous groups. However, due to the time depth of prehistory there have only been occasional reburial claims, most notably of the prehistoric human remains displayed at the Alexander Keiller Museum (BDRC, 2009; Thackray and Payne, 2009, 2010; Tatham, 2016). Despite a lengthy public consultation process this request for reburial from the Council of the British Druid Order (CBDO) was not found to fulfil the DCMS (2005) criteria for repatriation or reburial as no demonstrable biological, cultural or religious continuity could be found that would privilege the claims of the CBDO over others (Thackray and Payne, 2009, 2010; Tatham, 2016).

Museum policies relating to the visibility of prehistoric human remains tend to be governed more by concerns over visitor reactions to the remains. Some museums believe it would be distasteful to place human remains on display for entertainment purposes, whilst other museums recognise the inherent interest and appeal of using bones in their displays. A small minority also provide a pre-warning for visitors, leaving the decision to view the human remains up to visitor discretion. This tactic is employed at the newly opened displays at Brighton Museum where visitors are informed of the human remains before entering the space and are even asked not to photograph the remains out of respect for the individuals (figure 5.96). However, despite this apparent sensitive approach the remains are still presented in central, visible locations and are even incorporated into an interactive to encourage visitors to engage with the remains and learn about individual pathologies illustrated by the skeletons. To understand the overall trends in how museums locate human remains on display across the sample of 44 museums where the visibility was known, the percentage of museums presenting human remains in central/ visible locations versus the percentage of museums that place them in more discreet/ less visible locations were calculated and are summarised in figure 5.97. It was impossible to calculate how many museums have such remains in their collections but decided not to display them for ethical concerns, as the details of each museum's reserve collections were difficult to ascertain in enough detail to identify how many museums

had prehistoric human bones in their collections. Even when such information was known for a particular museum, it was difficult to differentiate the motivations behind not displaying the remains.

Most museums appear to acknowledge visitor interest in human remains and utilise them as a tool for engaging visitors with prehistory as demonstrated by the 89% of museums that situate their displays of human bones in visible locations within the gallery, often in mid-height cases to enhance this visibility. In contrast, only 11% of displays were considered more discreet, perhaps reflecting a tendency for museums adopting a more sensitive approach to not display human remains at all rather than attempt to display them in less visible locations.

Figure 5.93. Skulls on display at Padstow Museum (Padstow Museum, 2019).

Figure 5.94. Photograph of the human remains discreetly viewed at the bottom right corner of the Bronze Age case at the Museum of Somerset (McDowall, 2017).

Figure 5.95. Photograph of part of the river wall case at the Museum of London where human skulls are presented alongside pots and weapons (McDowall, 2017).

Figure 5.96. Photograph of the visitor notification just outside the gallery at Brighton Museum (McDowall, 2019).

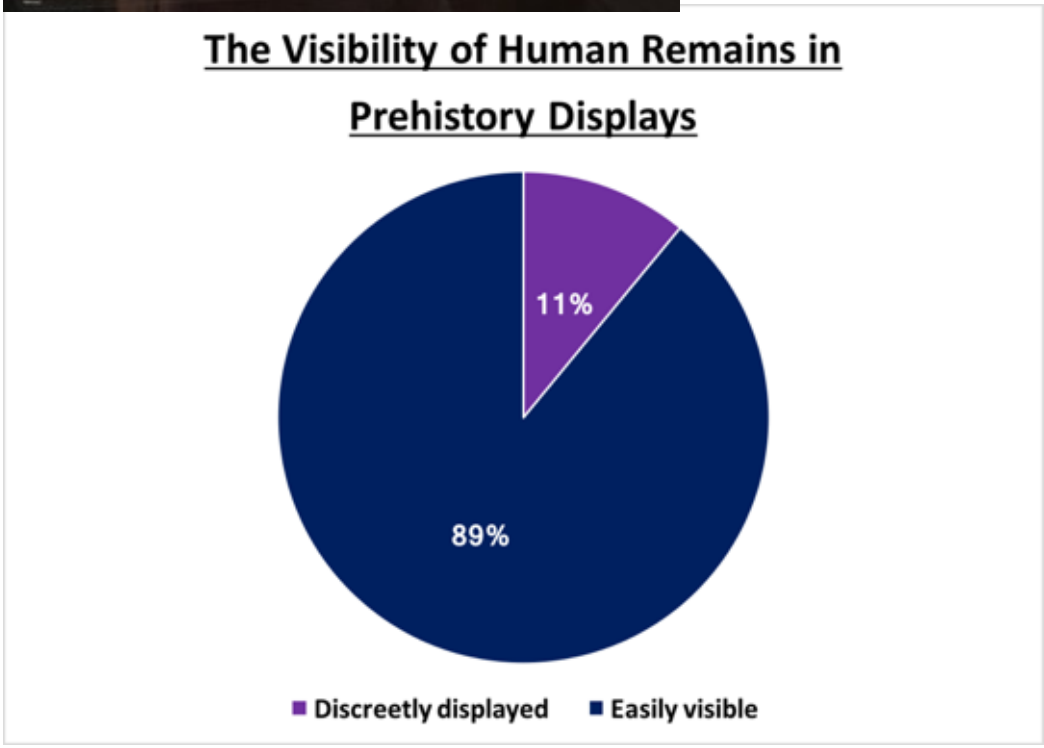


Figure 5.97. Pie chart illustrating the percentage of museums with human remains displayed visibly versus more discreetly across the 44 displays where this information was recorded.

The display style and object associations with human remains greatly impact the overall visual impression of human remains once seen by the visitor. Some museums attempt to contextualise their displays of articulated human remains by presenting them as if in-situ as seen at Sunderland Museum where human remains are presented within a stylised barrow (figure 5.98). To provide context to cremated remains, these are often presented inside or next to the cremation urns they were deposited in as seen at Lawrence House (figure 5.99) and Folkestone Museum (figure 5.100). The objects associated with remains also contribute to the style and framing of displays and these associations are dependant on the context of the human remains. In some museums human remains are displayed alongside associated grave goods as seen at South Shields Museum and Art Gallery (figure 5.101). These objects are, however, not always within the same collection or available depending on the circumstances of the remains and their discovery and consequently many isolated bones and skulls are presented on their own or incorporated into thematic displays alongside other thematically relevant but unassociated materials such as collections of cremation urns, as seen at the Dukes Museum in Alnwick Castle (figure 5.102). To explore these common associations made between human remains and material culture the representation of these different display styles used to present human remains across the museums were calculated and are summarised in figure 5.103.

Figure 5.98. Photograph of the stylised barrow structure where human remains are displayed in Sunderland Museum (McDowall, 2019).

Figure 5.99. Photograph of the cremated fragments of bone on top of material inside the cremation urn at Lawrence House (McDowall, 2017).

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Top; Figure 5.100. Photograph of cremated remains inside an Iron Age cremation urn on display at Folkestone Museum (McDowall, 2018).

Bottom; Figure 5.101. Photograph of the Whitburn cist with shells and lithics found with the skeleton presented alongside it in the display at South Shields Museum (McDowall, 2019).

Figure 5.102. Photograph of the pottery on display alongside disarticulated human remains and cremated remains on display in the Dukes Museum, Alnwick Castle (McDowall, 2017).

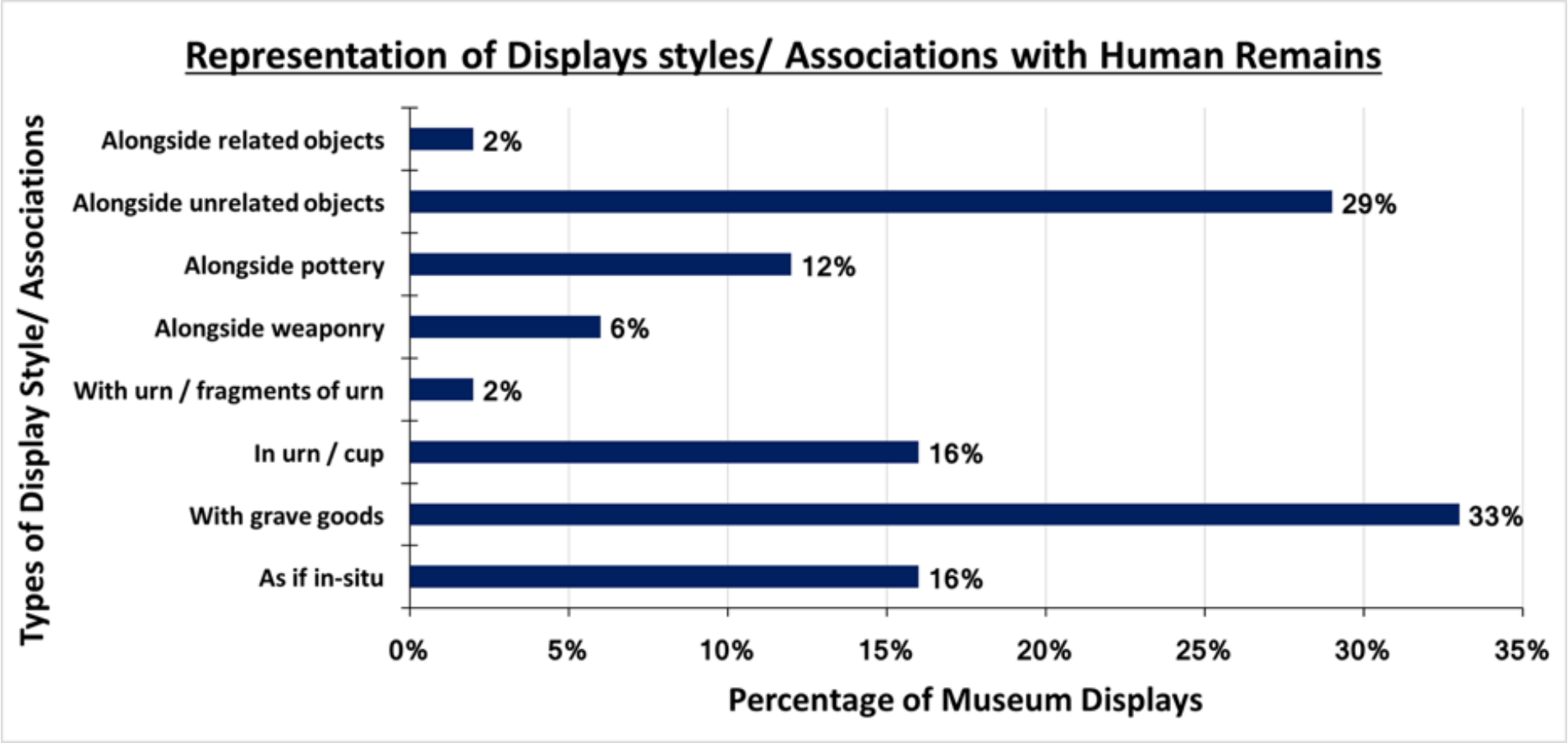


Figure 5.103. Graph demonstrating the percentage of museums using different styles of display to present human remains out of the 60 displays analysed.

The majority of human remains are presented either alongside their associated grave goods or unrelated objects. Pottery is also often associated with displays of human remains due to their use in the deposition of human remains in prehistoric burial practices and thus the nature of collections. Consequently, bones are either presented alongside pottery or in an urn/ cup and sometimes even just alongside fragments of pottery rather than complete vessels. Human remains are rarely presented alongside related objects that are not from the site of deposition.

Displays of human remains also vary based on the amount of context known about the remains and how much of this is selectively communicated to the visitor. Particular skeletons have been the subject of intensive research and scientific analyses so more information is known about their isotopic profile, diet, sex, age, location they were found in, how they died, any pathologies they may have and when/ how they were deposited, such rich context is provided alongside articulated skeletons at Brighton Museum as illustrated by figures 5.104-106. Such an example of a well-known and intensively researched skeleton is the Amesbury Archer currently on display at Salisbury Museum (figure 5.107). To humanise skeletal remains some museums even utilise facial reconstructions and audio narratives to give a face and a voice to the individual on display. This form of supporting interpretation is particularly helpful for connecting visitors with such a deep past with no known individuals, as seen at the Rotunda Museum where a computerised facial reconstruction and audio narrative are employed to bring life to the skeleton of Gristhorpe Man (figure 5.108). To explore the variety of context provided alongside displays of human remains the percentage of museums using different types of supporting interpretation and the level of context provided were calculated and summarised in figure 5.109. To facilitate the exploration of context associated with displays the textual information alongside displays was classified as either a lot of context, if there were lots of details about the individual such as their sex/ age/ cause of death/ their pathologies, or details of their deposition/ excavation, or some context if only minimal information was presented and no context if there was no details about the individual and their deposition provided.

Whitehawk Woman

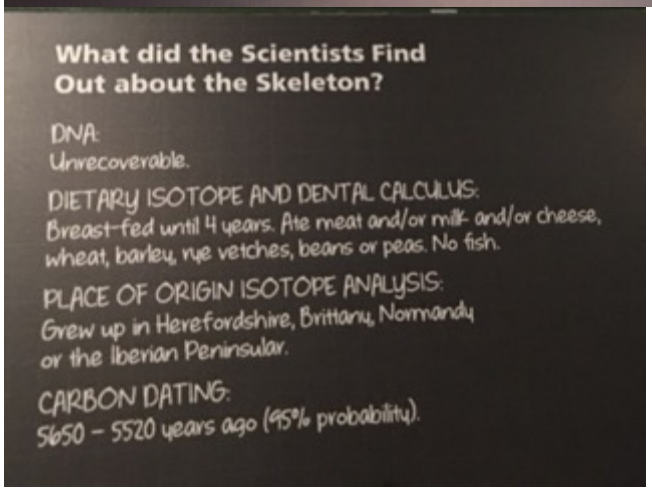
Age 17-25, Height 1.45m (4' 9")

This woman was buried in a ditch at an entrance to Whitehawk Causewayed Enclosure. Small and slight, she probably died in childbirth. Her careful burial at Whitehawk may mean she was part of an important family. She grew up close to Wales, Normandy, Brittany or Spain. Her clothes were made from animal skins. She would have worked hard looking after animals, growing crops and grinding wheat into flour. Most Neolithic people didn't live longer than 35 years.

Buried with her were:

- two small pieces of chalk with holes
- two fossil sea urchins
- half the leg bone of an ox and other animal remains

Top; Figure 5.104. Photograph of a skeleton on display at Brighton Museum surrounded by details of the individual, their pathologies and their associated facial reconstruction (McDowall, 2019).



What did the Scientists Find Out about the Skeleton?

DNA:
Unrecoverable.

DIETARY ISOTOPE AND DENTAL CALCULUS:
Breast-fed until 4 years. Ate meat and/or milk and/or cheese, wheat, barley, rye vetches, beans or peas. No fish.

PLACE OF ORIGIN ISOTOPE ANALYSIS:
Grew up in Herefordshire, Brittany, Normandy or the Iberian Peninsular.

CARBON DATING:
5650 – 5520 years ago (95% probability).

Centre; Figure 5.105. Close up photograph of part of the supporting text along the bottom of the case of human remains at Brighton Museum (McDowall, 2019).

Bottom; Figure 5.106. Photograph of the additional context provided alongside the facial reconstruction of the same individual at Brighton Museum (McDowall, 2019).

Figure 5.107. Photograph of the Amesbury Archer presented alongside associated grave goods and supporting interpretation including a text panel and text along the side of the case at Salisbury Museum (McDowall, 2018).

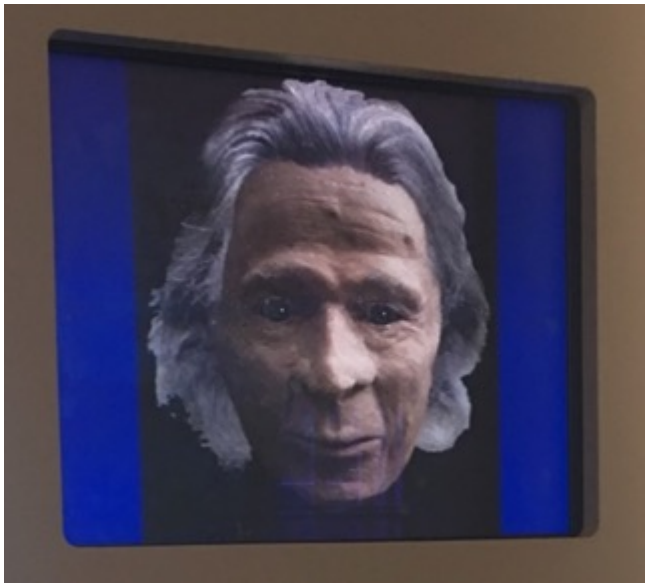


Figure 5.108. Photograph of the computerised facial reconstruction of Gristhorpe Man on display at the Rotunda Museum (McDowall, 2017).

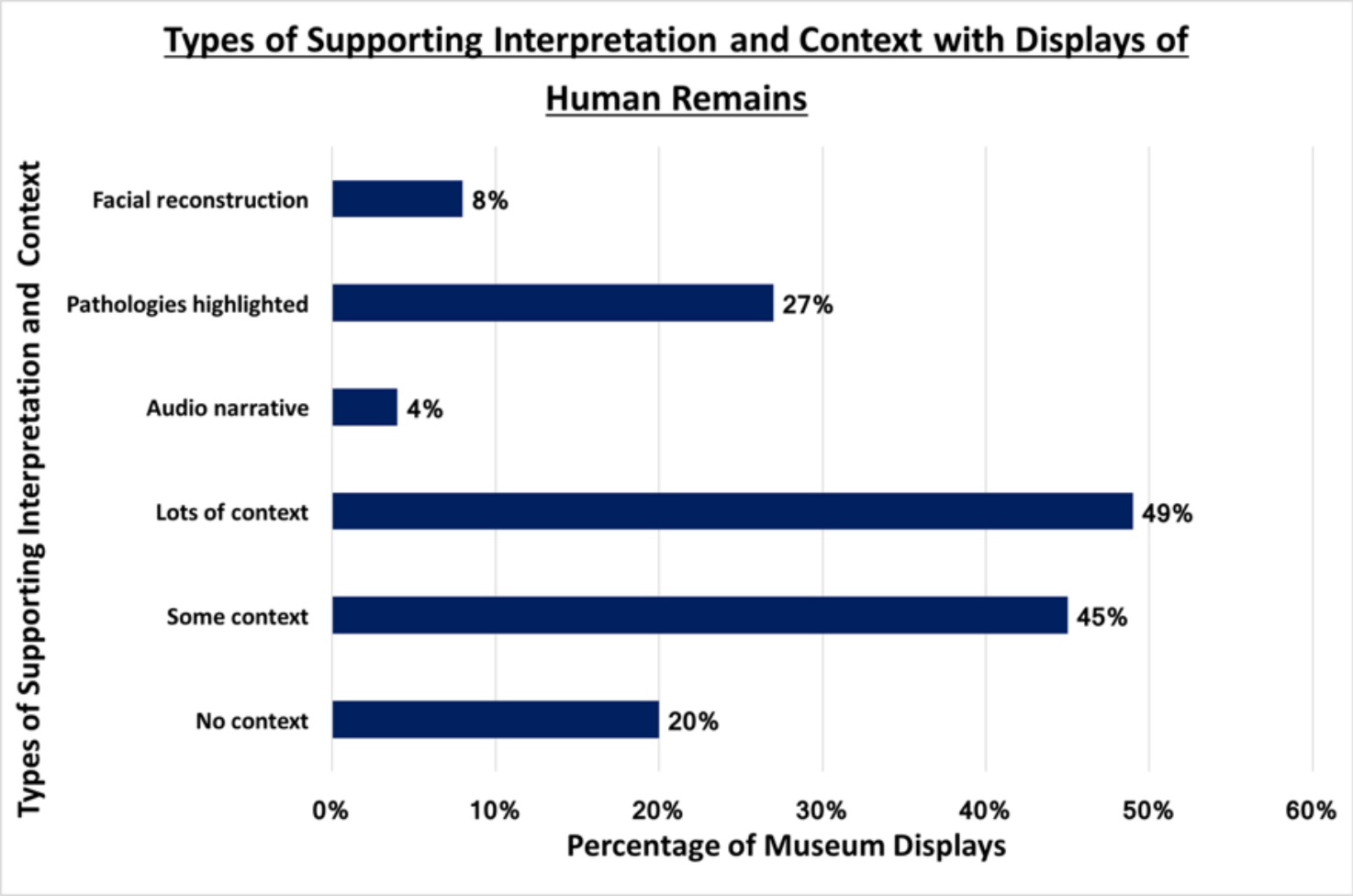


Figure 5.109. Graph summarising the types of context and supporting interpretation presented alongside displays of human remains out of the 78 displays analysed.

Across the 51 museums with displays of human remains recorded, nearly half of these museums provide lots of context or some context alongside such displays. Only 20% of museums provide no context alongside displays of human remains. Some museums recorded have several displays of human remains on display in the same space and the range of context can vary between these displays within a museum. For example, a mixture of interpretive styles are observed at Worthing Museum and Art Gallery where a skull is presented alongside lots of context, mandible fragments are associated with no context and cremated remains are presented with some context. To further understand these relationships between the level of context provided alongside human remains and the types of human remains displayed these are summarised in figure 5.110.

Overall, the level of context associated with displays of human remains were ascertained for 63 individual displays across the 51 museums that display human remains. For most types of human remains only 9-12 examples of such displays could be associated with a certain level of context and so the overall sample is quite restricted which serves to inflate the percentage of displays in each context category. For example, 11% of partially articulated remains on display were associated with no context but this figure only accounts for one display of partially articulated remains within the sample. Thus figure 5.110 serves to highlight general trends for more articulated remains to be presented with more context compared to more fragmentary remains such as cremated and disarticulated remains associated with less context, yet these trends must be treated cautiously due to the small sample size.

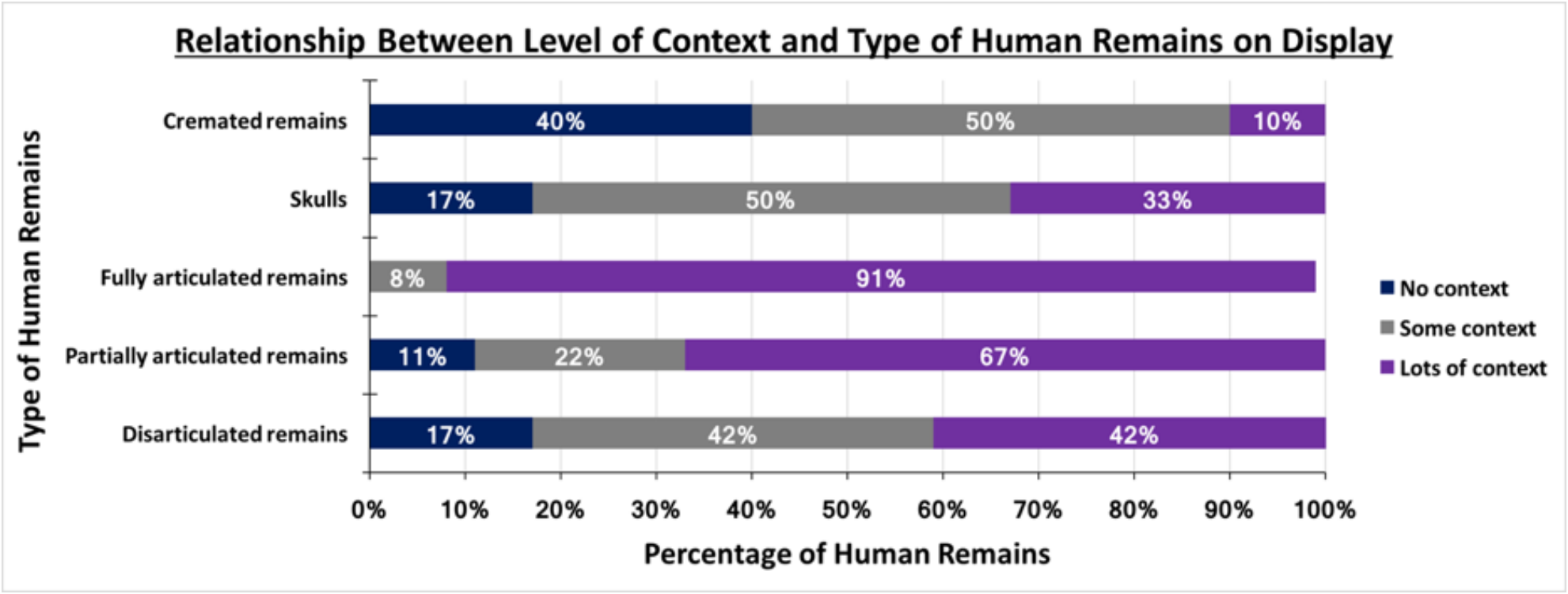


Figure 5.110. Graph illustrating the relationship between the type of human remains on display and the level of associated context provided for the most popular types of human remains on display from a sample of 55 displays where the level of context was known.

5.4.11 Overarching display narratives

The final variable of display analysed to reveal the prevailing trends that affect the representation of prehistory in museum displays is the holistic variable 'overarching display narratives'. The narratives utilised to frame prehistory can be conveyed to the visitor through a combination of the grouping of objects, the route through the displays and reinforced through supporting text panels and additional interpretation. Thus to understand the prevalent narratives presented in the prehistory displays across the museums the displays were categorised into overarching narrative categories that are summarised and defined in table 5.13 and their representation across the museums is provided in figure 5.111.

Narrative Category	Description
Chronological	Prehistoric material is presented in displays aligned in a linear chronological order from the Palaeolithic through to the Iron Age with a clear route for the visitor to follow. Sometimes supported by a timeline for additional temporal context. Text panels are focused on the time periods and developments through time.
Archaeological	There does not appear to be any clear theme that links the material presented. Prehistoric material is presented intermixed with material from later historical periods. Supporting interpretation may focus on the process of archaeology and how archaeologists interpret the past.
General themes	Prehistoric material is presented in a broadly chronological manner grouped around general themes such as 'metalworking' or 'hunting and gathering'.
Specific themes	Prehistoric material is intermixed with different periods of prehistory and/ or material from later periods grouped in relation to a specific theme such as 'evolution', 'salt making' or 'the axe trade'.
Material type	Prehistoric objects are grouped together based on their material properties. Prehistoric objects may also be presented alongside ethnographic and or/ historical objects made of the same materials. Supporting interpretation often focuses on the technology utilised to extract raw materials and produce the variety of objects on display.
Site-based	All objects on display are from/ relate to a specific site and are grouped together based upon a variety of connecting themes.

Table 5.13. Summary of the different overarching narratives that are utilised to situate the prehistory displays in the 124 displays that could be analysed.

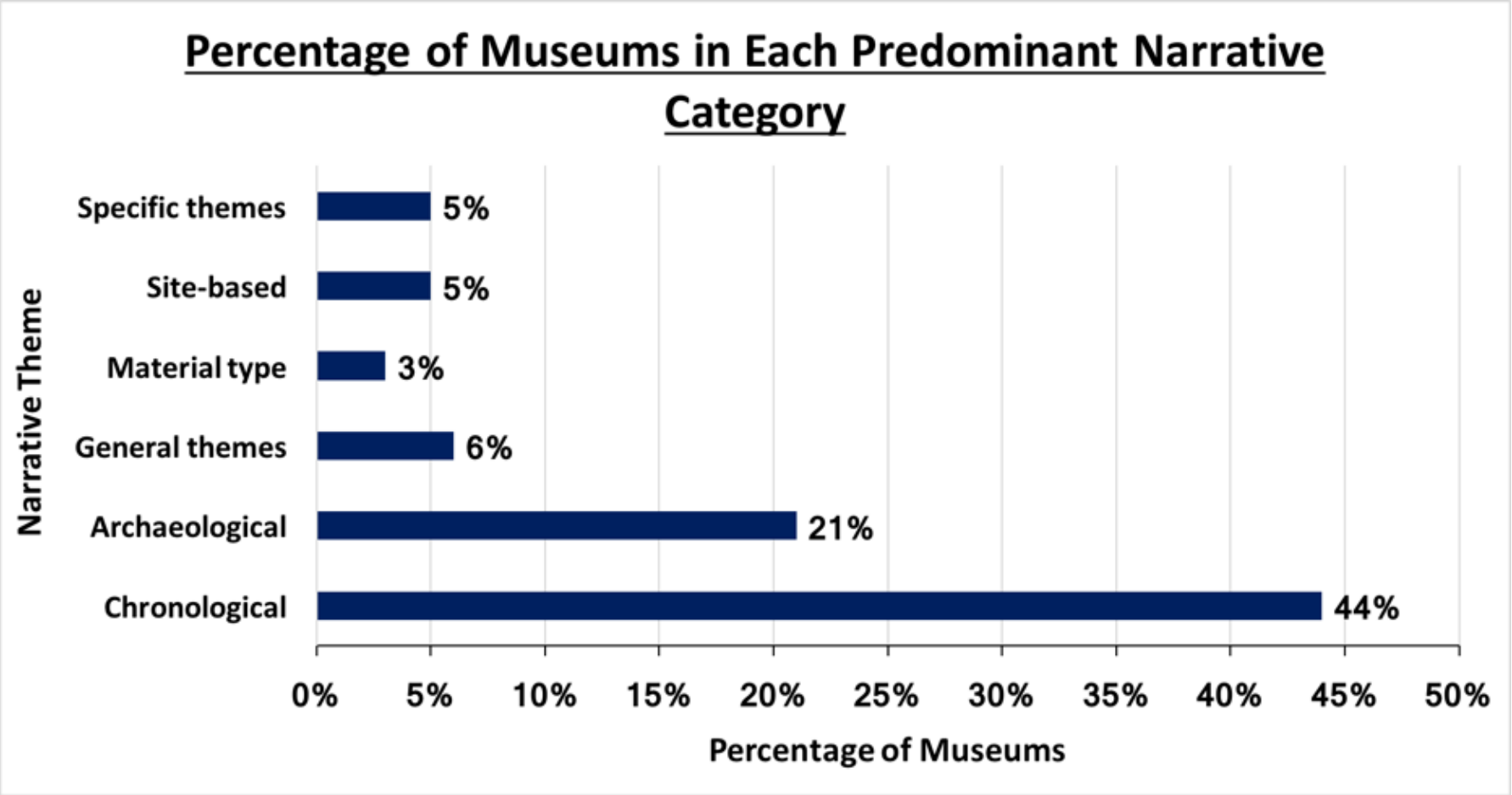


Figure 5.111. Percentage of museums with displays in each thematic category out of 124 museums that could be analysed.

Nearly half of the museums represented in the sample utilise chronological narratives to situate the temporality of their prehistory displays. This traditional style of presentation is often preferred as it is the narrative mode expected by the visitor and is perceived to be more user-friendly, providing visitors with a format they favour. The clear sense of direction provided by displays formatted in a linear chronology furnishes them with the ability to navigate through the displays with ease and can be utilised to covey the time depth of prehistory.

Prehistory displays presented within a broader archaeological narrative are also quite popular in the sample of museums, with 21% of display narratives characterised as such. This narrative appears to be most pervasive in smaller volunteer-run museums. The popularity of focusing more generally on archaeology is particularly useful for museums with less prehistoric material in their collections where focusing on archaeology provides a unifying narrative to connect their disparate collections. South Molton Museum exemplifies this style of display as a variety of archaeological objects from temporally diverse periods are presented on display alongside prehistoric material, as illustrated in figure 5.112.

Figure 5.112. The display of prehistoric objects alongside later material at South Molton Museum (McDowall, 2018).

Overall the analysis of this holistic variable has revealed that the majority of prehistory displays frame their displays within chronological linear narratives emphasising the development of technology through time. This narrative in combination with the reduced space and interpretation, as well as the restricted material repertoire and narratives associated with early prehistory convey these periods as more technologically 'primitive' in comparison to later periods of prehistory.

5.5 Summary

This chapter has independently analysed each of the 13 variables of display recorded across the 173 museums recorded to achieve the second research aim of the thesis to *'Identify common themes and trends in how prehistory is presented in diverse museums across England'*. This research aim was achieved by accomplishing the second research objective to *'Produce and analyse a comprehensive database of prehistory displays in England'*. This visual analysis of the variables of display revealed trends in display style and content between different types and sizes of museums. It was revealed that most prehistory displays across England are presented within rather neutral and subdued earthy colour schemes. They are often provided with very little space comparative to later time periods, in 1 case or less with a comparably small amount of supporting textual interpretation. This relative 'invisibility' of the period is further reinforced by the low density of objects that are quite spaced apart in these small displays reflecting contemporary display conventions. Most displays are framed within a chronological technology focused linear narrative, supported by a predominance of tools, weaponry and pottery. Displays tend to focus on either past landscapes, past people, general archaeology or a combination of these different themes. Audio-visual interpretation is frequently utilised to invoke a sense of these themes placing either the landscape within the museum or giving a face to the distant past providing greater context for the displays beyond the restricted material culture on display. The linear narrative of prehistory conveyed in museum displays is further reinforced by the focus on sub-dividing the periods based upon the Three Age system, framing each period in association with technological developments through

time and increasing complexity. These linear narratives of technological progress have previously been ambiguously identified by Wood and Cotton (1999) and Ballard (2007) and their impact upon the visitor will be evaluated in the following Chapter 6 which will utilise visitor-based data to analyse how the variables of displays can influence the overall visitor experience and visitor perceptions of prehistory.

Chapter 6: Visitor engagements and responses to the prehistory displays at the case studies

6.1 Introduction

This Chapter will focus on addressing research question 3, '*How do visitors engage with prehistory displays?*' by exploring the trends and variables that govern visitor engagements with the specific prehistory displays at the 6 case study museums. The visitor-based data collected in the tracking surveys and questionnaires will be utilised to evaluate visitor engagements with and perceptions of displays fulfilling the third research aim of the thesis to '*Identify which display types/ methods are most effective for engaging visitors with prehistory displays'*.

The analysis of the micro-scale data will be split into two parts. Firstly, from pages 459-551 the tracking surveys undertaken at the case studies will be used to interpret visitor behaviour and interactions with different types of interpretation. Visitor interactions will be analysed and illustrated using visitor frequency heat maps to reveal how visitors move through the different spaces and how they engage with the various displays, thereby achieving the third research objective of the thesis to *'Record and interpret visitor engagements and interactions with prehistory displays'*.

The second part of the micro-scale analysis undertaken from pages 552-597 will evaluate the responses to the second part of the visitor questionnaire to reveal how visitors conceptualise and articulate their experiences with these specific displays addressing the fourth research objective of the thesis to *'Collect and interpret visitor responses to prehistory displays'*. These responses will be analysed using word count frequencies and the quantification of thematic response nodes as outlined in section 3.5.2. Guided by research question 3b, *'What do they find most/ least interesting about prehistory displays?* the questionnaire responses will be used to identify which types of interpretation and displays visitors preferred at each case study, further supporting the visitor behaviour observed in the tracking surveys. This chapter will

then explicitly address research question 3c, *'What do visitors want to see more of in prehistory displays?'* by reviewing the themes, narratives and objects visitors want to see more of in prehistory displays and will explore the extent to which these interests are related to the different visitor profiles represented across the case studies. Lastly, questionnaire responses will be evaluated to achieve research aim 3d, *'Do visitors learn from prehistory displays?'* by determining whether the case studies are successful in challenging the visitor preconceptions outlined in Chapter 4 and gauging whether visitors leave with a certain amount of 'new' knowledge.

6.2 Visitor engagements at the case studies

The 300 tracking surveys across the case studies were assessed to understand how the different visitor profiles represented across the museums interact with the prehistory displays. The analysis of this data will therefore answer research question 3a by revealing the trends in visitor engagement behaviours between the case studies and the variables that influence these engagements.

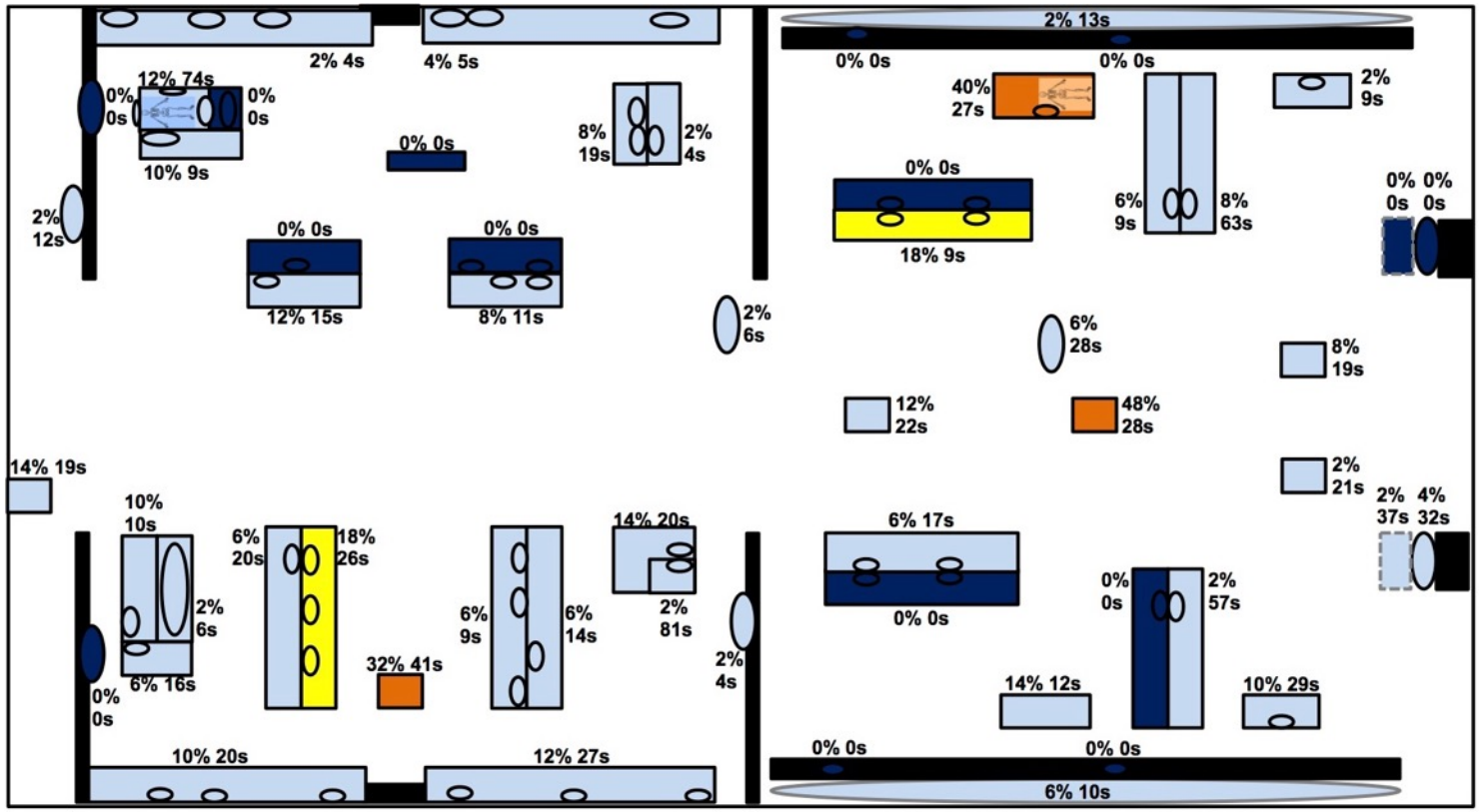
Firstly, to understand the popularity of certain displays over others the visitor frequency for each tracked display feature was calculated utilising the 50 tracking surveys at each museum. These calculations based upon the times recoded in the tracking database (Appendix D) revealed which display features in each space were visited the most and the least, indicating which areas visitors found more engaging than others. Secondly, to understand the extent of these engagements the mean average dwell time spent at each tracked feature was also calculated. A summary of the tracked features for each case study alongside the results of these calculations are presented in Appendix 11. To visually highlight the variety of engagements with the tracked features heat maps based on visitor frequency were produced. These maps demonstrate the most visited areas in warmer colours such as red and orange, less visited areas in yellow, rarely visited areas in the colder colour of light blue and areas not visited at all in cold dark blue, as previously outlined in section 3.5.1. The 6 heat maps that summarise visitor engagements with the tracked features at each museum are presented in figures 6.1, 6.8, 6.20, 6.29, 6.37 and 6.46. Most of the heat

maps are quite warm and visually indicate that the different prehistory displays are quite popular with visitors. Across all museums the coldest areas tend to be the text panels, a trend which has long been recognised in visitor studies (Serrell, 1997, 1998, 2020; Yalowitz and Bronnenkant, 2009; Davies and Heath, 2013). Each of these heat maps will be discussed individually alongside the identification of prevalent visitor routes and popular first stops at each of the case studies.

It is important to understand the routes that visitors take through the prehistory displays as these routes will determine visitor understanding of the displays and how they interpret the narrative presented. The most popular visitor routes were reconstructed and these spatial movements are visually demonstrated in figures 6.2, 6.12, 6.27, 6.32, 6.44 and 6.53. It was not feasible to calculate the exact percentages of how many visitors follow each route all the way through as there is greater directional variation of visitor routes after the first few stops based upon individual visitor interests/ preferences. To highlight the differences between the consistent visitor routes and areas where visitors deviate more from the predominant routes the parts of the journey that are most popular are represented by a thicker arrow and the parts of the journey which become more variable are represented by a thinner arrow. This variability is also increased by the variety in number of stops within each segment each visitor makes. However, it is possible to calculate a percentage of visitors that initially start on a particular route as a guideline to understanding the popularity of these routes and these figures are also included on the route maps provided.

To further understand how visitors interacted with the 6 different prehistory displays the first three stops were also recorded for each visitor. These displays which are stopped at by 10% or more of tracked visitors in their first three gallery stops are visually represented in orange colours and the three most popular first stops are represented in red in figures 6.4, 6.19, 6.28, 6.35, 6.45 and 6.54.

6.2.1 Visitor behaviours observed at the British Museum



Key

50%+	Visitor Frequency
30-49%	Visitor Frequency
16-29%	Visitor Frequency
1-15%	Visitor Frequency
0%	Visitor Frequency

Figure 6.1. Heat map of visitor frequency at the British Museum with dwell times.

The British Museum

The BM has the coldest heat map with no red hot areas, 5 warm areas and 15 tracked features that were not visited once in the 50 tracking surveys. The low visitor retention at the BM is further exemplified by the average number of features stopped at. Out of 57 tracked features an average of only 4 features were stopped at, representing 7% of the tracked displays. The prehistory displays thus appear to possess a low visitor retention and level of engagement with displays, despite representing the largest museum space evaluated with the most tracked features displaying some of the most 'iconic' objects of British prehistory. This low level of engagement is, however, consistent with the predominantly touristic visitor profile composed of British and overseas tourists represented by the sample of respondents (table 4.2). These tourists visiting the museum are pressed for time attempting to visit as many of the museums 'star' displays as quickly as possible. Similarly, fast paced visits associated with sightseers have also been observed at comparably large institutions such as the Smithsonian (Pekarik, 2005; Yalowitz and Bronnenkant, 2009:57).

One of the most famous exhibits at the BM is Lindow Man (see figure 3.45, section 3.5.1), the preserved bog body presented in the corner of Room 50. Due to concerns about the ethics of presenting human remains in such a public space in a sensitive and respectful manner, the body has been positioned so that he is not immediately visible from the centre of the gallery and visitors have to intentionally visit the display to be able to see him (Joy, 2014:17). Unfortunately, it appears that he is so well hidden that most visitors are unaware that he is there, as only 12% of visitors stopped at this display. Yet those that did stumble across the body spent an average of 1 minute and 14 seconds at the display, which reflects quite a long dwell time and indicates quite an active engagement with Lindow Man and his surrounding interpretation. Human remains have often been found in other tracking surveys and visitor observations to be popular areas of engagement with visitors (DCMS, 2005; BDRC, 2009; Thackray and Payne, 2009; Joy, 2014; Sayer, 2010; Walter, 2004; Swain, 2002; Patterson, 2007; Brown, 2011). They simultaneously provide the displays with

a sense of agency and serve as a reminder that people like them lived in the past, they effectively provide the past with a face. Yet, the potential for Lindow Man to engage visitors at the BM is under-realised in comparison to the more visible remains of the Bronze Age Barnack burial in Room 51 which attracted 40% of visitors. However, even though visitors had to deviate from the centre of the room to see the Barnack burial, visitor retention with the surrounding displays was still low as illustrated by the cold cases surrounding the warm Barnack burial case.

For the most part, the architecture of the BM seems to funnel people through both rooms as if the galleries merely serve as a corridor towards other more exciting displays. This tendency is further highlighted in figure 6.2 which highlights the most popular routes of the visitors through the space. Due to such space usage, the inner displays not visible from the central corridor as a consequence are rarely, if at all visited. Certain displays have been purposefully positioned in the centre of Room 51 to try and counteract this usage of the space and encourage visitors to stop. This seems to be fairly effective in the case of the Mold gold cape which is presented in one of these central displays (figure 6.3). This case is the most popular prehistory display as 48% of visitors stop at this case. As has been observed by Sarah-Jane Harknett (2016) during her extensive observations of visitors at the various university museum sites in Cambridge, visitors also have an observable predilection for shiny objects. This is clearly seen at the BM where the most popular 'warm' areas are the Mold gold cape, a gold object, a case of Bronze weaponry and gold cups and two cases of gold torcs, all shiny and aesthetically intriguing objects. This visiting behaviour is further reinforced by visitors' first few stops illustrated in figure 6.4. There are other cases of such eye-catching material that were not visited as frequently due to their position, out of the visitor's line of sight. It is also worth noting that none of the tracked features were 'hot', that is no feature was visited by 50% of the visitors or more. Thus, even though these warm areas appear to be more popular, they are not as well visited as the warm areas in the other museums.

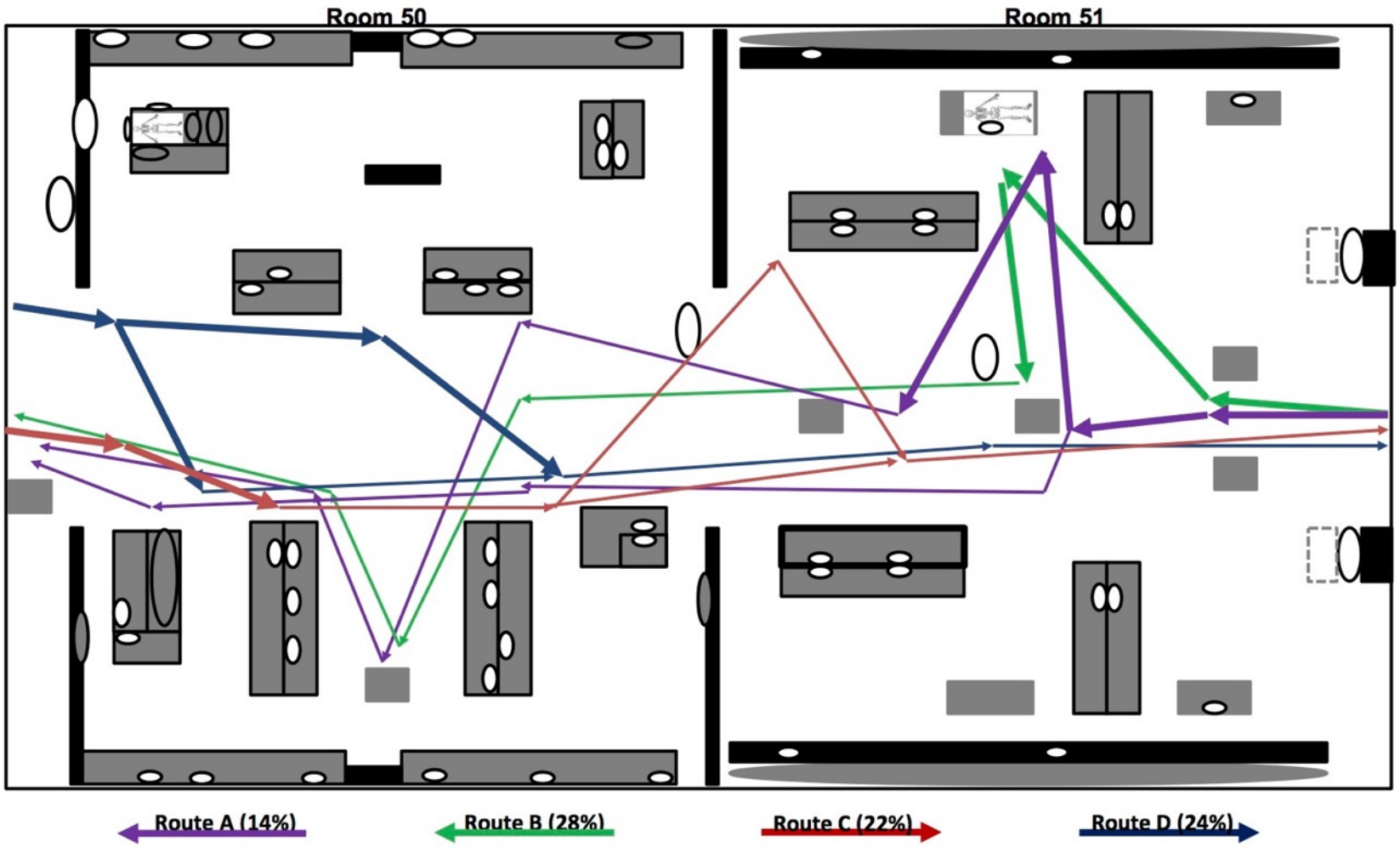


Figure 6.2. The four most popular visitor routes at the British Museum.

Figure 6.3. Photograph of the Mold gold cape on display at the British Museum, positioned in the middle of the central aisle to encourage visitors to stop (McDowall, 2017).

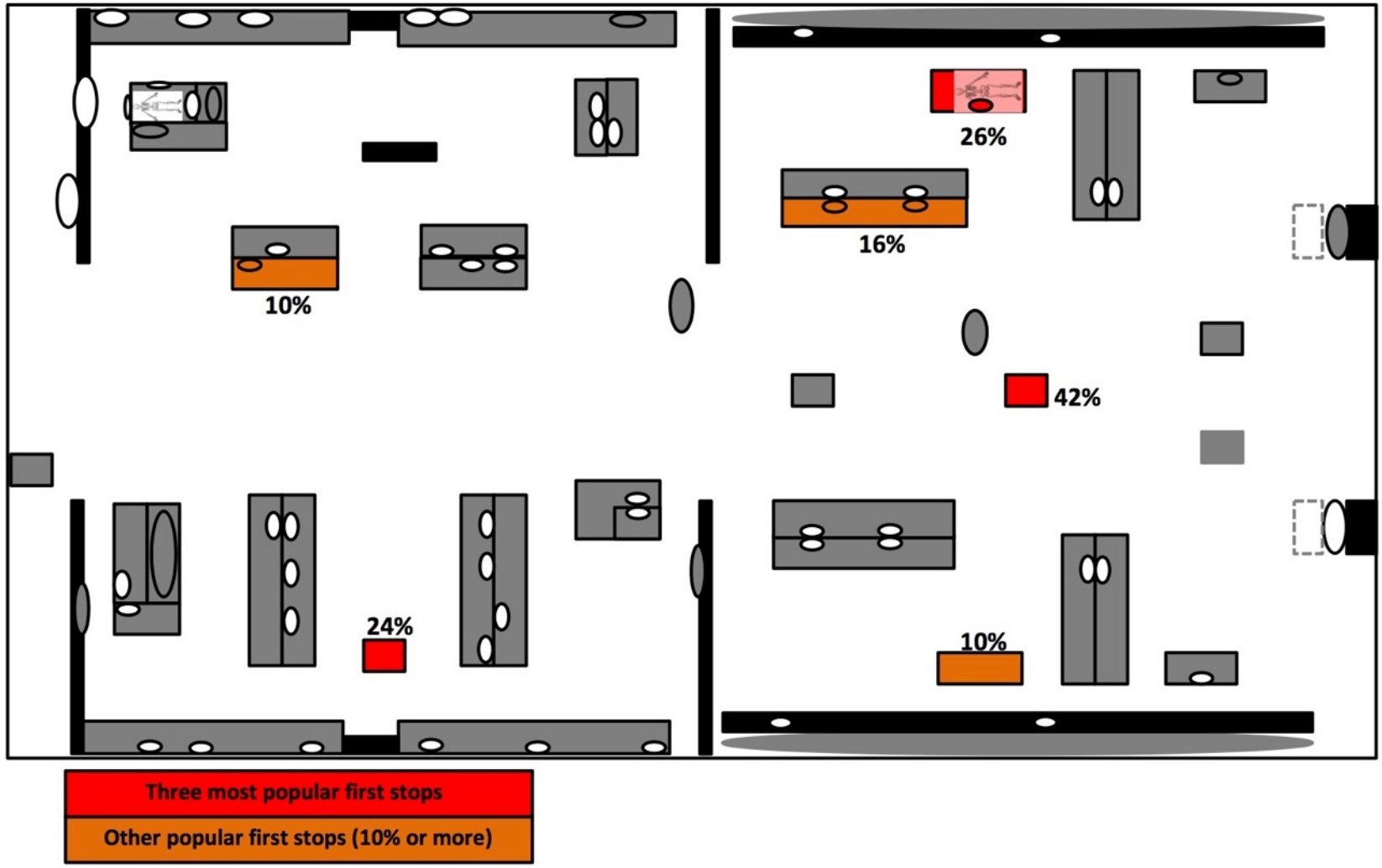


Figure 6.4. The most popular first few stops at the British Museum.

The four predominant routes at the BM illustrated in figure 6.2 are summarised in table 6.1 and further highlight how visitors utilise the space as a 'corridor'. All routes are centred around the central aisle of space in between the displays only deviating around either the torcs (figure 6.5-6.6) in the Iron Age section or the Barnack burial (figure 6.7) in the Bronze Age section. These appear to be the only cases that can attract visitor's attention from the centre of the space. This pattern is further highlighted by figure 6.4 which illustrates the cases most frequently stopped at in the first three stops by visitors. Two of the cases which are popular with 10% and 16% of visitors are positioned alongside the central aisle and the Mold gold cape is stopped at by 42% of visitors within their first three stops. The various routes also reinforce the popularity of this display as Routes A-C involve some sort of interaction with the cape. A display that is not present in any of the popular routes through the gallery but is represented in figure 6.4 as one of the most popular first stops, is a case of Bronze Age jewellery. This case is full of eye-catching gold and bronze decorative items and this may explain its pulling power as visitors first enter the space. Yet, it is worth noting that 10% of visitors only represents 5 people and out of all the stops made by the 50 visitors only 14% ever visited this case so it is perhaps not as 'attractive' as first it appears.

Route	Direction
Route A (14%)	Entering from the Iranian gallery (Room 52), visitors process straight to the Barnack burial then visit the Mold gold cape, they then continue to process through the centre of the Iron Age displays skirting by the torc displays and out.
Route B (28%)	Entering from the Iranian gallery (Room 52) and going straight to the Mold gold cape, then visiting the Barnack burial before re-visiting the centre aisle and processing through the centre of the Iron Age displays skirting by the torc displays and out.
Route C (22%)	Entering from the Roman gallery (Room 49), coming in near the object handling desk, processing through the centre of the Iron Age and Bronze Age displays before stopping at the Mold gold cape and then continuing out of the space.
Route D (24%)	Entering from the Roman gallery (Room 49), coming in near Lindow Man, skirting past the torc cases in the Iron Age room then processing through the centre of the Bronze Age/ Neolithic displays and out.

Table 6.1. Summary of the four most popular directional routes through the British Museum prehistory displays.

Figure 6.5. Photograph of the case of torcs from Snettisham on display at the British Museum (McDowall, 2017).

Figure 6.6. Photograph of another case displaying a variety of torcs positioned opposite the Snettisham case in the British Museum (McDowall, 2017).

Figure 6.7. Photograph of the Barnack burial on display at the British Museum (McDowall, 2017).

Overall, the visitor interactions with the prehistory displays at the BM identified from the tracking surveys are very low. Visitors only engage with aesthetically-captivating shiny objects and human remains if they are visible from the centre of the two rooms. The majority of the displays were consequently rarely visited, if at all by the tracked visitors.

6.2.2 Visitor behaviours observed at the Stonehenge Visitor Centre

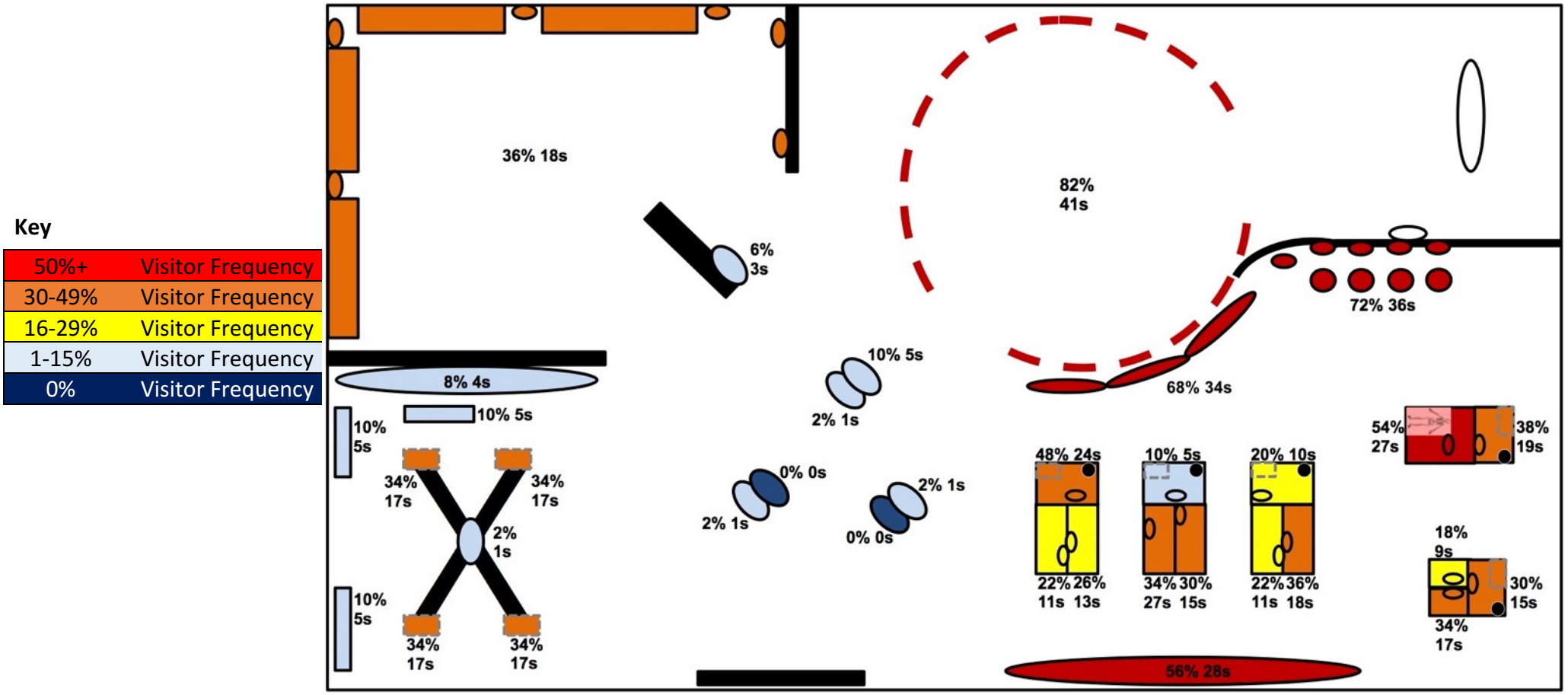


Figure 6.8. The heat map of visitor frequency at the Stonehenge Visitor Centre with corresponding dwell times.

Stonehenge Visitor Centre

SVC has the warmest heat map out of all the case studies with 19 red hot to warm areas, which is further reflected by the average dwell time of 12 minutes in the space. Both the longer dwell time and higher level of engagement was expected due to the visitor profile interested in viewing prehistory and the price these visitors pay to enter the exhibition and visit the nearby monument (table 4.2). SVC also has the highest number of red hot areas visited by 50% of visitors or more. The most frequently visited area is the 360˚ panoramic video of Stonehenge through time (figure 6.9) that visitors are funnelled in to as they enter the exhibition space. Due to this visitor route imposed by the architecture of the visitor centre a high visitor frequency is not surprising. However, even though visitors are more likely to stop here does not necessarily mean they will or that they will engage with this audio-visual. Yet, the average dwell time in this area was 41 seconds, representing the longest dwell time recorded for the entire exhibition. Thus, even though visitors have a tendency to stop here they are also engaging with the space. This is further facilitated by roaming tour guides who frequently talk visitors through the length of the video and consequently increase dwell time when they encourage visitors to stop and listen to their narrative.

Figure 6.9. Photograph of the panoramic video funnelling visitors into the gallery at Stonehenge Visitor Centre (McDowall, 2018).

There are only 9 cold areas at SVC and two text panels that received no visits. These text panels that received no visits are utilised for aesthetic value rather than an attempt to engage visitors as they only present singular words (figure 6.10). Consequently, they do not require visitors to stop and read them as they can be easily read whilst walking past. Such visitor behaviour with larger areas of interpretation has been previously highlighted by Yalowitz and Bronnenkant (2009:50-51) in their discussion of visitor 'non-stop' engagements with displays. The rest of the cold areas except one in SVC are all text panels and benches. The only case that is cold is a case focused on food at the Neolithic local site of Durrington Walls (figure 6.11) which has a low density of objects on display and only presents an arrow and arrowheads alongside a video about arrow manufacture and some arrowheads that visitors can touch.

Figure 6.10. Photograph of the three tall text panels that present singular thematic words at Stonehenge Visitor Centre (McDowall, 2018).

The temporary exhibition room at SVC, although a 'warm' area only had an average dwell time of 18 seconds which is relatively low in comparison to the rest of the singular cases in the room which have comparatively longer dwell times for less

material on display. Considering that the temporary exhibition included 4 cases and 5 text panels, despite the high visitor frequency it appears that the displays are not capturing visitor attention. Unfortunately, more precise tracking data that would enable the differentiation of dwell time for each of these cases and text panels could not be collected due to the size of the space which made inconspicuous tracking unfeasible.

Figure 6.11. Photograph of the case that received the least visits at Stonehenge Visitor Centre (McDowall, 2018).

SVC utilises a range of audio-visuals in the space which at first glance appear to be very popular yet the dwell times at these elements do not correspond to the length of these audio-visuals. The large timeline video of the area around Stonehenge runs for about 2 minutes yet the average dwell time at this feature is 28 seconds, much shorter than the video, which needs to be watched in full for a couple of loops to see all of the different levels of information conveyed. Perhaps the rich detail provided by this video is off-putting to visitors who give up trying to interpret the information presented part way through the video, as they get saturated with information. The videos about the interpretation of Stonehenge also have quite short dwell times comparative to their visitor frequency. These videos present 4 clips, each of which are longer than the average dwell time of 17 seconds.

The general pattern of warmth illustrated on the SVC heat map seems to follow the most popular route of the visitor which is further exemplified in figure 6.12. Visitors are entering through the 360˚ video and then going to the case to their left '*How was Stonehenge built?*' (figure 6.13), then stopping at the pictorial timeline (figure 6.14), followed by the models of Stonehenge through time (figure 6.15). The pictorial timeline is the second most popular feature as it serves to situate the international visitor profile highlighted in section 4.3 within the context of British prehistory. The popularity of the models perhaps reflects their tactile nature. Most visitors are unaware of the time depth of Stonehenge and how it changes, this display challenges this homogenised view of the site and the popularity of this display perhaps also reflects visitor interest in this alternative history.

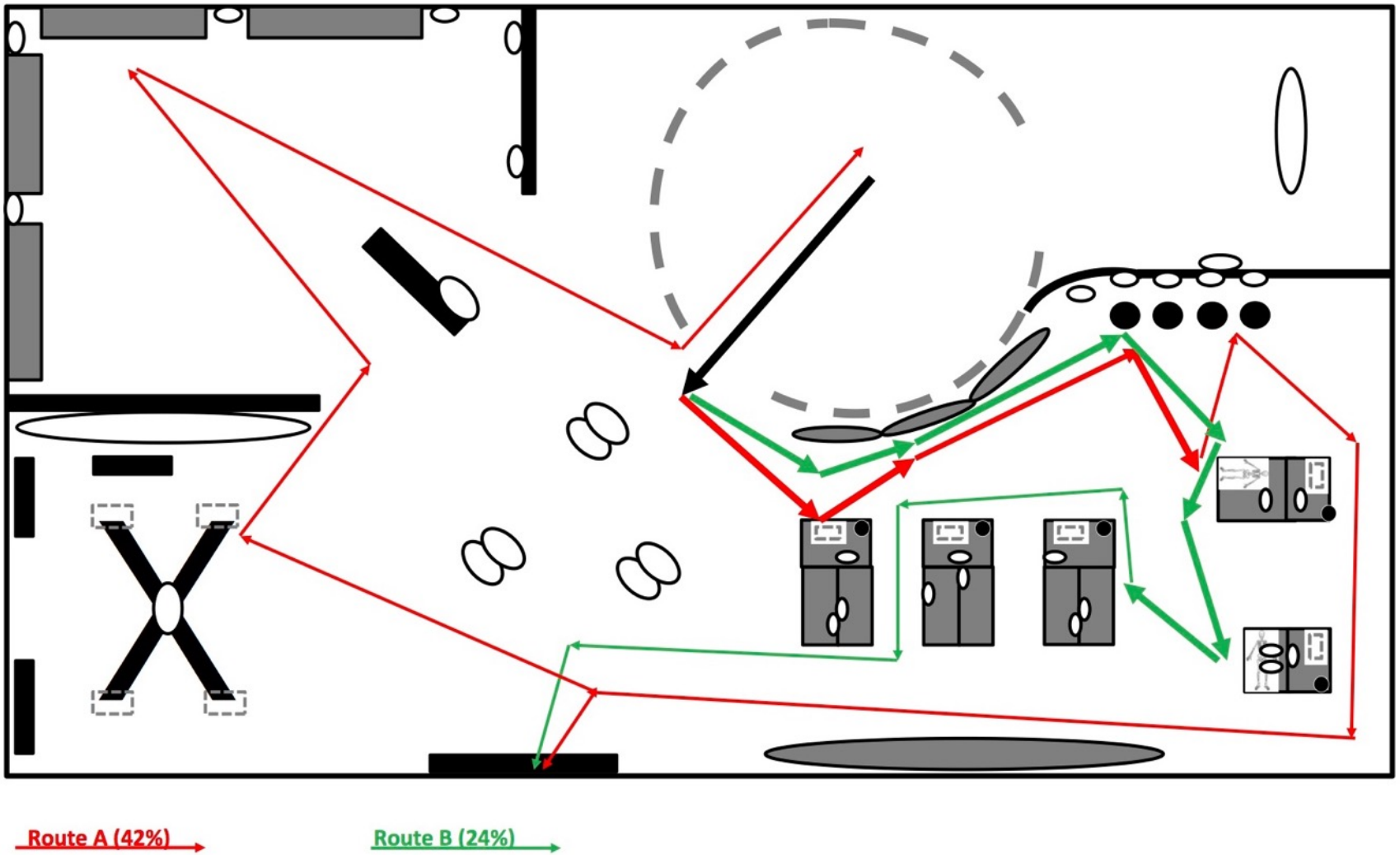


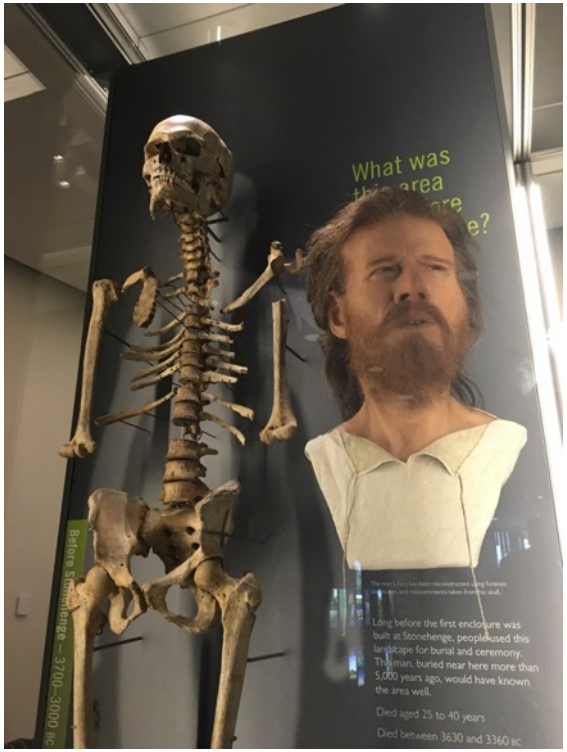
Figure 6.12. The two most popular routes through the prehistory exhibition at the Stonehenge Visitor Centre.

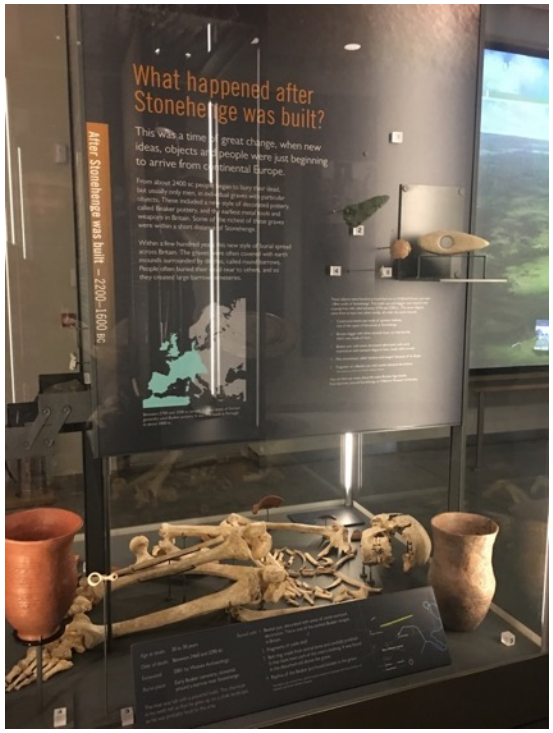
Figure 6.13. Photograph of the most popular case to visit in the first three stops at Stonehenge Visitor Centre (McDowall, 2018).

Figure 6.14. Photograph of the pictorial timeline often visited in the first three stops a visitor makes at Stonehenge Visitor Centre (McDowall, 2018).

Figure 6.15. Photograph of the popular models of Stonehenge through time at Stonehenge Visitor Centre (McDowall, 2018).

Human remains again seem to be popular at SVC and one of the hottest cases presents the Winterbourne Stoke skeleton vertically alongside a facial reconstruction of what they looked like (figure 6.16). This case is more popular with visitors than the case opposite which presents a crouched skeleton laid horizontally at the bottom of the case without a facial reconstruction (figures 6.17-6.18). Although both skeletons are visible their different presentation styles seem to impact on visitor engagement. The remains which are immediately more recognisably 'human' appear to be more popular based on dwell time, as this case captures the attention of over 50% of the tracked visitors. It was however, more difficult to fully assess how long visitors spent engaging with the other skeleton as it was laid along the bottom of a case and could be viewed from either side of the case and was consequently included in two tracked features. Thus it was not possible to differentiate which visitors were looking at the human remains and which visitors were engaging with the different objects and interpretation provided above the remains on both sides. The only way to determine the precise number of people engaging with the crouched remains in this case was if a more sensitive tracking technique involving eye tracking technology had been utilised. It is, however, still possible to gain the impression that these remains were not as frequently interacted with based on the lower dwell times and visitor frequency of the two displays the remains are positioned underneath. It certainly seems that the level human remains are displayed at can significantly determine the level of visitor engagement with the remains. At the BM, although the Barnack skeleton was also presented crouched, it was presented on its own in a mid-height case in which the remains could easily be seen. In contrast the crouched burial at SVC was presented below eye-level underneath the objects and interpretation that are at eye-level. Thus, it seems that although visitors find human remains quite interesting to interact with they are only doing so when the remains are presented visibly without other forms of interpretation and objects to distract from the remains.





Left; Figure 6.16. Photograph of the Winterbourne Stoke vertically presented skeleton at Stonehenge Visitor Centre (McDowall, 2018).

Centre; Figure 6.17. Photograph of the left side of the case with the crouched human remains on display at Stonehenge Visitor Centre (McDowall, 2018).

Right; Figure 6.18. Photograph of the right side of the case with the crouched human remains at Stonehenge Visitor Centre (McDowall, 2018).

All visitors enter at the same point at SVC but once they are funnelled through the 360˚ panoramic video they are presented with multiple options for how they want to navigate through the space. The majority of visitors at SVC tend to stop as they enter the main exhibition room before then moving to the left, rather than the right. The temporary exhibition room directly to the right is partially closed-off and perhaps appears less inviting, whilst the lack of displays directly in front of the entrance guides visitor attention to the more obvious route through displays to the left of the entrance.

Two of the most popular routes through the space, Routes A and B skirt the left side of the displays as illustrated in figure 6.14 and summarised in table 6.2. Only 10% of visitors, representing a mere 5 visitors choose to go to the right as they enter and go into the temporary exhibition room and consequently this route is not illustrated as one of the more popular routes. Visitors often prefer to have an obvious route to follow and perhaps from the entrance the object displays on the left look like a chronological route to be followed. Both routes illustrated on figure 6.12 are very similar and only deviate slightly as to whether visitors prefer to visit the first case on the left or pictorial timeline first and whether they visit the temporary exhibition after visiting the central three cases. These popular routes via the case '*How was Stonehenge built?*', the pictorial timeline, models of Stonehenge, Winterbourne Stoke skeleton and video of the landscape through time are further reinforced by figure 6.19 illustrating the most popular first three stops made by visitors in the space.

Route	Direction
Route A (42%)	Visitors enter through the 360° panoramic video then go to the first case on the left, *'How was Stonehenge built?'* they then walk to the models of Stonehenge via the pictorial timeline and then move on to the Winterbourne skeleton and then move to a point where they can view the landscape video and wander around the central three cases before either leaving through the doors to the huts outside or visiting the temporary exhibition and then leaving via the 360° panoramic video.
Route B (24%)	Visitors enter through the 360° panoramic video then go to the pictorial timeline on the left and continue walking along the left side of the gallery to the models of Stonehenge. They then move on to the Winterbourne skeleton and then move to a point where they can view the landscape video and wander around the central three cases before leaving through the doors to the huts outside.

Table 6.2. Summary of the two most popular visitor routes through the prehistory exhibition at the Stonehenge Visitor Centre.

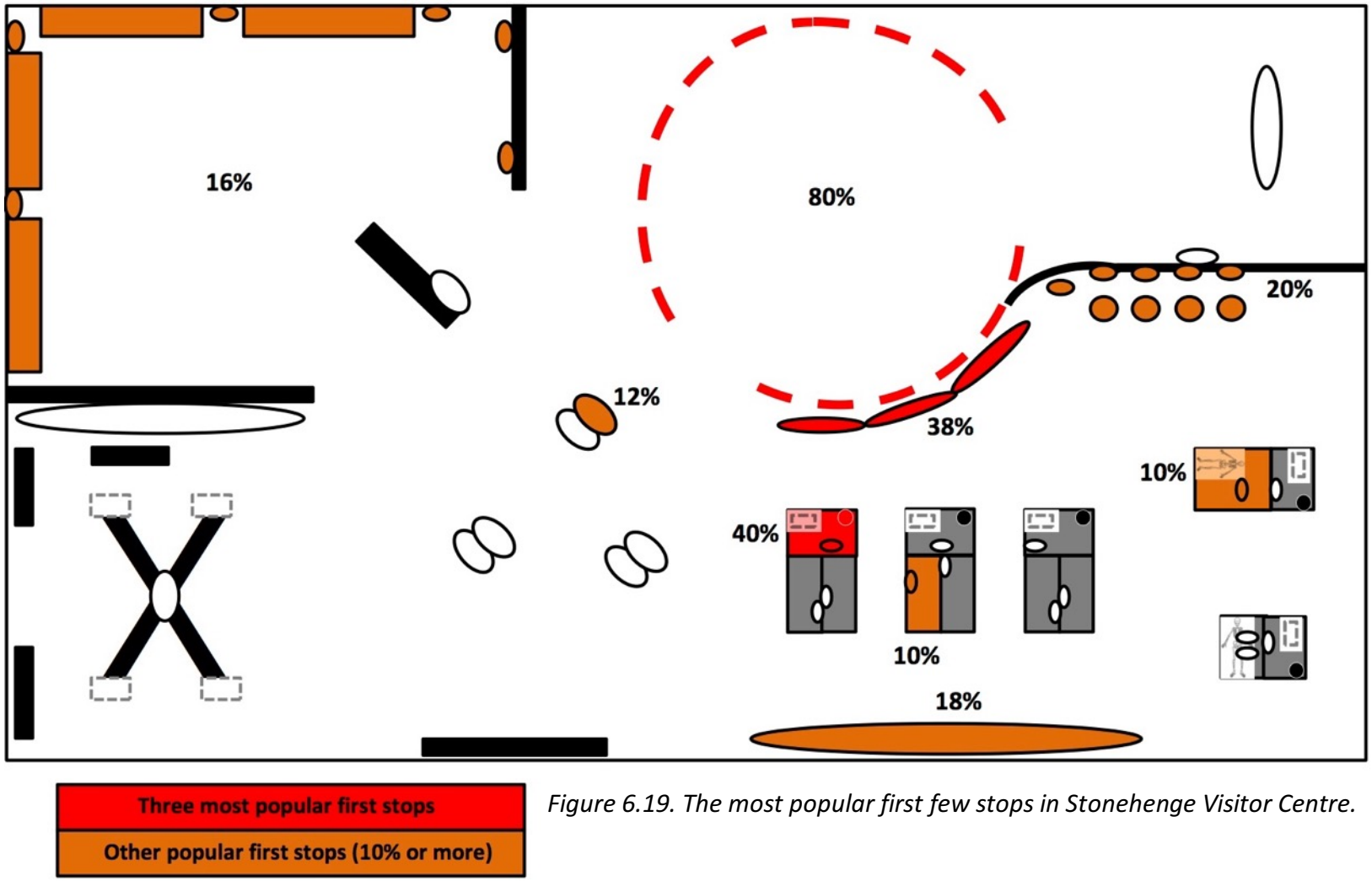


Figure 6.19. The most popular first few stops in Stonehenge Visitor Centre.

From the tracking surveys it was clear that the 360˚ panoramic video of Stonehenge through time represents the most popular display at SVC with 82% of visitors stopping at this feature and 80% of visitors stopping there in the first of their stops. The large landscape video also appears quite popular with a visitor frequency of 56%, yet the smaller videos in the space are comparatively less popular. Even though these smaller videos are situated next to benches encouraging visitors to stay for longer in comfort they are not visited in the most popular routes and are only visited by 34% of visitors overall. Visitors therefore demonstrate different behaviours with different types of video interpretation, demonstrating greater engagements with the more immersive video experience.

6.2.3 Visitor behaviours observed at North Lincolnshire Museum

Key

50%+	Visitor Frequency
30-49%	Visitor Frequency
16-29%	Visitor Frequency
1-15%	Visitor Frequency
0%	Visitor Frequency

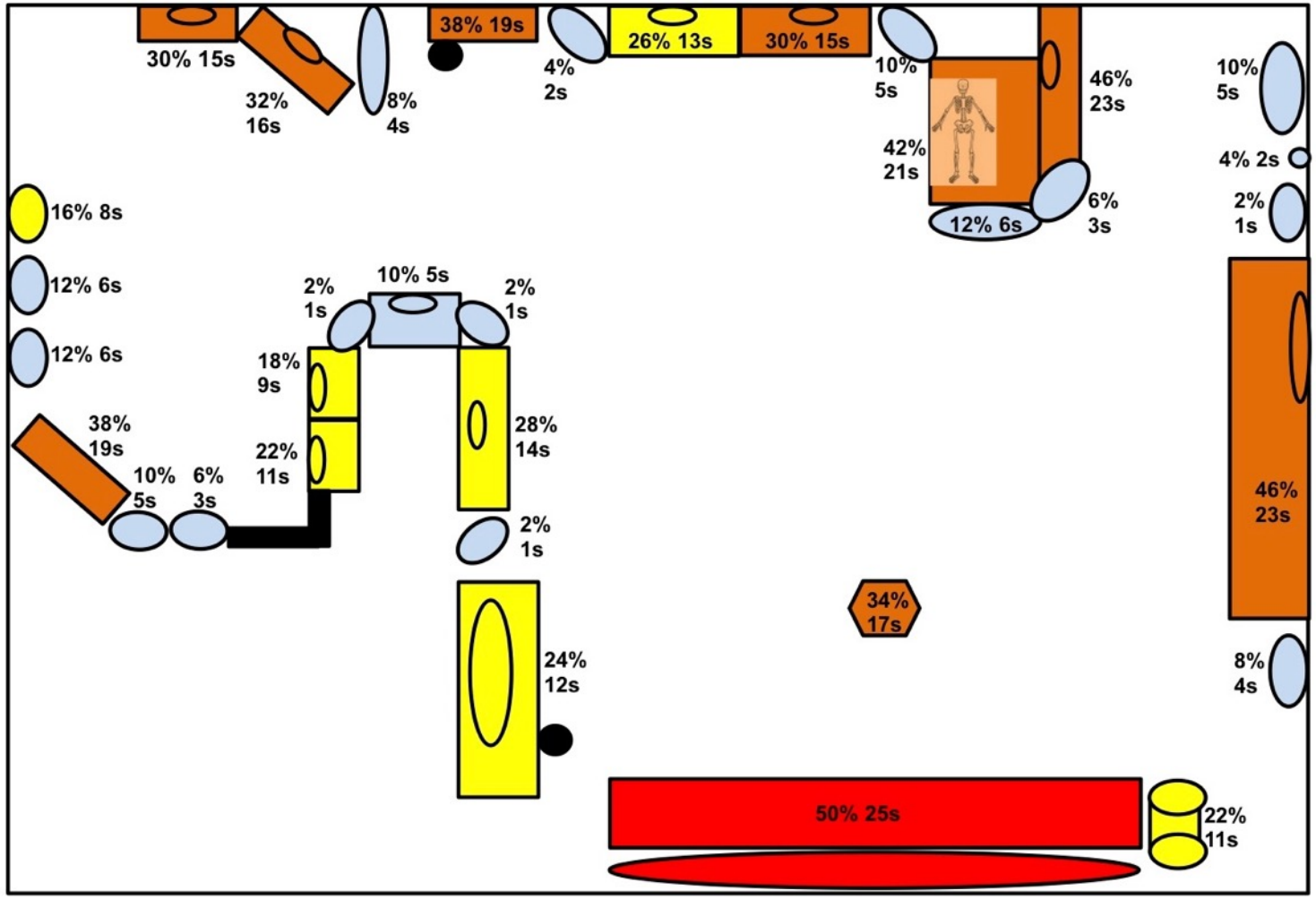


Figure 6.20. Heat map of visitor frequency at North Lincolnshire Museum with dwell times.

North Lincolnshire Museum

The heat map for NLM is quite warm overall with no dark blue areas, 1 red hot case and 16 other warm orange and yellow features. Everything in the gallery is visited at least once in the tracked sample. The warm areas represent 50% of all of the tracked features demonstrating quite high visitor involvements with the prehistory displays. The trend for a lack of engagement with text panels observed at the BM is also present at NLM, where all but one text panel are cold light blue areas. Furthermore, these text panels do not even seem capable of sustaining visitor attention for more than a few seconds. On average visitors are dwelling at text panels for between 1-6 seconds which is not enough time to read them. It appears that of the few visitors that stop to read the text panels, they take a few seconds to make a judgement on whether they want to commit to reading the panel and often decide to move on. Even the text panel '*The beginnings of archaeology'* (figure 6.21), which is visited the most frequently out of all of the text panels, was only visited by 16% of visitors and still has a short average dwell time of only 8 seconds. Despite the higher number of visitors stopping at this panel as they first enter the room, it appears that most visitors are not either reading the full panel or looking at the photographs. Cases that contain a combination of interpretation and objects have a higher average dwell time.

Figure 6.21. Photograph of the most visited text panel at North Lincolnshire Museum (McDowall, 2018).

The only case that is cold in the gallery is the case '*Flint working'*, this case displays flints from different periods from Palaeolithic hand axes to contemporary gun flints (figure 6.22). These objects are accompanied by black and white illustrations of how to knap flint. This topic focused on tool production does not appear to be popular with visitors at NLM with only 5 people out of the 50 tracked individuals stopping here and only spending an average of 5 seconds at the case. This lack of engagement with this case also reflects the inaccessibility of the accompanying text, positioned well-below eye-level in a small font size.

Figure 6.22. Photograph of the least visited case at North Lincolnshire Museum (McDowall, 2018).

There is only 1 red hot case at NLM, this large case presents the preserved Bronze Age logboat from Appleby in a commanding position within the space (figure 6.23). This case attracts the attention of 50% of visitors who dwell for an average of 25 seconds at this aesthetically intriguing long case that takes up an entire wall.

Figure 6.23. Photograph of the most visited feature in North Lincolnshire Museum (McDowall, 2018).

The second most frequently visited areas in NLM are two cases focused on the Iron Age which are both visited by 46% of the tracked visitors. One of these cases presents a variety of pottery from the local site of Dragonby in another large case that takes up a lot of space and a prominent position in the gallery (figure 6.24). The other Iron Age case is situated next to the Roman section and could thus be the last or first case a visitor encounters depending on their route through the space. This case is situated high up and presents the topic of '*Iron and the Iron Age'* with a display of brooches, terret rings, votive objects and coins (figure 6.25). It is very unusual for a case full of pottery to be so frequently visited, as pottery is often viewed as aesthetically uninteresting and critiqued by visitors in museum surveys, as highlighted by the visitor responses reviewed in section 4.6. Yet in NLM, the second most popular case is full of such material. Perhaps it is the focus on a local site of relevance to the local demographic or the encyclopaedic style of display that is engaging visitors with this case. Furthermore, visitors are not just stopping to take in the mass of pottery but are also reading the interpretation as highlighted by the average dwell time of 23 seconds at this case. Intriguingly both of these popular Iron Age displays are presented on a red background, a colour usually reserved for presenting the Romans

in museums. This colour has been intentionally utilised to challenge these ideas of which colours are associated with more 'sophisticated' and 'modern' periods of time by the curator (Nicholson, 2017). Perhaps this colour association is signalling to the visitor that these displays are thus more 'worthy' of their attention as they present sophisticated people who are skilled pottery makers and metalsmiths. Yet, presenting a range of brown/ beige pottery and brown/ black fragments of metal against a red background is usually viewed with hesitancy due to concerns about making displays look aesthetically unexciting.

Figure 6.24. Photograph of the large Iron Age case presenting finds from Dragonby that represents the second most frequently visited area in North Lincolnshire Museum (McDowall, 2018).

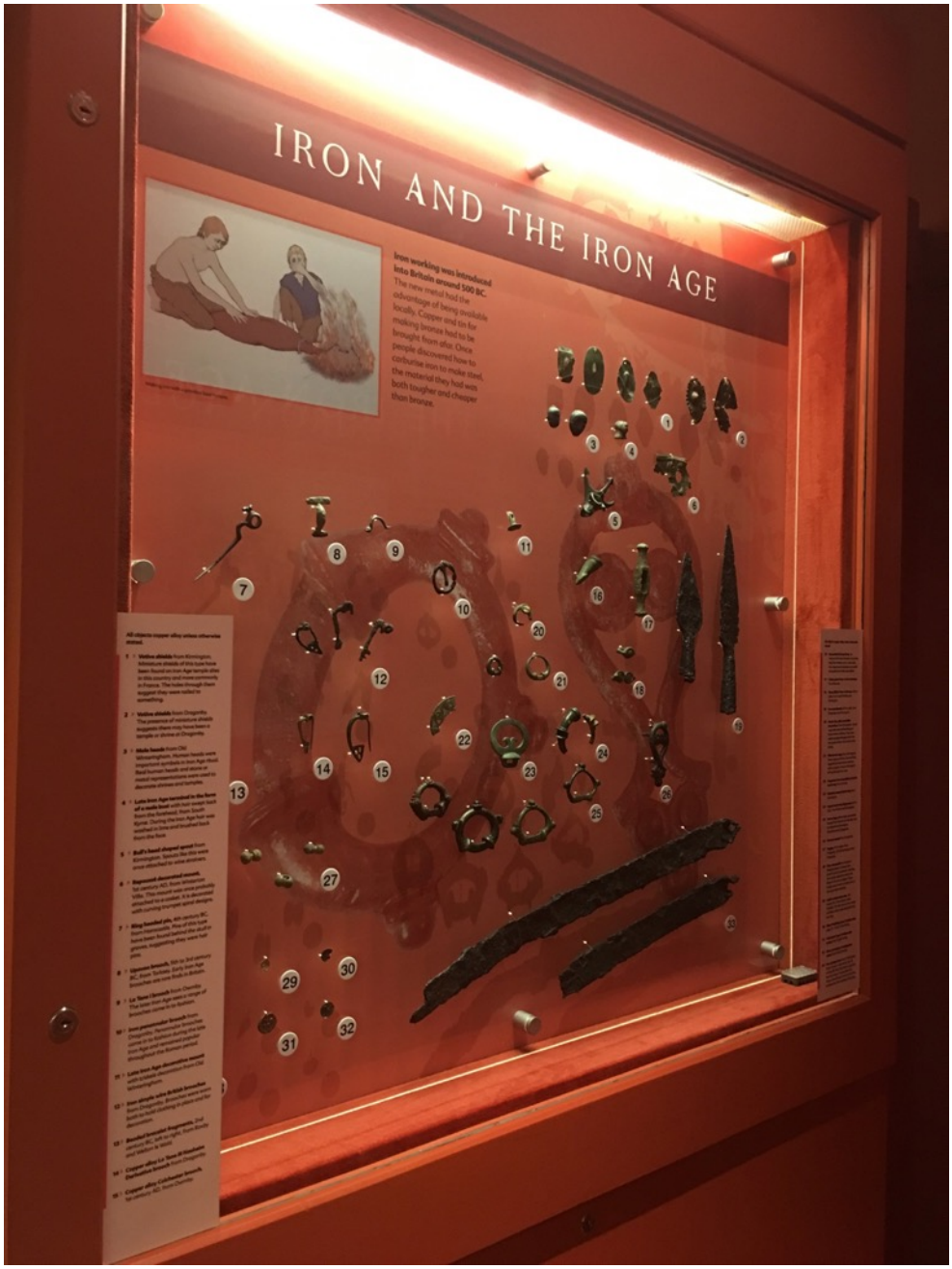


Figure 6.25. Photograph of the smaller case of Iron Age material near to the entrance to the Roman gallery at North Lincolnshire Museum (McDowall, 2018).

The third most visited display includes a crouched skeleton and was visited by 42% of visitors who spent an average of 21 seconds engaging with the case. This crouched skeleton is presented as if in-situ in view of the main entrance at ground level in a tall case alongside a variety of pots. It thus appears that as observed at the BM and SVC visible anatomically articulated skeletons are visually appealing to visitors who often stop to engage with these visual reminders of the people of prehistory.

Another popular display at NLM is the interactive station at child-height designed by local school children and used by visiting children[21] and their accompanying adults. This station where they can play a variety of prehistory-related games was visited by 34% of the sample. Towards the end of the data collection as previously highlighted in Chapter 3 this station was altered but remained an interactive area for children and these changes do not appear to have significantly altered the visitor frequency or average dwell time at this tracked feature.

Despite the general warmth of the NLM heat map it is worth noting that even some of the cases that were visited frequently were not actively engaged with. For example, although the two cases presenting the earliest prehistory (figure 6.26) are both a warm yellow, they also represent the least visited cases with the shortest dwell times after the '*Working flint'* case. The Palaeolithic case has an average dwell time of 11 seconds and the Mesolithic case has an average dwell time of 9 seconds. These dwell times are quite low when compared to the warmer orange cases which range between 15-23 seconds. Despite the lower engagement with these cases one of the most popular visitor routes includes walking past these cases as highlighted in figure 6.27. Furthermore, the Palaeolithic case is visited by 12% of visitors in their first three stops as demonstrated in figure 6.28. These cases are getting visitor traffic but just do not seem to be able to hold visitor attention for more than a few seconds.

The visitor routes are summarised in table 6.3 and reflect the pattern that emerges in both the heat map (figure 6.20) and figure 6.28 showing the most popular first three stops. Visitors appear to be predominantly entering through the main entrance and skirting the left side of the room. Only 10% of the tracked visitors entered via the Roman side and so this route is not represented on figure 6.27. The displays along the right side of the room are less visited, particularly in the second section of the

[21] Although children were not tracked in this survey the adults taking them around were tracked and it was recorded on the tracking maps if the adults were engaging with their children by interacting with this activity station.

room in which these displays are a paler yellow, in contrast to the warmer orange cases along the left side of the room.

Figure 6.26. Photograph of the early prehistory cases that possess low average dwell times at North Lincolnshire Museum (McDowall, 2018).

Route	Direction
Route A (54%)	Visitors enter through the main entrance and visit the first two cases they are presented with, followed by the case of treasure finds and then visitors move back to the left side of the displays either by walking past the early prehistory cases or going straight to the Neolithic cases. Visitors then walk towards the in-situ burial and then move into the centre of the second room section to either engage with the interactive station or look at the logboat before exiting via the Iron Age displays.
Route B (22%)	Visitors enter through the main entrance and head straight towards the in-situ burial skirting the displays on the left of the gallery. They then move into the centre of the second room section to either engage with the interactive or look at the logboat before exiting via the Iron Age displays.

Table 6.3. Descriptions of the two most popular routes through the prehistory displays at North Lincolnshire Museum.

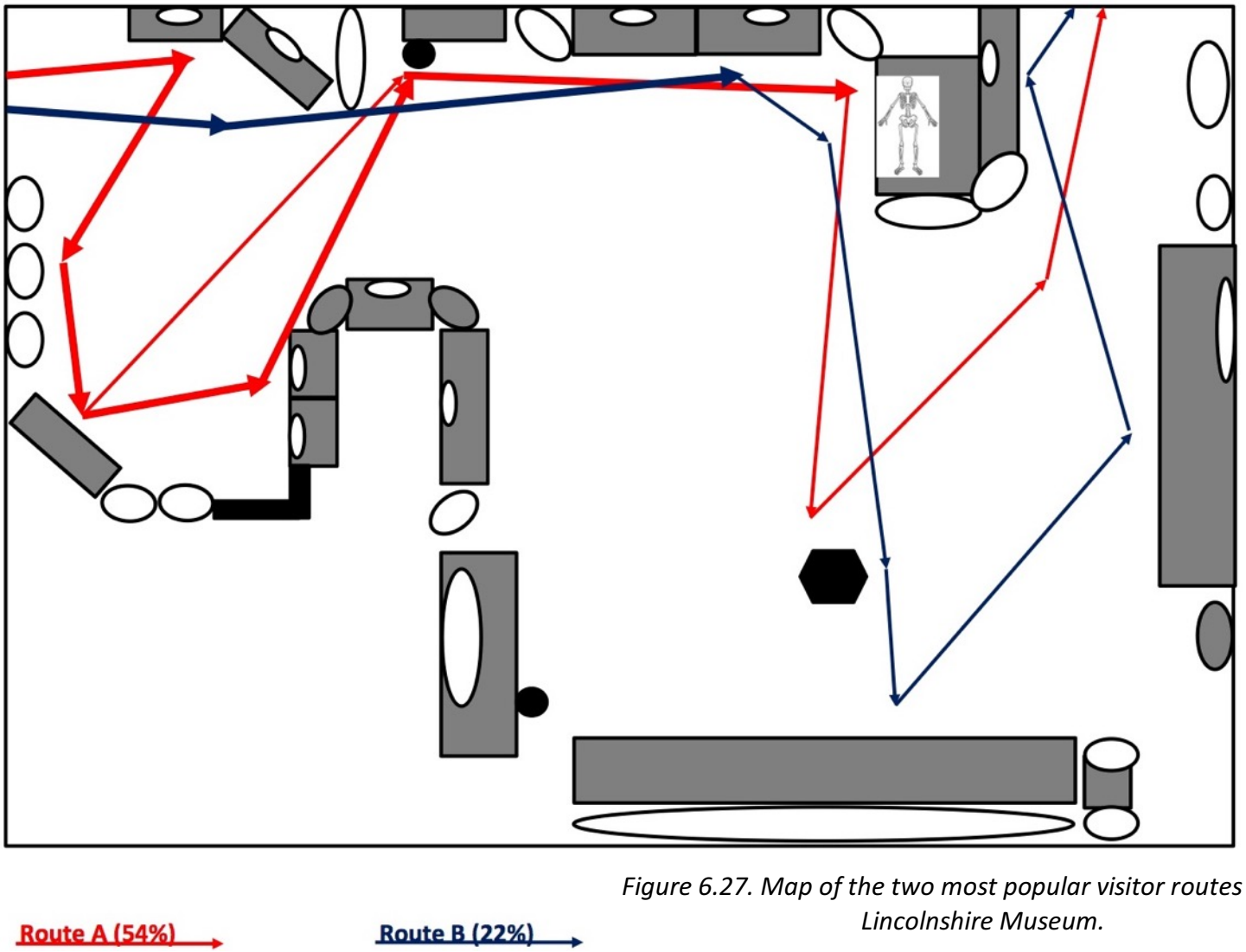


Figure 6.27. Map of the two most popular visitor routes at North Lincolnshire Museum.

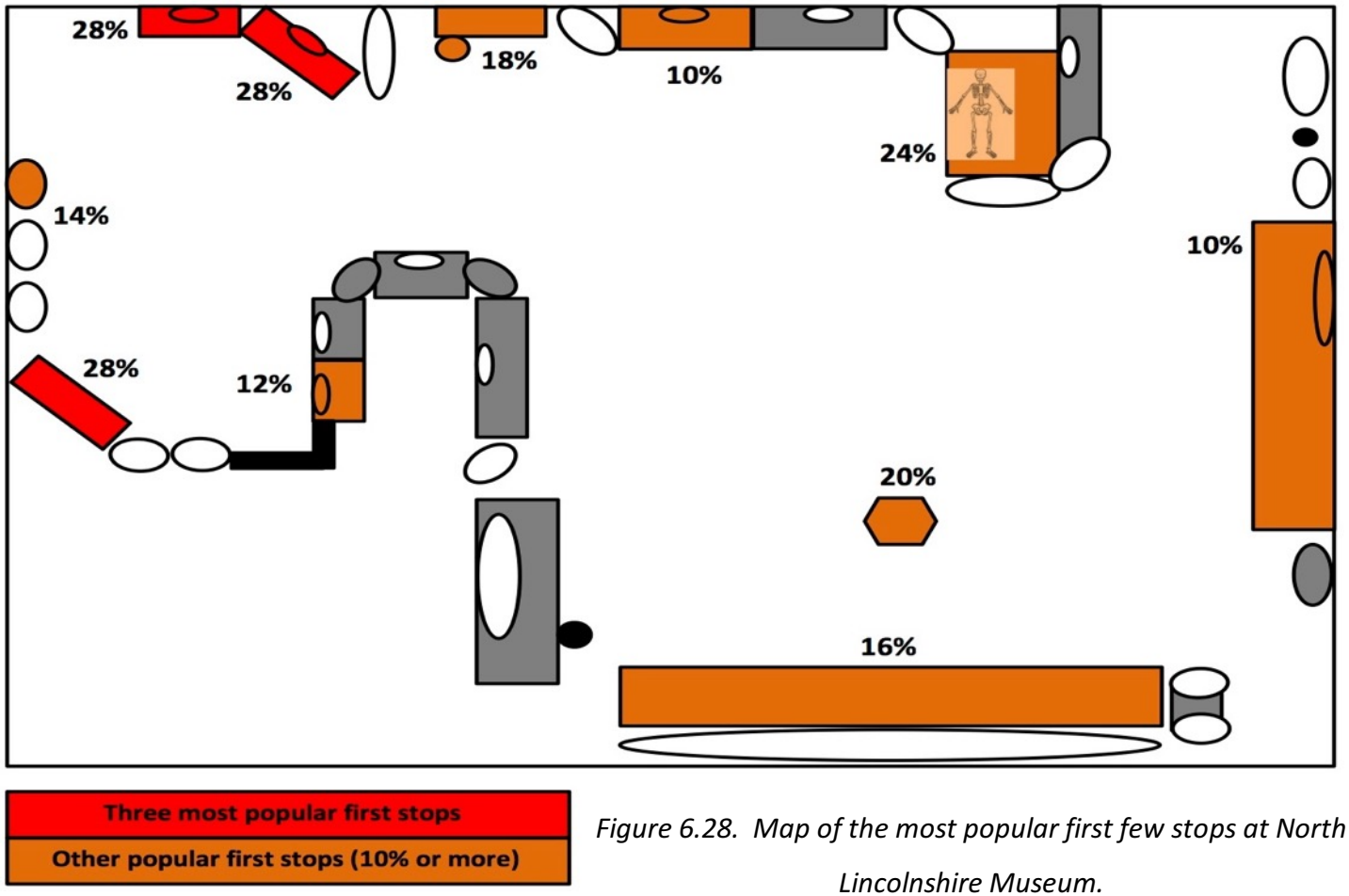


Figure 6.28. Map of the most popular first few stops at North Lincolnshire Museum.

The two cases near the entrance to the archaeology exhibition at NLM are unsurprisingly capturing visitor attention as they first enter the space. One case presents finds from the local Iron Age site of Kirmington whilst the other case focuses on archaeology and presents pottery from different periods of time. Again, like the Iron Age Drogonby case it seems that pottery is engaging visitors enough to stop them as they walk through the space despite the negative associations with the presentation of this material. Another popular case also visited by 28% of visitors in their first three stops is a case presenting local treasure finds from different periods of time. This case is full of shiny metal objects and is aesthetically quite captivating and acts like a hook to bring visitors from the entranceway into the displays. Like at the BM it seems that a case of shiny objects appeals to visitor's 'magpie' interests. Figure 6.30 does, however, highlight that there is great variety in where visitors stop when they first enter the space as there are 11 tracked features, representing 32% of the displays that are stopped at by 10% or more of visitors in their first three stops. Furthermore, even the more popular first few stops are only stopped at by 28% of visitors in their first three stops. Overall from both figures 6.27 and 6.28 it is visibly apparent that the cases that are more popular to stop at in the first three stops broadly follow the predominant visitor routes. Figure 6.28 further highlights spatial variability in the visitors first gallery stops, as these stops are not concentrated around the main entrance. This indicates that visitors are not always stopping at the entrance or that they make less stops in general.

6.2.4 Visitor behaviours observed at Torquay Museum

Key	
50%+	Visitor Frequency
30-49%	Visitor Frequency
16-29%	Visitor Frequency
1-15%	Visitor Frequency
0%	Visitor Frequency

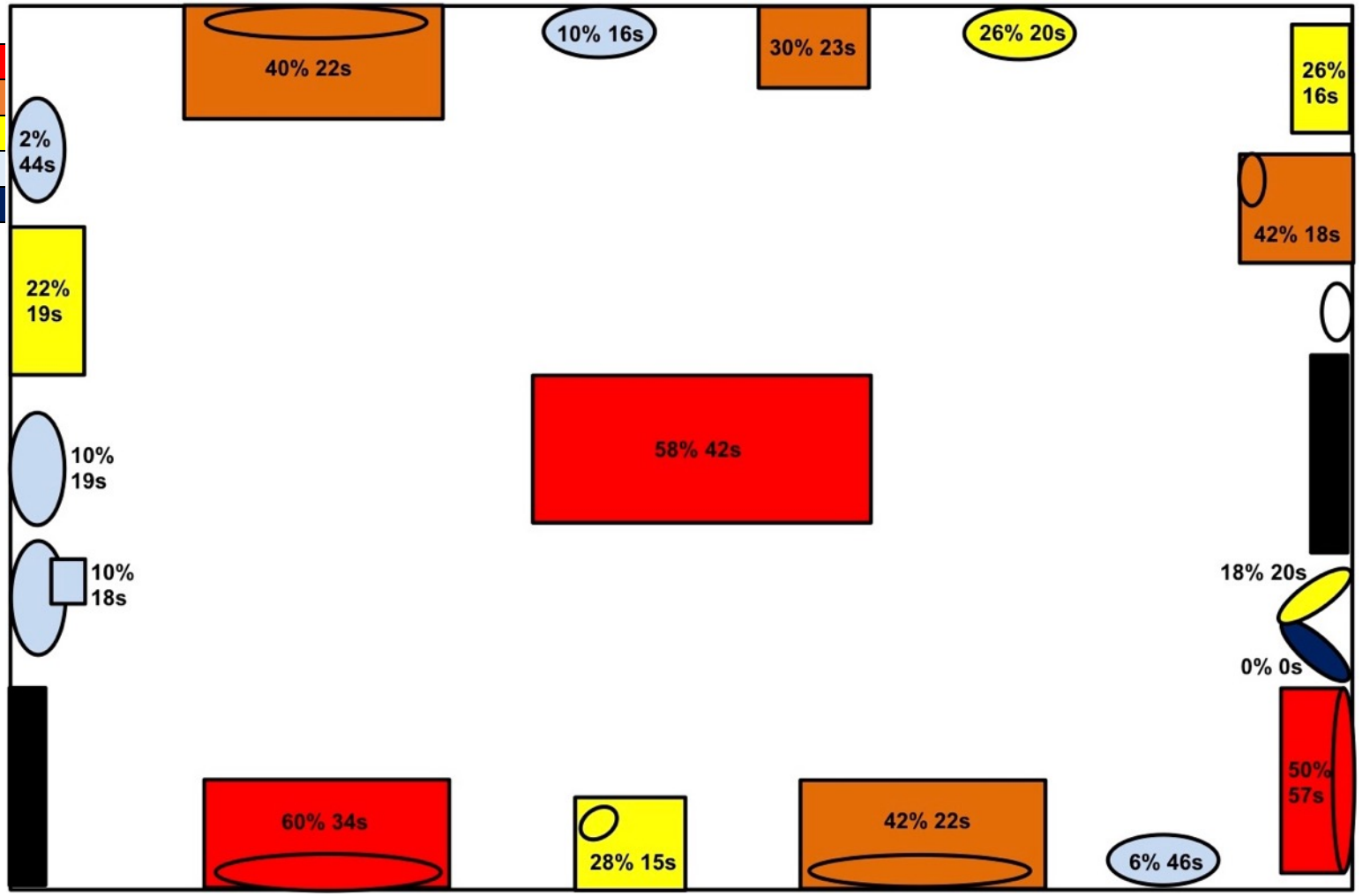


Figure 6.29. Heat map of visitor frequency at Torquay Museum with dwell times.

Torquay Museum

The heat map produced from the tracking surveys at TQ is also relatively warm like the SVC and NLM heat maps. Warmer colours are represented more in figure 6.29 than colder colours and there is only one feature that was not visited once in the 50 tracking surveys. This feature is a text panel about flint knapping (figure 6.30) that is exceptionally text heavy and instead of visualising the dynamic process of flint knapping through a video like many of the museums recorded in the macro-scale analysis (section 5.4.8), this panel instead describes the process step by step alongside static two-dimensional photographs that make it difficult to relate to. This text panel is also situated behind another panel at the entrance so is not clearly visible from the Agatha Christie entrance to the room. Furthermore, the text panel is positioned next to one of the hottest cases with the longest average dwell time in the room. It thus appears that visitors are bypassing this text panel because it is not as visually inviting as the case positioned next to it.

Figure 6.30. Photograph of the text panel that received no visits during the tracking at Torquay Museum (McDowall, 2018).

Following the trend already observed at the BM and NLM the rest of the colder areas at TQ are all text panels. However, despite their relatively low visitor frequency these text panels do appear to be read fully by the visitors who stopped to read them as the average dwell time for these panels range from 16-46 seconds. The text panels at TQ are particularly verbose and resemble a scientific text book in how they are formatted with lots of graphs and infovisuals. This overly wordy appearance seems to be quite off-putting for most of the visitors apart from perhaps those with a special pre-existing interest in the topic who do stop and read them. One text panel is slightly more visited than the others and is represented in yellow due to this higher visitor frequency of 26%. This text panel is rather enigmatically entitled, *'The cult of the*

ancestors 4,500-2,300 BC' and visually signals this theme to the visitor with a photograph of a local tomb (figure 6.31). Perhaps this 'exoticised' language in combination with such a recognisably prehistoric structure feeds into visitor's pre-existing frame of reference and is why this is one of the more popular panels to engage with.

The hottest case in the room is situated next to one of the access points to the room and depending on the visitors access point is either directly in front of them as they enter or viewed just before they leave the space, as highlighted in figure 6.32. This case is visited by 60% of visitors with an average dwell time of 42 seconds indicating that as well as capturing visitor's attention this case successfully holds their attention whilst they look at the objects and corresponding interpretation on display. This case entitled '*Return of the Neanderthals 60,000-36,000 years ago'* (figure 6.33) presents a mixture of archaeology alongside natural history with a cast of the La Chapelle-aux-Saints Neanderthal situated alongside locally excavated Neanderthal tools and Pleistocene animal remains including a scimitar cat skull, hyena jaw and mammoth tooth. It is overwhelmingly a fossilised skeletal assemblage and as observed at the BM, SVC, and NLM skeletal remains are very popular with visitors. It thus seems that all types of skeletal remains, not just human, are engaging to the visitor.

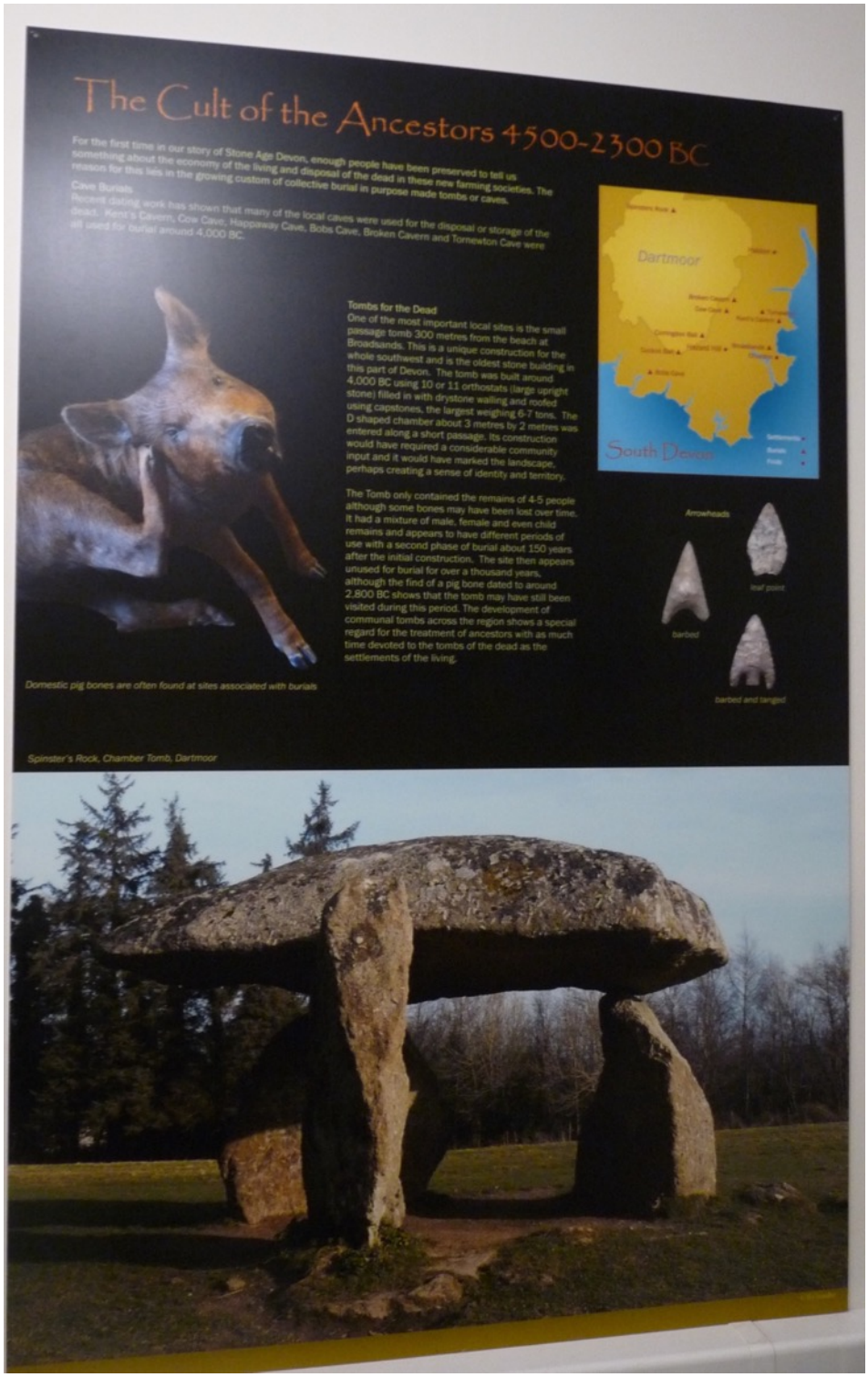


Figure 6.31. Photograph of the most frequently visited text panel at Torquay Museum (McDowall, 2018).

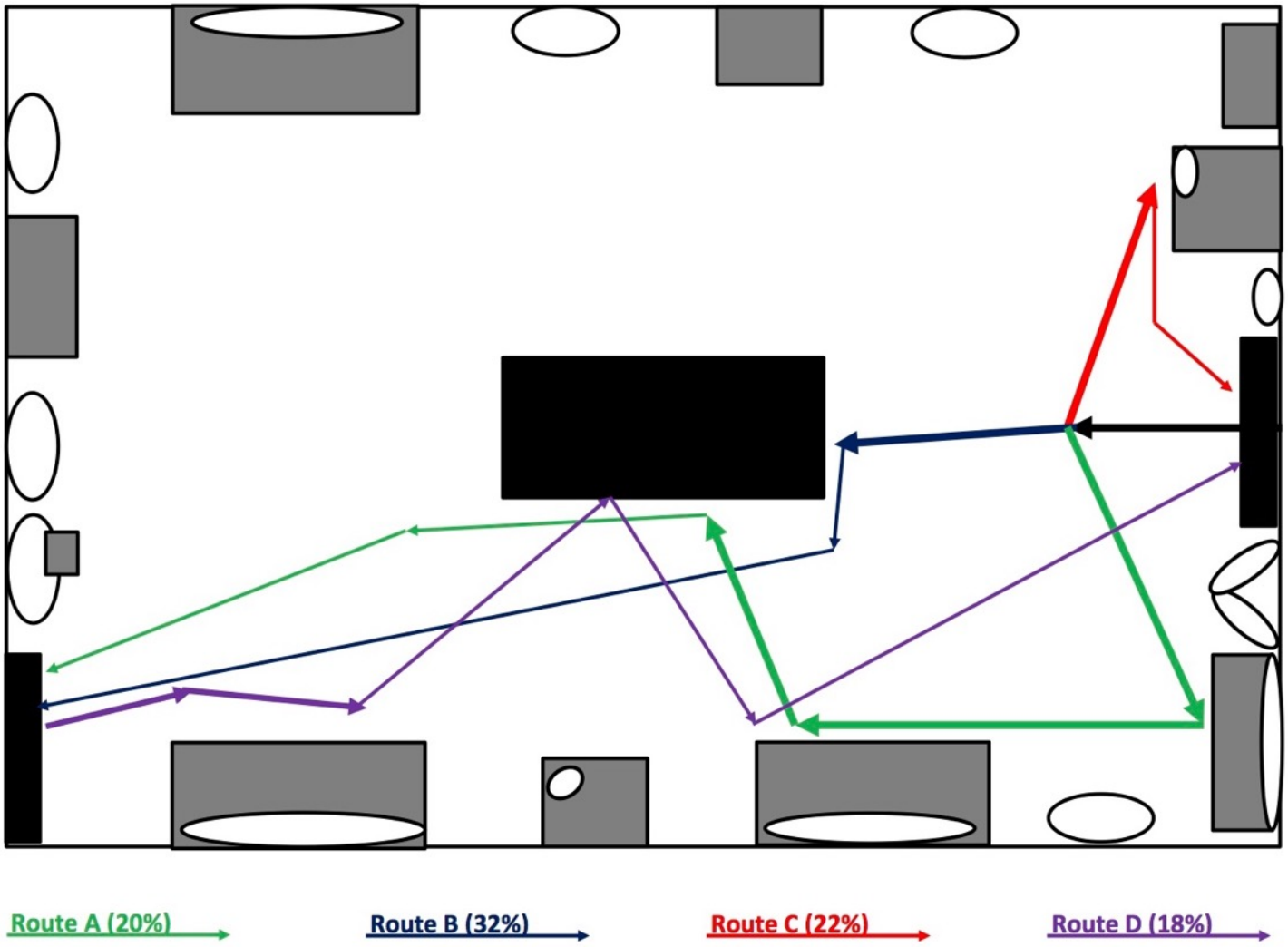


Figure 6.32. Map of the four most popular visitor routes at Torquay Museum.

Figure 6.33. Photograph of the most frequently visited display at Torquay Museum (McDowall, 2018).

The central interactive in the room (see figure 3.30 in section 3.3.1) is very popular with visitors, reflected by its visitor frequency of 58% and average dwell time of 42 seconds. The case '*Bears, breccia and bifaces 524,000-400,000 years ago'* next to the Agatha Christie entry point also has a very high visitor frequency of 50% and the highest average dwell time of 57 seconds. This case (figure 6.34) much like the most popular Neanderthal case also presents a combination of human-made hand axes alongside the cast of a hominin species, in this case a skull of *Homo heidelbergensis* from Atapuerca with Pleistocene faunal remains including bear and lion skulls. It thus appears that the combination of skeletal remains with a catchy title utilising alliteration produces quite an engaging display. In contrast to NLM, it is the cases that present our deepest prehistory that are more popular at TQ. These differences I would argue are not due to different visitor motivations but the presentation of the period. At NLM the cases are smaller with more text and a reliance on stone tools. The addition of skeletal remains and casts of skeletal remains against large

background images seem to more effectively appeal to visitors from the same demographic group at TQ (table 4.2).

Figure 6.34. Photograph of the case with the longest average dwell time at Torquay Museum (McDowall, 2018).

The case displaying the earliest modern human maxilla fragment is, however, not as well visited as the other surrounding cases. Unless a visitor had prior knowledge of the importance of this find they could quite easily not notice it as it is not explicitly advertised within the space, as emphasised in Appendix 3.4.

The variability of visitor routes through TQ museum are highlighted by figure 6.32, where there are more routes represented than at the other case studies. The directional preferences of visitors where so varied that when the individual routes were calculated 4 routes were revealed as popular routes through the space and these are summarised in table 6.4. Yet none of these routes are utilised by more than 32% of the visitors and so still represent a small number of visitors. However, it is

clear from figure 6.32 that there is a preference for visitors to enter via the Agatha Christie gallery rather than the stairs from the geology gallery downstairs. Slightly more visitors when faced with the interactive table as they enter go straight ahead to investigate and interact with this element before leaving the space, whilst an almost equal number of visitors choose to go left as choose to go right as they enter. These directional choices are further illustrated in figure 6.35 which illustrates that 44% of visitors stop at the interactive table in their first few stops.

Route	Direction
Route A (20%)	Entering via the Agatha Christie gallery and going to the displays to the left of the entrance, including the '*Bears, Breccia and Bifaces'* case and then moving past the next case on the left to the interactive table before leaving via the geology gallery stairs.
Route B (32%)	Entering via the Agatha Christie gallery and going straight to the interactive table and then leaving via the geology gallery steps.
Route C (22%)	Entering via the Agatha Christie gallery and then going to the Ötzi case to the right of the entrance before leaving via the Agatha Christie gallery.
Route D (18%)	Entering via the geology gallery stairs and walking past the displays to the right of this entrance and then visiting the interactive table and walking past the displays on the right side before leaving via the Agatha Christie gallery.

Table 6.4. Descriptions of the 4 most popular directional routes through the prehistory displays at Torquay Museum.

Figure 6.32 reveals that visitors who decide to engage with the display to the right of the Agatha Christie entrance are less likely to stay in the gallery and engage with other displays in comparison to visitors that choose to go to the case on the left. The case on the left *'Bears, breccia and bifaces'* seems more successful at hooking visitors into the narrative of the space. In terms of chronology this case represents the start point for the displays and perhaps it is this more accessible chronological route that increases the likelihood that the visitor will continue to follow this route through the gallery. This case also possesses the longest average dwell time so perhaps it is also the content of this case that encourages visitors to visit more in the room. In contrast, the case to the right, displays a grass cape from the museum's ethnographic collection alongside an interpretation panel about Ötzi the Iceman (figure 6.36). It

seems capable of initially engaging visitors as they enter but does not capture their attention in the same way as the case to the left. This is somewhat reflected by its lower dwell time of 18 seconds in comparison to 57 seconds. Furthermore, the cases to the right of the Ötzi case are a different style to the ones on the left, they present later prehistoric material in smaller, mid-height tabletop cases where the visitor needs to stand directly above the case to view the material. These cases do not seem very successful at retaining visitor attention as illustrated by Route C. The stylistic conventions of the less visited cases on the right of the room directly contrast with the more popular large wall cases on the left side of the room that present earlier prehistoric material easily visible from a distance at eye-level, against large scenic background images. It thus appears that visitor movements through the space are exposing visitor preferences for the presentational style of the objects presented.

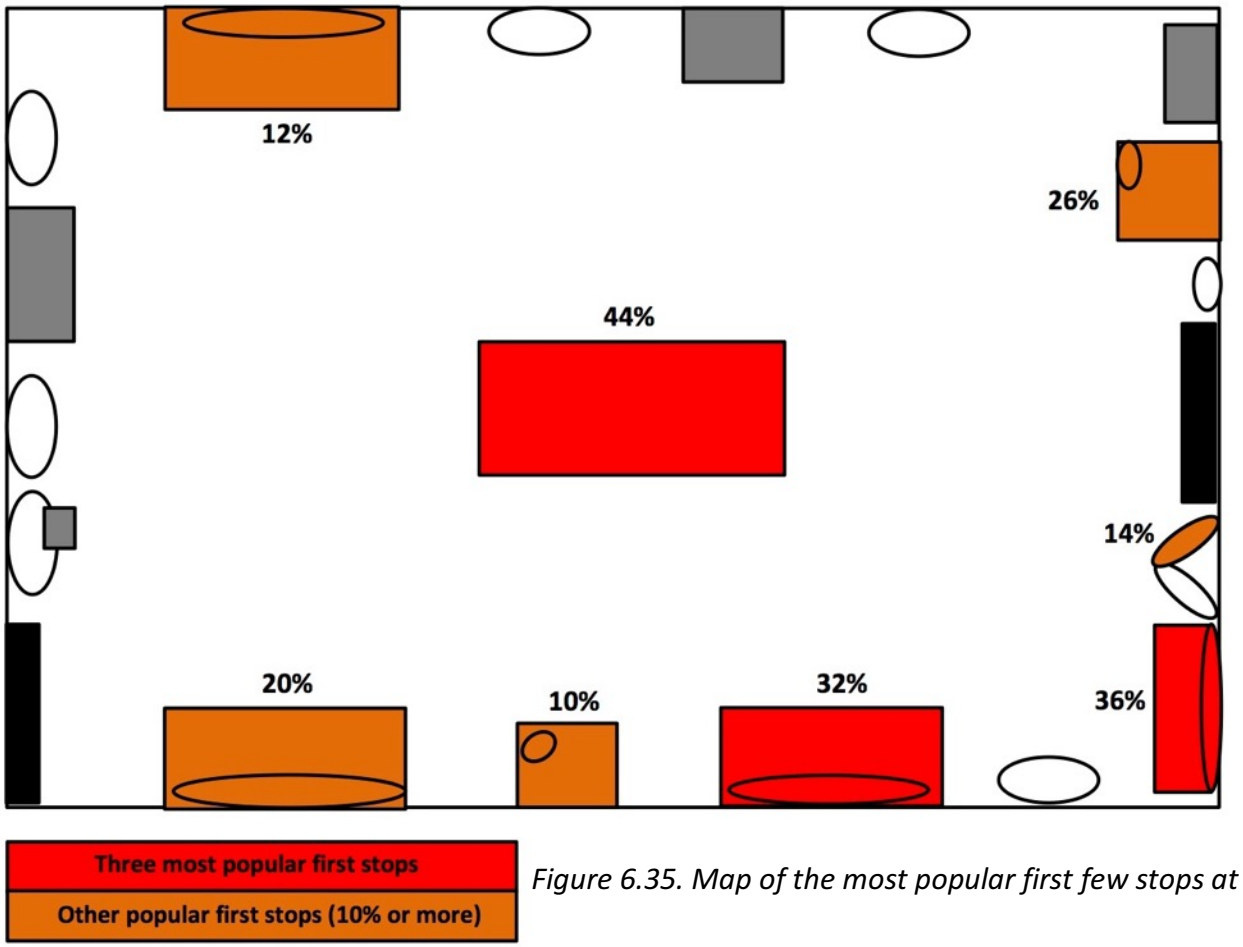


Figure 6.35. Map of the most popular first few stops at Torquay Museum.

Figure 6.36. Photograph of the ethnographic cape presented in the case to the right of the Agatha Christie entry point at Torquay Museum (McDowall, 2018).

Routes A, B and D all take in the interactive table as a key component of the routes and this is reflected by the popularity of the table as one of visitor's first stops in the space, illustrated in figure 6.35. In addition, this figure further reveals the general visitor preference for the cases on the left side of the room, as these cases are predominantly the ones that visitors choose to stop at first in the room. The case '*Bears, Breccia and Bifaces'* is visited by 36% of visitors in their first few stops, whilst the next case on the left '*Deserted Devon 400,000 – 60, 000 years ago'* was visited by 32% of visitors in their first few stops and the popularity of Route C is highlighted by the 26% of visitors that stop at the Ötzi case in their first few stops in the space. The introductory text panel to the gallery is also illustrated as quite a popular starting point for orientating visitors to the space with 14% stopping here as they first enter the gallery. This visitor frequency is the same as the text panel's overall visitor frequency indicating that visitors are only engaging with this feature for the purpose it was designed, as they first enter the room.

6.2.5 Visitor behaviours observed at Weston Park Museum

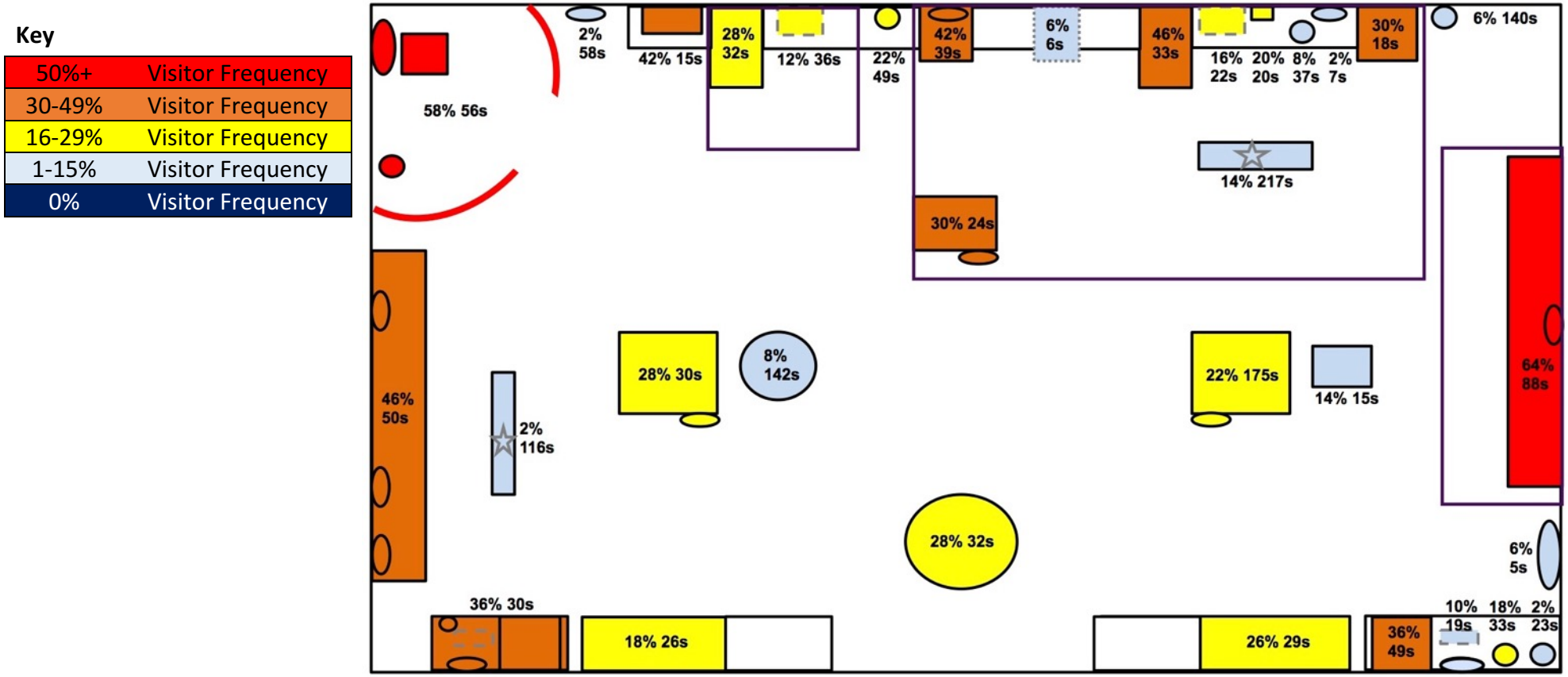


Figure 6.37. Heat map of visitor frequency at Weston Park Museum with dwell times. Areas highlighted in purple rectangles contain no prehistory interpretation or content.

Weston Park Museum

The heat map at Weston Park like most of the case studies except the BM is relatively warm with 64% of the tracked features represented in warm colours in figure 6.37. Despite there being no features that received no visits, there are, however, 12 cold light blue areas. There are less individual text panels at WP and so not all of these colder areas are text panels as observed at NLM and TQ. Only 3 of the 12 cold areas at this case study are text panels, although one of these text panels, *'Becoming Roman: Iron Age and Romano British 500 BC - 400 AD'* is particularly cold with only 1 visitor stopping at it. This text panel is slightly obscured, quite high up to the right of the roundhouse. A painting depicting the barrow knight Thomas Bateman and his son receives relatively little visitor attention but this was expected as visitors can look at this image without needing to stop and dwell. Intriguingly, despite the perceived popularity of interactives, at WP, 5 of the interactive areas represent colder spots in the gallery. These interactives include a book stand which was visited only once, a dressing up area visited by three people, a Medieval mosaic interactive game and the 'hands on' table which was only visited by 4 people, yet had a large average dwell time of 142 seconds. This 'hands on' table (figure 6.38) was only present during 28% of the tracking surveys so it was expected that the visitor frequency would be lower for this feature due to the lack of opportunities for visitors to engage with it. A similar case was also observed at the BM where the 'hands on table' situated just by the end of the Iron Age gallery was only visited by 7 people because it was only active for 56% of the tracking surveys. At WP certain interactives were certainly more popular than others as the microscope interactive and central map were both quite warm areas, receiving 18% and 28% of visitors respectively. Furthermore, the most popular prehistory display that is illustrated as red hot on the heat map was the interactive Iron Age roundhouse (figure 6.39) that visitors can go inside, read books, build a fire inside and dress up in, as well as engage with the text panel and case inside.

Figure 6.38. Photograph of the 'hands on' interactive table that was occasionally present in the archaeology gallery at Weston Park Museum (McDowall, 2018).

Figure 6.39. Photograph of the most frequently visited prehistory display at Weston Park Museum (McDowall, 2018).

The most frequently visited case in the room was visited by 64% of visitors yet it does not include any prehistoric objects. The case focuses on Medieval to contemporary history presented in a long tall case that takes up most of the right wall of the room. This type of prominent case seems to be quite engaging for visitors, as previously highlighted by the case of the Appleby logboat display at NLM. This preference for taller, larger cases also seems to be present at WP where the second most frequently visited prehistoric display (figure 6.40) is also a long tall case against the left wall of the rectangular room, which is visited by 46% of the tracked sample. The case presents prehistoric material from the Neolithic to the Iron Age. The range of material types showcased includes a variety of ornately decorated and rare objects and the quantity of material on display is reflected in the long average dwell time of 50 seconds. On average the cases at WP possess longer average dwell times than at the other case studies. Reflecting either a deeper level of engagement or a greater time commitment necessitated by the greater quantity of material on display in some of the cases at WP. The longest average dwell time in the room was 175 seconds at

the case presenting a variety of material excavated by the antiquarian Thomas Bateman (figure 6.41). The density of material presented requires a longer dwell time for those willing to engage with this case.

Figure 6.40. Photograph of the second most visited prehistory display at Weston Park Museum (McDowall, 2018).

Figure 6.41. Photograph of the Thomas Bateman case with the longest average dwell time at Weston Park Museum (McDowall, 2018).

There are no articulated or even partially articulated human or animal skeletal remains on display at WP and so it was not possible to see if the visitor preference for such displays observed at the other case studies was present here. There are however 'shiny' prehistoric metal objects on display in one case, which as previously postulated are usually quite popular with visitors if they are immediately visible. This particular case (figure 6.42) has one of the highest visitor frequencies of 42% which seems to support this trend. Yet the objects are not immediately visible to the visitor as they are presented in a mid-height tabletop case to the right of the interactive roundhouse.

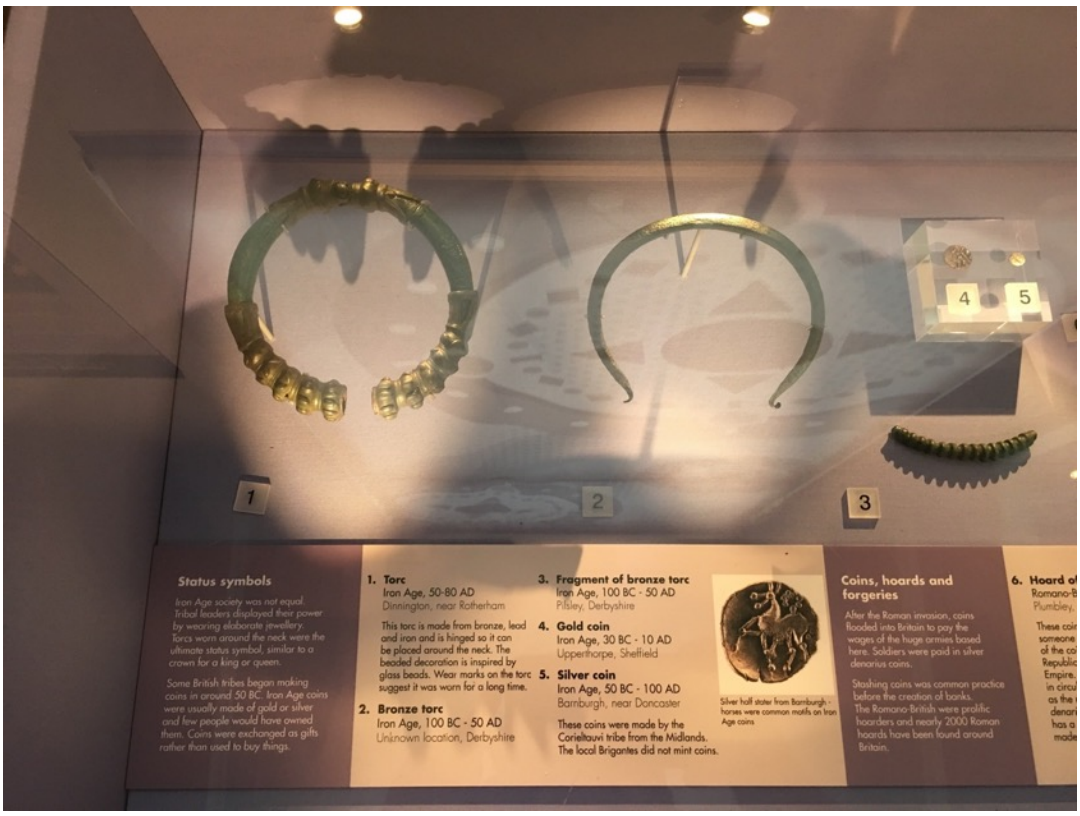


Figure 6.42. Photograph of the prehistoric objects in the case of 'shiny' metal objects at Weston Park Museum (McDowall, 2018).

Despite the lack of engagement with early prehistory observed at NLM, the Palaeolithic/ Mesolithic display (figure 6.43) at WP which combines a small case of objects with an interpretation panel, video and tactile hand axe is visited by quite a high frequency of visitors (36%). The mixed-media approach seems to be engaging visitors and encouraging them to dwell for longer as they explore and interact with

these various elements, reflected by an average dwell time of 30 seconds. This dwell time allows visitors to interact with several of the elements, although it is not enough time to engage with everything. For example, the video explaining flint knapping is much longer than 30 seconds indicating that visitors are only partially listening to and watching this explanation.

Figure 6.43. Photograph of the deep history mixed-media display at Weston Park Museum (McDowall, 2018).

Audio-visual elements in displays are often perceived as quite engaging for a range of visitors and this certainly seems to be the case at SVC. Yet, at WP the audio-visual elements in the room are not as popular as the cases. They are, however, predominantly presenting non-prehistoric topics and rely on visitors picking up a

hand held phone to listen to the audio. This phone creates a physical commitment to the video as the user needs to pick it up and hold it to their ear which appears more time-consuming to the visitor than casually watching a video for as long as they choose. Furthermore, this potential barrier may also deter visitors who do not want to appear like they are monopolising the phone as it can only be used one at a time. Another relatively unpopular visual element is a slideshow of photographs of local sites from different periods including some local prehistoric sites that only received 10% of the visits with a relatively low dwell time of 19 seconds. This dwell time only accommodates for about 2/3 image changes indicating that visitors are not engaging with this element for long.

In contrast to previous case studies the majority of visitors entering the space at WP (76%) are choosing to visit the displays on the right side of the gallery first, as illustrated by the representation of Routes A and B in figure 6.44. The three popular visitor routes at WP are summarised in table 6.5.

Route	Direction
Route A (40%)	Visitors turn right as they enter the gallery and walk past the beaker pottery case and treasure finds case to the tall and long modern history case and then skirt the back wall of Medieval cases to the roundhouse. From this point visitors either leave the gallery or walk past the tall long prehistory case and deep history display before leaving.
Route B (36%)	Visitors turn right as they enter and head straight for the case of more modern history and then skirt the back wall of Medieval cases to the roundhouse. From this point visitors walk past the tall long prehistory case and deep history display before leaving.
Route C (20%)	Visitors head straight for the roundhouse and after interacting with the roundhouse leave the gallery.

Table 6.5. Descriptions of the three most popular visitor routes through the prehistory displays at Weston Park Museum.

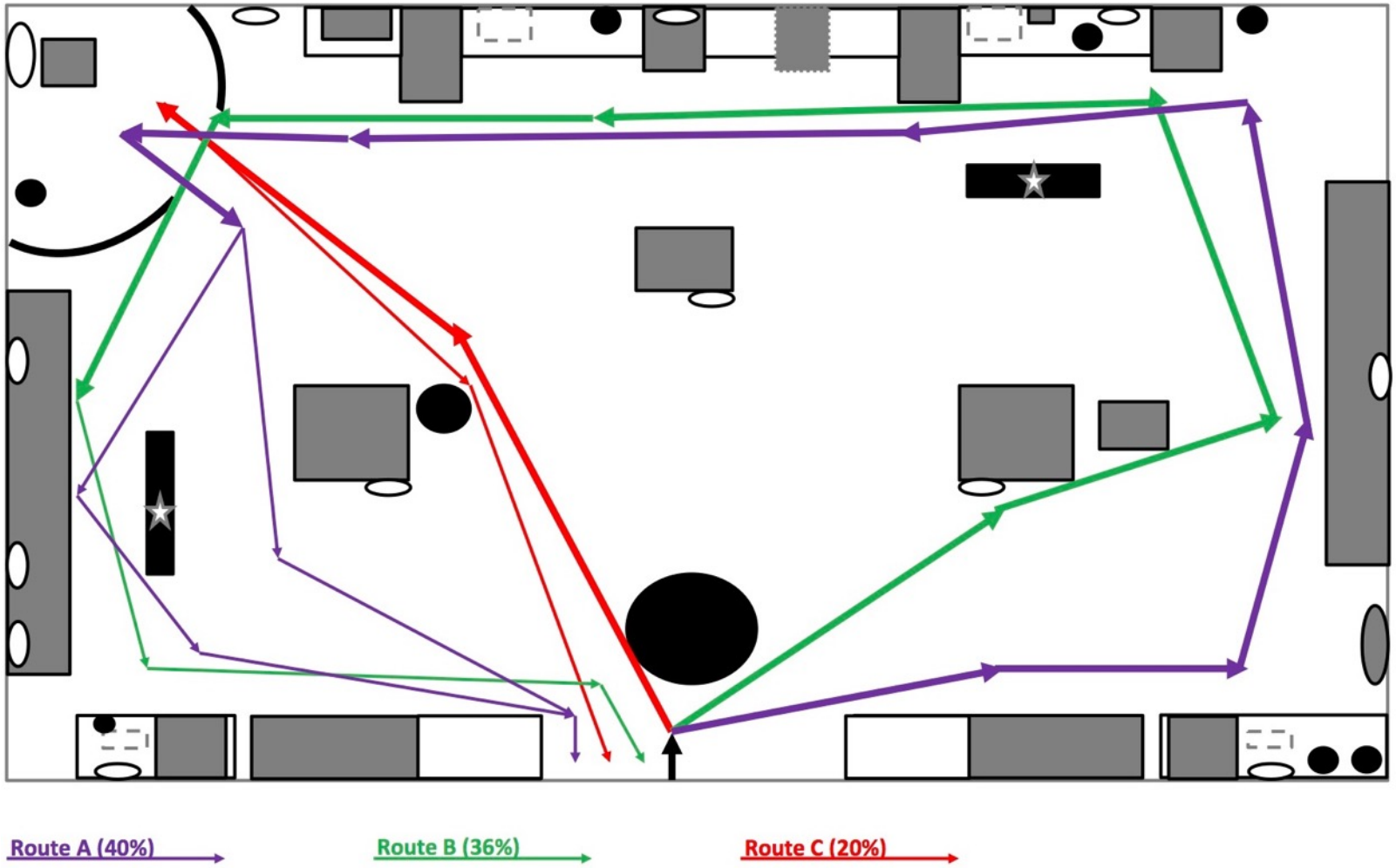


Figure 6.44. The three most popular visitor routes at Weston Park Museum.

The visitor preference for the right side of the gallery exemplifies why the modern history case along the right wall is the most frequently visited case and it is also one of the most popular cases that visitors first stop at, as highlighted in figure 6.37. The first three stops of many visitors were concentrated on the left side of the room, as illustrated in figure 6.45. This juxtaposing spatial pattern suggests that there are quite a few visitors who are going all the way around following the anti-clockwise route of A or B that only stop once or twice before reaching the prehistory displays along the left side of the room. Further support for this type of visitor strategy is indicated by the average number of stops recorded at WP of 7. The predominant visitor routes also reveal why the central cases are not as frequently visited as those around the walls of the gallery, as visitors have a tendency to only walk along the edges of the space. This may reflect visitor interest in following a chronological linear narrative, albeit the wrong way.

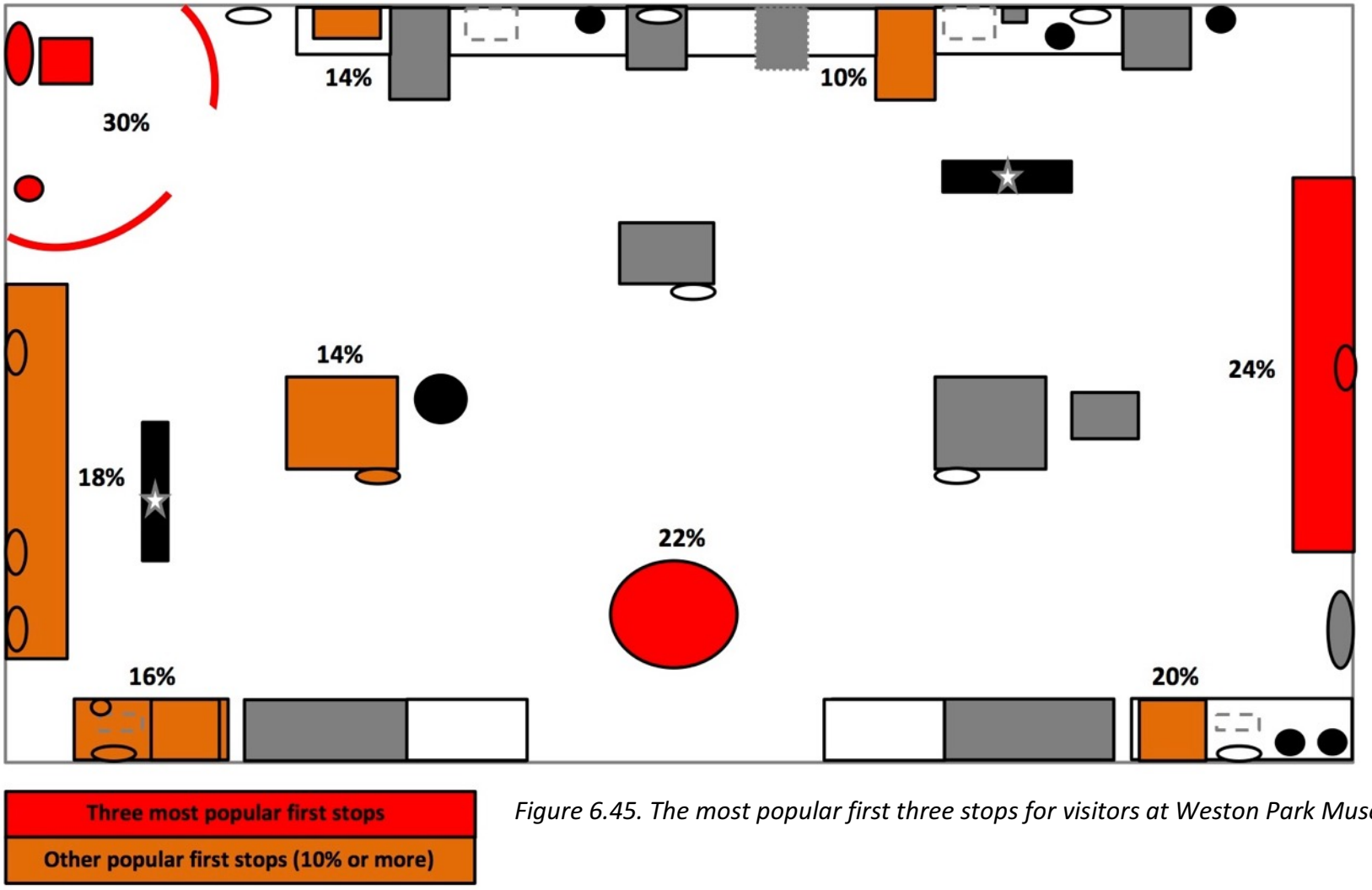
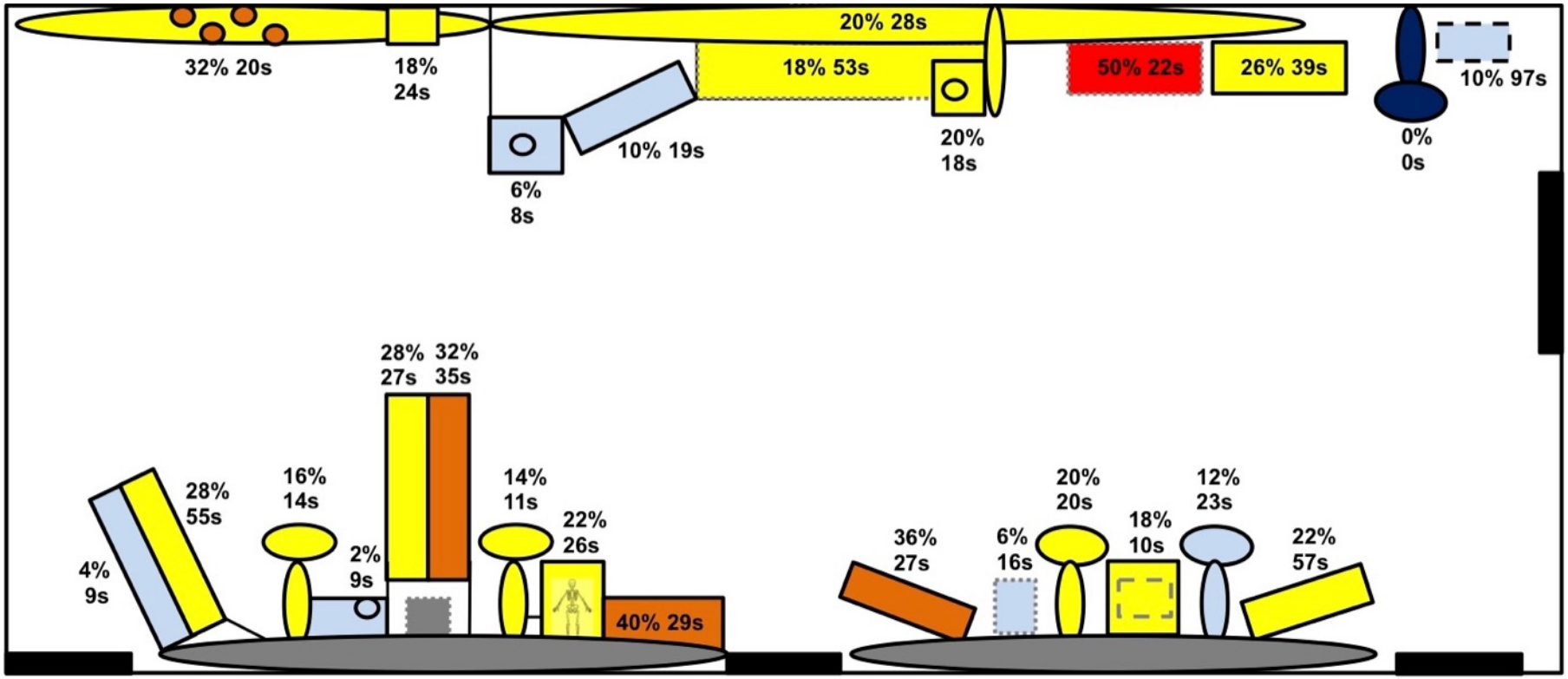


Figure 6.45. The most popular first three stops for visitors at Weston Park Museum.

6.2.6 Visitor behaviours observed at the Great North Museum



Key

50%+	Visitor Frequency
30-49%	Visitor Frequency
16-29%	Visitor Frequency
1-15%	Visitor Frequency
0%	Visitor Frequency

Figure 6.46. Heat map of visitor frequency at the Great North Museum with dwell times.

The Great North Museum

The heat map for the GNM reveals a relatively warm gallery with the majority of features represented in yellow, at the lower end of the warmth spectrum. There is only one feature that was not visited by any visitors in the tracked sample. This feature was the introductory text panel to the gallery, *'10,000 BC'* which alongside a large scenic photograph of ice sheets sets the scene for the Ice Age (figure 6.47). This panel is situated just above floor level below visitor's direction of sight, hindering its accessibility. From the chronological entrance this is one of the first text panels that visitors are presented with but it does not appear to capture their attention. Unlike other case studies the colder areas are a mixture of different types of interpretation, not just text panels. There is one cold text panel, *'10,000-4,000 BC'* but 2 of the cold areas are cases, 2 are interactives, 1 is an open-display and 1 is a video.

One of the cases represented in light blue (figure 6.48) is the back of a more popular case positioned at the exit to the gallery leading on to the dinosaur room. Unlike the other cases in the gallery the display is not different on both sides of the case and so if visitors have already seen the front side of this case they are not likely to stop and look at it from behind. Furthermore, some of the objects on display in this case are obscured, presented on opaque acrylic so can only partially be seen from the back of the case. It is immediately obvious to the visitor that this side of the case is the reverse of the front side and so visitors that are intrigued by the contents of the case who have entered from the dinosaur room are more likely to go around to the other side of the case to view the contents, as exemplified by the higher visitor frequency on that side of the case. Thus due to the position of the case near the gallery exit and the repetition of contents it is not overly surprising that this side of the case receives less footfall than the other tracked features in the gallery.

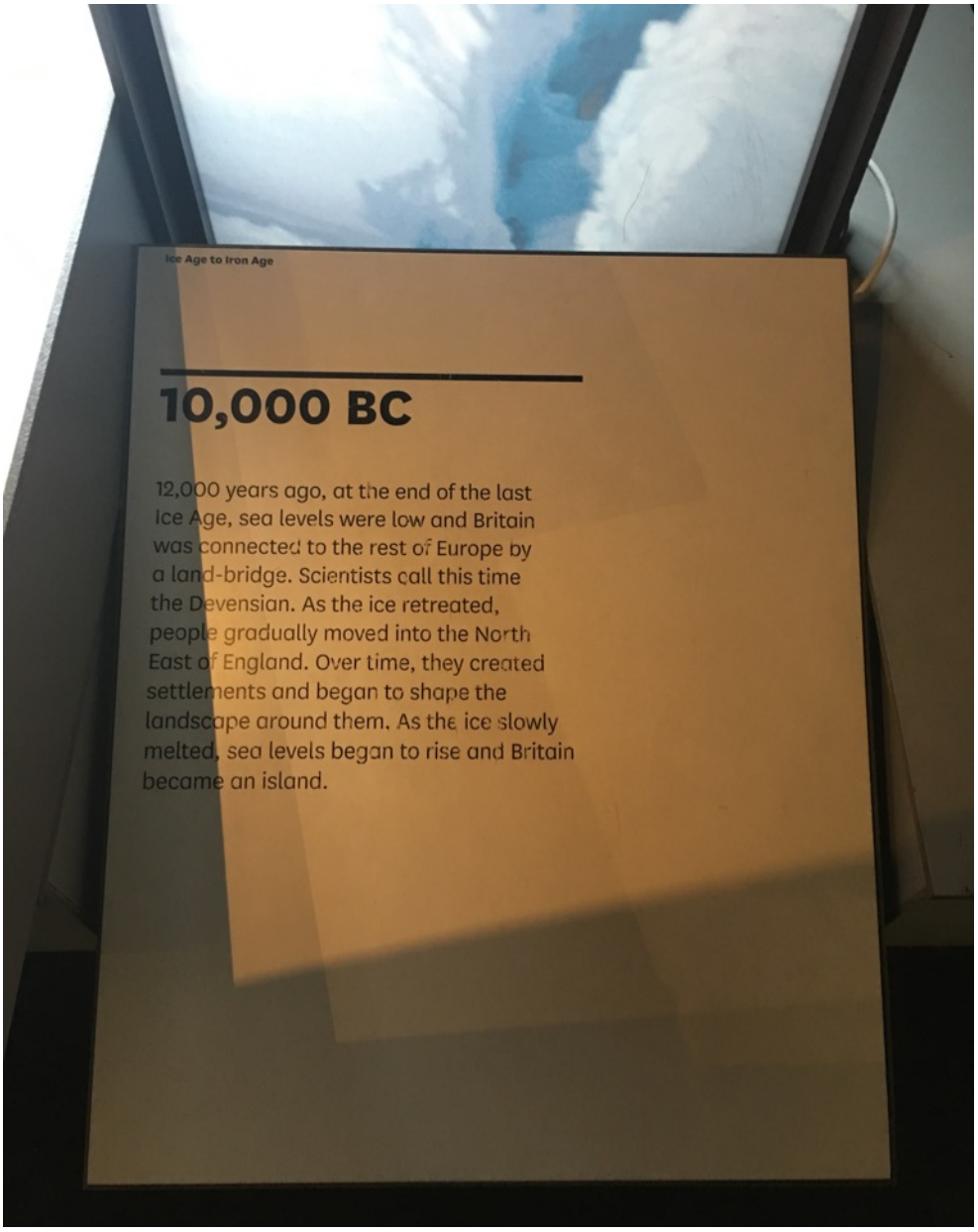


Figure 6.47. Photograph of the text panel not visited by any of the tracked visitors at the Great North Museum (McDowall, 2018).

Figure 6.48. Photograph of the reverse side of the case where only parts of the contents are visible that is near the exit of the gallery and not frequently visited at the Great North Museum (McDowall, 2018).

The other case that is visited by only a handful of people contains small portable pieces of rock art and tools used to mark such stones (figure 6.49). This case is positioned next to a series of larger cup and ring marked stones that are on open-display that are more popular. Perhaps visitors are preferring to interact with these stones that are within touching distance rather than objects concealed out of reach. In contrast to the large stones on open-display set against a juxtaposing grey background the stones inside the case are smaller and presented on a beige background that corresponds to the colour of these stones. This case consequently appears less aesthetically interesting in comparison to the more visually stimulating open-display of stones.

Figure 6.49. Photograph of the case of portable stones that is less frequently visited at the Great North Museum (McDowall, 2018).

There is, however, an open-display presenting a singular cup and ring marked stone that is visited by only 6% of visitors (figure 6.50). It initially appears contradictory that visitors are not preferentially engaging with this open-display as observed with the other stones in the gallery. Yet, this particular open-display only presents a single stone where the decoration is not immediately recognisable. Furthermore, it is presented alongside a large space where an object has previously been removed and not replaced and so the area looks unfinished and uninviting. The corresponding interpretation describes the object as a red deer and so it seems that this red deer may have been the previously removed object and so the rock art is presented de-contextualised as a 'filler' display.

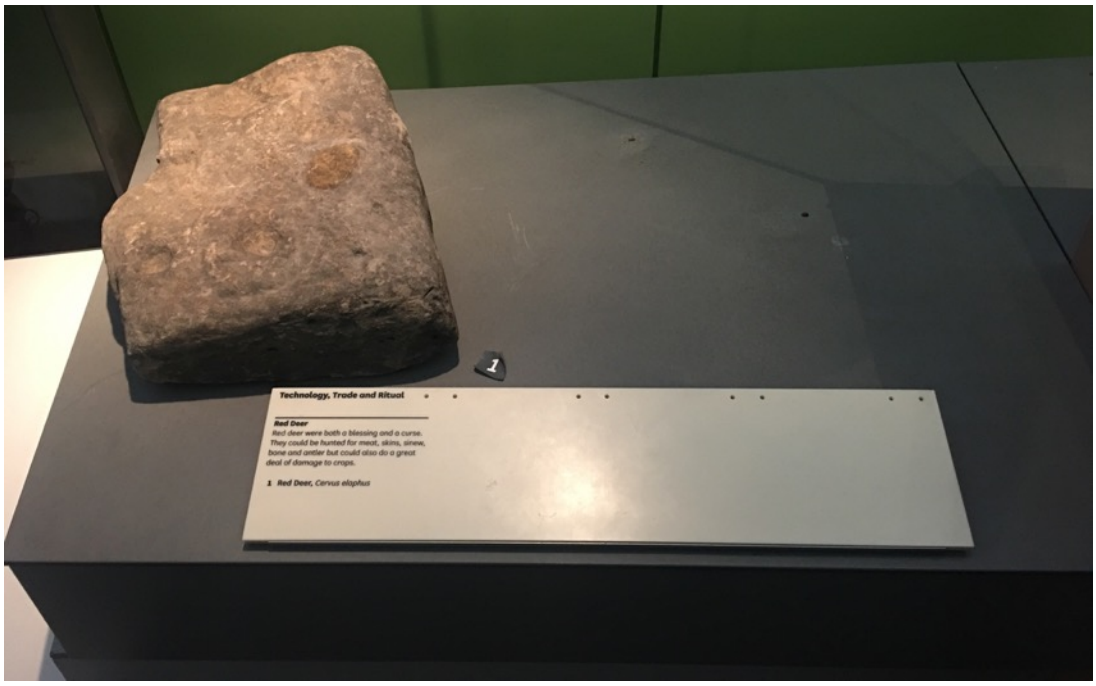


Figure 6.50. Photograph of the less popular open-display of rock art at GNM. Presented with incorrect interpretation at the Great North Museum (McDowall, 2018).

The variable popularity of the different interactives at GNM further challenges the widely held assumption that interactives are always more engaging with visitors. Just because a display involves visitor participation does not automatically make it engaging. At GNM, 2 of the less frequently visited areas in the gallery are interactives. One is a tile with different cup and ring marks that the visitor is encouraged to touch to provide a haptic experience with the stones. Yet only 6% of visitors interacted with this interactive. Only 2% of visitors stopped to engage with another similar interactive called 'Enigma', a cup and ring motif that visitors can touch. In contrast an interactive involving binoculars that visitors are encouraged to look through to see images of pollen grains was visited by 32% of visitors.

Human remains have proved quite popular at the other case studies yet at GNM the in-situ presentation of the 'Blaydon Burial' (figure 6.51) only received 22% of the visitors. This burial is presented crouched surrounded by stones from the original Bronze Age cist on the floor-level and similarly to the less-visited crouched burial displayed at SVC is consequently less visible and more difficult to look at and engage

with as visitors have to stand over the case and look down at the remains. It thus appears that skeletal remains are only appealing to visitors when they are more visible and consequently easier to engage with. This trend will be further discussed in section 6.2.9. In contrast, the highly-prominent and visibly imposing cast of a deer skeleton (figure 6.52) is the most visited display, reflecting the tendency for visitors to engage with aesthetically-intriguing skeletal remains, even casts, as observed at TQ.

The video directly in front of the main entrance to the gallery represents one of the less visited areas despite its visibility. Figure 6.55 highlights that 52% of the tracked visitors enter opposite this video yet it was only visited by 10% of visitors. The video is presented in quite a scientific and academic framing illustrating how Britain geographically changed through time relative to the climate. Perhaps this topic or presentational style without an audio narrative is not the most appealing. However, this display also has the longest average dwell time and so it seems that despite the lack of visitors willing to engage with this video, those that do are watching it all the way through as they spend an average of 97 seconds at the video.

Figure 6.51. Photograph of the Blaydon Burial at the Great North Museum (McDowall, 2018).

Figure 6.52. Photograph of the most frequently visited display at the Great North Museum (McDowall, 2018).

There are 5 entry points to the prehistory gallery at the GNM and these points may greatly affect which displays visitors engage with and consequently the narrative that visitors experience. The narrative is chronological so if visitors enter via the Mouse

House or main entrance they will begin in the Ice Age at the start of this narrative. However, if they enter from the Roman gallery they enter part way through the narrative, faced with later prehistoric rock art directly in front of them, whilst, if visitors enter from the dinosaur gallery or far staircase they are confronted with the end of the Iron Age. In the tracked sample, only 1 person entered via the Mouse House, 14% of visitors entered from either the dinosaur gallery or far staircase. The most popular entry points illustrated on figure 6.53 were from the Roman gallery (32%) and the main entrance (52%). From these preferences two of the most popular routes through the gallery were identified and are summarised in table 6.6.

Route	Description
Route A (52%)	Visitors enter from the main entrance and head straight to the Ice Age case and deer on open-display before turning to the other side of the gallery towards the Neolithic trade and ritual case. After this point visitors either zig zag back towards the other side of the gallery to the open rock art display and then back to both sides of the Bronze Age weaponry case and then out through the dinosaur gallery or they head towards the Bronze Age displays and then to the interactives on the back wall and out through the dinosaur gallery.
Route B (32%)	Visitors enter from the Roman gallery and go to both sides of the Bronze Age weaponry case before following the displays on the left side to the Iron Age case and out through the dinosaur gallery.

Table 6.6. Summary of the two most popular visitor routes through the prehistory gallery at the Great North Museum.

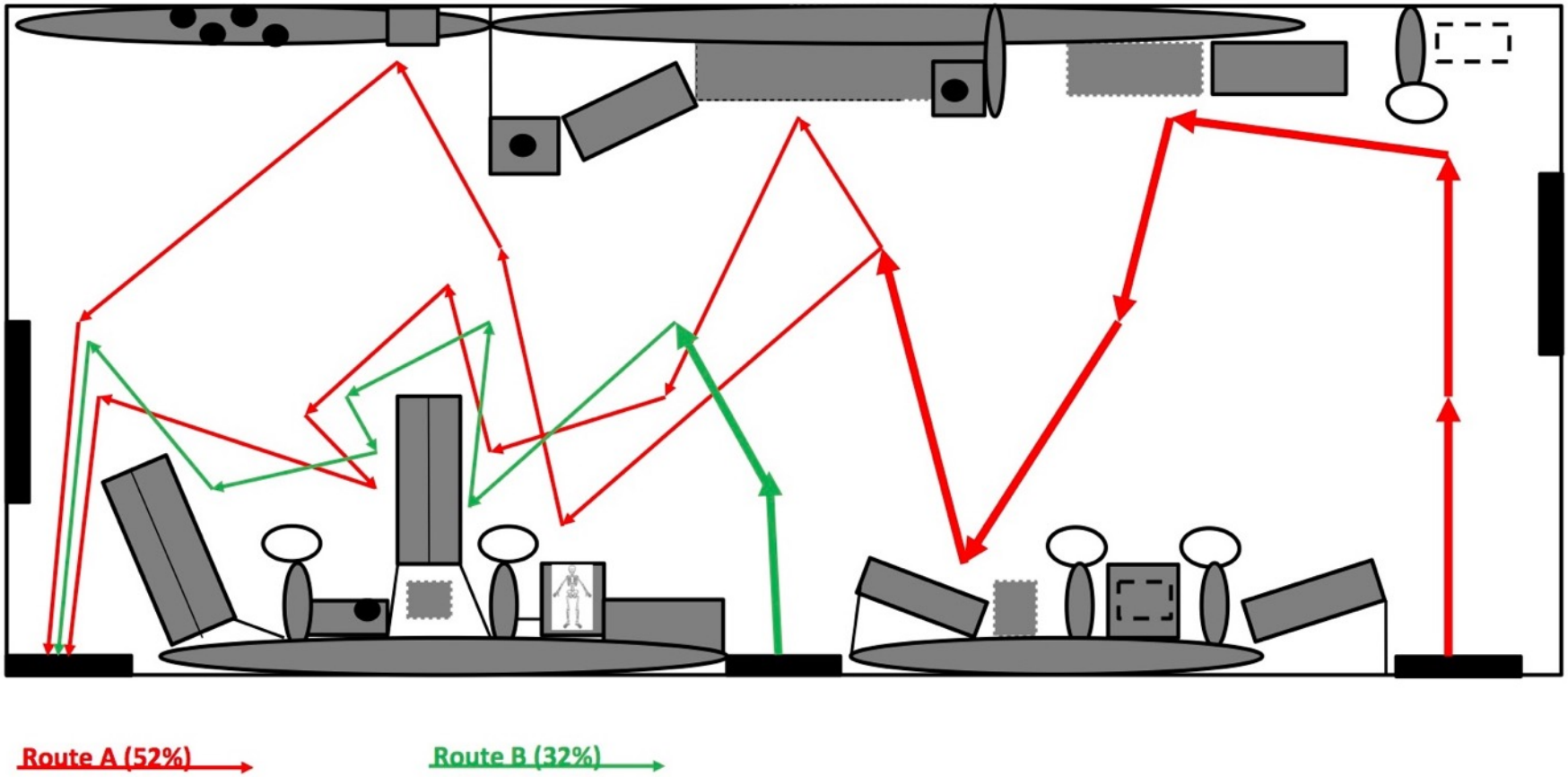


Figure 6.53. Map of the two most popular visitor routes through the prehistory displays at the Great North Museum.

From figure 6.53 and table 6.6 it is clear that visitors who entered via the Roman gallery (Route B) are not likely to visit the displays on the right side of the gallery and have a tendency to only interact with the left side of the gallery, particularly the later prehistory displays along the left wall. This route will consequently lead to a different comprehension of the display narrative excluding earlier prehistory that may impact the responses to part two of the questionnaire. Route A demonstrates the popularity of the open-display of the deer previously discussed as it pulls visitors from the entrance to the opposite side of the room as they enter. The appeal of this display is further reinforced by figure 6.54 where this display is the most popular first stop for visitors. The Ice Age case next to it also benefits from this increased footfall at this side of the room as it is also visited frequently by visitors in their first three stops.

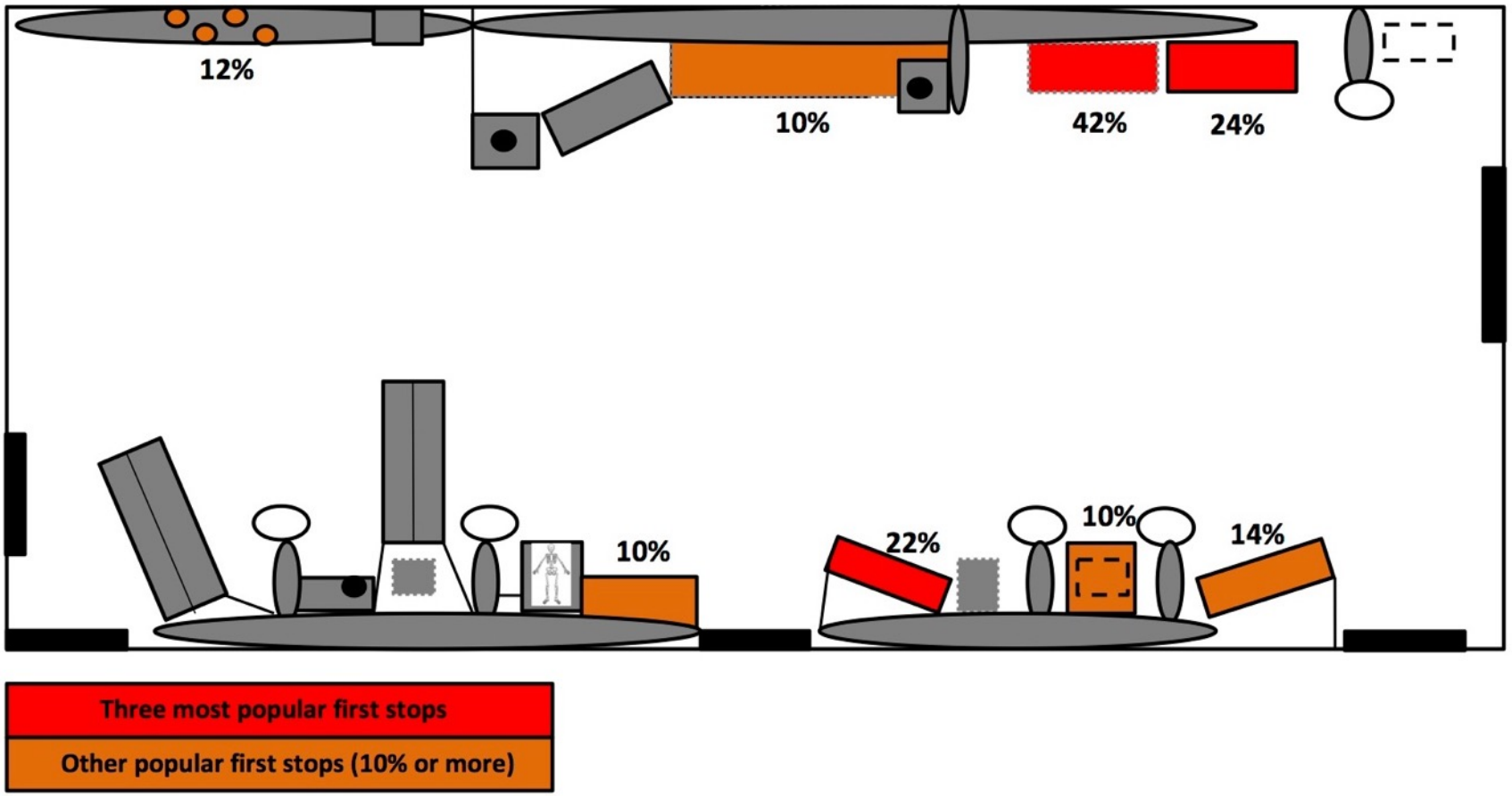


Figure 6.54. Map of the most popular first few stops at the Great North Museum.

6.2.7 Active engagement behaviours

To further understand visitor engagements and interactions with prehistory displays and meet the third objective of the thesis, other active behaviours beyond 'stopping' were also analysed. At each case study there were other behaviours that reveal further active engagements with the displays beyond merely stopping to look and read about a display. The tracking maps enabled the recording of when visitors call a friend/ partner/ family member over to look at something and conversely when the tracked individual was called away from where they were looking to another display by someone else in their group. These behaviours indicate certain displays that peak an individual's interest and explicitly express the intention to share their interaction with another person. This desire to selectively share the experience of some of the displays can consequently reveal personal preferences for particular displays that are judged to be more pertinent to them. The frequency of visitors expressing an interest in sharing their interactions with others at each case study were recorded and the frequency of these behaviours are summarised in table 6.7. The displays that visitors were called to were also recorded to understand which displays stand out more and if visitors were using audio guides this was interpreted and recorded as an active engagement behaviour as well.

Visitors photographing displays was another active behaviour that was recorded on the tracking maps. This behaviour reveals which displays are more appealing to visitors for photographing, explicitly conveying a visitor's intention to capture the moment in a more permanent form. The visitor motivations for photographing certain displays instead of others may reflect aesthetic, academic or emotional interests in particular objects/ types of interpretation. The frequency of visitors photographing displays at each case study is summarised in table 6.7 and the displays that attracted the most attention were also recorded.

The kinaesthetic behaviours of touching, pointing and undertaking interactive activities were also recorded and summarised in table 6.7. These engagements took different forms at the case studies, with some instances of touching involving tactile

elements that visitors are encouraged to interact with, as well as visitors touching open-displays that they are not supposed to touch. Furthermore, active kinaesthetic engagements included other physical engagements not covered by 'touching'. These engagements included; playing videos on the interactive table at TQ, playing the games on the interactive table at NLM, moving the microscope, playing the flip game, listening to the audio for the flint knapping video and exploring the map at WP or looking through the binoculars, watching the video of flint knapping or making rock art on the computer interactive at GNM.

Case Study	Frequency of visitors using audio guides	Frequency of visitors calling others over	Frequency of visitors called away by others	Frequency of visitors photographing displays	Frequency of visitors pointing	Frequency of visitors touching displays	Frequency of physical engagements with interactives	Overall frequency of visitors expressing active behaviours
BM	8%	6%	6%	12%	0%	0%	0%	24%
SVC	4%	4%	4%	20%	10%	10%	N/A	40%
NLM	N/A	6%	14%	0%	6%	12%	14%	30%
TQ	N/A	4%	2%	0%	2%	4%	8%	16%
WP	N/A	6%	10%	14%	4%	8%	28%	48%
GNM	N/A	4%	6%	10%	2%	4%	22%	38%

Table 6.7. Summary of the frequency of other active engagements beyond visitor frequency and dwell time that were recorded at the case studies.

From table 6.7 it is apparent that the active behaviours observed at each case study vary considerably. At the BM despite the lack of visitors engaging in pointing at or touching exhibits, 12% are photographing displays. Due to the touristic visitor profile (table 4.2) represented a more active level of engagement with photography was expected. The most popular display to be photographed was the Mold gold cape, followed by the Barnack burial and Snettisham torcs, the three most popular displays illustrated on figure 6.3. Yet, these displays were still not photographed by that many visitors, as the Mold gold cape was only photographed by 3 visitors despite being visited by 24 visitors and both the torcs and burial were only photographed twice in the sample. Overall, the number of visitors engaging in photography across all of the case studies is relatively low compared with more traditional forms of engagement. The only case study where photography is more popular is SVC, another case study with a predominantly tourist based visitor profile that is more likely to engage in photography as they produce permanent reminders of their holiday. However, most of these tourists are not there to photograph the displays but the famous stone circle. The preference for visitors to photograph the site is reflected in their choice of displays to capture, with the majority of visitors taking photos of the models of the site through time and the 360˚ panoramic video of Stonehenge through time. In both instances these displays are focused on the site with the panoramic video explicitly included to give visitors the experience of being inside the circle that they cannot get at the site itself.

Physical engagements with interactives were more frequent than the other forms of active behaviours recorded at all case studies except the BM and SVC. At the BM this was due to the lack of interactives, whilst at SVC the tactile interactives were included under the behavioural category of 'touching'. WP had the highest level of engagement, partially as a result of the greater number of interactives that visitors could engage with in comparison to the other case studies. However, their presence does not necessarily mean visitors will engage with them. The most popular interactives for visitors to get involved with were the sliding microscope utilised to convey the science of archaeology and the flip game where visitors can learn which objects were invented by the Romans. At GNM there are less interactives than WP,

yet nearly all those engaging with interactives were engaging with the binocular interactive.

At all the case studies, calling for another's attention to share an interesting display was not a very popular behaviour represented by the narrow range of visitors engaging in this type of interaction of 4%-6%. Pointing and touching are also not very common behaviours and are quite variable in how they are employed at each case study. At SVC for example 3 visitors pointed at the large video of the Stonehenge landscape through time, whilst 1 person pointed at the temporary exhibition and 1 person pointed at the 360˚ panoramic video. Furthermore, the displays that were touched were equally variable with only one visitor touching the interactives at 4 different cases. However, despite the lack of discernible patterns in these types of behaviours if taken together they can reveal an individual's level of involvement with the displays. By categorising each visitor expressing one of these active behaviours as 'actively interacting' the overall frequency of active involvements with the displays at each case study could be calculated and are presented in table 6.7.

Other forms of active engagement, including the viewing intensity, whether a visitor is intently reading all supporting text or looking between the object and text to fully contextualise each display was not accounted for as it was not always recorded. However, the number of stops each visitor made and their individual coverage of displays was calculated and the average number of stops made by visitors at each case study. Such data was used to surmise the overall level of engagement visitors experienced. To further interpret the level of engagements observed across the case studies the average dwell time the tracked visitors spent at the exhibitions are provided in a box plot (figure 6.55) to emphasise how the average dwell times are comparable between the case studies.

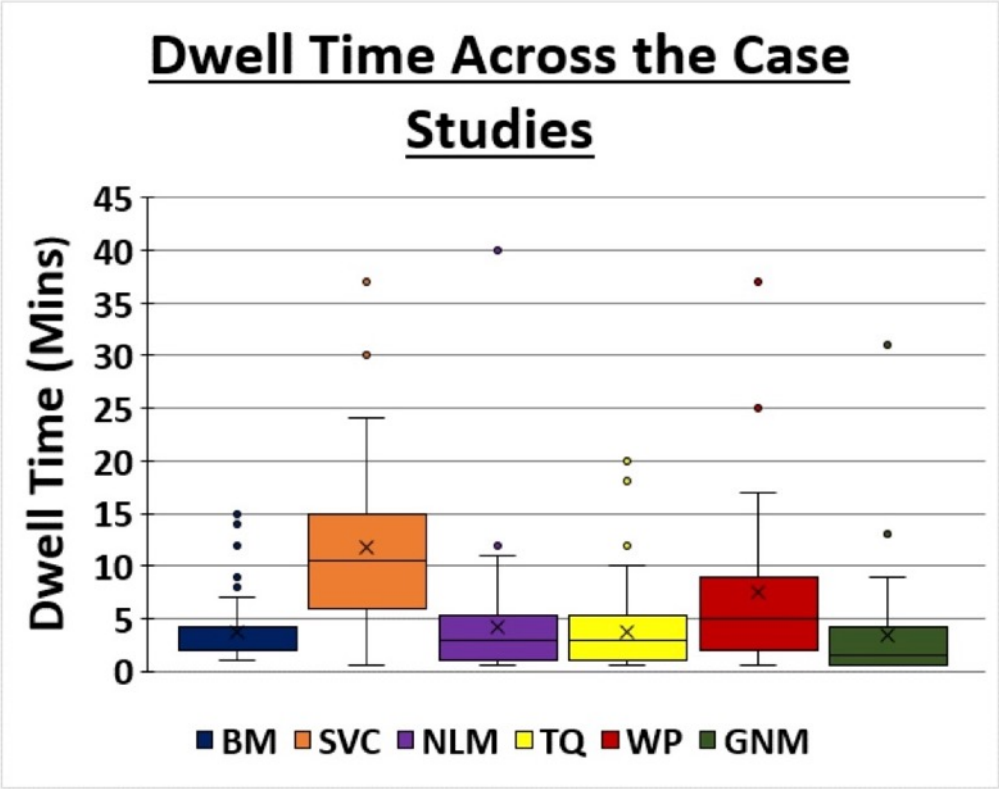


Figure 6.55. Box plot illustrating the range of dwell times represented at the different case studies.

On average the case studies have rather comparable average dwell times despite differences in the amount of material on display, style of displays, size of the space and visitor frequency. The BM has the narrowest dwell time range with most visits lasting between 2-7 minutes long in contrast to SVC with the highest mean average dwell time of 12 minutes and the greatest range of dwell times from 1 minute to 46 minutes. Both NLM and TQ are very similar perhaps reflecting their similar visitor profiles, whilst WP represents a slightly longer average visit length and GNM represents a slightly shorter average visit length.

In addition to the active behaviours discussed visitors also express more 'passive' behaviours that can be interpreted as a lack of engagement with displays. It was inherently more difficult to measure these passive behaviours as the majority of information recorded relates to visitor engagements. However, two metrics were recorded on the tracking maps that could be quantitatively analysed to reveal passive behaviours; the usage of mobile phones and 'non-case' stops. These behaviours are,

however, frequently exhibited in combination with active behaviours and consequently cannot be used to interpret a lack of engagements with displays. Visitor behaviours do not exist in a vacuum and these behaviours that appear 'passive' could also be interpreted as 'active'. If a visitor was observed on their phone they may not necessarily be disengaged with the displays and could for example be texting a friend about the museum, posting on social media about the displays or googling the material on display. Due to the difficulties interpreting these passive behaviours their frequency across the case studies is further discussed in Appendix 18 and was not taken as a direct measure of any form of 'disengagement'.

6.2.8 Quality of visit

To further answer research question 3a focused on identifying the trends and variables affecting visitor engagements with displays the types of visit and how visitors experienced the different spaces across the case studies were interpreted to provide an overall quality of visit for each case study as outlined in section 3.5.1. This calculation accounts for the average visitor dwell time in combination with average percentage of displays visited, proportions of visitor frequency at displays and frequency of visitors expressing active behaviours and is summarised in table 6.8.

Case Study	No. of tracked features	Average frequency of tracked features stopped at	Average dwell time (mins)	Displays visited frequently (30%+)	Displays visited moderately (16-29%)	Displays visited rarely (0-15%)	Frequency of active behaviours	Overall quality of visit
BM	57	7%	4	5%	4%	91%	24%	Low Quality
SVC	30	27%	12	47%	17%	37%	40%	High Quality
NLM	34	21%	4	29%	21%	50%	30%	Medium Quality
TQ	18	28%	4	39%	28%	33%	16%	Low/ Medium Quality
WP	33	21%	8	30%	33%	36%	48%	Medium Quality
GNM	26	19%	3	19%	50%	31%	38%	Medium quality

Table 6.8. Overall quality of visit for each case study.

Despite differences in gallery size and visitor profiles between the BM, NLM, TQ and GNM they all possess very similar average dwell times. Yet the amount of displays visited during this timeframe varies considerably between these case studies. Intriguingly the highest and lowest quality visits represented by the BM and SVC both have the same visitor profiles but the disparity between visit quality at the two extremes highlights different motivations. At the BM visitors have not visited the museum with the intention of specifically viewing prehistory, unlike visitors at SVC where all visitors have chosen to visit a prehistoric site reflecting a greater interest in the subject.

6.2.9 Visitor interactions with different display features

To answer research question 3 and identify the most/ least effective displays for engaging visitors with prehistory, visitor interactions with the different types of interpretation at the case studies were evaluated. In museum studies literature there are numerous assumptions based on accepted knowledge and experience that suggest interactives and audio-visual elements are more popular with visitors than traditional forms of interpretation (Davies and Heath, 2013; Harknett, 2017). To understand how visitors across the case studies interact with different types of prehistory interpretation the visitor frequency and average dwell times for five different types of interpretation were calculated. The tracked features were grouped together based on their main style of interpretation. Displays based around objects either on open-display or in cases alongside object descriptions and supporting text panels were included under the interpretation category 'Object-based displays'. This category accounts for 47% of all tracked features across the case studies. Tracked features of individual text panels outside of cases were classified under the self-explanatory category 'Text panels' and interactives including tactile elements were classified as 'Interactives'. Audio-visual tracked features including pictorial timelines, large images alongside text, videos and paintings were encompassed by the interpretation category 'Audio-visual elements'. There were, however, multiple tracked features that could not simply be reduced to one of these singular categories as they employ different styles of interpretation. For example, tracked feature number 3 at WP includes a case with objects, text panel, tactile hand axe and audio-visual about flint knapping. Categorising this feature was based on the core aspect of the object-based display and it was classified under the category 'Object based display with additional interpretation'. There are quite a few tracked features across the case studies that fit into this broader category of interpretation. There are, however, two other tracked features that are not accounted for by this broader category. At SVC the text panels supported by models of Stonehenge and the combined text panel/ reconstructed photos at GNM were classified under the category 'Text panels' to facilitate a coherent comparison with the other case studies.

The representation of different types of interpretation across the case studies will likely impact the visitor frequency at these different types of interpretation as visitors can only engage with what is available to them. Therefore, the low proportion of audio-visual elements and interactives in the sample reduces the opportunities for visitors to interact with these displays and will also likely reduce the visitor frequency. To understand how the proportion of different types of interpretation impacts visitor frequency with these types of interpretation figure 6.56 presents the overall visitor frequency associated with each type of interpretation alongside its representation across the case studies. From figure 6.56 it is clear that the representation of different types of interpretation does affect the visitor frequency with these types of interpretation. That is to say, that for the most part the number of features does dictate the number of engagements with these features, as both visitor frequency and proportion of representation are within 4% of each other for most forms of interpretation. Text panels appear to be the only type of interpretation that are visited far less frequently compared to their representation across the case studies. Reinforcing the trend for visitors to not engage with text panels. The traditional object-based displays although represented more frequently in the sample still represent the most frequently visited type of interpretation.

To further understand visitor engagements with individual types of interpretation the visitor frequency and dwell times for each type of interpretation were calculated separately at each case study and are summarised in figures 6.57 and 6.58.

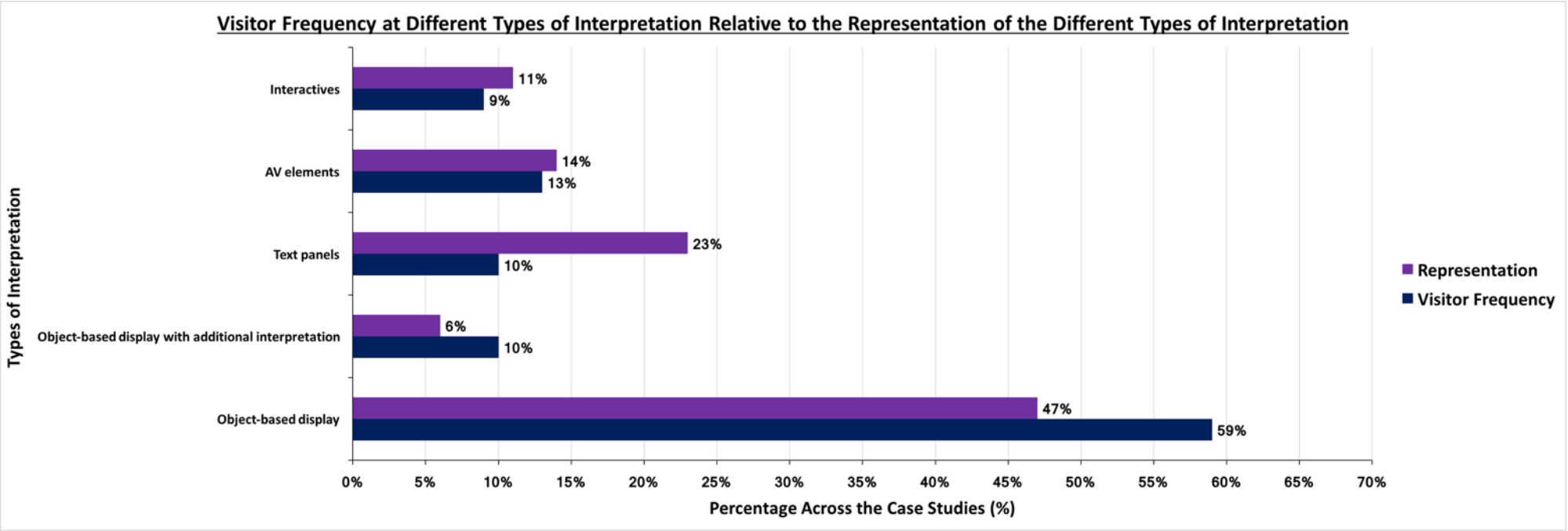


Figure 6.56. Comparison between overall visitor frequency at each type of interpretation and the proportion of that type of interpretation represented in the museums.

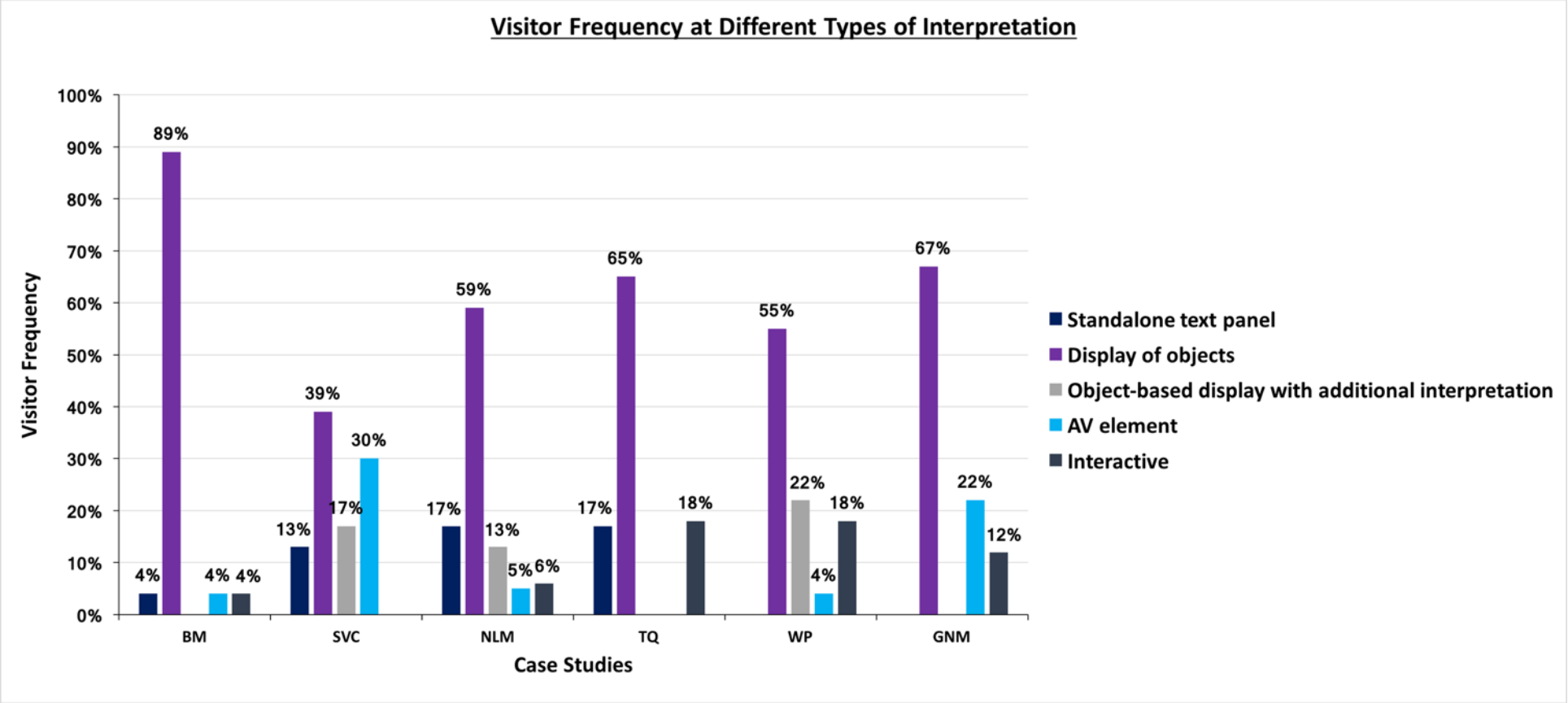


Figure 6.57. Visitor frequency at different types of interpretation across the case studies.

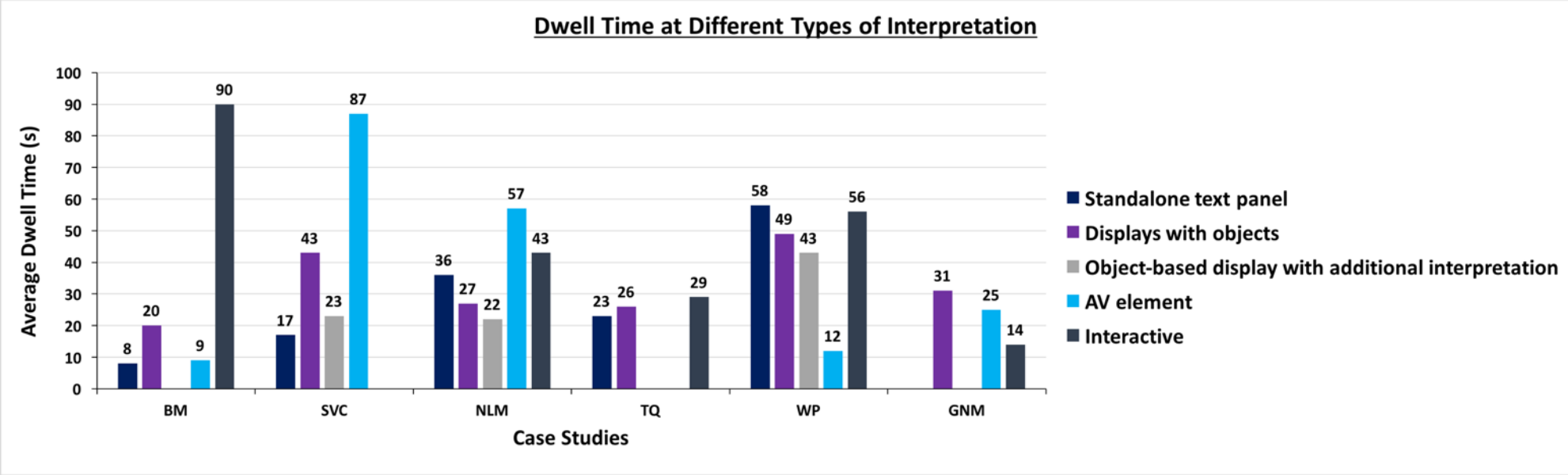


Figure 6.58. Average dwell time at different types of interpretation across the case studies.

Figures 6.57 and 6.58 demonstrate that dwell time is not necessarily correlated with visitor frequency at the different types of interpretation. A type of interpretation with a high visitor frequency does not necessarily maintain this visitor attention.

The figures seem to support the accepted idea that visitors do not frequently engage with text panels, as this category of interpretation has a consistently low dwell time and visitor frequency across the case studies. However, at NLM object-based displays with other types of interpretation, audio-visual elements and interactives possess a lower visitor frequency in comparison to text panels. Despite their lower visitor frequency and lower representation at the case study both audio-visual elements and interactives still possess higher dwell times than text panels. This trend is also observed at the BM, SVC and TQ where text panels, even when frequently visited represent the form of interpretation with the lowest dwell times. At these three case studies all of the dwell times are under 24 seconds and indicate that visitors are not fully reading the panels when they do stop to engage with them. At WP, however, where the dwell time for text panels is quite high, this figure is inflated due to the low visitor frequency at the singular text panel accounted for in the gallery. Overall, this widely observed trend for visitors to avoid and pay little attention to text panels is demonstrated by visitor engagements with prehistory focused text panels across the case studies.

The representation of forms of interpretation does affect the visitor frequency at certain forms of under-represented interpretation, as exemplified by the BM where audio-visuals and interactives are quite rarely visited. These elements are less represented in comparison to text panels and object-based displays, yet the one interactive element in the exhibition possesses the greatest dwell time compared to other types of interpretation more pervasively represented. In general, interactives when present on their own garner higher average dwell times relative to other forms of interpretation such as text panels and object-based displays. Objects presented in combination with other forms of interpretation that include interactives or audio-visual elements generally have a lower dwell time compared to singular object-based displays. At all case studies object-based displays are the most popular form of

interpretation to interact with as these displays are the most frequently visited. These displays are also the most represented so are more likely to attract a greater audience breadth compared with more under-represented forms of interpretation. Furthermore, only at GNM do singularly object-based displays possess the longest dwell time, with most average dwell times between 49 seconds and 20 seconds. In contrast, the other forms of interpretation with higher dwell times are of times from 57 seconds upwards. These elements do, however, usually require a greater time investment to fully comprehend them as they are videos with a long run time or interactives that involve kinaesthetic engagements.

To further explore visitor engagements with different styles of display, visitor engagements with displays of human remains across the case studies were also evaluated and are illustrated in the comparative scatter graph in figure 6.59. This graph illustrates that the more visible remains are visited more frequently yet despite their visibility most of the displays have very similar dwell times between 26-31 seconds. This popularity of more visible skeletal remains is further reinforced by the high visitor frequency at the open-display of a large cast of a giant deer at GNM and the animal and hominin cranial casts at TQ.

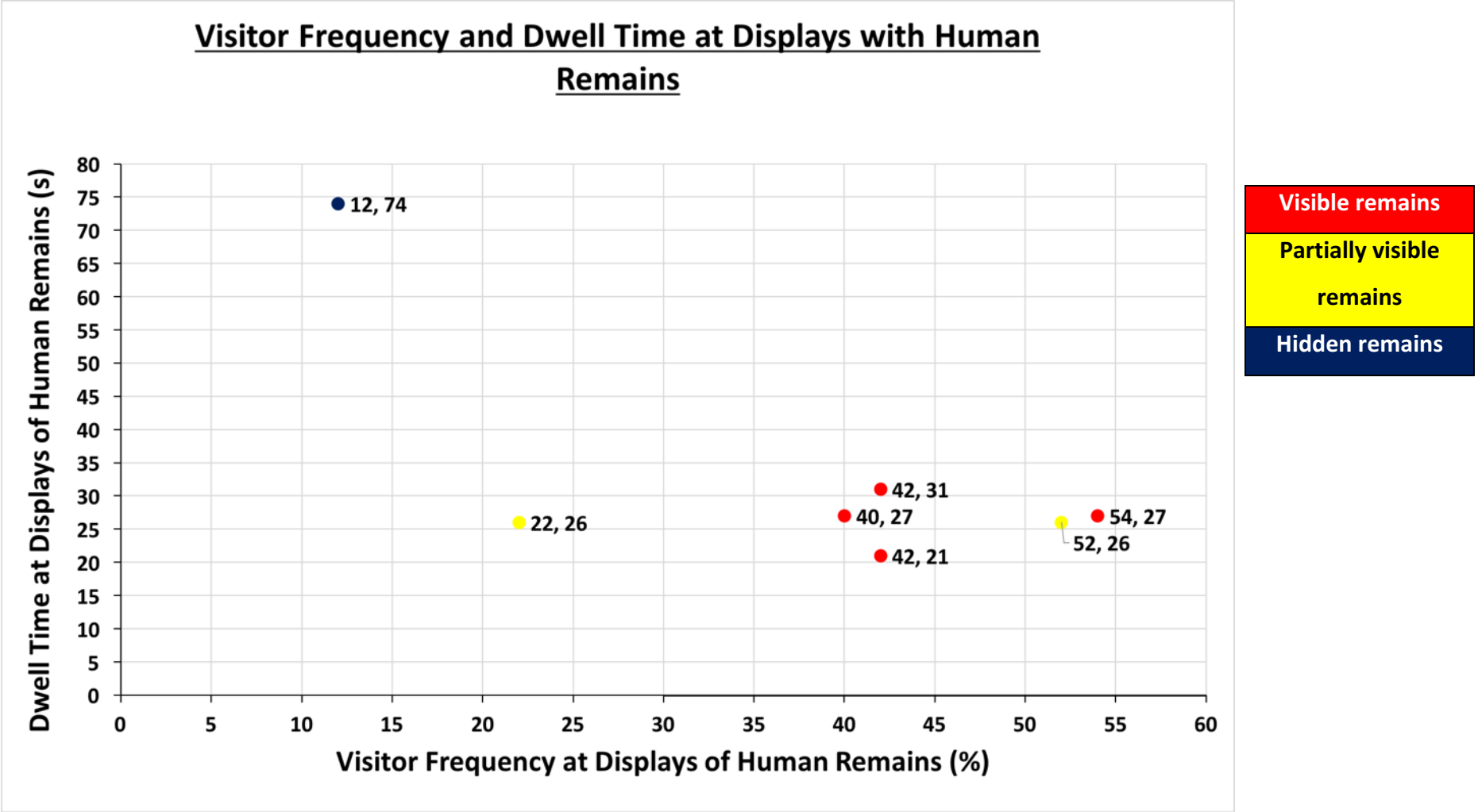


Figure 6.59. Visitor frequency compared with dwell time at the different displays of human remains.

6.3 Visitor interests in the prehistory displays

To understand visitor motivations behind their engagements recorded in the tracking surveys and answer research question 3b, '*What do they find most/ least interesting about prehistory displays?,* this section analyses the visitor responses to part 2 of the questionnaire. These responses will be analysed to identify how visitors perceive the displays. Firstly, to reveal what visitors most liked responses to question 7, '*What did you like most about the gallery?'* were compiled across all case studies to identify if there are any common response themes. Across all 300 respondents, 256 answered this question and a word cloud produced from all of these responses is presented in figure 6.60 and the 5 most frequently referenced words are presented in table 6.9.

Figure 6.60. A word cloud illustrating the most frequently mentioned words in response to 'What did you like most about the gallery?' from 256 respondents across the case studies.

Ranking	No.	%	Word
1	28	11	displays
2	23	9	information
3	19	7	artefacts
4	17	7	Stonehenge
5	15	6	jewellery

Table 6.9. The 5 most frequently referenced words in responses from the 256 respondents to the first part of question 7.

Figure 6.60 and table 6.9 demonstrate the overall satisfaction with the prehistory displays at the different case studies as visitors are specifically praising the presentation of objects with *"displays"* mentioned the most frequently by respondents. The level of information provided also seems to be a popular response with "*information*" referenced by 23 of the respondents. An appreciation of the information provided at the case studies initially seems to contradict the tracking data as standalone text panels were very rarely visited. Yet, respondents that refer to the amount of information provided could be referring to the cases with object labels and text panels that effectively contextualise the objects on display. The tracking data already discussed highlighted visitor interest in object-based forms of interpretation, particularly displays of decorative 'shiny' objects and this appears to be supported by the questionnaire data, as the category of "*artefacts*" was referenced 19 times and the more aesthetic eye-catching items of *"jewellery*" were referenced 15 times. Another popular response to question 7 involved discussion of the site of "*Stonehenge"*, this response was unsurprisingly most prevalent at SVC due to the focus of the exhibition. However, the famous prehistoric site was also referenced at the BM and TQ in responses to question 7, reflecting general public interest in the site.

To further understand how respondents viewed the displays in more depth the 256 responses were also categorised into 23 thematic response nodes which are summarised in table 6.10 alongside the overall representation of each node in the sample. Similarly, to the first part of the questionnaire quite a few of the thematic nodes referenced in visitor responses share similar concepts and consequently employ similar descriptive language. The nodes are presented in order of frequency across the sample to highlight the popularity of such responses across the case studies. Also, to understand the differences between how visitors view the displays at each case study the frequency of these nodes across the case studies were calculated separately for each case study and are presented in table 6.11.

Node	Description	Example	% across the sample (N=256)
Display style/ layout	Reference to the design features of the displays or layout of the prehistoric displays.	*"photos of Stonehenge"* *"the graduated Neolithic – Bronze – Iron Age displays"*	23%
Information/ informative nature of displays	Reference to the level of information provided or more specific information.	*"lots of info on everything"* *"it's impressive amounts of detail…"*	23%
Specific named displays	Responses that reference specific displays.	*"the Lindow man"* *"displays of the tools used to build Stonehenge"*	22%
Specific types of material culture/ artefacts	Any references to 'artefacts' or types of material culture such as 'tools', 'weaponry', 'jewellery', 'cave art' etc.. as well as specific types of artefact such as 'Beaker pot', 'flint tool' or 'shield'.	*"The burial objects"* *"The weapons/ armour"*	21%
Non-prehistoric display	References to displays that do not present prehistory or galleries elsewhere in the museum that do not display prehistory.	*"Anglo-Saxon art"* *"mosaic of Baccus"*	10%
Quality/ breadth of collection	Responses that reference the quality or breadth of the prehistory collection.	*"the collection and amount of objects they have on showcase"* *"diversity of different cultures and country"*	10%

Node	Description	Example	% across the sample (N=256)
Aspects/ activities of daily life	Responses that mention daily life in prehistory or aspects of daily life such as 'trade'.	*"information about housing/ houses, fortifications"* *"information about the daily lives (agriculture etc)"*	7%
Experience of seeing objects/ nature of objects	Responses that emphasise the importance of seeing objects in person or responses that convey the importance of authentic original artefacts.	*"seeing the coin hoards"* *"That the pieces are real and not duplicates"*	5%
Interactives	Responses that reference interaction with displays or utilising interactives in the space.	*"great interactives"* *"interactive displays"*	5%
Everything	Responses that do not specify what they like most and instead make reference to enjoying the entirety of the displays.	*"all of them"* *"everything is interesting"*	4%
Local focus	Responses that refer to the local focus of prehistory displays.	*"The snapshot of Derbyshire from Neolithic times to in particular"* *"that you have displays from Sheffield…"*	4%
AV elements	Responses that refer to the category of audio-visual interpretation on display.	*"the multimedia use"* *"screens are engaging"*	4%
Accessibility	Responses that refer to the accessibility of the space and accessibility for different knowledge levels/ audiences.	*"free and easy to access…"* *"very child friendly…"*	4%

Node	Description	Example	% across the sample (N=256)
Focus on questions about Stonehenge	Responses that reference information about Stonehenge.	*"how Stonehenge evolved"* *"…how the Stonehenge was built, etc"*	2%
Interesting	Responses that refer generally to their interest in the displays.	*"it's a wonderful place, well fitted out, interesting,…"* *"…very interesting displays…"*	2%
The staff	Responses that refer to tour guides/ museum staff.	*"guide giving the brief explanation was interesting"* *"interaction with knowledgeable 'staff' (?) member"*	1%
Preservation	Responses that refer to the preservation of objects presented.	*"how it is all so well preserved…"*	1%
Haven't seen enough yet	Responses that suggest they have not seen enough of the displays to make a judgement.	*"haven't seen enough to really say yet"*	0%
Relevance/ similarity to today	Responses that reference the relevance of the themes covered in the gallery or how similar aspects of prehistoric life are to contemporary society.	*"…how similar it is to today's jewellery"*	0%

Node	Description	Example	% across the sample (N=256)
Improvement suggestion	Responses that specify how the displays could be improved.	*"…would be good to be larger"*	0%
Skill of past peoples	Responses that reference the skills/ sophistication of prehistoric people.	*"The craftsmanship in the torcs…"*	0%
Change through time	Responses that indicate a type of change through time/ since prehistory	*"…development during the ages"*	0%
Use of androcentric terms	Use of androcentric terms such as 'mankind', 'caveman' and 'early man'.	*"man's…"*	0%

Table 6.10. Summary of the 23 thematic nodes referenced by the 256 respondents to the question 'What did you like most about the gallery?'.

Node	Case Study (%)					
	BM (N=42)	SVC (N=44)	NLM (N=38)	TQ (N=38)	WP (N=47)	GNM (N=47)
Non-prehistoric displays	12%	0%	5%	16%	13%	13%
Specific types of material culture/ artefacts	40%	9%	29%	11%	17%	23%
Aspects/ activities of daily life	7%	9%	8%	5%	4%	9%
Display layout/ style	10%	25%	32%	32%	26%	19%
Information/ informative nature of displays	21%	32%	18%	26%	26%	13%
Haven't seen enough yet	2%	0%	0%	0%	0%	0%
Quality/ breadth of collection	21%	5%	13%	8%	4%	11%
Experience of seeing objects/ nature of objects	10%	5%	3%	3%	6%	2%
Everything	2%	0%	8%	3%	11%	0%
Relevance/ similarity to today	2%	0%	0%	0%	0%	0%
Improvement suggestion	2%	0%	0%	0%	0%	0%
Skill of past peoples	2%	0%	0%	0%	0%	0%
Specific named displays	7%	43%	11%	13%	17%	36%
Interactives	0%	11%	11%	0%	6%	0%
Focus on questions about Stonehenge	0%	11%	0%	0%	0%	0%
The Staff	0%	2%	0%	0%	2%	0%
Local focus	0%	0%	13%	3%	11%	0%
AV elements	0%	18%	0%	0%	4%	2%
Interesting	0%	2%	3%	0%	4%	4%
Preservation	0%	0%	0%	0%	4%	0%
Accessibility	0%	0%	0%	0%	11%	11%
Change through time	0%	0%	0%	0%	0%	2%
Use of androcentric terms	0%	0%	0%	0%	0%	2%

Table 6.11. The frequency of the 23 response nodes at each case study.

Two response nodes were mentioned the most frequently, with each of these nodes being referenced by 23% of the 256 respondents. These popular thematic nodes of '*Display style/ layout'* and *'Information/ informative nature of displays'*, further reflect the visitor interest in displays and information provided highlighted by the

quantification of words in table 6.11. The style and layout of displays is a rather broad node category as it can include a variety of responses pertaining to this theme from comments on the general aesthetic of the space to the colour scheme or lighting or types of cases, as well as the amount on display or manoeuvrability through the space. This node is most popular at NLM and TQ where 32% of respondents made comments on their interest in the display style/ layout at each of these case studies. At NLM most of these comments included how well presented the displays were overall as well as the brightness of the colour scheme. Such responses at TQ focused more on the good layout of the room which enabled them to easily move around and interact with the displays. The popularity of these design-based responses supports the relatively warm visitor frequency heat maps previously discussed in section 6.2. In contrast, only 10% of respondents at the BM reference how good the style or layout of the displays are at the museum, reinforcing the low visitor retention of the gallery and low visitor frequency at displays illustrated in its' cold heat map (figure 6.1). The response node focusing on comments concerning the level/ type of information provided by the displays although popular across all case studies was most frequently referenced at SVC. This response reflects the visitor profile represented at the case study (table 4.2) which is explicitly interested in learning about prehistory. Furthermore, 11% of respondents at SVC also specifically referenced their enjoyment learning about the questions surrounding the site of Stonehenge such as how the site was built and changed through time. The narrative focus of the displays on these questions consequently appears to be effectively engaging visitor's interests in the site.

Another popular response node across the case studies was '*Specific named displays'*, as visitors took the question literally and directly articulated which display they liked most in the different museums. This node was most popular at SVC and the specific displays referenced are summarised in table 6.12. From the table it is clear that timelines are a very popular form of interpretation at both SVC and GNM, the two museums using timelines to situate the visitor with their prehistory displays. The displays mentioned by respondents support the visitor frequency observed at the case studies previously discussed. At SVC the 360˚ panoramic video of Stonehenge

through time was mentioned explicitly by 6 respondents whilst the models of how the site changed through time were referenced by 4 respondents. These references in combination with the 18% of respondents that praised the audio-visual elements at SVC reinforce the popularity of these elements illustrated in figure 6.8. At NLM the tracking surveys revealed that the Appleby logboat was the most popular feature in the displays and it was referenced explicitly by 3 respondents, whilst the interactive roundhouse at WP which represents the most popular prehistory display was mentioned by 6 respondents and the popular deer cast at GNM was mentioned by 3 respondents. The named displays at TQ contrast with the other case studies, as the displays referenced are more varied and are each only mentioned by 1 respondent each.

Case Study	Total number of references	Named display
BM	2	Lindow Man
	1	The great torc
SVC	6	360˚ panoramic video of Stonehenge through time
	4	Models of Stonehenge through time Timeline
	3	Video explanations Timeline video
	1	'*Who built Stonehenge'* case Reconstructed face
NLM	3	Appleby logboat
	1	The Bronze Age case
TQ	1	Map of geographical changes Last hunter-gatherers case Woolly rhino skull Neanderthal case Clan of the cave bear Interactive table Bear jaw
WP	6	Roundhouse
	1	Dugout canoe Beaker pottery case
GNM	10	Timeline
	3	Large deer Images of past people with text
	2	Interactive binoculars Rock art
	1	Tribley shield

Table 6.12. Summary of specific named displays referenced by respondents across the case studies.

The popularity of object-based displays highlighted by the high visitor frequency at these types of displays is further supported by the 21% of respondents that explicitly referenced types of material culture and 5% of respondents referring to the experience of being able to see the objects on display. A summary of the different types of material culture/ artefacts referenced across the case studies and the number of references to these different material types is illustrated in figures 6.61

and 6.62. Overall, the most popular material culture referenced across the case studies were types of weaponry, particularly swords. This focus on weaponry was most prevalent at the BM where these responses account for over 50% of the object-based responses. Jewellery is also a very popular category of material culture referenced across the case studies, particularly at the BM. The higher frequency of respondents referencing weaponry and decorative items at the BM further supports the trend for visitors to only engage with such shiny displays as previously identified in section 6.2.1. This trend is further supported by the 21% of respondents that expressed their interest in the quality of the collection. This factor is deemed very important by the visitor profile of international tourists visiting to see national and global 'treasures'. '*Human/ animal remains*' was also a popular response, particularly at SVC and TQ where there is a higher amount of such material on display. Further highlighting visitor interest in physical remains.

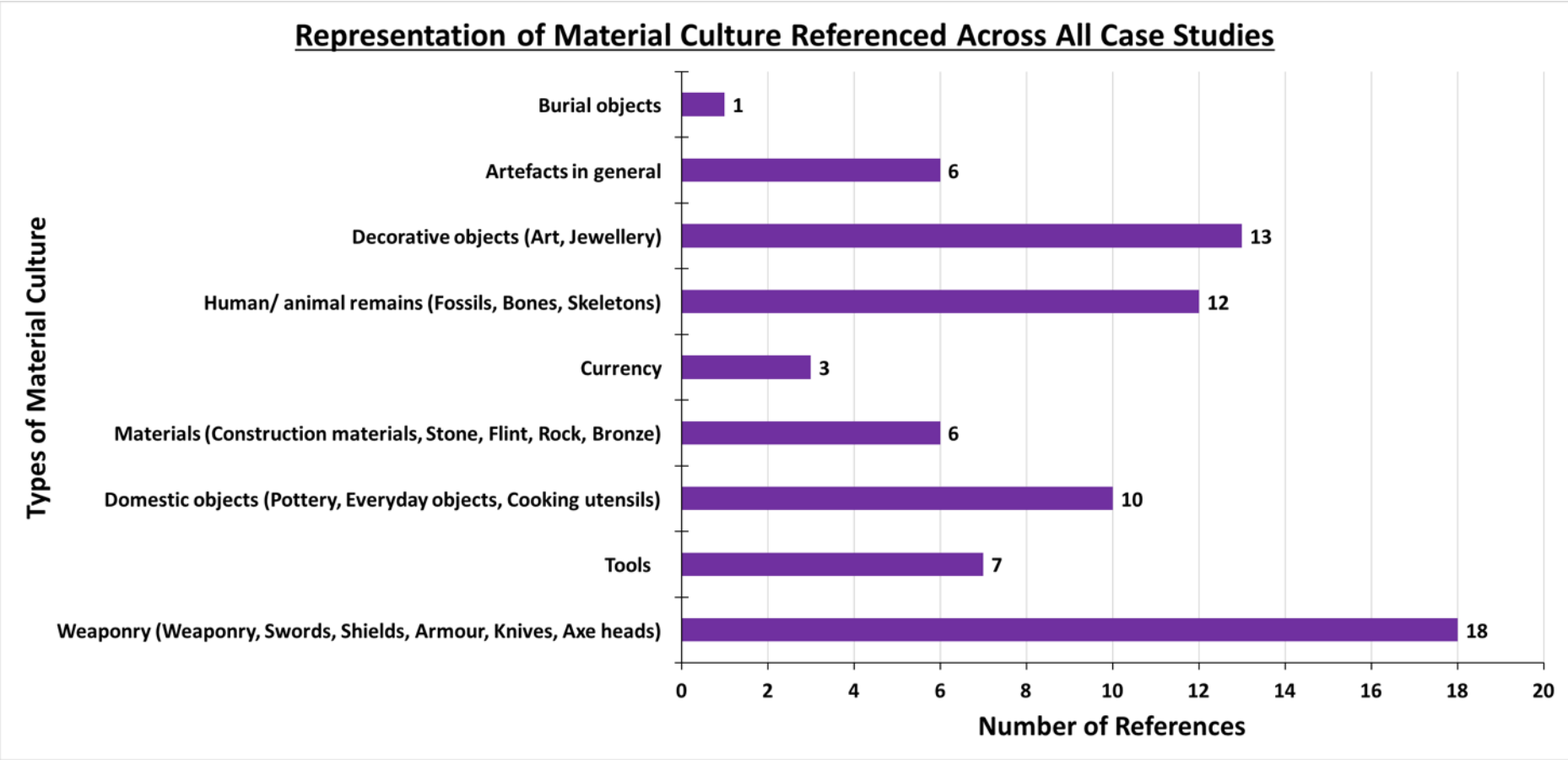


Figure 6.61. Representation of different types of material culture referenced by the 21% of respondents that referenced a type of material culture in response to the first part of question 7.

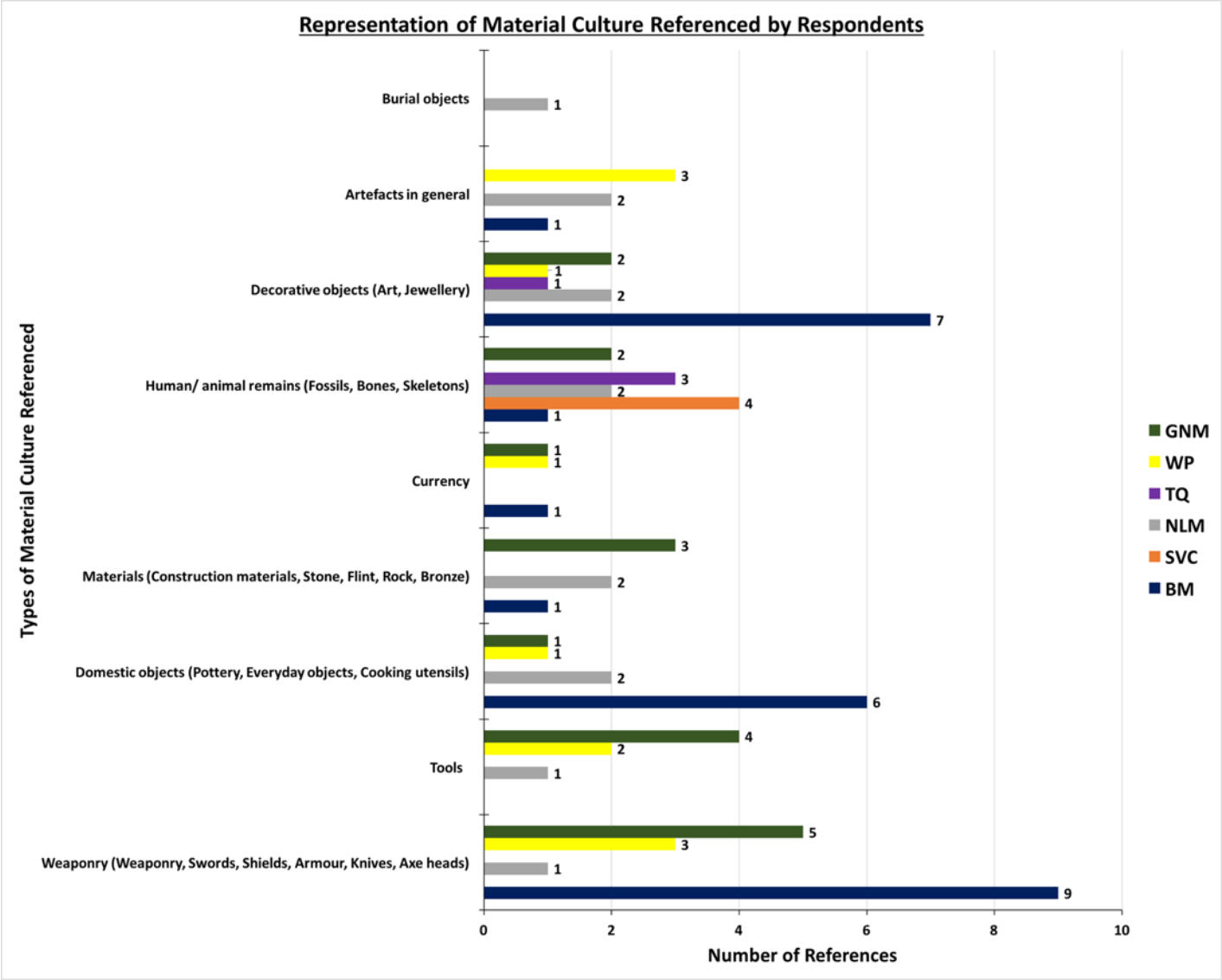


Figure 6.62. The representation of material culture references at each case study from the 21% of respondents to the first part of question 7.

The second part of the questionnaire was completed by respondents after viewing the prehistory displays at the case studies. Yet despite this, there are still a number of respondents referencing non-prehistory displays in their responses to question 7. These irrelevant responses are most common at TQ, WP and the GNM where visitors seem less able to distinguish the prehistory from the rest of the displays in the museum. This was also observed in the same respondents answers to the first part of the questionnaire. It was, however, hoped that after directly seeing and experiencing the displays, understanding of what constitutes prehistory would be improved. Confusion could have been caused by the mixture of prehistory and more modern historic periods presented in the same space at WP but at all case studies respondents were clearly instructed that the questions specifically referred to the prehistory displays and these were even pointed out to them. At TQ the prehistory displays are within their own room and despite the instructions given to visitors, 16% of respondents ignored these directions and expressed their interest in other areas of the museum, particularly the current temporary exhibition about Percy Fawcett and Explorers. At TQ, WP and GNM visitors took this question as an opportunity to discuss their overall impressions and interests in the museum as a whole. This confusion could partially be explained by a persistent misunderstanding of prehistory or lack of attention paid to the questionnaire and instructions. These responses may be driven by past experiences filling in questionnaires which usually ask about overall visitor experience and do not require visitors to compartmentalise their visit.

Responses focusing on enjoying the daily life aspects of the displays were quite minimal compared to the high frequency of respondents that previously expressed an interest in learning about daily life in prehistory, emphasised in Chapter 4. This shift in response possibly highlights a potential difference between visitor expectations of what a daily life display should look like and the daily life displays curated at the different museums.

Visitor interest in the local focus of displays at NLM and WP was reflected by a high frequency of respondents referencing the local relevance of displays. Accessibility was an important factor at both WP and GNM with most of these respondents at WP

citing the free access to the museum and accessibility for children as a great source of enjoyment for them. At GNM these respondents referencing accessibility focused on the clarity of the displays for all levels of knowledge, particularly children.

To understand comparatively what visitors did not enjoy at the case studies the responses to the second part of question 7, '*What did you like <u>least</u> about the displays?*' were compiled into a word cloud (figure 6.63) and were quantified into table 6.13 to reveal trends in how visitors articulate the aspects of display they found least interesting.

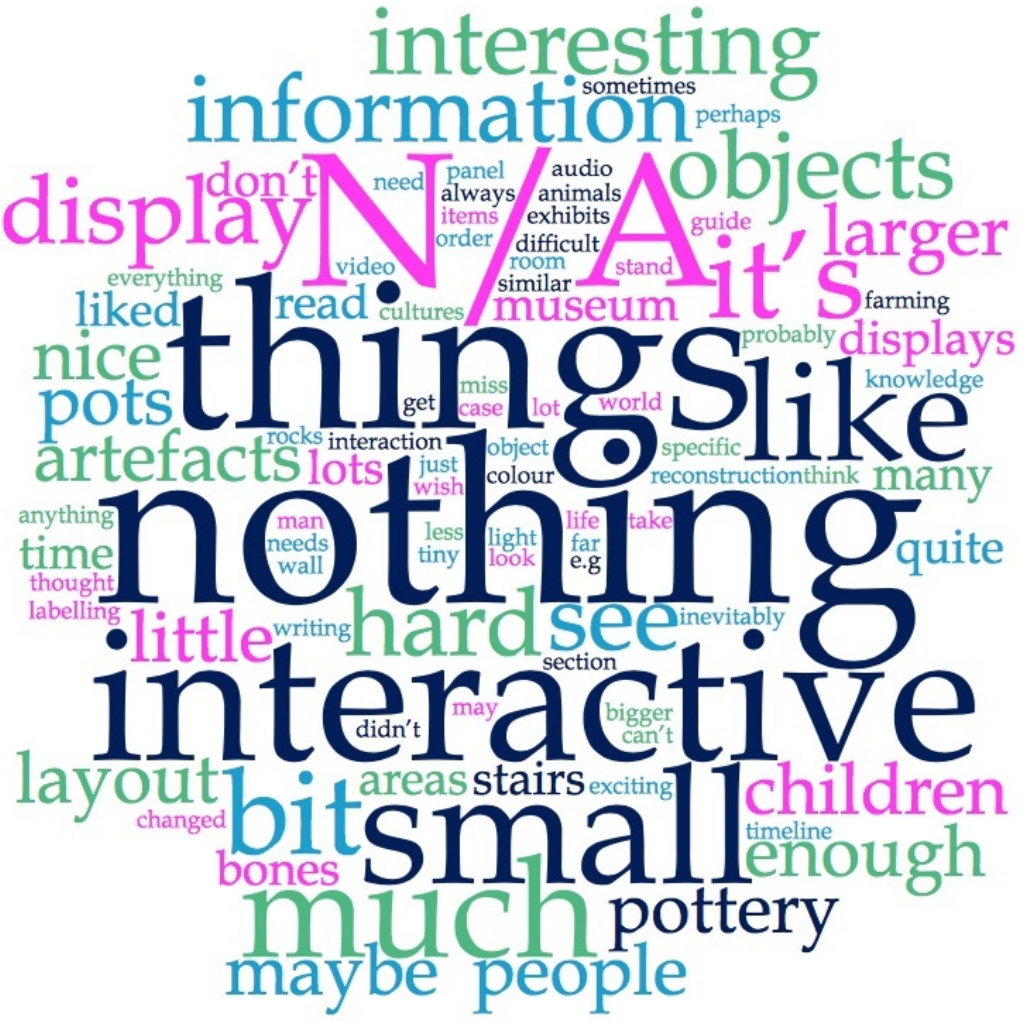


Figure 6.63. Word cloud illustrating the most popular words used in the 178 responses to the question 'What did you like <u>least</u> about the displays?'

Ranking	No.	%	Word(s)
1	37	21%	nothing
2	9	5%	interactive
3	8	4%	small
4	5	3%	information, interacting, display, objects, hard, see
5	4	2%	artefacts, children, pottery, little, people, layout, larger, maybe, pots, nice

Table 6.13. The 5 most frequently mentioned words utilised in responses to the second part of question 7 from 178 respondents.

From the table it is apparent that due to the lack of respondents answering this question there are very few words used in common amongst the respondents to express what they found least interesting in the displays. The most frequently used word to describe what visitors least like about the different galleries is "*nothing*". This positive response echoes the responses provided to the more negatively-phrased part of question 5 (section 4.6). It cannot be easily interpreted as visitors being unable to find anything uninteresting as this response may simply reflect visitor politeness and reticence to critique displays observed in surveys elsewhere and discussed in section 3.4 (Nichols, 1999; Davies and Heath, 2013; Dixon and Munro, 2015).

The more common visitor critiques include, the displays and objects being too small, pottery and the lack of interactives. All of these critiques are reflected by the words in the table including *"interactives", "small", "pottery", "pots", "little*" and "*layout*". Apart from the most frequently observed word in the sample the rest of the words ranked in the top 5 are rather low in frequency. Their low frequency cannot be interpreted as representative of the opinions of the 178 respondents as these words only appeared 4-9 times in all of these responses. Thus to further understand response trends from this small sample of respondents requires a broader node based analysis. The responses across the case studies were consequently categorised into 23 thematic nodes which are summarised in table 6.14.

Node	Explanation	Example	% across the sample (N=178)
Nothing	Responses that convey no issues with the displays.	*"basically no"* *"nothing in particular"*	26%
Issues with display layout/ style	Reference to issues with the design features of the displays or layout of the prehistoric displays.	*"The low lights of the room"* *"layout wasn't very cohesive"*	24%
Specific types of material culture/ artefacts	Any references to 'artefacts' or types of material culture such as 'tools', 'weaponry', 'jewellery', 'cave art' etc.. as well as specific types of artefact such as 'Beaker pot', 'flint tool' or 'shield'.	*"The pottery"* *"stone/ bronze/ pots/ ornaments"*	11%
Issues with collection and objects	References to the dubious origins of the collection or issues with the types of objects on display.	*"artefacts too small…"* *"how all these things ended up here feels like we have taken and stolen from other cultures"*	7%
Lack of interactives	Responses that refer to a lack of interactivity or interactive features in the space.	*"not being able to touch"* *"not very exciting or interactive"*	7%
Specific named displays	Responses that reference specific displays.	*"lovers sculpture"* *"the grass cape doesn't seem authentic"*	6%
Non-prehistoric display	References to displays that do not present prehistory or galleries elsewhere in the museum that do not display prehistory.	*"Egypt"* *"world cultures"*	5%

Node	Explanation	Example	% across the sample (N=178)
Overload of information	Reference to the overwhelming amount of information or details provided.	*"…there is a lot to take in – too much to remember…"* *"…too much going on – overwhelming amount of information…"*	4%
Inaccessibility	Responses that refer to the inaccessibility of the space and inaccessibility for different knowledge levels/ audiences.	*"…probably require a degree of specific knowledge to get maximum benefit, but hard to remedy, same with all museums"* *"20 pound entrance fee"*	4%
Lack of tour guide/ further information	Responses that refer to a lack of information or tour guide within the space.	*"that I didn't had a guide who could explain and tell about these things"* *"I wanted more detailed labels… maybe I should buy the guide!"*	3%
Issues with narrative of gallery	Responses that refer to the restricted nature of the prehistory narrative presented.	*"some eras are only covered in a sentence or two"* *"focus on human activity – not a reflection on environment/ animals of time, also there is not a space that shows how groups all of the world at the same time were functioning – too isolated – some comparisons would be better"*	3%
Problems with AV	Responses that refer to issues with the audio-visual elements in the space.	*"the sounds/ music were sometimes not fitting"* *"the timeline on the wall was informative but too fast – I had to watch it twice to read everything"*	3%

Node	Explanation	Example	% across the sample (N=178)
Aspects/ activities of daily life	Responses that mention daily life in prehistory or aspects of daily life such as 'trade'.	*"farming displays – critical but dull"* *"daily life"*	2%
Noise level/ congestion	Responses that critique the amount of noise or congestion within the space.	*"It's too loud"* *"very quiet place"*	2%
Improvement suggestion	Responses that specify how the displays could be improved.	*"…maybe need key facts to be emphasised"*	2%
Lack of AV elements	Responses that refer to a lack of audio-visual elements such as videos or illustrations for additional context.	*"I would like to see visualisations of people in interaction with the things"*	1%
Not sure	Responses that convey uncertainty.	*"I did not visit it before"*	1%
Problems with interactives	Responses that refer to issues with the interactive elements in the space.	*"audio guides"* *"computers"*	1%
Practical issues	Responses that refer to issues beyond the displays related to the viewing conditions such as the room temperature.	*"very cool- temperature"*	1%
Displays are okay	Responses that express rather ambivalent feelings towards the displays	*"It's not bad…"*	1%
Use of androcentric terms	Use of androcentric terms such as 'mankind', 'caveman' and 'early man'.	*"cave man"*	1%
Irrelevant	Responses that do not provide a response relevant to the question.	*"my wife (just kidding)"*	1%

Node	Explanation	Example	% across the sample (N=178)
Prehistory	Responses that express disinterest in the subject of the displays themselves.	*"prehistory"*	1%

Table 6.14. Summary of the 23 thematic nodes used to categorise the 178 responses to part two of question 7.

Across all case studies from the 178 respondents there are two frequent responses to the second part of question 7. Visitors either refuse to answer the question by leaving the question blank, writing "*N/A"* or "*nothing*" or they critique the '*layout/ style of the displays'*. The most common issues with the displays/ layout that are referenced in these responses are sometimes fairly positive as they can express an interest in seeing bigger displays indicating their interest in the current displays and interest to see more. These types of responses, however, only account for 21% of the issues with display style/ layout node responses. The majority of the issues cited are the lack of cohesiveness of displays and displays of small similar artefacts. These issues are exemplified by respondent 10 at the BM, "*layout wasn't very cohesive"*, respondent 32 at the BM *"…not a clear path to move through room to get information*" and respondent 33 at NLM "*inevitably, perhaps a lot of similar looking objects...".* The criticisms of the cohesiveness of displays are most pervasive at the BM and SVC with visitors confused about the temporal and geographical changes in the displays at the BM and the lack of chronology and obvious narrative route at SVC. At GNM most of these issues are related to the lack of light and the lack of bright colours in the gallery and highlight how aesthetics can impact visitor experience and make prehistory displays more inviting, previously emphasised in section 5.4.5. The only case study where no issues with displays or layout were referenced was TQ.

References to specific types of material culture are less frequent in response to the second part of question 7 in comparison to the first part. The majority of the 23 responses across all case studies that do refer to specific objects are related to pottery, which account for 43% of these responses. Only at NLM - where the most popular display was a case full of Iron Age pottery – did not one respondent express a lack of interest in the pottery on display. The other case studies seem to support the accepted assumption that visitors do not like prehistoric pottery as much as other objects.

After the two most popular response nodes, the rest of the responses are so variable that most of the response nodes are represented by 4%-1% of the 178 respondents across the case studies. Consequently, these low frequencies indicate that these

types of responses are not representative of respondent's interests in the particular displays. Thus to fully answer research question 3b and to further understand what visitors found least interesting about the displays at each museum, the response nodes were categorised separately for each museum and are summarised in table 6.15.

Node	Case Study (%)					
	BM (N=34)	SVC (N=28)	NLM (N=25)	TQ (N=22)	WP (N=33)	GNM (N=36)
Non-prehistoric display	3%	0%	4%	0%	9%	11%
Specific types of material culture/ artefacts	24%	4%	8%	14%	3%	11%
Aspects/ activities of daily life	6%	0%	0%	0%	0%	3%
Issues with display layout/ style	21%	36%	28%	0%	18%	33%
Overload of information	9%	4%	0%	0%	6%	3%
Issues with collection and objects	12%	4%	8%	0%	3%	11%
Specific named displays	6%	4%	4%	14%	3%	8%
Nothing	12%	21%	36%	36%	36%	19%
Lack of interactives	9%	11%	4%	5%	12%	3%
Lack of AV elements	3%	4%	0%	0%	0%	0%
Noise level/ congestion	3%	7%	0%	0%	0%	0%
Lack of tour guide/ further information	9%	0%	12%	0%	0%	0%
Issues with narrative of gallery	6%	0%	0%	0%	3%	6%
Inaccessibility	3%	4%	4%	14%	3%	0%
Problems with AV	0%	14%	0%	9%	0%	0%
Not sure	0%	0%	4%	0%	0%	0%
Problems with interactives	0%	4%	0%	0%	0%	3%
Practical issues	0%	0%	0%	5%	0%	0%
Displays are okay	0%	0%	0%	5%	0%	0%
Improvement suggestion	3%	0%	0%	5%	3%	3%
Androcentric terms	0%	0%	0%	5%	0%	0%
Irrelevant	0%	0%	0%	0%	3%	0%
Prehistory	0%	0%	0%	0%	0%	3%

Table 6.15. The representation of the 23 thematic nodes across the 6 case studies from the responses to part 2 of question 7.

Table 6.15 highlights the variability of response themes across the case studies. The majority of responses at the case studies do not specify what they find least interesting by simply writing *"nothing"* but the rest of the responses are split between nodes. At the BM for example 12% of respondents expressed issues with the collections. The respondents found the objects too small and respondent 38 even questioned the provenance of the collection,

> *"how all these things ended up here feels like we have taken and stolen from other cultures".*

As a national museum there are high expectations for the objects presented and how they are presented at the BM and for 12% of respondents these expectations do not appear to have been met.

At the GNM 11% of respondents also express concerns over the collection but these critiques are more focused on the lack of variety on display. However, the trends in responses identified by the categorisation of responses need to be treated with caution as they represent a small number of people due to the low response rate. For example, the 12% of respondents at the BM that express issues with the collections only represent 4 respondents whilst the 11% at GNM also only represents 4 respondents. Although a variety of critiques were articulated in response to part two of question 7 they were only mentioned by a small number of respondents at each museum. It is therefore difficult to formulate any concrete conclusions about what visitors do not like based purely on the qualitative data and a larger sample would be needed to increase the number of respondents.

Perhaps a better insight into whether visitor expectations were met by displays will be gained by an exploration of the responses to question 8 *'What do you want to see more of/ learn more about?*'. Responses to this question will address research question *3c 'What do visitors want to see more of in prehistory displays?'*. Furthermore, such responses are more likely to elicit constructive criticisms and

reveal more about the displays that visitors did not like as this question is phrased less negatively. To further explore whether the displays were effective the responses were firstly put into a word cloud generator to quantify the words utilised most frequently by respondents and the results are illustrated in figure 6.64 and summarised in table 6.16.

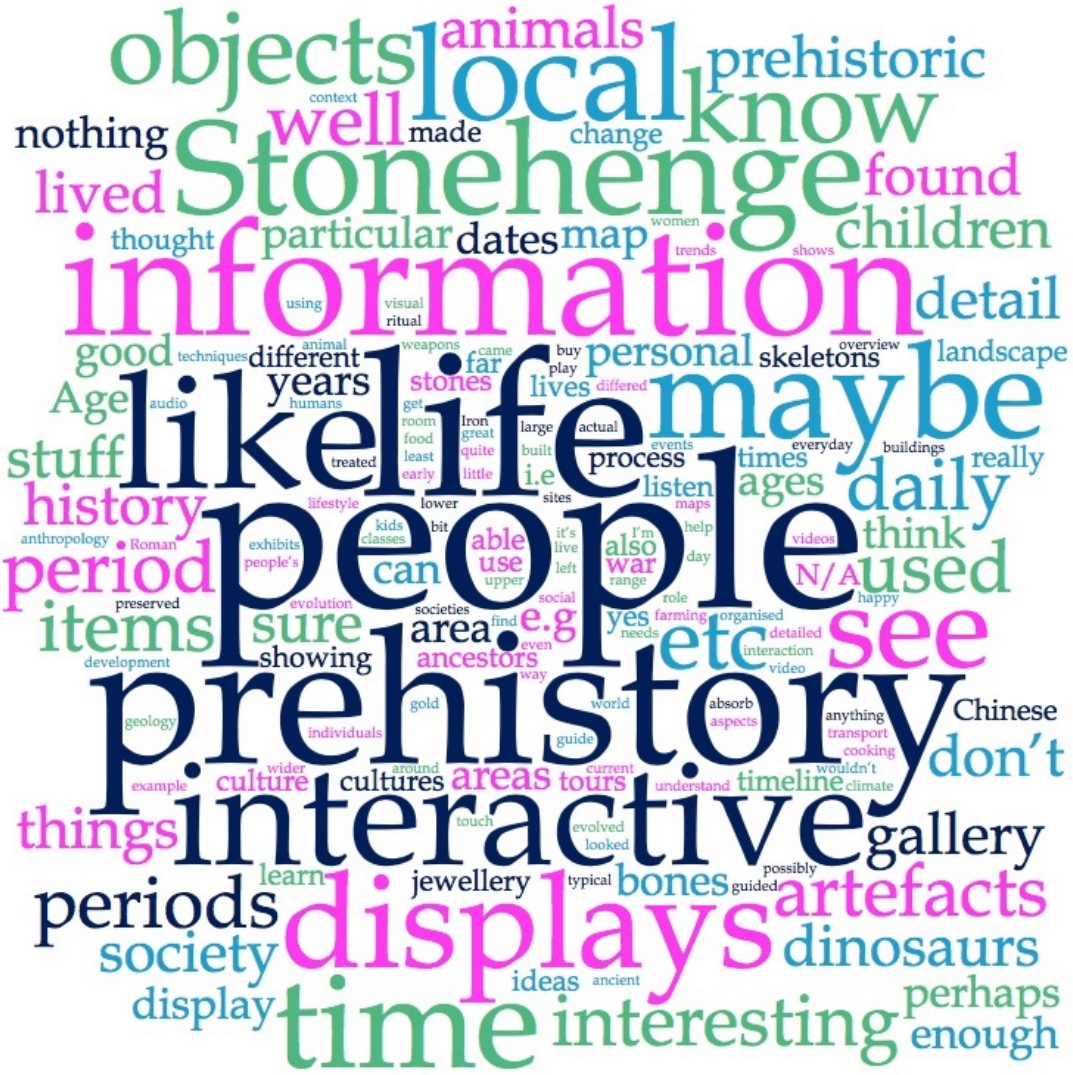


Figure 6.64. Word cloud illustrating the most frequent words used by the 217 respondents to question 8.

Ranking	No.	%	Word(s)
1	20	9%	people, life
2	16	7%	prehistory
3	12	6%	information
4	11	5%	interactive
5	10	5%	Stonehenge, displays, local

Table 6.16. The 5 most frequently used words in response to question 8 from the 217 respondents.

Visitor interest in the daily life of people like them in the past discussed in Chapter 4 still appears to represent a prevalent interest across respondents, exemplified by the popularity of *"people"* and "*life"* used in responses. The continued interest in this topic suggests that visitors did not feel that this topic was covered adequately by the displays as they want to see more of it. Visitors are also expressing an interest in broadening their interest in *"prehistory"* as demonstrated by respondent 12 at the BM who wants to specifically learn more about "*the transport in prehistory"*, whilst respondent 21 at the BM appears to still be unsure about what prehistory constitutes as they request *"a more concrete (if flexible) answer to what prehistory is"*, indicating that the displays have not been effective at communicating the period to them. This is further supported by the 5% of respondents wanting to see more "*information*" on certain aspects of prehistory, particularly "*local*" aspects. To further explore the interests of visitors the responses to question 8 were categorised into 22 thematic nodes summarised in table 6.17 and the frequency with which they are represented at each case study is presented in table 6.18.

Node	Description	Example	% across the sample (N=217)
Additional interpretation through reconstructions/ interactives/ AV	Responses that express a preference for additional types of interpretation such as audio-visual elements, interactives and reconstructions.	*"models of how humans looked…"* *"movie or play, actors play a drama about history life, that would be interesting"*	19%
Aspects/ activities of daily life	Responses that mention wanting to learn more about daily life in prehistory and/ or aspects of daily life such as 'trade'.	*"how society functioned in prehistory…"* *"the lifestyle of people back then"*	18%
Mention of non-prehistoric	Any references to topics/ themes/ events/ sites/ objects/ individuals/ periods that are not prehistoric.	*"world war, Tudor, Elizabethan times"* *"more about the Romans"*	11%
More in depth/ contextual information	Responses that express an interest in learning more about prehistory in general/ certain topics covered by the gallery or wanting to learn more about the context of objects/ topics on display.	*"…more detail of larger trends…"* *"A bit more detail in transitioning periods, Bronze Age – Iron Age – Roman invasion etc"*	10%
Suggested improvements to display style/ layout	Responses that specify how the displays could be improved.	*"…A little bit more decoration would also be nice, to get the feeling from the past"* *"yes"*	10%
Specific types of material culture/ artefacts	Any references to 'artefacts' or types of material culture such as 'tools', 'weaponry', 'jewellery', 'cave art' etc.. as well as specific types of artefact such as 'Beaker pot', 'flint tool' or 'shield'.	*"animal bones/ skeletons"* *"weapons"*	9%

Node	Description	Example	% across the sample (N=217)
More information on the people/ their worldview	Responses that refer specifically to learning about the people and their lives.	*"more personal information"* *"more personal aspects of life"*	9%
Wouldn't change it	Responses that are already happy with the state of displays and do not provide any suggestions for improving the displays.	*"I was happy with the exhibition, wouldn't change anything"* *"so far so good"*	8%
Information on how objects used/ made/ why	Responses that refer to learning more about how certain objects were produced/ used and why they were created.	*"how they made gold jewellery"* *"the processes used for smelting etc…"*	6%
More information about animals/ environment	Responses that specifically refer to learning more about animals or the environment in prehistory.	*"Mammoths"* *"…how the lions got to the UK"*	6%
Don't know	Responses that do not express an opinion and convey an uncertainty of how to respond.	*"I don't know enough to know what more I could learn"* *"I'm afraid I don't really know enough about prehistory to suggest anything"*	4%
More information about the construction of Stonehenge/ the stones	Responses that specifically refer to learning more about Stonehenge and how the site was constructed.	*"details about why Stonehenge was built?"* *"exactly how the stones were built…"*	3%
More of a local focus	Responses that express an interest in learning more about or seeing more local objects on display.	*"more space to local history"* *"more local prehistory"*	4%

Node	Description	Example	% across the sample (N=217)
More information on developments	Responses that specifically refer to learning more about developments through time.	*"…clash of ideas as change came…"* *"possibly more information about comparative development…"*	1%
More information on human evolution	Responses that specifically refer to learning more about human evolution.	*"…how they evolved"* *"evolution from our primate ancestors to the modern Homo sapien"*	1%
More information on rituals and beliefs	Responses that specifically refer to learning more about rituals or beliefs.	*"I would like to know more about Stonehenge history and ritual"* *"religion/ ritual"*	1%
More information about a certain site/ activity/ period of prehistory	Responses that specifically refer to learning more about a particular prehistory site/ activity/ period of prehistory.	*"farming practice, early industry, mining etc"* *"Iron Age"*	1%
Issues of gender	Responses that highlight the lack of representation of women or wanting to learn more about women in the past.	*"social and political issues of the period – for example : women's rights their role in society, etc"* *"…who used what e.g gender roles…"*	1%
Issues with the displays/ layout	Responses that highlight issues with the design features of the displays or layout of the prehistoric displays.	*"…it doesn't quite flow"* *"audio guide is not enough"*	1%
Use of androcentric terms	Use of androcentric terms such as 'mankind', 'caveman' and 'early man'.	*"cavemen…"* *"Prehistoric man (more of)…"*	1%

Node	Description	Example	% across the sample (N=217)
Relevance to today	Responses that express an interest in learning more about how the subject is relevant to today.	*"…maybe some indication of enduring relevance of the information i.e types of farming patterns and how they help explain how current states/ cultures function"*	0%
Not related to the museum displays	Responses that are not about learning more or seeing more in the displays.	*"dig up the remaining 50 %..."*	0%

Table 6.17. Summary of the 22 thematic nodes and their representation across the 217 responses to question 8.

Nodes	Case Study (%)					
	BM (N=42)	SVC (N=34)	NLM (N=34)	TQ (N=26)	WP (N=40)	GNM (N=41)
Aspects/ activities of daily life	24%	24%	12%	4%	20%	17%
Specific types of material culture/ artefacts	19%	6%	6%	12%	5%	5%
More in depth/ contextual information	19%	9%	3%	0%	10%	15%
More information on the people/ their worldview	5%	6%	9%	12%	18%	5%
More information on developments	5%	0%	3%	0%	0%	0%
More information on human evolution	2%	0%	0%	4%	3%	0%
More information on rituals and beliefs	2%	0%	0%	0%	0%	2%
More information about a certain site/ period of prehistory	5%	0%	3%	0%	0%	0%
Information on how objects used/ made/ why	17%	0%	6%	0%	8%	0%
Wouldn't change it	10%	6%	9%	4%	0%	17%
Additional interpretation through reconstructions/ interactives/ AV	10%	18%	15%	19%	33%	22%
Mention of non-prehistoric	10%	6%	12%	12%	10%	15%
Suggested improvements to display style/ layout	7%	12%	21%	12%	8%	5%
Don't know	2%	3%	9%	0%	10%	0%
Issues of gender	5%	3%	0%	0%	0%	0%
Relevance to today	2%	0%	0%	0%	0%	0%
More information about the construction of Stonehenge/ the stones	0%	15%	0%	4%	0%	0%
Issues with the displays/ layout	0%	6%	0%	0%	0%	0%
Not related to the museum displays	0%	3%	0%	0%	0%	0%
More information about animals/ environment	0%	0%	0%	15%	0%	20%
More of a local focus	0%	6%	6%	12%	3%	2%
Use of androcentric terms	0%	0%	0%	4%	3%	0%

Table 6.18. Representation of the 22 thematic response nodes across the case studies from responses to question8.

Table 6.17 highlights that the most popular response to question 8, represented by 19% of responses is visitors wanting to see more forms of interpretation alongside the displays. Considering the lack of audio-visual elements and interactives when compared to object-based displays it is perhaps not surprising that visitors want to engage with a greater variety of display types. The opportunity to haptically engage with prehistory is particularly valued by visitors. However, table 6.18 demonstrates that despite only possessing one interactive and the predominance of traditional object-based displays at the BM, only 10% of respondents at the museum were interested in seeing more types of interpretation on display. Instead respondents at the BM prioritise learning more in depth/ contextual information about prehistory and seeing particular objects types on display. This focus on objects and their quality appears to be a trend across all questions at the BM where the touristic visitor profiles (table 4.2) are expecting to see 'star' objects from the museum's extensive global collections.

Node categorisation further supports the popularity of learning more about people and their daily life indicated by the quantification of word frequencies summarised in table 6.16. Across the 217 respondents 18% want to see more about different aspects of prehistoric daily life, a trend observed in responses to question 5 discussed in Chapter 4. A continued emphasis on this subject by respondents indicates that respondent's expectations for learning about this topic were not successfully met. This is further indicated by the representation of other people-centric nodes that involve wanting to know more about prehistoric people and some of their specific activities such as; '*More information on the people/ their worldview', 'More information on rituals and beliefs'* and '*Issues of gender*'. People-centric responses are quite popular at WP, where 18% of respondents provided responses that could be categorised as relating to '*people and their worldview'*. A few of these responses focused on what people looked like as highlighted by respondent 3 who wanted to see *"models of how humans looked/ dressed in these eras/ areas*". Other respondents were interested in societal hierarchies and such responses further reinforce visitor interest and preoccupation in learning about people like them in the past. The context of prehistory is so far removed and perceived as so distant that visitors

cannot conceptualise what day to day life was like. Even after viewing the prehistory displays their responses to question 8 demonstrate that they still do not fully understand what life in prehistory was like.

Only at TQ was there less interest in learning about daily life. In contrast visitors were more interested in animals and the environment instead of humans. This greater interest in animals and the environment at TQ may reflect effective engagements with the prehistory displays that predominantly display animal remains which could have sparked further interest in these extinct mammals for visitors. A similar interest in seeing more about animals and the environment is also present at GNM, another case study with highly engaging displays of animal remains as illustrated in it's heat map (figure 6.46).

At SVC despite the narrative focus of displays centred on Stonehenge, 15% of respondents still want to know more about the site and how it was constructed. Respondents are still questioning how the site was built as exemplified by respondent 2 "*details about why Stonehenge was built?"* and respondent 5 "*exactly how the stones were built. Maybe a display on how they moved them etc"*. The persistence of these questions surrounding the site despite the display focus on how the site was constructed indicate that the displays do not cover all aspects of interest about the site and for at least 5 people the narrative of the displays is not obvious to them.

At NLM the most popular node for question 8 represented by 21% of respondents is *'Suggested improvements to display style/ layout'.* Yet due to the lack of visitor responses this popular response node only represents 6 respondents that provided quite variable suggested improvements to the displays. Two respondents suggested that the displays should be more child friendly whilst the other respondents were focused more on altering specific details of the displays such as including BP dates and presenting objects in-situ. Respondent 20 even suggested dividing the displays into sub-periods*,* "*if prehistory is organised with ages to understand in timely manner, if it is these probably I missed it".* This rather confused response clearly

demonstrates the lack of attention given to displays as they are categorised into sub-periods and colour-coded yet this was not recognised by the visitor.

Despite the position of question 8 answered after viewing the prehistory displays there are still respondents providing responses that do not relate to prehistory indicating that certain displays are not effectively communicating the timeframe of the period to visitors, particularly at GNM. These responses include topics such as dinosaurs, the Egyptians and the Romans. Such responses further demonstrate the difficulty visitors face in conceptualising prehistory within a temporal frame of reference, first highlighted in Chapter 4. Even at NLM where the displays are colour-coded into time periods and the prehistory is compartmentalised in its own half of the archaeology room, respondents are still referring to periods that pre-date or post-date prehistory. Conveying the temporal distance of prehistory and the events/ sites it encompasses is inherently difficult. To understand whether any of the displays at the case studies were successful in challenging visitor preconceptions and developing visitor knowledge of the period the responses to question 9 will also be explored.

6.4 How the displays influenced visitor preconceptions

To appreciate which key pieces of information visitors retained from viewing the displays respondents were asked '*Have you learnt anything new today, if so what?*'. This question provided visitors with the opportunity to reflect on their learning experience and facilitated an exploration of research question 3d to find out, *'Do visitors learn from prehistory displays?*'. Initially the responses to this question were categorised into *'yes', 'no'* and '*don't know*' to give a provisional understanding of how much visitors felt they had learned, the percentage of respondents in each category were calculated separately for each case study and are illustrated in figure 6.65.

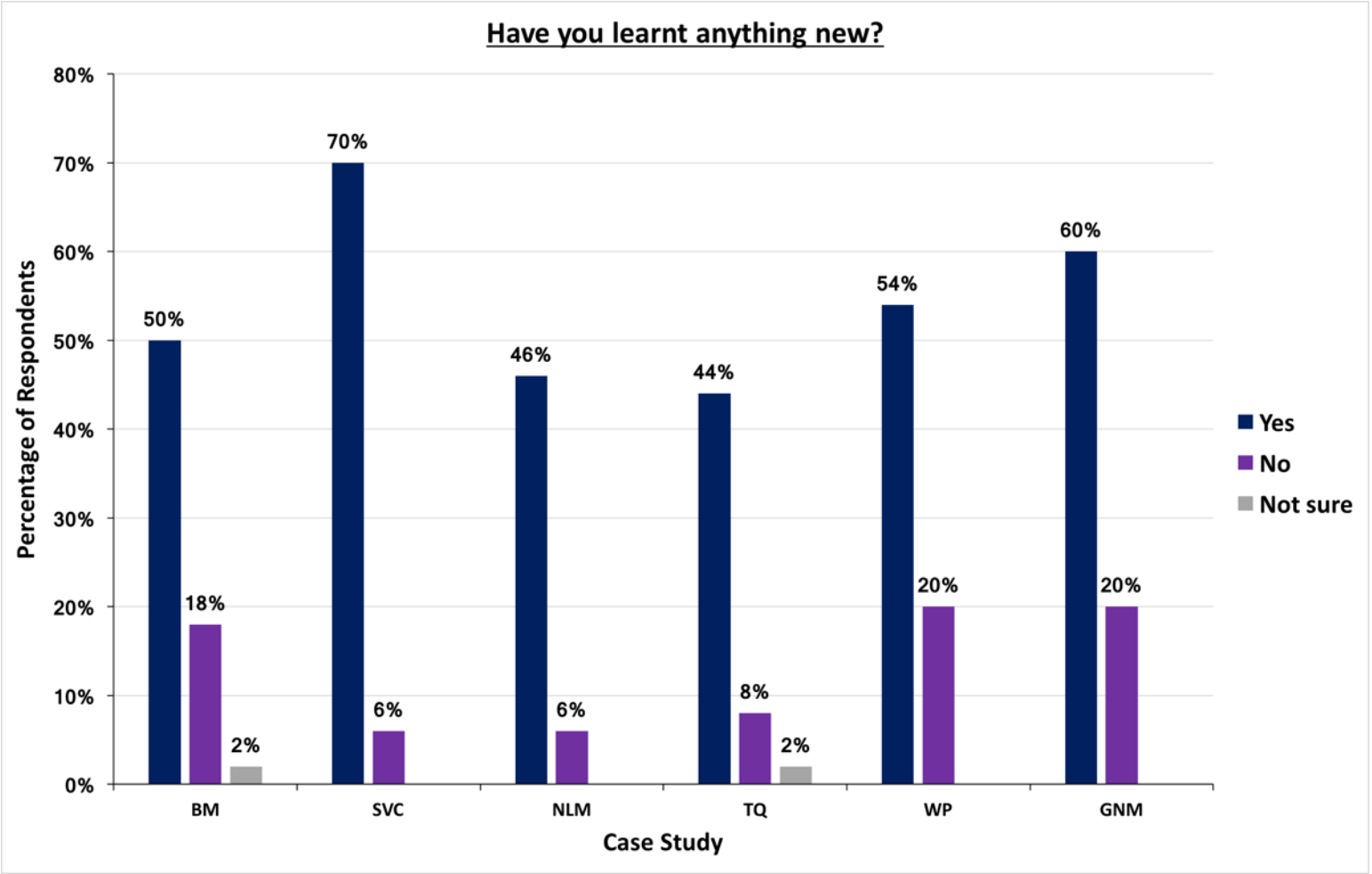


Figure 6.65. The percentage of respondents that felt they had learnt something new from the 190 respondents that answered question 9.

Overall across all case studies 54% of respondents explicitly stated *"yes"* that they had learned something new or implicitly indicated that they had learned something new by providing a fact they had learned. It was expected, as previously asserted by Davies and Heath (2013:56) that visitors once asked to reflect on if they have learnt something new might not provide very informative responses, as respondents are generally more likely to answer positively to avoid embarrassment and appear intellectually rigorous. However, 32% of respondents did not answer the question and 63% of respondents provided more verbose responses beyond a simple affirmation. The case study where respondents expressed the greatest attainment of new knowledge was at SVC where 70% of respondents responded positively. This high number of respondents that admitted to learning from the displays reflects the motivations of the visitors to learn about the prehistoric site. In contrast at both NLM and TQ, less than 50% of respondents indicated that they had learned something from the prehistory displays. The lower quality of visit observed at TQ and NLM perhaps partially explains the lack of respondents that feel they have been intellectually stimulated by the displays. Yet despite both of these case studies superficially appearing to possess respondents with low levels of learning, less than 10% of respondents explicitly stated that they had not learned anything. Instead many respondents had simply not answered the question. This question is the last one on quite a long questionnaire so this lack of response could reflect questionnaire fatigue or perhaps respondent hesitance to express their new understanding of prehistory and have their academic integrity questioned.

From question 3 in the first part of the questionnaire it was apparent that there was no common understanding of prehistory beyond a basic definition of the period as prior to the written record and including three technology-based periods. Responses were so variable that it was clear there was no general shared knowledge, not even an old-fashioned stereotypical perception of prehistory as 'primitive cavemen living alongside dinosaurs'. The biggest preconception was the lack of any preconceptions prior to viewing the prehistory displays. Responses only shared the inability to place prehistory within its temporal context. To identify whether the displays presented at the case studies improved the temporal understanding of visitors or whether

respondents now shared a common understanding of prehistory the frequency of words they used to articulate their new knowledge were quantified and are illustrated in figure 6.66 and table 6.19.

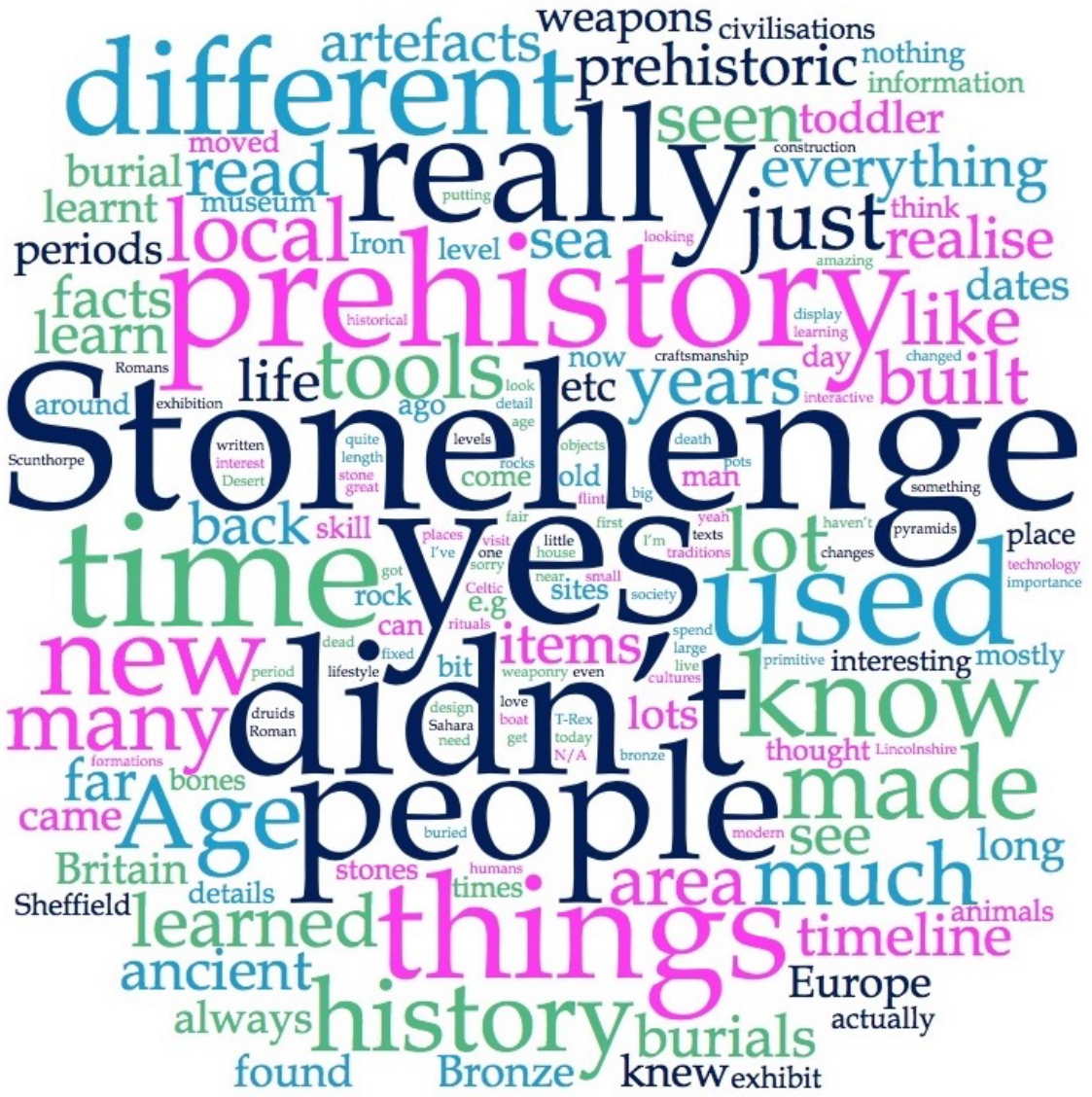


Figure 6.66. Word cloud illustrating the most frequently used words in response to question 9 from the 190 respondents.

Ranking	No.	%	Word(s)
1	23	12%	yes
2	18	9%	Stonehenge
3	15	8%	didn't
4	12	6%	prehistory, people, time
5	10	5%	different

Table 6.19. The 5 most frequent words referenced by the 190 respondents to question 9.

Table 6.19 further highlights the greater attainment of knowledge observed at SVC in comparison to the other case studies, with "*Stonehenge"* ranked the second most frequently used word. This word frequency reflects the high frequency of respondents citing new facts and theories they have learned about the famous prehistoric site. Initially the frequency of the word *"didn't*" seems to reflect a lack of new knowledge but this word was also utilised to communicate how an individual's perceptions had changed as demonstrated by respondent 10 at the BM, "*A lot, I didn't know much at all before (especially about Celtic Europe)*". In this context "didn't" isn't being used to articulate learning nothing new but in contrast is used to express learning a lot about prehistory. A better understanding of daily life and the temporality of prehistory is hinted at by the frequency of the words "*people"* and *"time"*. An understanding of how prehistory differs from contemporary society seems to be recognised with respondents utilising the word *"different"* to express their knowledge of prehistory. Responses to question 9 were further contextualised by categorising the 190 responses into 29 thematic nodes summarised in table 6.20.

Node	Description	Example	% across the sample (N=190)
Better understanding of daily life in general	Responses that specifically refer to a better understanding of aspects or activities of daily life in prehistory.	*"…The facts of ancient life"* *"yes, it is how the ancient people in Europe live"*	12%
Very specific facts/ details	Responses that refer to specific or detailed facts/ pieces of information they have learned particular to the displays.	*"The Sahara Desert was turned to a rainforest…"* *"people started fighting in 1300 BC in Europe"*	9%
Mention of non-prehistoric	Responses that refer to learning about topics/ themes/ events/ sites/ objects/ individuals/ periods that are not prehistoric	*"A lot of things about the unborn cemeteries in Britain during the Norman period was given considerable attention"* *"Romans ruled today's territory of England and Scotland introducing medicine, coins, writing, other religion, administration, art, architecture"*	9%
Information relating to Stonehenge/ how constructed	Responses that specifically refer to a better understanding of Stonehenge and how it was built	*"…how Stonehenge was built what was before it"* *"how Stonehenge was constructed"*	9%
Greater understanding of local prehistory	Responses that specifically refer to a better understanding of local prehistory	*"local information"* *"animals in Torquay/ UK"*	8%
A lot/ all new	Responses that indicate the attainment of lots of new knowledge.	*"A lot, I didn't know much at all before (especially about Celtic Europe)"* *"everything was new to me"*	7%
The skill of past people	Responses that reference the skills or sophistication of prehistoric people.	*"…the elaborate detail of the metal artefacts was impressive"* *"artistry, design, carving skill on good/ pottery"*	7%

Node	Description	Example	% across the sample (N=190)
Nothing/ knew before	Responses that indicate a lack of new knowledge.	*"not really…"*	6%
Specific period/ activity/ sites	Responses that specifically refer to certain periods of prehistory/ activity/ prehistory site.	*"I learnt about Celtic Europe…"* *"…eating and drinking…"*	6%
Information relating to burial/ ritual	Responses that specifically refer to learning about burial or ritual in prehistory.	*"I liked the section on burial rites, feel I learned more about the ceremonies involved through the collection of pots etc"* *"more detailed knowledge on burial rituals in ancient civilisations"*	6%
Challenged preconceptions/ made think	Responses that refer to how the displays have changed their understanding of prehistory or more reflective responses.	*"…I didn't realise there were civilisations 12,000 years ago"* *"It has made me re-evaluate what prehistory means although I do not have a straight up answer on what it is, it has really made me think"*	6%
Information about animals/ the environment	Responses that specifically refer to learning about animals or the environment in prehistory.	*"A lot more large predators in local area than first imagined"* *"yes, size of primitive animals…"*	6%
Ability to see objects	Responses that specifically refer to being able to see the objects.	*"I got to see some of the types of items that people would have used during this periods"* *"visual aspect"*	5%
The depth/ amount/ importance of prehistory	Responses that specifically refer to learning how expansive/ important prehistory is or the extensive time depth of the period.	*"was not aware of so many local sites that are archaeologically important"* *"the depth of local prehistory"*	5%

Node	Description	Example	% across the sample (N=190)
General understanding of prehistory	Responses that specifically refer to gaining a better understanding of prehistory.	*"I learned what prehistory is – no 'written' record by people of society"* *"yes – the definition of prehistory…"*	4%
Not had time/ not yet	Responses that indicate they have not had enough time to learn anything yet.	*"not sure yet as haven't been long enough"* *"I think I would have learned more if there is more time but if you want to read all the texts you'll need years"*	3%
Context of time	Responses that specifically refer to a better understanding of the temporality of prehistory.	*"The time period that these were built lined up with the time the pyramids were built"* *"the place of Stonehenge in the world's timeline"*	3%
Extensive amount to learn	Responses that convey the vast amount to learn about prehistory.	*"yes and I could spend all day learning here"* *"lots of facts – but difficult to retain as not very relevant to today"*	3%
Information relating to hunting/ fighting	Responses that specifically refer to learning about hunting or fighting in prehistory.	*"…bone as a material to construct hunting weapons"* *"…forge weapons to hunt and gather"*	2%
Information relating to the archaeological process	Responses that specifically refer to learning about archaeology or aspects of the archaeological process such as dating techniques.	*"how to age artefacts i.e length of swords – chronological order – is this true ??"* *"how archaeologists establish age of Iron Age objects"*	2%
Expression of interest	Responses that express interest in prehistory.	*"very interesting"* *"lots of interesting facts"*	2%

Node	Description	Example	% across the sample (N=190)
Didn't pay attention	Responses that express a lack of engagement with the displays.	*"not really, sorry, pre-occupied looking after kids"* *"mostly just followed toddler around so didn't get to read anything"*	2%
Already had a general knowledge, some details are new	Responses that refer to developing their existing knowledge of prehistory.	*"not entirely new…"* *"…I knew about the overall principles, but many of the small details in the exhibit were new to me…"*	1%
Suggested improvements	Responses that specify how the displays could be improved.	*"If it would be a bit more interactive (films, pictures, illustrations etc) it would be more helpful to learn something"* *"Maybe this could be a bit more interactive"*	1%
Don't know	Responses that do not express an opinion and convey an uncertainty of how to respond.	*"?"*	1%
Further questions	Responses that ask further questions.	*"…How did they get them here ???"*	1%
Information relating to human evolution/ hominins	Responses that specifically refer to human evolution or hominins	*"yes, Neanderthals,…"*	1%
Use of androcentric terms	Use of androcentric terms such as 'mankind', 'caveman' and 'early man'.	*"man was around in some extreme conditions…"* *"the prehistoric man…"*	1%
Irrelevant	Responses that bear no relevance to the question.	*"never try to fill out a questionnaire whilst taking a toddler to a museum"*	1%

Table 6.20. Summary of the 29 nodes used to categorise the 190 responses to question 9.

Despite the high frequency of visitors interested in learning more about daily life the most popular response to question 9 was learning about daily life in prehistory. It thus appears that to a certain extent the displays at the case studies are successful at communicating the period and providing visitors with a grounding in the period. However, one of the second most popular responses involves referencing periods unrelated to prehistory indicating that visitors are still unable to place prehistory within its temporal context. To further explore how successful the displays at the different case studies were at communicating prehistory in their displays the frequency of thematic nodes were calculated separately for each museum and are presented in table 6.21.

Nodes	Case Study (%)					
	BM (N=31)	SVC (N=35)	NLM (N=27)	TQ (N=24)	WP (N=37)	GNM (N=36)
A lot/ all new	13%	3%	4%	17%	11%	0%
Nothing/ knew before	3%	3%	7%	0%	14%	8%
Already had a general knowledge, some details are new	6%	0%	0%	0%	0%	0%
Ability to see objects	13%	0%	7%	0%	3%	8%
Specific period/ activity/ sites	10%	3%	15%	0%	3%	8%
The skill of past people	13%	6%	11%	4%	0%	8%
Better understanding of daily life in general	13%	26%	7%	4%	16%	3%
Very specific facts/ details	10%	20%	15%	4%	0%	6%
Information relating to hunting/ fighting	3%	0%	0%	0%	3%	3%
Information relating to burial/ ritual	10%	0%	4%	4%	11%	8%
Information relating to the archaeological process	6%	3%	0%	0%	3%	0%
Not had time/ not yet	10%	0%	7%	0%	3%	0%
Mention of non-prehistoric	6%	0%	4%	17%	16%	11%
The depth/ amount/ importance of prehistory	3%	0%	11%	0%	8%	6%
Suggested improvements	6%	0%	0%	0%	0%	0%
Don't know	0%	0%	0%	4%	0%	0%
Challenged preconceptions/ made think	6%	11%	0%	17%	0%	3%
General understanding of prehistory	3%	6%	0%	4%	3%	6%
Information relating to Stonehenge/ how constructed	0%	49%	0%	0%	0%	0%
Context of time	0%	14%	0%	0%	0%	0%
Expression of interest	0%	3%	0%	0%	5%	3%
Further questions	0%	3%	0%	0%	0%	0%
Extensive amount to learn	0%	0%	11%	4%	0%	3%
Information relating to human evolution/ hominins	0%	0%	0%	4%	0%	0%
Use of androcentric terms	0%	0%	0%	4%	0%	3%
Greater understanding of local prehistory	0%	0%	22%	4%	14%	8%
Didn't pay attention	0%	0%	0%	4%	5%	3%
Information about animals/ the environment	0%	0%	0%	13%	3%	22%

Nodes	Case Study (%)					
	BM (N=31)	SVC (N=35)	NLM (N=27)	TQ (N=24)	WP (N=37)	GNM (N=36)
Irrelevant	0%	0%	0%	0%	0%	3%

Table 6.21. Representation of the 29 thematic nodes referenced in responses to question 9 across the case studies.

Table 6.21 highlights the diversity of responses to question 9 but despite this diversity, the majority of nodes relate to visitors developing their knowledge about certain topics. These nodes therefore reflect a greater understanding of prehistory gained from the displays. This new knowledge varies considerably between museums with respondents at SVC expressing a greater awareness of the site illustrated by the 49% of respondents explicitly referring to Stonehenge and how it was constructed and 20% articulating detailed facts about the site. These responses demonstrate the effectiveness of the displays at SVC which aim to tackle the key questions visitors have about the site and contextualise it. At NLM the most popular response node was '*A better understanding of local prehistory*', reflecting the interests of the local visitor profile and focus of the displays that has been identified by visitors. At the BM the object-focused responses previously discussed are also prevalent in visitor responses to question 9 which frequently cited the opportunity to see objects as enabling them to develop their learning.

A better understanding of daily life in general, although a popular response at SVC, BM and WP was very rarely referenced at TQ and GNM. However, the lack of responses about daily life in general does not imply a lack of understanding of prehistory at TQ and GNM as the responses still refer to other aspects of life. At GNM 22% of respondents specifically refer to learning about animals/ the environment reflecting the active visitor engagements with the displays of animal remains. At TQ, 17% refer to learning a lot and having their preconceptions challenged. Yet, at the same time at TQ 17% are still referring to periods that are not prehistoric, highlighting the continued confusion over the temporality of the period. The usefulness of a

timeline for providing this temporal context is highlighted by respondents at SVC who articulate gaining a better understanding of where Stonehenge fits into a global temporal framework, exemplified by respondents 5, 26 and 53;

> "*The time period that these were built lined up with the time the pyramids were built"*

> "*the place of Stonehenge in the world's timeline*"

> *"Easter Island isn't as old as I thought it was".*

However, despite the popularity of the timeline at GNM explicitly referenced by respondents in their responses to what they most liked about the displays (table 6.12), some respondents were still unsure of the temporal context encompassed by prehistory. At WP equal numbers of respondents communicated a greater understanding of daily life yet also referenced periods that pre or post-date prehistory. It thus seems that the temporal confusion that plagued visitor responses to the first part of the questionnaire have only improved slightly after viewing and engaging with the prehistory displays at the case studies.

6.5 Summary

This Chapter has addressed the third research question of the thesis by evaluating how visitors engage with prehistory displays, focusing on the trends and variables influencing these engagements. The combined analysis of tracking data and questionnaire responses to part 2 of the questionnaire revealed visitor engagements and interests in different types of prehistory display. The analysis of these engagements through the use of heat maps and questionnaire response node categorisation facilitated the identification of display types that were more effective for engaging visitors with prehistory fulfilling the third research aim of the thesis and research objectives 3 and 4. The visitor behaviour revealed that visitors are engaged by aesthetically demanding displays involving tall cases, visible skeletal remains and

visible shiny metal objects. Respondents also expressed a strong interest in learning about daily life. However, the styles of daily life display utilised by the case studies were not viewed as effective or engaging by respondents. These cases presented domestic material such as pottery as well as lots of small dull coloured objects which respondents expressed a lack of interest in and consequently such cases garnered on average a low visitor frequency and did not meet visitor expectations as respondents left with their questions about daily life unanswered.

The analysis of how displays impacted visitor preconceptions achieved research question 3d by highlighting that visitors did gain a better understanding of prehistory from the displays across the case studies as there was very little shared understanding of the period to start with. The confusion respondents articulated when trying to place prehistory in time highlighted in Chapter 4 was, however, generally not challenged by the displays. Respondents still left confused about the temporal context of the period and what daily life was like. However, the use of timelines to provide such context was popular and effective for challenging understandings of prehistory at SVC indicating the potential usefulness of this narrative tool to challenge preconceptions and develop visitor understanding. These findings will be further discussed and situated within their broader context within the following discussion Chapter 7.

Chapter 7: Discussion

7.1 Introduction

This Chapter will review and discuss how the following research questions have been explored throughout the thesis to address the three main research aims.

1. *What preconceptions do the public have about prehistory before viewing displays?*
2. *How is prehistory presented in different types of museum across England?*
3. *How do visitors engage with prehistory displays?*

The key trends identified by the application of these research questions will be situated in relation to their wider academic and geographical context and are summarised in figure 7.1, along with some proposed suggestions to address the representational issues identified. This Chapter will draw upon additional resources which were not included in the previous analyses and exploration of the research questions. Firstly, the visitor preconceptions identified in Chapter 4 will be discussed in relation to trends revealed in previous studies of public preconceptions and in relation to curator expectations of visitor's prior knowledge. Followed by an exploration of how these preconceptions are shaped and can be challenged within the museum space. This Chapter will then summarise the prevailing trends identified in Chapter 5 that govern how prehistory is presented in museums across England based upon the 13 variables of display analysed. The expression of these trends will be compared with museum displays beyond England to assess the effectiveness of different display styles and highlight the continuity of display trends through time. Lastly, this Chapter will review the visitor engagements with different styles of prehistory display and interpretation observed in Chapter 6. How these observed behaviours fit within wider visitor studies research will be discussed and recommendations for how the effective engagement strategies identified can be incorporated into prehistory displays will be postulated.

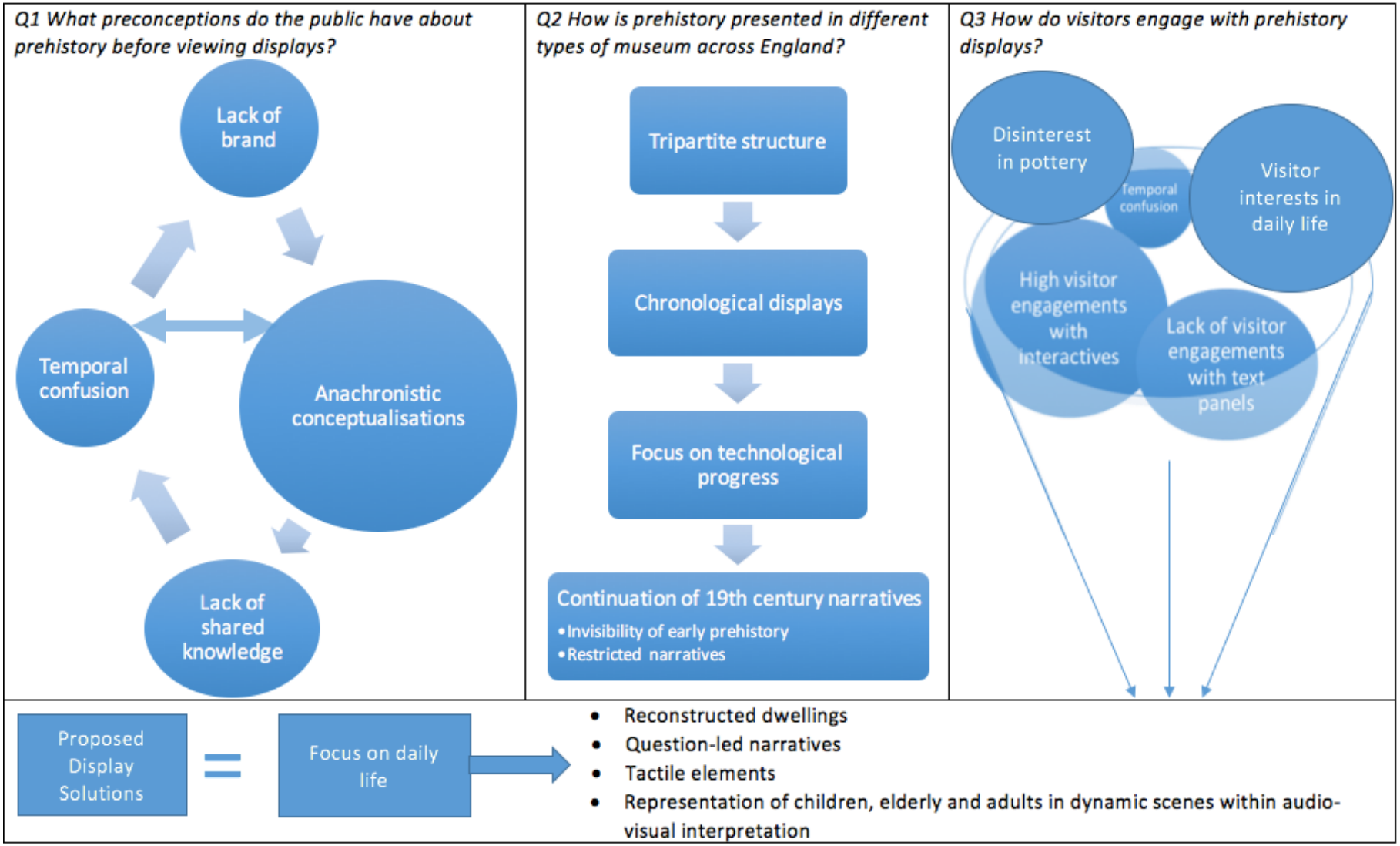


Figure 7.1. Infographic outlining the key trends identified by the application of each research question and some proposed solutions.

7.2 'Lost in temporal translation' visitor preconceptions of prehistory

Chapter 4 aimed to, *'Gain an understanding of public perceptions of prehistory'* by working towards the first research objective to *'Collect and interpret visitor pre-display understandings and interests associated with prehistory'*. This objective was successfully achieved by collating the questionnaire data into an Excel spreadsheet (Appendix E) and quantitatively analysing the qualitative data using thematic node categorisation. This Chapter was guided by the research question, '*What preconceptions do the public have about prehistory before viewing displays?* and by revealing the trends and variables governing visitor preconceptions Chapter 4 successfully achieved the first research aim of the thesis. Visitor responses captured in the first part of the questionnaire revealed the variable nature of visitor preconceptions of prehistory and generally anachronistic understandings of the period. Few respondents across the 6 case studies referenced the same sites, hominins, monument types, named individuals or objects more than once or twice in the sample of 300 respondents. The only concepts shared by respondents across the case studies was an understanding that prehistory is generally defined as pre-Roman, before the beginning of writing, is vaguely associated with pottery, the ambiguous object category of stone tools and consists of a Stone Age, Bronze Age and Iron Age. This lack of consistency in visitor pre-display preconceptions demonstrates that there is an absence of a shared language or understanding of prehistory beyond a general awareness that it is defined by a lack of written sources and can be split into three technology-based ages. Respondents, however, struggled to situate these ages chronologically in time. Such temporal confusion is perhaps reinforced by popular portrayals of prehistory in the media where different time periods are often conflated to produce an 'exotic' and compelling narrative. Even the traditional primitive caveman stereotype living contemporaneously with dinosaurs was not a pervasive concept within visitor conceptualisations of prehistory. From the visitor responses compiled it was abundantly clear that in the public imagination prehistory, unlike later periods does not have a 'brand'.

To gain an insight into curator intentions and how these align with the visitors at the case studies curators at all case studies apart from TQ[22] filled in a questionnaire about their displays and their responses can be viewed in Appendix 19. The responses from these questionnaires revealed that the lack of shared understandings demonstrated by the respondents was predicted by the curators across the case studies who expressed an awareness of the variability of visitor preconceived ideas and a perceptiveness and understanding of their different audiences. Curators at the BM and NLM even articulated that visitors probably do not have a good chronological understanding of prehistory before viewing displays and such a lack of chronological awareness was indeed pervasive within visitor responses.

7.2.1 The prehistory 'branding' issue

"Celts, man, they ain't got no brand"

The above anonymous statement was captured in a focus group undertaken by TW research for the front-end evaluation in advance of the BM '*Celts'* exhibition (Farley, 2018:6). Such a statement can, however, be extrapolated more widely to sum up the ostensible lack of visitor associations with prehistory captured by the questionnaire responses in this study. In addition, to the temporal distance that hinders the relatability of the period in the public consciousness, the lack of written records characterising prehistory that could provide well known individuals, events and dates further decreases the relatability of the period in comparison to later historical periods (Wood and Cotton, 1999:30; Pratt, 2015). Prehistory essentially suffers from a 'branding' issue. The variability of visitor responses within this study has highlighted that there are few common associations visitors share, beyond a simple definition of the period or ambiguous reference to stone tool technology or pottery. In contrast, historical periods have stronger 'brands' in the public consciousness, the Romans are associated with civilisation, military power and imperialist concepts of Empire, the

[22] Despite numerous attempts to contact Barry Chandler the Curator of Torquay Museum post-data collection I was unsuccessful in receiving a response or completed curator questionnaire from him.

Anglo-Saxons are associated with Kingdoms and Christianity, the Medieval Period with castles, churches and monarchies and the twentieth century with war and nostalgia (Wood and Cotton, 1999:29). Yet there is no clear 'brand' associated with prehistory that encapsulates the diversity of the material culture and lifestyles encompassed by the 1 million years of British prehistory. Trying to reduce such a long period into a singular homogenised 'brand' with a widely popularised associated repertoire of material culture, named individuals and key events is a challenging task. However, if museums want their displays to engage more effectively and be more relevant it is a challenge that needs to be faced.

The branding issue that prehistory embodies is further exacerbated by the language and terminology used to describe it. The word '**pre**history' itself serves to reinforce the varied preconceived ideas of a temporally distant and unrelatable past **pre**ceding major social and technological advancements. Museums can thus play a pivotal role in subverting these preconceived views, particularly in how they choose to title their prehistory displays. The use of certain words that are more linguistically intriguing such as 'deep past' could invoke a more compelling image of prehistory altering visitor expectations. The terminology and phrasing used can greatly influence the perceived relatability of the period and visitor pre-display expectations and this was emphasised in section 5.4.1. The name of the prehistory gallery that visitors are faced with can either captivate visitor interests and attention directly connecting prehistory to their identity and invoking a sense of ownership over their past or it can be perceived as distant, irrelevant and primitive. Possible alternatives for naming prehistory galleries and displays should therefore be carefully constructed so as to both engage the visitor and relate them to familiar concepts without romanticising or 'exoticising' the period. Thus to create such a title would require concept testing different phrases and terms with target audiences to measure their visitor appeal.

In addition to critically reflecting on gallery titles, the terminology employed to structure the chronology of prehistory displays should also be critically reviewed. The reductive Three Age system that has been critiqued by scholars for decades still haunts prehistory displays and remains widely accessible in the public imagination.

Visitors, however, do not know how these 'Ages' are chronologically situated and this unfamiliarity offers an opportunity for museums to move away from this outdated language and seek linguistic alternatives. Now that these 'Ages' have also become embedded within the national curriculum for KS2 children in England such an overhaul of language may, however, promote greater temporal confusion, particularly for school groups that are increasingly utilising museums as an educational resource. The compelling possibilities of developing the chronological structure of prehistory displays outside of the conventional Three Age system has been demonstrated by the gallery names employed at the newly opened prehistory displays at Moesgaard Museum, Denmark. The hominins along the stairs that introduce human evolution are referred to as '*Meet the family'*, whilst the Bronze Age is referred to rather imaginatively as *'People of the sun'* and the Iron Age as '*At the edge of the bog'*, framing the chronological context around changes in beliefs rather than technology invoking a more spiritual and romanticised vision of the past. Similarly, the National Museum of Ireland frames the Iron Age bog bodies within a ritual context in the gallery '*Kingship and Sacrifice*'. These names are compelling and intriguing but are by no means perfect, invoking ambiguous notions of 'ritual' and presenting a more 'exoticised' version of prehistory. These names do, however, illustrate how displays can move away from the Three Age system for temporally structuring displays. It is very important to give visitors a coherent chronological context as highlighted in Chapters 4 and 6 and the lack of visitor familiarity with the Three Age system enables museums to create this without restricting their narratives to a reductive focus on technology. How then can museums move beyond technology-driven narratives if their collections are primarily composed of prehistoric technology? Firstly, framing the content of displays with compelling titles outside of the reductive tripartite structure requires museums to seek alternative terms to frame the period and establish an accessible and widely recognised 'brand'. Prehistory could be framed around a diversity of themes such as '*Origins', 'What made us human?', 'Living in a changing environment*' or more provocatively and humorously framed around '*Only BC kids will remember this…*' or '*What did prehistory ever do for us?*'. To develop compelling terminology requires testing possible alternatives with different segments of the public in front-end evaluation to

gauge public associations and familiarity with different words. Furthermore, to develop narratives beyond technology and technology-focused collections requires the narrative focus to shift away from 'production' to 'use' and requires the utilisation of other forms of interpretation to supplement collections, which will be further discussed in section 7.3.2.

The lack of shared conceptions demonstrated between respondents also highlights that despite the current toxic political climate emphasised in section 1.2.2, concepts of 'Britishness' and contemporary identity politics related to prehistory were not apparent within responses. For example, despite the well-publicised skin colour of Cheddar Man within the media during the period of data collection (Frieman and Hofmann, 2019), no responses articulated concepts related to race or indigeneity. Yet, the politicisation of prehistory is increasingly plaguing archaeologists fuelling debates over how we engage with the public about prehistory, most recently highlighted by Barclay and Brophy (2020). These issues were not, however, visible within the analysis of visitor preconceptions in Chapter 4. It appears that certain aspects of contemporary academic debate do not seem to be as prevalent as certain academics believe. The topics archaeologists and curators are preoccupied with do not necessarily align with the public and this will be further discussed in relation to visitor conceptions of human remains on display in section 7.4.2.

7.2.2 Anachronistic understandings of prehistory

The lack of shared understanding between respondents highlighted in Chapter 4 resulted in rather anachronistic conceptualisations of the period. These temporally confused responses further illustrate the lack of a recognisable 'brand' associated with prehistory and respondent's difficulty placing the period in their understanding of chronology. Previous research into public understandings of prehistory has been very limited, as emphasised in section 2.2 and so it is difficult to compare the results of my research with previous studies. The most comparable study was undertaken by Wood and Cotton (1999) but it was conducted in 1992 and only with respondents at the MoL so represents a rather restricted data set that may not reflect

contemporary attitudes and understandings. Wood and Cotton (1999) also highlighted the variability of visitor pre-display preconceptions of prehistory, further demonstrated by this study but they also emphasised that many visitors associated the period with dinosaurs and cavemen. These associations were rarely made by respondents across the 6 case studies and indicates a shift away from the well-established 'primitive caveman stereotype' in which people are believed to have lived alongside dinosaurs. Intriguingly most of the curators at the case study museums believed that visitors would still associate prehistory with cavemen and dinosaurs, in line with Wood and Cotton's (1999) findings. Furthermore, all of the curators (Appendix 19) indicated that 'Stonehenge' would be a familiar prehistoric site within the public consciousness and this site although the most represented within the sample of 300 respondents, was only referenced by 7% of the respondents. Yet other prehistoric sites, groups and named burials that the curators believed would also be popular within the popular imagination such as the 'Amesbury Archer', 'Skara Brae', 'Boudica' and 'the Celts' were rarely if at all referenced. Further reinforcing that prehistory suffers from a lack of recognisable 'brand' identity. Despite curator expectations that certain key concepts, sites or stereotypes would be familiar within the public consciousness the respondents across the case studies clearly demonstrated that no such familiarity exists. Furthermore, the lack of preconceptions also emphasises that public preconceptions are not influenced by classical sources. Visitors although generally from a more educated background and interested in history (DCMS, 2019) do not associate the Iron Age with Roman ideas of a Celtic people and they do not associate the Bronze Age with Homeric texts. These concepts although thought to be embedded within public preconceptions are irrelevant to them and are only central to academic debates. This was highlighted by the front-end evaluation undertaken for the BM 'Celts' exhibition which also highlighted that these perceptions about the Celts that the exhibition sought to debunk and deconstruct did not even exist.

Perhaps the lack of recognisable 'brand' associated with prehistory is partly related to the names given to prehistoric sites and monuments that are rather alien within the public consciousness in comparison to familiar names of Medieval castles named

after recognisable locations. Yet, the lack of visitor familiarity with some of the key concepts of prehistory is still surprising considering the exposure prehistory receives in the media and resulting public interest as demonstrated by the viewing statistics for two recent television documentaries, '*Britain's ancient capital: secrets of Orkney'* (2017) which attracted 3 million viewers and '*The Celts: blood, iron, and sacrifice*' (2015) which attracted nearly 2 million viewers per episode (B.A.R.B, 2020). There is clearly widespread public interest in both of these topics related to prehistory, yet they are not commonly associated with the term 'prehistory' due to the chronological confusion respondents encounter attempting to differentiate what aspects of their knowledge relate to prehistory. This was further illustrated by Bonacchi *et al's* (2018) analysis of social media posts that identified that the 'Celts' are often referenced in posts but they are often perceived as a more modern group existing chronologically later in time. The lack of references to the 'Celts' in my survey, however, clearly demonstrates that they are not widely viewed as prehistoric. There is thus a disjuncture between the perceived popularity of certain aspects of prehistory within the public imagination and visitor associations with prehistory. The chronological confusion expressed by respondents in combination with visitor unfamiliarity with key terms and concepts restricts any potential anchors that curators might use to frame their prehistory displays and engage the visitor.

The temporal confusion exhibited by respondents appears to be influenced in part by popular representations of prehistory in film and television, outside of documentaries. Anachronistic portrayals of both factual and fictional prehistoric events have produced high-profile blockbuster television series and films. Most notably the Sky Atlantic TV series '*Britannia*' that began airing in January 2018 and the 2008 blockbuster film '*10,000 BC'*. Britannia was championed as a 'Game of Thrones-eque' portrayal of the invasion of Britain by the Romans yet represented Celtic druids prancing over a Stonehenge-type structure where ritual sacrifices were carried out. Reinforcing the problematic and antiquated association between Stonehenge and a poorly defined and understood group of religious practitioners active 1000s of years after the structure was built. The film '*10,000 BC'* presents a fictionalised tale set within a hodgepodge of unrelated geographical and temporal

contexts (Milner *at al.*, 2015; Henson, 2016). Despite the title of the film indicating that it is set within the Mesolithic, it focuses on a group of scantily-clad hunter-gatherers living in a cold tundra environment who hunt mammoths, a narrative better suited to a simplistic representation of the Palaeolithic. These hunters are then kidnapped by metal wielding warriors who ride around on domesticated horses and come from a pyramid-building society that have a complex farming-based economy that rely on mammoths (mammals that were extinct by the Mesolithic) to aid construction of pyramids, a type of structure that post-dates the Mesolithic. Considering the fictionalised representations of prehistory in films and television it is perhaps not surprising that respondents across the case studies from different demographic backgrounds referenced 'mammoths' in association with 'the pyramids', as well as other similarly anachronistic conceptions in their prehistory-focused responses. After all, most encounters with prehistory outside of the museum are primarily through derogatory memes on social media or hybridised representations of prehistory in film and television, where it appears that certain temporally distant concepts that are assumed to be popular within the public imagination are mixed together to engage the viewer's attention. Similar hybridised understandings of prehistory were identified by Taylor (2008:2) and observed in Högberg's (2007) study of Swedish children's understanding of the Iron Age which was often conflated with elements of Viking mythology. Television documentaries about prehistory although apparently popular with the public - attested to by high viewing statistics and illustrated in figure 4.3- do not appear to subvert these more prevalent anachronistic understandings of prehistory in the public imagination.

The hybridised versions of prehistory presented in the media serve to represent prehistory as the 'Other', emphasising the differences between life today and life in prehistory (Moser, 1998:172). Accentuating these differences widens the gulf between people today and in prehistory communicating an 'us' and 'them' dichotomy. This dichotomy of opposition 'exoticises' the period alienating the lives and practices of prehistoric people, reminiscent of the colonial Orientalist discourse that framed Eastern cultures in opposition to Western cultures (Said, 1978). The influence of this discourse on public perceptions of prehistory has previously been

identified by Merriman (1999) in his survey of public attitudes towards the past in Britain. His survey explicitly asked respondents whether they believed that prehistoric people were just like them and he identified that 51% of respondents disagreed, while only 38% agreed (Merriman, 1999:101). Respondents to Merriman's survey also ranked prehistory as the least desirable period to live in, further demonstrating the lack of connection that the majority of the public felt towards the period (Merriman, 1999:34). This survey was carried out with a much wider demographic of both museum visitors and non-visitors over 25 years ago but the public attitudes towards prehistory captured in Merriman's landmark survey, as evidenced by my questionnaire do not appear to have substantially changed. It still seems that the temporal distance between us and prehistory identified by Wood and Cotton (1999:30) and Pratt (2015:60) acts as both a chronological and conceptual barrier preventing people from relating to the period. This 'exoticisation' of prehistory can be further exacerbated by the use of ethnographic comparisons within prehistory displays. Visitors as highlighted in Chapter 6, do not read text panels explaining the use of ethnographic comparisons so this material is viewed as synonymous with prehistoric material and problematically conveys to the visitor that contemporary hunter-gathers are stuck in a Stone Age existence. This style of display within the 173 museums analysed was, however, very infrequent and only present within 1 of the case study museums, at TQ. There were no visitor responses to the grass cape from the museum's Japanese collections as visitors did not distinguish the cape as non-prehistoric. One visitor even proclaimed astonishment that they were in the prehistory gallery as they thought they were in an African gallery, highlighting the issues that ethnographic material can create when included within prehistory displays.

7.2.3 'Strange but familiar' visitor interests in prehistory

To identify how museums can best cater towards the interests and expectations of their visitors, respondent's interests were analysed across the case studies in Chapter 4 to address research question 1c, '*What do they find most/ least interesting about the concept of prehistory?*'. This analysis revealed that the majority of respondents

expressed a strong interest in learning about the daily lives of people in the past. Visitor interests in people like themselves are unsurprising considering the relatability of such content which can enhance the accessibility and relevance of temporally distant prehistoric people and practices. This visitor interest in learning about daily life in prehistory was also identified in previous studies of public interests (Stone, 1994; Wood and Cotton, 1999), as discussed in section 2.2.3, indicating a continuity of interest through time that transcends demographic background. Visitor interests in people like themselves are unsurprising considering the relatability of such content. Yet this interest appears to rarely be met by current displays of domestic and everyday objects as revealed through the analysis of visitor engagements with prehistory displays in Chapter 6. It is clear that the generic questions about day to day life in prehistory are not being satisfactorily presented within contemporary museum displays. Some suggestions for how these elements can be better accommodated within prehistory displays are further explored in section 7.3.2.

Respondents also expressed a strong interest in learning about human evolution, the skill of past people and contemporary animals. Many respondents also expressed an interest in the mystery of the period which is often reinforced in prehistory displays across England through the conflation of prehistory with archaeology, an issue previously highlighted by Wood and Cotton (1999) in their brief discussion of prehistory museum displays of the 1990s. The lack of documentary evidence that characterises prehistory of course entails a greater reliance on the interpretation of the archaeological evidence. Intriguingly visitors often perceive this process of archaeological interpretation as exploratory rather than explanatory. This ambiguity of interpretation is then either viewed as an exciting process of discovery exploring the mystery of prehistory or viewed with scepticism as mere conjecture with little supporting evidence. Thus visitor engagements with prehistory displays are dependant on how this ambiguity of interpretation is framed within museum displays. Very few museums have, however, capitalised on these interests by evoking the innate mystery of prehistoric objects in their displays. Such a focus can provide museums with the opportunity to open up dialogue with the visitor inviting them to

provide their own interpretation and directly engage their curiosity. This framing is illustrated by the presentation of Neolithic carved stone objects at the Skara Brae Visitor Centre (figure 7.2) and a Neolithic wooden object in Tullie House Museum (figure 7.3). These displays demonstrate how museums can cater towards visitor interests in the mystery of prehistory without over-exoticising the period by placing undue emphasis on the dustbin term 'ritual' or undermining the academic integrity of the displays.

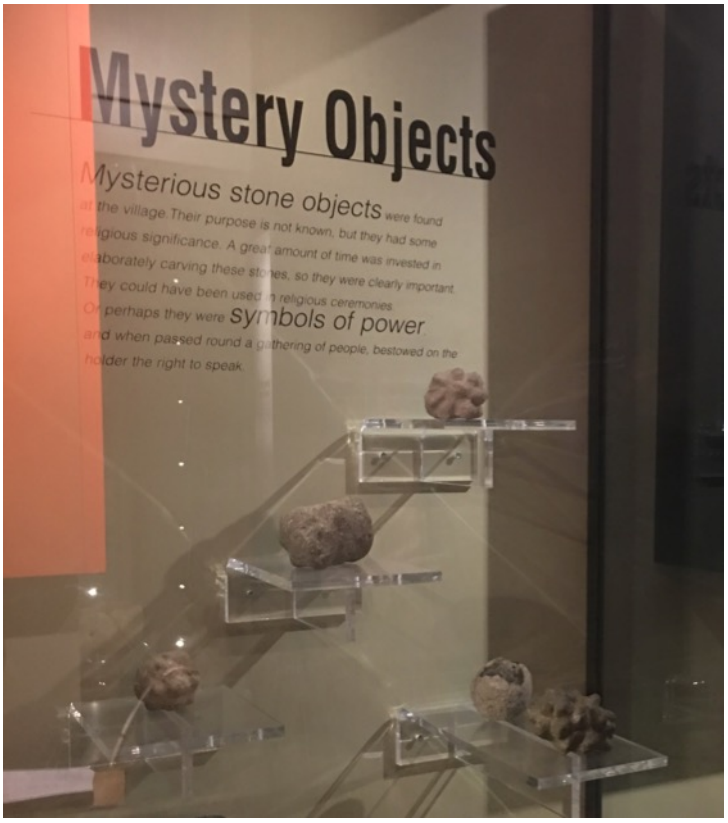


Figure 7.2. Photograph of the 'Mystery objects' case in the Skara brae Visitor Centre (McDowall, 2017).

Figure 7.3. Photograph of the ambiguous interpretation associated with the wooden 'tridents' on display at Tullie House Museum (McDowall, 2019).

7.3 'Entombed in static isolation' the representation of prehistory in museum displays across England

In Chapter 5 the comparative analysis of the 13 variables of display across the 173 museums recorded fulfilled the second research aim of the thesis *to 'Identify common themes and trends in how prehistory is presented through displays in diverse museums across England'.* This research aim was achieved by fulfilling the second research objective to *'Produce and analyse a comprehensive database of prehistory displays in England'.* The 13 variables of display were recorded for the broad data set of 173 museums in a spreadsheet of museum visits (Appendix B), which enabled the quantitative comparison of these display variables across different types and sizes of museum. Guided by the second research question, *'How is prehistory presented in different types of museum across England?'* the comparison of display variables highlighted key trends influencing the representation of prehistory in museums

across England. Overall three prevalent frameworks for contextualising prehistoric material culture and facilitating its interpretation within displays were recognised. It was found that museums either frame prehistory with a focus on people, landscape or archaeology or a combination of these elements which are reinforced through the selection and use of certain audio-visuals, textual interpretation, the presentation of human remains, representation of gender, material on display and colour schemes employed in displays.

This study represents the first visual analysis of museum displays utilising so many variables of display and such a large data set. Tully (2010:196) and Moser's (2006:3) previous analyses of Egyptian museum displays restricted their focus to between 6 and 9 display variables and a much smaller sample of museums, only one museum in Moser's study and 4 museums in Tully's (2010) study. It is difficult to extrapolate broad trends from such a restricted data set and consequently I recorded 173 museum displays (Appendix B). Furthermore, it was essential to record all 13 variables of display to record displays in enough objective detail to gain an in-depth insight into display trends across such a broad spectrum of museum types and sizes. These variables when analysed together in Chapter 5 revealed the variety of ways that prehistory can be displayed. There were, however, certain styles favoured above others that were more prominent in museum displays across England. The prevailing trends in how these variables are expressed in prehistory displays are presented in table 7.1, as it is the combination of these variables and how they are expressed that dictate the overall visual impression of prehistory that is communicated to museum visitors.

Variable	Trend
1 Name of displays	1. Archaeology/ history of local area 2. Prehistory explicitly 3. Prehistory implicitly
2 Age of display	➢ Last 10 years
3 Amount on display	➢ 1 case or less
4 Types of material on display	1. Stone tools 2. Pottery 3. Stone/ Base metal weaponry
5 Colour scheme	White or Grey or Yellowy/ Beige walls White or Grey or Black backing
6 Types of lighting	➢ Artificial in-case
7 Display furniture	➢ Recreating organic shafts ➢ Organic materials and lithics as backing
8 Spatial relationships between objects	➢ Low-Medium density of displays ➢ Well-spaced apart by a few cms
9 Text panels	➢ 5 or less ➢ Period-specific
10 Additional interpretation	1. Photographs of objects, sites or landscapes 2. Paintings of people or sites 3. Illustrations of objects, people or sites 4. Maps 5. Tactile interactives 6. Booklets with additional information
11 Representation of gender	➢ Women not often present ➢ Stereotyped gender roles
12 Presentation of human remains	➢ Easily visible ➢ Some-lots of associated context ➢ Associated with grave goods or unrelated objects 1. Skulls 2. Disarticulated remains 3. Fully articulated remains
13 Overarching narratives of displays	1. Chronological 2. Archaeological

Table 7.1. Summary of the prevalent trends associated with each variable of display from the analysis of the 173 prehistory displays.

It was recognised in section 5.4.2 that the majority of prehistory displays analysed have been substantially re-furbished and updated in the past 10 years, often as a result of successful bids to the NLHF. This charitable organisation has transformed the museological landscape in England and facilitated the development of many prehistory displays, particularly in the wake of the curriculum change in England (Department of Education, 2013). It was not, however, feasible to fully assess the influence of the curriculum change on the applications for NLHF funds within the thesis but anecdotally many museum curators have attested to the effect of the curriculum change on museum re-display projects. There have been several large-scale re-display projects in recent years including the re-display at Wiltshire Museum funded by NLHF for £500,000 (Wiltshire Museum, 2020), new human evolution gallery at the Natural History Museum (NHM, 2015), the re-development at Brighton Museum (part funded by Arts Council England) and the ongoing redevelopments of Corinium Museum's prehistory displays for £1.87 million (Corinium Museum, 2020) and Dorset County Museum's displays for £15.3 million supported by the NHLF (Dorset County Museum, 2020). These projects although perceived as rather expensive, are on a different scale to their European counterparts. Most notably the redevelopment of the traditional Musée de l'Homme, France for €92 million (Lebovics and Boëtsch, 2018) which also resulted in the creation of a new museum telling the story of European civilisation for €191 million (Moore, 2013), the recent re-opening of Moesgaard Museum, Denmark for £47 million (Price, 2015) and investment in Halle State Museum of prehistory (Roberts, 2020). The only comparable recent large-scale investment of funds within Britain was expended on the transfer of archaeological collections to St Fagans National History of Wales (St Fagans), which opened in 2018 at a cost of £30 million (Morris, 2018). This project, however, was rather exceptional, museums in Britain rarely receive the same level of investment as European redevelopment projects highlighting the general greater scale of investment in certain European prehistory displays. Furthermore, although it was not within the scope of the thesis to evaluate the influence of this differential application of funds these greater investments in European museums clearly indicate a greater value placed upon the past outside of England. However, as illustrated by the lack of visitor engagements at the BM identified in section 6.3.1, a greater

investment and perceived 'quality' of objects on display does not necessarily equate to greater, more engaging displays. Low-technology approaches, the quality of interpretation and catering towards visitor interests, as will be further discussed in section 7.4.2, appears to produce a greater impact on visitor engagements than the quality of objects or funding opportunities at an institution. Although the combination of all of these factors can, as observed at SVC produce displays with high visitor dwell times and interactions.

7.3.1 The continuity of prehistory display narratives

The overarching narratives of prehistory displays continue to contextually situate displays within the temporal framework of the Three Age system that as emphasised in section 7.2.1 does not mean very much to the public. Museums utilising this tripartite framework to structure the contents of displays within a linear chronological narrative focused on changes in tool technology, explicitly communicates a traditional narrative of 'progress'. The narrative trend of technological process through time that is prevalent in most museums across England can be traced back to the origins of both prehistory as a discipline and museum displays. It has previously been recognised by Wood and Cotton (1999) in museum displays of the 1990s and more recently by Ballard (2007) and Bünz (2012). Yet this traditional didactic narrative is still prevalent within contemporary museum displays as highlighted in Chapter 5. Few museums deviate from this linear narrative of progress, highlighting that although most contemporary displays have been updated in the past 10 years, traditional Victorian narratives of 'progress' are still firmly embedded in the interpretation of prehistory.

The narratives of progress and continued reliance on the Three Age system stem from the 19th century origins of prehistory as a discipline and early archaeological displays focused on socio-cultural evolutionist narratives of technological change (Bennett, 2004). This display style is still preserved in the Pitt Rivers Museum (figure 7.4) and several civic museums in the Emilia-Romagna region of Italy which have re-displayed their prehistoric material in displays reminiscent of their 19th century

origins (Cova, 2010:299) (figure 7.5). These displays retain the distinctive evolutionary and typological display style of the 19th century within original cases from the period (Hicks and Stevenson, 2013; Trigger, 2008; Cova, 2010).

Figure 7.4. Photograph of one of the typological displays characteristic of the evolutionary display style of the Pitt Rivers Museum (McDowall, 2017).

Figure 7.5. Photograph of the archaeology display in Museo Civico Archeologico Etnologico, Italy which was reconstructed in the late 1980s to reflect the 19th century origins of the museum (Cova, 2010:302).

To highlight how contemporary displays are shaped by past display styles and trends I attempted to reconstruct a history of prehistory displays. Unfortunately, however, there are no comprehensive historiographies of prehistory displays in England. It was also not possible to synthesise one due to a lack of publically accessible and detailed museum archives in combination with the uniqueness of each museum with its own trajectory. There are, however, historiographies that have been published which focus on the history of prehistory collections (Skeates, 2000; Leckie, 2011; Harris *et al.,* 2019), the origins of museums up until the 20th century (Schubert, 2000; Bennett, 2004; Arnold, 2006), the development of particular institutions (Caygill, 1992; Hicks and Stevenson, 2013) and the evolution of prehistoric archaeology as a discipline (Trigger, 2008), that make passing references to prehistory displays but these are not detailed or comprehensive enough to reconstruct a complete history. Thus it is difficult to interpret how changes within archaeological practice and theory were reflected in prehistory displays apart from a very generalised understanding that displays in the early 20th century were cluttered and arranged typologically, whilst displays in the 1960s/ 70s were influenced by the radiocarbon dating revolution and interpretive power of experimental archaeology. The influence of experimental archaeology on prehistory interpretation is nicely illustrated by this photograph (figure 7.6) from Bristol Museum's 1960s prehistory display and is still apparent in museums today.

Figure 7.6. Photograph of a man using a reconstructed Mesolithic bow with a distinctly 1960s haircut. This photo was part of Bristol Museum's prehistory displays until they were taken down in 2007 (Boyle, 2017).

Therefore, due to the lack of readily accessible historiographical information about the history of prehistory displays it was not within the scope of the thesis to attempt to reconstruct such a history, as it would require detailed research in various museum archives. Furthermore, due to the nature of how museums develop and change, and record these changes it is impossible to produce a comprehensive history without being reductive, homogenising display trends. Thus it was only feasible to chart a brief history of prehistory displays at the case study museums, provided in Appendix 2.

It is possible to recognise the continuous presence of traditional narratives within contemporary museum displays, despite the unfeasibility of reconstructing a history of prehistory display trends. Even though as highlighted in section 5.4.2 most museums have recently updated their prehistory displays they still utilise traditional narratives of tool based evolution and progress structured around the tripartite system and continue to represent men and women in outdated and unsubstantiated stereotyped gender roles. The continuous presence of these aspects further illustrates the static nature of prehistory museum displays. Additionally, the continuity of this linear technology focused narrative still preserved within contemporary museum displays serves to disproportionately restrict the representation of the earlier Palaeolithic and Mesolithic, defining these periods solely by durable stone technology. It was only by analysing the variables of display recorded that these persistent trends could be identified and could act as indicators of progress for the representation of prehistory. If men and women continue to be presented in stereotyped roles and narratives of prehistory continue to exclusively focus on technology in prehistory displays then it appears no progress has been made. However, if this representational gender imbalance is addressed and a greater diversity of narratives are presented in future museum displays this would clearly indicate progress. Already, it seems that progress has been made in regards to public preconceptions which have changed dramatically from the 'primitive caveman living contemporaneously with dinosaurs' stereotype recognised by Wood and Cotton (1999) in the 1990s.

The reductive technology-driven narrative that characterises contemporary prehistory displays is reinforced by the popularity of utilising chronological frameworks. Such displays are utilised to situate the visitor within the temporal context of prehistory which as identified in Chapter 4 is pivotal for enhancing visitor understanding and familiarity with the period. Curators are very conscious about creating chronologically coherent prehistory displays and consequently few museums have deviated from this technology focused narrative that has defined prehistory displays for over the past 100 years. Intriguingly of the small minority of museums that choose to structure their prehistory displays exclusively thematically,

devoid of temporal context there is a tendency for these displays to still associate the period with technological developments, as exemplified by the displays at the National Museum of Scotland (NMS) and St Fagans. Both of these museums structure their prehistory displays thematically around crafting and creating in multi-period displays. The NMS displays were devised by David Clarke and opened in 1998 (Ascherson, 2000; Clarke, 2000; Sheridan, 2016) presenting prehistoric material culture alongside Roman and Viking material culture within themes such as *'Working wood', 'Shaping stone*' and *'Weaving and winding'*. Similarly, St Fagans is also structured thematically with one gallery divided by material-type also focused on production and crafting called '*Gweithdy…The workshop…*' where prehistoric objects are presented alongside objects from later time periods. Additionally, another thematic gallery *'Cymru…Wales is…'* takes a different, more nationalistic approach, presenting internationally important prehistoric finds such as the Bronze Age Caergwrle bowl and Neanderthal teeth from Pontnewydd Cave alongside later historic material and several politically motivated interactives questioning contemporary Welsh cultural identity. Visitors are asked politically provocative questions such as; '*Should Wales be completely independent?*' and *'Does it matter if the Welsh language dies?'*, whilst a shared Welsh heritage from prehistory to present is explicitly communicated by a slideshow of iconic objects from the museum's collections (figure 7.7). Prehistory presented within this context is utilised to support a nationalistic agenda where the past is politicised and used to provide legitimacy for a Welsh national identity that transcends time. In contrast, at the NMS despite the recent increase in nationalist sentiments as a result of the independence referendum, this discourse does not enter the museum space as Clarke explicitly did not want to make any Nationalist concessions in the presentation of prehistory within the NMS (Ascherson, 2000; Clarke, 2000). Whether either of these thematic approaches demonstrated at the NMS and St Fagans are successful at engaging visitors would, however, need to be ascertained through summative evaluation.

Figure 7.7. Photograph of the photo montage projected onto the wall at the entrance to the 'Wales is…' gallery at St Fagans Museum where a political poster is juxtaposed with images of the museum's prehistoric collections including a Neolithic skull (McDowall, 2019).

The majority of previous scholarship addressing the representation of prehistory in museums has tended to either focus on the representation of gender or the use of dioramas and reconstructive models in prehistory displays (Gifford-Gonzalez, 1993; Porter, 1995; Butler, 1996; Cook, 1996; Wood, 1996; James, 1999; Moser, 1999; Sørensen, 1999). The static nature of such models were widely critiqued for communicating the same suite of outdated gender stereotypes and tropes through time from the first models employed in world fairs of the late 19th and early 20th century to their pervasive use in museum displays throughout the 20th century (Moser, 1999). Chapter 5, however, revealed that although gender is still represented in stereotyped roles in prehistory displays the use of dioramas and reconstructive models for depicting people are rarely present in contemporary museum displays in England. Museums are perhaps wary of depicting gender exemplified by the apparent reticence of museums within the sample analysed to depict people in displays with only 49% of museums depicting people in their audio-visual interpretation. Of the 75 museums that did depict people they predominantly

utilised paintings and illustrations to present scenes of prehistoric life that either neglected to depict women altogether or presented them in exclusive association with the domestic sphere, often in the background enhancing their 'invisibility'. Unusually, even new displays often proclaiming to address the gender binary imbalance continue to perpetuate the same 1950s housewife tropes, as exemplified by the recent redevelopment of prehistory displays and their associated interpretation at Tullie House Museum, in Carlisle. The curator overseeing the project informed the audience at the Northern Prehistory Conference in 2019, hosted at the museum that to try and combat the misrepresentation of gender in prehistory they had been very careful in how they represented men and women in the new Iron Age domestic scene they had commissioned. I was, however, surprised given this introduction that the scene commissioned (figure 7.8), exemplified the stereotyped gender roles of women as child carer and textile maker while the men sit around eating and engaging in social activities that are not afforded to women. Women may be present in this scene but as highlighted by Moser (1999) and Ballard (2007:173) their presence does not decrease their invisibility if they continue to be presented in these roles perceived as peripheral.

Figure 7.8. Photograph of new visual at Tullie House Museum in which women are still presented in stereotyped gender roles (McDowall, 2019).

The use of dioramas and reconstructive models as forms of interpretation, are quite pervasive within prehistory displays more widely in Europe. These reconstructions, however, rarely conform to the outdated 'primitive caveman' trope and typically present the symbolic and complex behaviours of early humans, particularly the production of art. These more 'progressive' reconstructions facilitate the incorporation of more person-centric narratives within the museum space and broaden the narratives associated with earlier prehistory beyond the production of stone tool technology. Early humans are no longer depicted as hairy hunched over savages bearing a wooden club. They are more often depicted wearing items of personal ornamentation, pigment and clothing, as exemplified by a recreated cave art scene in the Museu Arquelogic de Catalunya (MAC) (figure 7.9), the feature display of reconstructed Neanderthals in Gibraltar National Museum (figure 7.10)

and recreated Palaeolithic hominins by the French sculptor Elisabeth Daynès at the Musée National de Préhistoire (MNP) (figure 7.11). These recent reconstructions more accurately reflect the abundance of archaeological evidence for personal ornamentation and art production attributed to early humans over the past twenty years (Chase and Dibble, 1987; Bahn, 1998; McBreaty and Brooks, 2000; D' Errico, 2003; Henshilwood and Marean, 2003; Zilhão, 2007; Abadía and Morales, 2010; Barnard, 2012; Finlayson *et al.,* 2012; Hoffmann *et al.,* 2018).

Top Left; Figure 7.9. Photograph of humans creating cave art in the Museu Arquelogic de Catalunya (McDowall, 2018).

Top right; Figure 7.10. Photograph of the Neanderthal woman and child reconstructed by the Kennis Brothers on display at the National Museum of Gibraltar (McDowall, 2018).

Bottom left; Figure 7.11. Photograph of a Neanderthal man and child reconstructed by Elisabeth Daynès on display at Musée National de Préhistoire (McDowall, 2019).

Men and women continue to be depicted in traditional binary stereotyped gender roles, despite the more diverse narratives conveyed by reconstructions in European museums. Women are rarely present and in the few museums that do present women in depictions of prehistory they tend to be presented in the usual domestic stereotyped roles as exemplified by figure 7.12, where a semi-naked Palaeolithic woman is depicted pregnant stood at the side of a reconstructed domestic scene acting as a symbol of fertility, or women are depicted in domestic settings crafting textiles and grinding grain with their faces barely visible as illustrated by figures 7.13 and 7.14. Even in new displays that make a conscious effort to challenge these tropes such as Madrid's Museo Arquelógico Nacional that intentionally employed a feminist artist to create an illustration of a Neolithic woman (Tully, 2017) the resulting image recycled the usual gendered aesthetics (figure 7.15). The woman is depicted in a highly sexualised position, semi-naked on all fours within a stereotypical domestic role with a passive facial expression, devoid of agency. In comparison to museum displays in England, however, linguistically androcentric narratives are more pervasive in European prehistory displays where interpretation utilises more explicit references to 'man' and 'mankind'. This trend is exemplified by the rebranding of the Musée de l'Homme which despite concerns over the ambiguity of the pronoun 'Homme' kept its antiquated and ambiguously androcentric title often translated as the 'Museum of Mankind' (Lebovics and Boëtsch, 2018:106-7, see www.museedelhomme.fr/en).

Top Left; Figure 7.12. Photograph of a semi-naked pregnant woman inside a reconstructed domestic scene at the Abri du Cap Blanc visitor centre, France (McDowall, 2019).

Top Right; Figure 7.13. Photograph of a Neolithic woman grinding grain at Museo di Storia Naturale del Mediterraneo, Italy (McDowall, 2018).

Bottom Right; Figure 7.14. Photograph of a Neolithic woman using a loom in the domestic setting of a roundhouse at Museo di Storia Naturale del Mediterraneo, Italy (McDowall, 2018).

Figure 7.15. Illustration on a text panel in the recently re-furbished Museo Arquelógico Nacional, Spain depicting a prehistoric woman grinding grain in a highly sexualised and stereotyped role (Tully, 2017).

Removing explicit depictions of men or women from prehistory displays will not address these issues as visitors will continue to read displays in relation to their own preconceived ideas of gendered task division or associations of certain genders with particular types of material culture. Furthermore, in addition to the issues presenting women and men that have been highlighted, similar arguments can also be made for the representation of children, the elderly and the disabled. All of these groups suffer from invisibility within prehistory displays despite their presence in the past and visitor interest in seeing people like them within museum displays, emphasised in section 7.2.3. To accommodate more democratic and nuanced representations of these groups is not difficult, it simply requires critical reflexive approaches to creating images, as well as explicit conversations about their inclusion between the curators and the designers/ illustrators. Simply presenting women in only active roles and men in only passive roles would also misrepresent the past and lead visitors to question the credibility of these depictions that challenge their assumptions. It is possible to represent gender and present a more nuanced view of prehistoric

activities where men and women are equally engaged in social, symbolic and domestic roles, as illustrated by the reconstructed image depicting a family working together seen in the Brú na Bóinne Visitor Centre, Ireland (figure 7.16).

Figure 7.16. Photograph of a Neolithic family scene at Brú na Bóinne Visitor Centre (McDowall, 2018).

7.3.2 The future of prehistory displays

Going forward the representation of gender should be used as an indicator of progress within the representation of prehistory. The continued recycling of outdated gender stereotypes clearly indicates a lack of progress from displays critiqued in the 1990s but if more nuanced representations of gender roles were presented in future displays it would clearly illustrate progress. Another indicator of progress could be the representation of prehistoric periods, as the current invisibility of the Stone Age can be attributed to the restricted linear narratives of technology perpetuated by the tripartite system that reduce these periods to 'stone and bone' (Pratt, 2015:60). In juxtaposition to the representation of early prehistory, the Bronze and Iron Ages are associated with a greater diversity of material culture often imbued with greater symbolic capital and utilised to convey the greater technological sophistication of craftspeople. 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. Earlier prehistory continues to be 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 is often restricted due to regional differences to a few de-contextualised lithics that in combination with the narrative focus on tool technology dictated by the tripartite structure presents a didactic and modernist narrative homogenising the diversity of Stone Age culture, simultaneously decreasing the relatability and enhancing the invisibility of our deepest past.

Very rarely are decorative or 'symbolic' objects presented in Palaeolithic or Mesolithic displays despite their presence in the archaeological record. Some museums, do possess collections of objects beyond stone hand axes, faunal remains and microliths. At the British Museum for example, the museum possesses an extensive collection of portable art from Lartet and Christy's seminal excavations in France, as outlined in Appendix 2.1, but none of this aesthetically intriguing material is currently on display (British Museum, 2017). Other museums are not as fortunate to have such diverse collections of early prehistoric material culture, but a lack of these more diverse objects in museum collections does not mean they cannot be presented. The Ashmolean Museum (figures 7.17-7.18) and Natural History Museum (figures 7.19-7.20) for example utilise casts of Palaeolithic portable art, weaponry and human remains to provide a fuller picture of Palaeolithic life. The incorporation of more diverse objects in displays and a greater reliance on casts and copies to complement Palaeolithic lithic collections within displays are particularly prevalent in European museums. Recreated full size sections of cave art for example are included in the MAC, Spain and the Museo di Storia Naturale del Mediterraneo (MSNM) (figure 7.21), Italy and a cast of the famous anthropomorphic figurine of the lion-man is on display in the newly opened Musée des Civilistions de l'europe et de la Méditerranée (MuCEM), France (figure 7.22) and casts of hominin skulls and venus

figurines are prevalent across many European museums. These museums often adopt a wider geographical focus enabling them to incorporate copies and casts of Palaeolithic sites and objects discovered in other countries. This approach highlights how a wider geographical focus within museums in England could provide the opportunity to incorporate more diverse and social/ symbolic narratives in association with the Palaeolithic and Mesolithic. Furthermore, a wider geographic approach is more appropriate for situating local archaeological finds in their broader context, particularly for earlier prehistory when contemporary geographic boundaries did not exist.

Top; Figure 7.17. Photograph of the hominin skulls on display at the Ashmolean Museum (McDowall, 2017).

Bottom; Figure 7.18. Photograph of the venus figurine copies on display at the Ashmolean museum (McDowall, 2017).

Top; Figure 7.19. Photograph of some of the hominin casts on display at the Natural History Museum (McDowall, 2017).

Bottom; Figure 7.20. Photograph of the copies of a Palaeolithic spear thrower and anthropomorph on display at the Natural History Museum (McDowall, 2017).

Figure 7.21. Photograph of a reconstructed section of the Palaeolithic cave art site of Lascaux on display in the Museo di Storia Naturale del Mediterraneo, Italy (McDowall, 2018).

Figure 7.22. Photograph of a copy of the Palaeolithic anthropomorph found in Germany on display in the Musée des Civilistions de l'europe et de la Méditerranée, France (McDowall, 2018).

Museums in England appear reticent to include casts or copies to supplement their collections due to concerns about the legitimacy and reception of objects that are not perceived as 'authentic originals'. Visitors however, as highlighted in Chapter 6 rarely read explanatory text panels and mostly experience museums through transient visual engagements so will not necessarily be aware that these are copies or casts and consequently engage with these displays as they would with 'originals'. Furthermore, as emphasised by Isaac (2011) copies of objects can be valued as much as originals depending on an individual's cultural background and reconstructed prehistoric sites such as Altamira (Corrushuga and Monforte, 2006) or Lascaux are immensely popular visitor attractions despite only imitating the original. The popularity of copies with visitors was illustrated by the heat map for TQ where cases containing casts of hominin skulls alongside casts of Pleistocene faunal remains were the most popular areas for visitors to stop and dwell at. These casts and copies demonstrate a greater variety of Palaeolithic and Mesolithic material culture and thus offer great potential for communicating wider narratives and provoking greater visitor engagements. Casts or copies of hominin skulls, portable art and enigmatic antler headdresses, as illustrated by the recent temporary exhibition on Star Carr at the Museum of Archaeology and Anthropology, Cambridge (figure 7.23), could be presented in a greater variety of museums across England to enhance the representation of earlier prehistory and broaden the narratives associated with it.

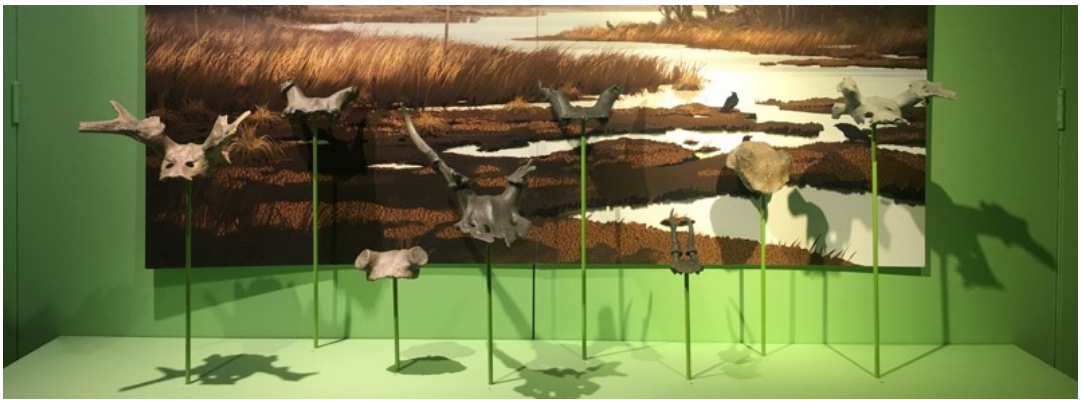


Figure 7.23. Photograph of the casts of antler frontlets from Star Carr on display in the temporary exhibition at the Museum of Archaeology and Anthropology, Cambridge illustrating the diversity of Mesolithic Antler frontlets discovered at the site (McDowall, 2019).

Furthermore, it is possible for museums in England to present a richer more compelling narrative with a lack of organic remains and context without over-exoticising the Palaeolithic or Mesolithic through a wider focus on daily life. Focusing on the features of daily life simultaneously highlights the complexity of early humans and their skills. The expansive time depth of these periods creates many interpretational and presentational issues, yet it is also an asset that museums can capitalise on. Narratives are not restricted by textual sources, and the ambiguity that characterises the interpretation of this period offers a unique opportunity to present our past in an innovative non-didactic, immersive, tactile and engaging manner that can intrigue the curiosity of the visitor (Wood and Cotton, 1999:30). Two of the most intriguing Mesolithic sites of Star Carr and Blick Mead are situated in England and a focus on these sites within displays could provide a wider exploration of Mesolithic sociality and ritual practice broadening the narratives associated with the period. The Palaeolithic is characterised by human evolution and the development of recognisably human culture, topics of great public interest that satisfy visitor interests in broader aspects of prehistoric life, the skill of past people and human evolution, as highlighted in section 4.6. Moreover, a focus on daily life in prehistory displays would also enable museums to counter the growth of insidious narratives co-opting prehistory to legitimise right-wing extremist ideologies or to support notions of genetic superiority, as previously discussed in section 1.2.2.

7.4 'Beyond the museum as mausoleum' visitor engagements with prehistory displays

Chapter 6 revealed how visitors engage with prehistory displays at the case studies resolving the third research aim, to *'Identify which display types / methods are most effective for engaging visitors with prehistory'*. This aim was achieved by addressing the third and fourth research objectives of the thesis to '*Record and interpret visitor engagements and interactions with prehistory displays*' and '*Collect and interpret visitor responses to prehistory displays'.* The third objective involved recording the tracking observations in an Excel spreadsheet (Appendix D) and then quantitatively analysing these recorded behaviours at the tracked features and between different

types of interpretation at each case study. The fourth objective utilised the transcribed visitor responses (Appendix 12) and collated responses in Appendix E to quantitatively compare visitor responses to the prehistory displays at the case studies. Guided by the research question *'How do visitors engage with prehistory displays?*' the visitor-based data was evaluated to reveal that, in line with previous visitor research, visitors rarely engage with text panels and find human remains and shiny objects more engaging than pottery which is widely perceived as less interesting. Visitors also expressed a strong interest in learning about daily life in prehistory but rarely engaged with displays more focused on domestic life revealing a discord between visitor interests and how museums have attempted to meet these interests.

7.4.1 Engaging visitors with prehistoric pottery

Chapter 5 highlighted that the majority of prehistory museum displays are dominated by pottery and lithics as these more durable technologies are more likely to survive in the archaeological record. Consequently, as revealed in section 4.5 these objects are also widely associated with the period in the public consciousness but despite previous assumptions that visitors find stone tools unengaging this was not identified in either visitor preconceptions or engagements with such material in the displays analysed. In contrast, visitors unequivocally stated a widespread lack of interest in prehistoric pottery at all of the case studies except for NLM where it appears that the local focus of the display transcended the usual visitor preferences. How then can these vessels that are so abundant in the archaeological record and characterise most museum's prehistory collections be framed in a more engaging way?

Pottery is a very broad category of material culture and encompasses a variety of sizes and types of vessel from the Neolithic onwards. Some of these vessels such as finely decorated Beaker pottery can be innately more aesthetic to certain visitors as illustrated by tracked visitor 6 at WP, where the visitor spent 28 minutes drawing a Beaker pot on display. Furthermore, certain temporary exhibitions of pottery have

demonstrated that pottery can appeal to the public. Highlighted by the success of Grayson Perry's high profile exhibition '*The Tomb of the unknown craftsman'* which presented objects from the BM's stores alongside his own artwork and made the BM the leading visitor attraction in the UK in 2012 (ALVA, 2013; Steel, 2013). It thus seems that pottery can be highly engaging for museum visitors depending on the context it is presented in. Pottery framed within prehistory displays is generally viewed as not very interesting in comparison to pottery framed within displays celebrating the artistry and craftsmanship involved in creating pottery, such as Perry's exhibition. Visitors across the case studies expressed high engagement with intricately crafted eye-catching metal objects and it could be possible to engage visitors more with displays of prehistoric pottery if museums capitalise on the artistry involved in creating pottery.

Presentational issues are often exacerbated by the majority of prehistoric pottery displays which have a tendency to represent pottery within cluttered encyclopaedic displays, as discussed in section 5.4.6 and illustrated by the display of pottery at Hull and East Riding Museum (figure 7.24) and the Museum of the Iron Age (figure 7.25).

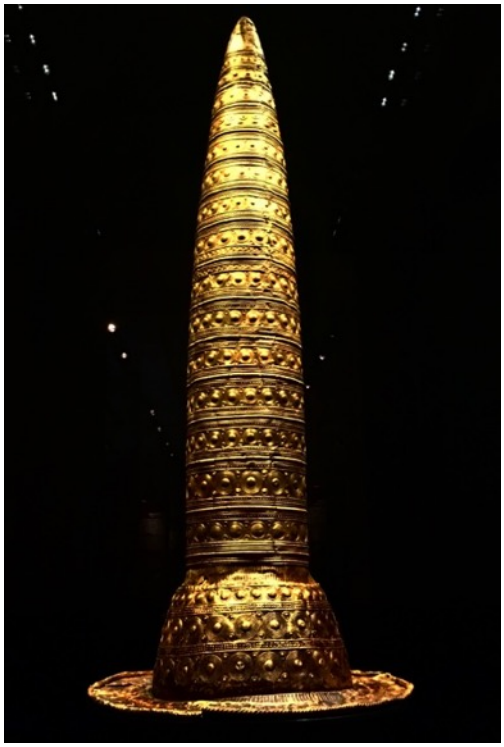
Figure 7.24. Photograph of the high density display of pottery at Hull and East Riding Museum (McDowall, 2018).

Figure 7.25. Photograph of another high density display of pottery in the Museum of the Iron Age (McDowall, 2017).

To create visually stimulating and engaging pottery displays may require presenting objects on their own in separate cases set against a complementary colour such as light blue (figure 7.26) or presented against a black background framed by dramatic lighting as discussed in section 5.4.5. Such display conventions are usually reserved for shiny metal objects or objects deemed to represent great artistic value as illustrated by the presentation of the Venus of Lespugue in Musee de l'Homme (figure 7.27) and the Berlin hat in the Neues Museum, Germany (figure 7.28). The juxtaposition of bright lighting against dark backgrounds serves to imbue these objects with great aesthetic value and emphasises their perceived importance to the

visitor. If pottery were presented in a similar way within the authoritative arena of the museum it would clearly communicate to the visitor that these objects are greatly valued. The use of a raking light to highlight decoration on pottery can further emphasise the skill involved in crafting these objects and can be utilised to connect the visitor to the people of the past.

Figure 7.26. Photograph of another well populated display of prehistoric pottery against the complementary colour turquoise at the Collection Museum, Lincoln (McDowall, 2018).



Left; Figure 7.27. Close-up photograph of the Venus of Lespugue presented in a black room lit by spotlights above, Musée de l'Homme, France (McDowall, 2017).

Right; Figure 7.28. Close-up photograph of the gold Berlin hat presented in a black room lit by spotlights above enhancing the natural glow of the gold, Neues Museum, Germany (McDowall, 2017).

7.4.2 Effective forms of interpretation for engaging visitors with prehistory

From the visitor behaviour and responses evaluated in Chapter 6 certain trends and variables influencing visitor engagements with prehistory displays were identified. Firstly, the comparison of visitor dwell times and visitor frequencies between the case studies revealed that visitor engagements are not collections nor funding dependant. The BM, for example, despite possessing some of the nationally most significant prehistory collections housed within an exceptionally popular and well-funded museum demonstrated the lowest quality of visit. In contrast, NLM, a museum with much lower visitor figures with comparably less valued collections displayed on a shoestring budget demonstrated far greater visitor satisfaction and

engagements. It thus appears that catering towards the interests of the local visitor profile and implementing a clear colour-coded chronological narrative with striking tall display cases was more important for enhancing visitor engagements with the prehistory displays than the perceived quality of the collection.

In the general field of visitor studies videos and interactives have often been heralded as highly engaging interpretative technology (Owen, 1999; Haggis, 2008; Eardley *et al.,* 2018). For prehistory displays which are more reliant on innovative forms of supporting interpretation, videos and interactives have great potential for bringing prehistory to life, illustrating aspects of prehistoric life not captured within static displays, engaging more of the visitor's senses. Videos enable visitors to see objects in use and hear from 'experts' about sites and objects whilst interactives can encourage visitors to compare life today and in prehistory or provide meaningful tactile experiences with objects. The appeal of interactives across the case studies was emphasised by the heat map analysis in section 6.3, but visitor engagements with videos were more variable.

At WP the technical videos about flint knapping and bronze production received very little attention whilst at the BM and NLM where there are no videos embedded within displays very few visitors identified this as an issue and respondents across the case studies rarely requested additional interpretation in the form of videos, indicating that video interpretation is not a priority for visitors. GNM had a video that was not working during the collection of the tracking surveys illustrating the issues associated with repairing and maintaining such technology. Surely the use of videos within prehistory displays is not necessary if they are expensive to produce and maintain, regularly need repairing and visitors do not seem as interested in videos as other forms of interpretation.

SVC, highlighted how prehistory displays can incorporate several elements of additional interpretation within prehistory displays. Yet even at this case study, apart from the guided talk around the 360° panoramic video of Stonehenge most videos in the gallery had an average dwell time of less than 30 seconds despite the length of

the video or provision of seating. It appears that perhaps visitor attention with videos cannot be sustained for longer than 30 seconds indicating that videos should be more conservative in their running length to encourage visitor engagement. Furthermore, the higher engagement with the panoramic video facilitated by roaming 'tour guides' at the visitor centre also illustrates how engagement opportunities can be increased with more human interactions. The high visibility of staff within the space and their direct involvement with visitors was often remarked upon and facilitated longer engagements with certain displays. The additional interpretation provided by these knowledgeable guides is arguably more effective than the technology-based interactives and videos but requires much greater investment to implement successfully.

Low-tech interactives can also prove popular and more resilient. The reconstructed roundhouse at WP, for example was the most popular area in the archaeology gallery. Once constructed these dwelling structures are generally easier to maintain and attract on average a longer dwell time than other forms of interpretation. They can be relatively cheaply furnished with furs and textiles (figure 7.29), soft play for younger visitors, include 'role-play' games to give a flavour of domestic life (figure 7.30) or like WP and The Collection Museum, simply house objects within their domestic setting (figure 7.31).

Left; Figure 7.29. Photograph of the reconstructed Mesolithic dwelling with furs inside at Yorkshire Museum (McDowall, 2018), Right; Figure 7.30. Photograph inside the reconstructed Iron Age roundhouse with props, dressing up clothes and role play cards to facilitate engagements within Colchester Castle (McDowall, 2018).

Figure 7.31. Photograph of the partially reconstructed roundhouse framing the domestic displays at the Collection Museum, Lincoln (McDowall, 2018).

Visitors are overwhelmingly interested in daily life and their expectations do not appear to be met by current displays of pottery, textile making tools and food preparation/ cooking equipment. Presenting these objects, however, within their domestic context inside and around a dwelling structure as seen at The Collection, Lincoln (figure 7.31), Museum of the Iron Age (figure 7.32) and WP could enhance their relatability to temporally distant contemporary visitors.

Figure 7.32. Photograph of a reconstructed Iron Age roundhouse with displays of Iron Age objects associated with domestic life presented in recesses within the roundhouse at the Museum of the Iron Age (McDowall, 2017).

The relevance of domestic objects can further be augmented through a person-centric narrative approach focused around key questions to intrigue the curiosity of the visitor, relating them to recognisable aspects of contemporary life and implicitly encouraging them to compare themselves to past people. This approach is rarely adopted by museums and tends to primarily be utilised at visitor centres based around a prehistoric site where this type of question-led narrative enables a detailed site-specific enquiry. This approach is exemplified by the narrative structure at SVC and is also seen at the Skara Brae Visitor Centre, which utilises questions such as

'*What was their life like?', 'Where did they come from?'* and *'Why did they settle at Skara Brae?'* (figure 7.33) to provide the broader narrative structure of the excavated site-material on display. Thereby, providing visitors with a contextualised understanding of daily life framed around the archaeological evidence. This approach could be adopted more widely within museum displays across England to enhance the relevance and engagement with their collections. Questions can be tailored around a museum's particular collections to invoke locally-specific narratives and selected so as to provoke the innate inquisitive nature of the visitor. They should also be phrased around the questions commonly asked by visitors, highlighted by the responses to my questionnaire and also highlighted in Stone's (1994) questionnaires. Questions such as, *'What did people eat?', What did people look like?', 'Where did people live?', 'How did people live?', 'What did people do?', 'Was it a difficult life?*' and *'How did they get around?*'.

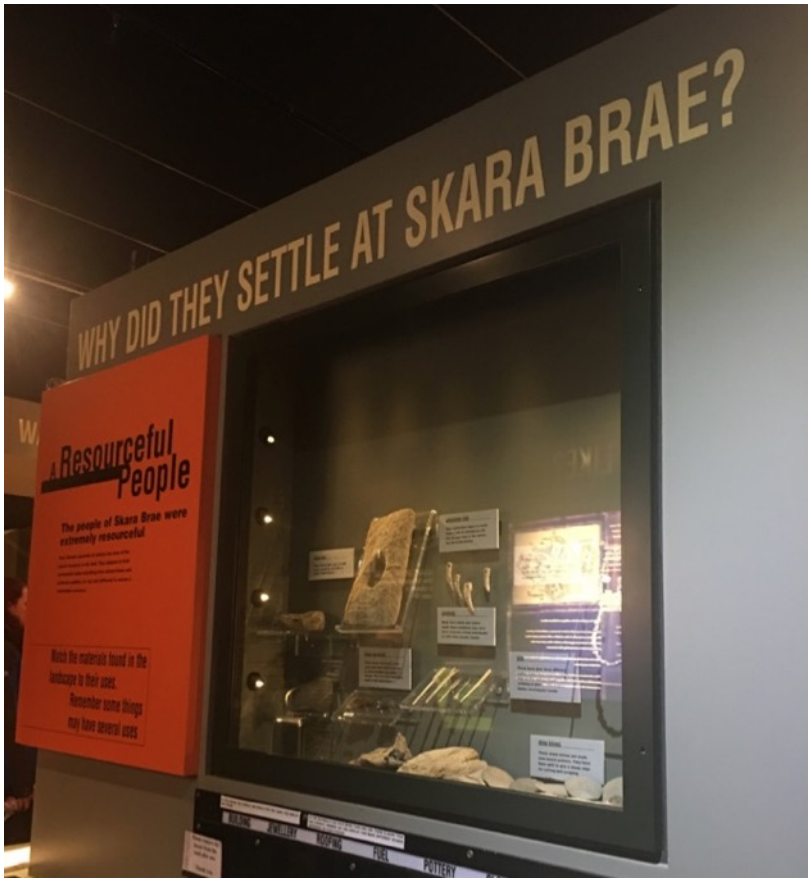
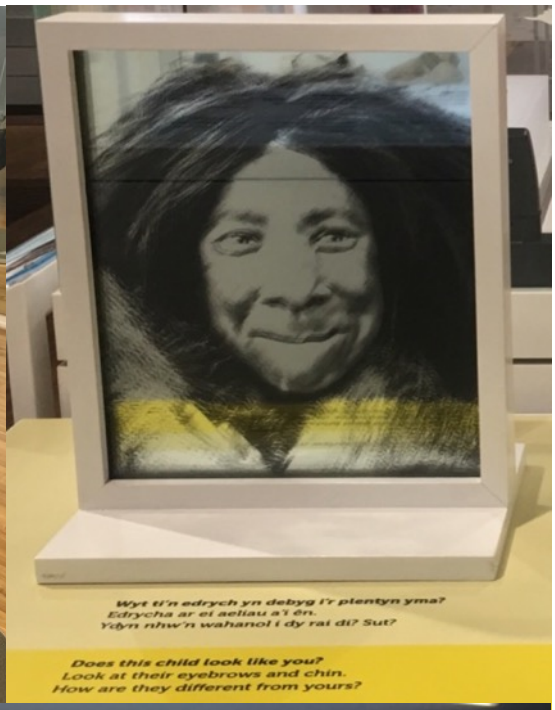


Figure 7.33. Photograph of one of the question-led text panels used to facilitate interpretation of the Neolithic material on display at the Skara Brae Visitor Centre, Orkney (McDowall, 2017).

Comparative interactives can encourage visitors to view themselves in relation to prehistoric people and enhance the relatability of the content on display. These comparisons can range from high-tech computer-based interactives to low-tech interactives that are cheaper and easier to produce and maintain. A prime example of how such comparative forms of interpretation can be successfully employed in the prehistory displays is exemplified by the newly renovated Musée de l'Homme in France. The redeveloped museum includes a variety of both high and low-tech interactives that encourage visitors to adopt a comparative approach when encountering Palaeolithic humans, including; recreated Laetoli footprints opposite a mirror where visitors can walk in the footsteps of Australopithecines and compare their movements to early hominins (figure 7.34) and a computer simulator that morphs each individual visitor's face into a Neanderthal (figure 7.35), encouraging visitors to compare their facial morphologies. Such interactives can greatly enhance the relatability of different human species living thousands of years ago and really bring the past to life but they need not be expensive to produce and maintain.

A low-tech approach to creating comparative interactives is demonstrated by the new Neanderthal display at St Fagans where a Neanderthal face is sketched over a mirror and visitors are invited to look in to the mirror and compare their facial features (figure 7.36), visitors are also explicitly asked to compare their height to a Neanderthal child silhouetted on the wall and leave reflective comments on the wall (figure 7.37). A similar height comparison is also employed at Liverpool World Museum where visitors although not explicitly invited to, can measure their height against different silhouetted hominins (figure 7.38). Despite the variety of types of low-tech comparative interactives that can be incorporated within any size of museum and their potential for increasing visitor engagements with prehistory, such forms of interpretation are currently underutilised in museum displays across England. Furthermore, this paucity is further illustrated by the bias towards Palaeolithic-focused comparative interactives. Of the few museums that include such interactives they are predominantly utilised to facilitate visitor interpretations of the Palaeolithic rather than any other period, hence the Palaeolithic-focused examples

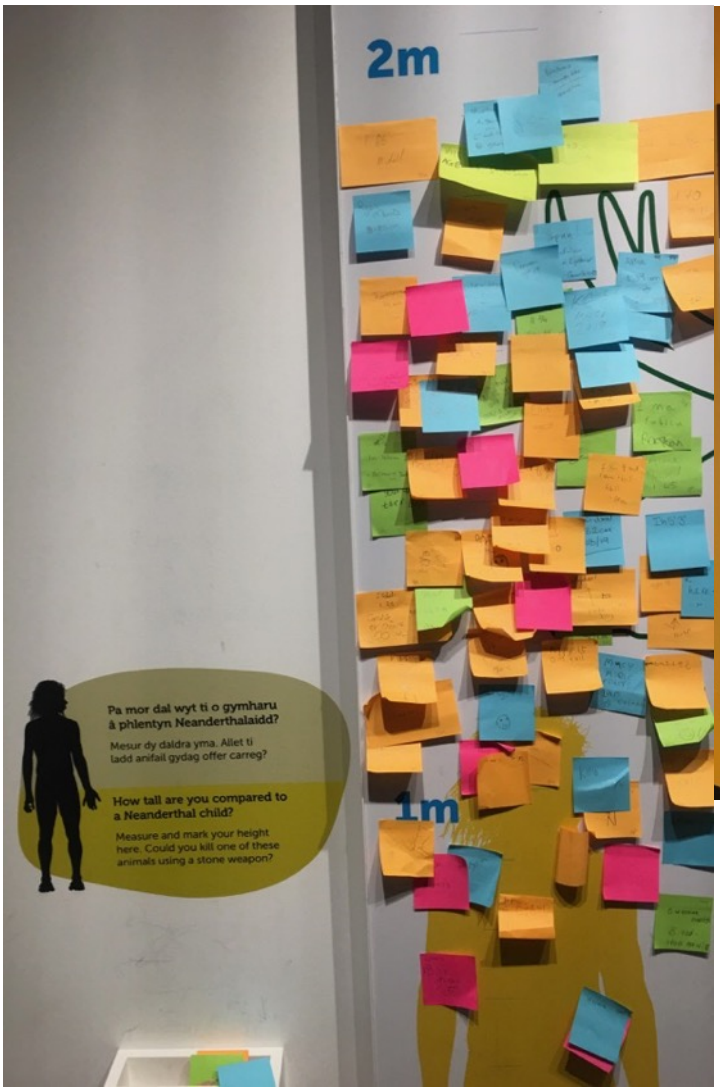
provided in figures 7.34-7.38. Yet, these comparative interactives offer great potential for relating visitors to all periods of prehistory.

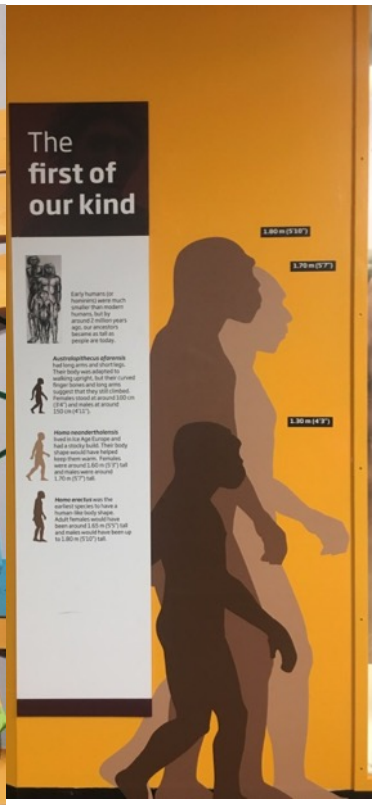


Top Left; Figure 7.34. Photograph of the interactive Laetoli footprints at Musée de l'Homme, France (McDowall, 2017).

Bottom; Figure 7.35. Photograph of the computerised Neanderthal face simulator at Musée de l'Homme, France (McDowall, 2017).

Top Right; Figure 7.36. Photograph of the comparative interactive inviting visitors to compare their facial features to a Neanderthal at St Fagans, Wales (McDowall, 2019).



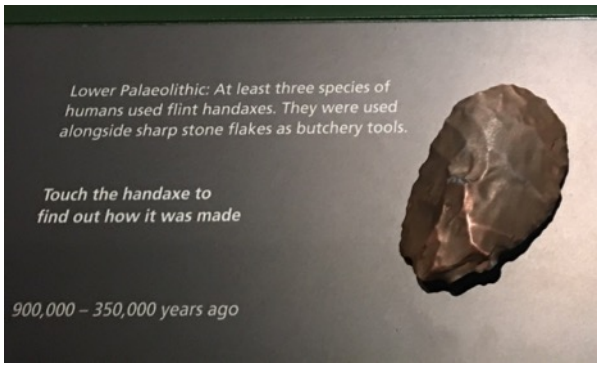


Left; Figure 7.37. Photograph of the interactive measuring comparison on the wall at St Fagans encouraging visitors to measure themselves against a Neanderthal child and write their height on the wall (McDowall, 2019).

Right; Figure 7.38. Photograph of the interactive measuring comparison on the wall at Liverpool World Museum where visitors can measure themselves against the height of different hominins (McDowall, 2019).

The importance of touch and haptic engagements with prehistoric objects were referenced by 5% of respondents across the case studies in Chapter 6. Although these references came from a small minority of visitors, as discussed in section 6.3.9 this likely reflects the minimal opportunities for respondents to engage with tactile elements at the case studies as these features were not well represented. The

tracking data, however, highlighted the long dwell times associated with the few tactile elements included in the displays, reinforcing the importance placed upon haptic engagements in the wider scholarship of visitor studies (Batey, 1999; Owen, 1999; Haggis, 2008; Morris Hargreaves McIntyre, 2008). The engagement potential provided by utilising tactile objects within prehistory display interpretation is often capitalised on by museums across England as discussed in section 6.4.8. The most widespread form of tactile element across the museums recorded were original and replica hand axes used to provide visitors with a tactile connection with the Palaeolithic, as seen at SeaCity Museum (figure 7.39) and the newly redeveloped prehistory displays at Brighton Museum (figure 7.40). These tactile elements therefore feed in to the restrictive technology-focused narrative that prehistory displays are susceptible to. Furthermore, a static hand axe does little to contextualise the dynamic function of this type of object that can only be fully appreciated in context within a reconstruction or butchery demonstration. Tactile elements do, however, provide the opportunity to recreate elements that are not preserved in the archaeological record or present in an individual museum's collections. They thus offer great potential for providing the wider context of the diversity of prehistoric material culture, particularly organic remains such as textiles and animal furs as seen at the Brú na Bóinne Visitor Centre (figure 7.41). Tactile elements can also be used to provide accessible anchors for museum visitors unable to or uninterested in reading the textual interpretation. For example, at the Musée de l'Homme visitors can navigate through the narratives of human evolution by engaging with tactile casts of hominin skulls (figure 7.42) which are situated at intervals in the gallery and provide an audio narrative.



Top left; Figure 7.39. Photograph of the tactile hand axe on display at SeaCity Museum, Southampton (McDowall, 2016).

Top right; Figure 7.40. Photograph of the tactile hand axe on display in the newly opened archaeology gallery at Brighton Museum (McDowall, 2019).

Bottom Left; Figure 7.41. Photograph of the tactile animal fur interactive at Brú na Bóinne Visitor Centre, Ireland (McDowall, 2018).

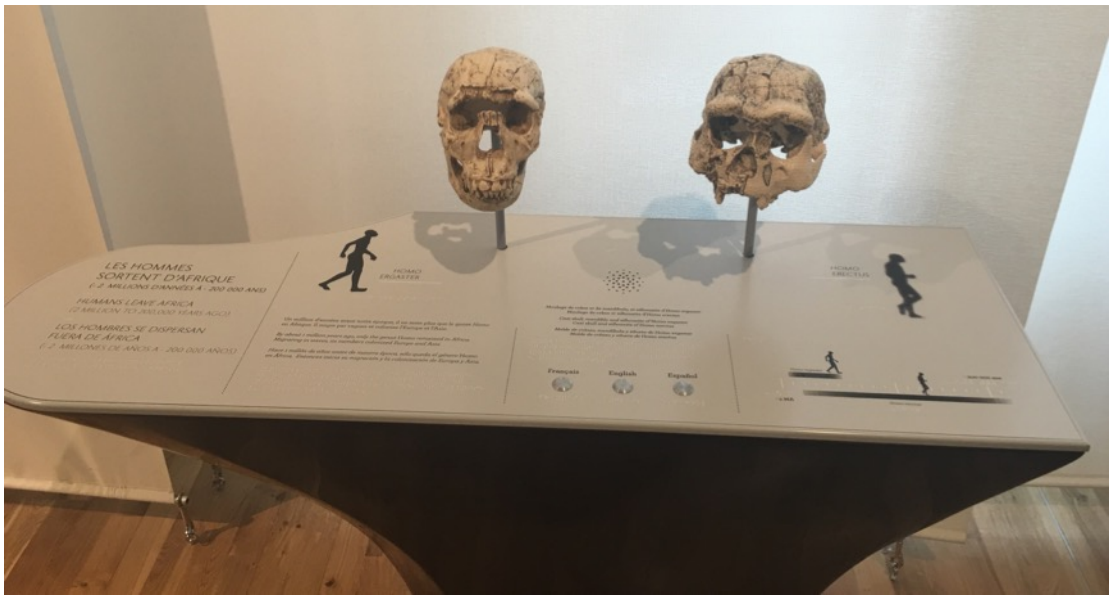


Figure 7.42. Photograph of one of the narrative hubs in Musée de l'Homme, France. The casts of hominin skulls are tactile, the buttons in front play their story guiding the visitor through human evolution (McDowall, 2017).

The most simple and effective form of interpretation for engaging visitors as identified in Chapter 6 is the use of a timeline for situating the visitor within the temporal context of the displays, which as identified in Chapter 4 is paramount for enhancing visitor understandings of prehistory. Chapter 5 revealed the variety of forms of timeline and how they can be incorporated into prehistory displays from a simple timeline border as seen at the Collection Museum, to pictorial timelines as seen at Guernsey Museum or the use of timelines for physically presenting objects as seen at the Museum of Barnstaple and North Devon (figure 7.43). Timelines with objects embedded within them can also provide visitors with a coherent route through displays, as exemplified by the use of a twisting timeline as the central design feature in the Rijksmuseum van Oudheden's (The Netherlands) archaeology gallery (bottom of figure 7.43). The timeline at the Rijksmuseum simultaneously provides visitors with a route to follow through the gallery and interactive spaces for children underneath it. This physical representation of time clearly illustrates to the visitor the comparatively deeper time depth of prehistoric periods in relation to later time periods and situates the visitor within the chronological context of Dutch prehistory.

Figure 7.43. Different styles of timeline to situate visitors within the chronological context of prehistory displays from Top to bottom; The Collection, Lincoln (McDowall, 2018), Guernsey Museum (De Jersey, 2017), Museum of Barnstaple and North Devon (McDowall, 2017) and the Rijksmuseum van Oudheden, The Netherlands (McDowall, 2016).

Displays of human remains are popular with visitors, attested to by the higher visitor engagements observed with human remains across the case studies in Chapter 6 and supported by previous explorations of public perceptions (Walter, 2004; Patterson,

2007; BDRC, 2009; Thackray and Payne, 2009; Sayer, 2010; Brown, 2011; Joy, 2014; Excell, 2016; Tatham, 2016). The context of their display within museums, however, is still central to ethical debates between archaeologists and curators (Swain, 2002; DCMS, 2005; Fletcher *et al.,* 2014; Jenkins, 2014; Williams and Giles, 2016). Yet, despite academic concerns over sensitively displaying human remains this does not appear to be a prime concern for visitors. Not one visitor expressed an issue with the display of human remains across the case studies despite the high visibility of remains at the BM, SVC and NLM. This lack of visitor concern is further reinforced by the 864 responses collated in the public consultation to the reburial request of the Avebury prehistoric human remains, which expressed overwhelming support for the display of human remains in museums (BDRC, 2009; Thackray and Payne, 2009, 2010; Tatham, 2016). However, 25% of the respondents also agreed that displaying such remains appeals more to sensationalism rather than curiosity when directly and explicitly asked (BDRC, 2009:11). This question was quite targeted in its language and consequently such a response was not surprising but reveals some visitor concern with sensitively displaying human remains. The overall picture, however, supported by the research undertaken for the thesis indicates that although the display of human remains is a source of debate for archaeologists and museum professionals it is not a prominent issue for museum visitors, who often prefer to engage with such material when it is presented sensitively and respectfully.

7.4.3 The importance of front-end evaluation

The summative evaluation undertaken for the thesis contributes to the body of previously published summative evaluations of prehistory displays, reviewed in Chapter 2. This study has demonstrated how this form of evaluation is essential for understanding the visitor profiles represented at a museum, visitor expectations, interests and interactions with physical displays. The creation of more engaging prehistory displays, however, should not be solely reliant on undertaking summative evaluation alone as it only allows museums to test physical displays already in-situ, limiting the visitor responses that can be captured. Front-end evaluation on the other hand enables museums to test potential exhibition content and concepts with their

target audiences before any physical displays are built (Friedman, 1999; Diamond *et al.,* 2016; Jacobsen, 2016). This provides museums with the opportunity to tailor their new displays around visitor interests, gauge the level of background knowledge visitors have and reveal any preconceived ideas or associations that visitors have about prehistory.

The influence of undertaking front-end evaluation upon future visitor engagements with displays is clearly demonstrated by the summative evaluation undertaken for the thesis at SVC. In advance of the creation of the new visitor centre due to a series of planning setbacks for the site there was an opportunity to undertake an extensive programme of front-end evaluation over many years (Appendix 1). The visitor interests and expectations gained from this visitor-based research were directly utilised to guide the creation of the new visitor centre and the effectiveness of these displays was then analysed in Chapter 6. The summative evaluation undertaken illustrated that SVC provides visitors with the highest quality of visit out of all of the case studies evaluated. Furthermore, visitor usage of the displays directly aligns with curator expectations and intentions, clearly reflecting the value of front-end evaluation for creating engaging displays that meet both the visitors needs and curator's intentions.

Feedback from tour guides consulted during the front-end evaluation at SVC emphasised the need for displays that can be visited expediently for tour groups with restricted time. The displays were therefore designed for visitors to spend no longer than 14 minutes within the exhibition space so that visitors have enough time to familiarise themselves with the site's context and visit the site during their time-bound visits. The average dwell time recorded during the tracking surveys was 12 minutes, demonstrating that the visitor centre has successfully created displays that achieve the optimum dwell time set out. Furthermore, some of the features and topics articulated during the focus group research were included in the final displays and demonstrably produced effective visitor satisfaction. The panoramic 360° immersive audio-visual of the site was suggested by the 'Round Table' discussion group composed of Neo-pagans (Doughty, 2005). This group suggested utilising such

an audio-visual to invoke a spiritual/ emotional response from the visitor and its success amongst visitors was clearly demonstrated during the tracking surveys, as it attracted the highest visitor frequency and longest dwell time of all the tracked features. Many site-users consulted during the front-end evaluation expressed an interest in the function of the site, the people who built it and how it was constructed and these questions also matched the questions highlighted by the Tour Guides consulted (Doughty, 2005; Carver, 2009). Due to these visitor interests obtained during the front-end evaluation the final displays were structured according to these people-oriented questions and the success of this format is clearly illustrated by the high number of respondents that articulated learning more about the site and its people after viewing the displays. The front-end evaluation also highlighted that many people want to know about the global context of the site and this was addressed with the addition of the pictorial timeline. This element was also very popular, frequently referenced by visitors in the questionnaires and regularly stopped at and engaged with. This element was also referenced by Abigail Coppins, Curator of the West's Archaeological Collections for English Heritage, in the curator questionnaire (Appendix 19.2) for its success and her ambitions to extend the geographical representation further to enhance the relevance of the temporal context provided for Asian visitors.

7.4.4 Incorporating dynamic elements into 'permanent' displays

Temporary exhibitions of prehistory have attracted large audiences and demonstrated the widespread public appetite for prehistory displays, exemplified by the recent blockbuster exhibitions *'Celts'* and '*Ice Age Art'*. These exhibitions, however, are governed by different display conventions due to their transient nature and costly entry fee. Consequently, the innovative and often experimental approaches that these exhibitions have adopted are rarely incorporated into 'permanent' prehistory displays. This divide between 'permanent' exhibitions and 'temporary' exhibitions is, however, becoming increasingly arbitrary and provides an opportunity for future prehistory displays to be more dynamic and creative.

Most museums regularly add to or update displays causing incremental changes to the structure and narrative of displays over the years as highlighted in section 5.4.2. Displays often experience the guardianship of several curators, each with their own input, objects may be taken out for loans, whilst leftover funds can be used to replace cases or implement additional interpretation and new treasure finds acquired through the Portable Antiquities Scheme may be integrated into the 'permanent' displays. Museums displays are thus rarely created at a set date remaining static and unchanged until the next gallery redevelopment. They are far more dynamic than that, changing organically and cumulatively through time. These displays thus more accurately represent a palimpsest of different periods of interventions since their initial inception. At NLM for example between the first data collection phase and second data collection phase the museum utilised newly acquired funds to update the interactive station in the prehistory displays. Moreover, some smaller volunteer-run museums may even completely take down and re-display their collections every year, as exemplified by Callington Heritage Centre which takes its displays down when it closes over the Winter months and then re-displays the collections in a different format when it re-opens the following Spring. No prehistory display can therefore be seen as wholly permanent, opening up the opportunities for museums to treat their 'permanent' displays with the same imaginative zealous. In line with this argument, should curators prioritise their creative energies on creating engaging permanent displays over temporary exhibitions and perhaps exclude temporary exhibitions altogether? Such decision-making should of course be subjected to a cost-benefit analysis to identify whether temporary exhibitions bring more revenue to the museum or whether frequently adding to and updating dynamic permanent displays could hold more pulling power, particularly for repeatedly attracting local residents.

7.5 Summary

This Chapter has situated the findings of the thesis in relation to their wider geographical and academic context for each of the research questions initially posed in Chapter 1 (figure 7.1). Provoking discussion about why visitors are unfamiliar with prehistory and how they can be better familiarised with prehistory in museum displays through the use of question-led daily life focused narratives incorporating timelines to anchor prehistory displays within their chronological context. The discussion of general trends within prehistory displays in England recognised in Chapter 5, revealed the problematic static nature of prehistory displays through time. It was emphasised how the continuity of displays perpetuates problematic outdated gender stereotypes and reductive linear narratives of technology that disproportionately affects the representation of earlier prehistory. Consequently, possible solutions to these representational issues were posed. This Chapter then explored the types of interpretation utilised in prehistory displays that attract greater visitor engagements as identified in Chapter 6. Comparisons with prehistory displays both within and beyond England were utilised to propose strategies for better engaging visitors with prehistory and it was also discussed how elements of temporary exhibitions can be incorporated into museum displays in England to create more representative and engaging displays that better suit visitor interests. These points will be further deliberated upon in the Conclusion Chapter and distilled to summarise the overall findings of the thesis. Based upon these findings the Conclusion Chapter will also propose suggestions that could improve displays and identify avenues for future research.

Chapter 8: Conclusion

8.1 Introduction

The thesis set out to provide a holistic analysis of prehistory displays in England guided by three main research questions; '*What preconceptions do the public have about prehistory before viewing displays?', 'How is prehistory presented in different types of museum across England?'* and *'How do visitors engage with prehistory displays?'*. By operating at two scales combining visual methods of analysis with visitor-based evaluation techniques these questions were successfully resolved. This Chapter will outline how these research questions were fulfilled and will summarise the main findings identified by the dual analysis. This Chapter will then discuss possible directions for future research in this area and will conclude with some final thoughts about the future of prehistory displays and the overall significance of this research for the field.

The thesis began by situating the research within its academic context, highlighting the importance of this research in Chapter 1 and how it will contribute to the thus far limited scholarship on public perceptions of prehistory and prehistory displays in Chapter 2. The lack of published or accessible evaluation reports identified in Chapter 2 emphasises the need for museums to be more transparent and provide access to such reports where they exist to promote greater accountability and facilitate knowledge-sharing between academics, researchers and museum professionals. The dual-scale methodology for addressing this gap in the literature was developed in Chapter 3. This methodology was then applied to gauge public preconceptions and interests in prehistory in Chapter 4, identified prevailing prehistory display trends in Chapter 5 and revealed visitor engagements and perceptions of prehistory displays in Chapter 6. This analysis provided an understanding of visitor pre-display preconceptions of prehistory, how prehistory is currently represented in museum displays across England and how visitors engage with these displays. These findings were then compared with similar previous studies, situating them within their wider

academic context in Chapter 7. The key points revealed through this analysis will be summarised in this final Chapter.

8.2 'Lost in temporal translation and entombed in static isolation'

The thesis revealed in Chapter 4 that visitors are generally unfamiliar with the concept of 'prehistory'. There is an awareness that it is generally defined as a period before writing, often associated with 'BC' dates, the ambiguous material categories of tools and pottery, as well as the Three Ages. Despite these general associations visitors cannot chronologically place the period within their frames of reference and frequently articulated anachronistic conceptions of the period, perhaps influenced by popular media portrayals. Prehistory is effectively *'lost in temporal translation'*. Museum displays are therefore, essential for countering these hybridised understandings of prehistory and meeting visitor expectations and interests, as well as enhancing visitor familiarity and chronological understanding of the period.

Chapter 4 also revealed that in addition to the variable understandings visitors expressed they were often interested in learning about people like themselves in the past. An interest that as demonstrated in Chapter 6 does not appear to currently be met by displays of domestic material in museums, which is generally perceived as less aesthetically interesting than shiny weaponry, human remains or more exotic decorative/ symbolic objects. The lack of material remains and reliance on archaeological interpretation for understanding the period polarised opinions. The framing of this ambiguity has the potential to excite visitors' intellectual curiosity or invoke criticism and scepticism. As highlighted in Chapter 5 there is still a trend for museums to present prehistory synonymously with archaeology and this framing can either reinforce the sense of discovery or didactic authority associated with the characteristically ambiguous interpretation of the archaeological record. First identified by Wood and Cotton (1999:30) this ambiguity provides museums with the opportunity to democratise displays and create open arenas for dialogue, where the visitor can actively contribute to the process of interpretation. The museums analysed in the thesis, however, rarely capitalise on this quality and continue to

didactically present archaeological theories as facts, obstructing potential engagements with visitors.

To a certain extent contemporary representations of prehistory appear to meet visitor interests in the daily lives of prehistoric people as identified in Chapter 5, displays often adopt a person-centric approach in their presentation of prehistory. A similar number of displays, however, focus solely on more landscape-centric narratives effectively de-humanising prehistory and decreasing the opportunities for visitors to engage with the material and narratives presented. Providing a sense of the landscape within the museum is essential for contextualising certain prehistoric monuments and objects but can reinforce a 'noble savage' image of the past, decreasing the relatability of the content on display and 'exoticising' prehistory. Therefore, a combined approach situating the content within its geographical and social context represents an alternative approach that was also quite pervasive within the museum displays analysed.

Visitor understandings of the timeframe of prehistory appear to be addressed to a certain extent by current museum interpretation in which displays are structured chronologically within the Three Age system. This restrictive structure, however, has changed very little since the initial inception of the tripartite system in the prehistory displays at the National Museum of Denmark by Christian Jürgensen Thomsen (Trigger, 2008). Furthermore, the relative invisibility of the Palaeolithic and Mesolithic in prehistory displays in combination with the continued focus on linear narratives of technological development serves to frame these periods as less sophisticated and more 'primitive'. Such framing harks back to the 19th century evolutionary approaches to prehistory displays, whilst the continued recycling of outdated thematic tropes and gender stereotypes further illustrates the static nature of prehistory displays. These remnants of old-fashioned and outdated display styles within contemporary displays contradicts Witcomb's (2003) assertion that contemporary museums, (at least in relation to prehistory) are moving beyond *'the museum as mausoleum'*, hence the title of the thesis '*entombed in static isolation'*. The visual analysis employed in Chapter 5 revealed that displays are preserving

outdated and restricted narratives that have been present for decades despite new research and discoveries.

Chapter 6 revealed that visitors can be effectively engaged with prehistory through the use of interactive technologies, particularly tactile elements and the presentation of skeletal remains and shiny objects. Most visitors prefer to interact with object-based displays and expressed an interest in participating in more dynamic experiences with alternative styles of additional interpretation. The contextualisation of the objects on display is key for answering visitor questions, helping them to visualise a distant past and provide them with a better understanding of the period and how it is situated in time. In Chapter 7 the incorporation of innovative forms of additional interpretation for contextualising prehistory usually reserved for temporary exhibits was explored and revealed the possibilities a more creative representation of prehistory can provide.

8.3 The do's and don'ts of prehistory displays

The summative evaluation undertaken at the 6 case studies in the thesis was used as a direct measure of how successful the 6 different prehistory displays were and the various elements and forms of interpretation employed within them. From the results of this visitor-based analysis it was identified which types of layout, styles of presentation and content were most engaging for visitors. The qualitative information about visitor preconceptions and interests revealed what core concepts are familiar within the wider public and can be used to anchor prehistory displays, as well as areas of unfamiliarity and confusion that need to be clarified and contextualised within displays. Furthermore, the visual-analysis of prehistory displays in England indicated how prehistory is represented using design and narrative features and how these styles can reinforce restricted understandings of the period or subvert them. All of this information in combination can be used to create effective prehistory displays that can simultaneously engage visitors, fulfil visitor interests and bring our most distant past to life. Some suggestions based upon the findings of this research are provided in table 8.1 but it is acknowledged that

these points are not always feasible to incorporate within prehistory displays due to access to funding, lack of display space, time pressures on increasingly over-worked museum staff and internal institutional pressures to present particular narratives and display certain local artefacts. Due to these limitations which are summarised in figure 8.1 some of the suggestions in table 8.1 cannot be implemented whilst others can more readily be adopted.

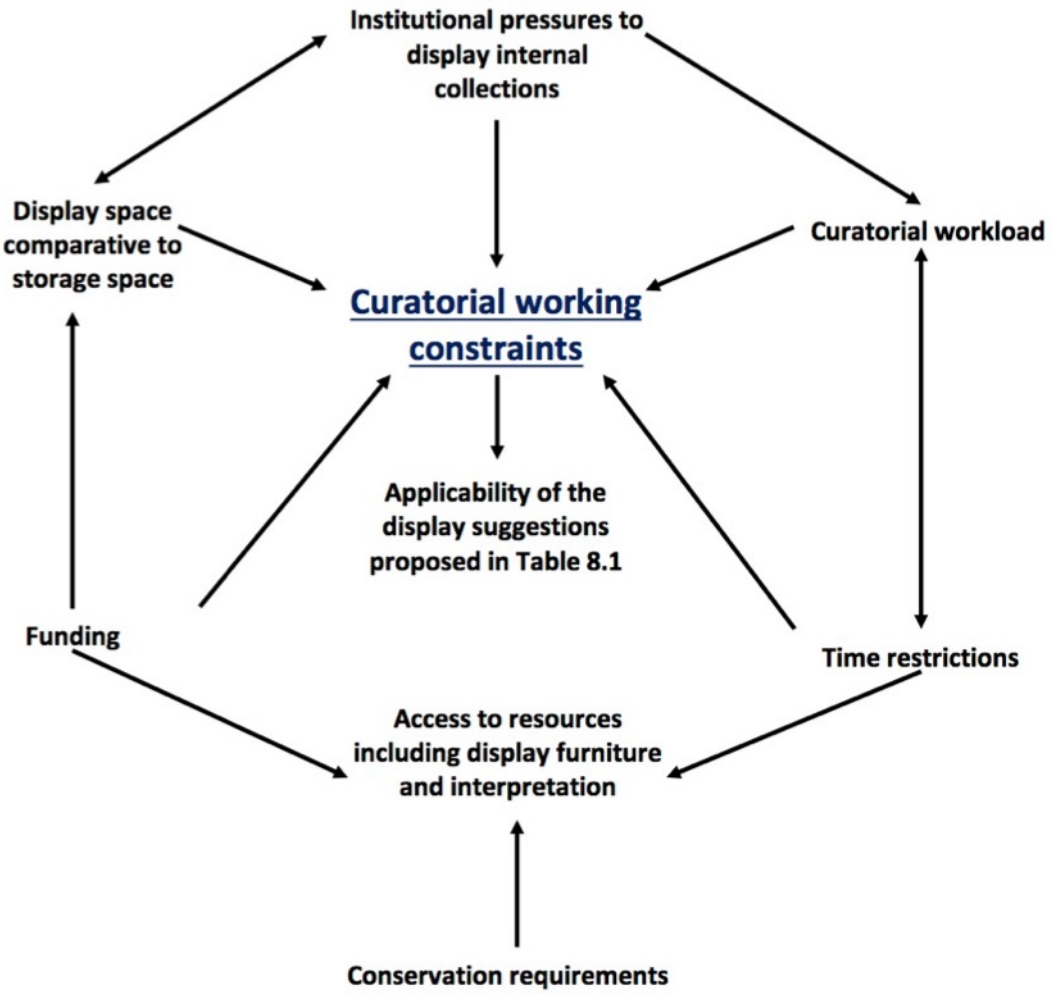


Figure 8.1. Infographic illustrating the relationships between the limiting factors that influence curatorial working constraints that in turn impact the applicability of the suggestions presented in table 8.1.

Type of Feature	Do's	Don'ts
Text panels	➢ Use a minimal number of text panels ➢ Only present snappy headline information ➢ Use provocative titles to encapsulate periods that present a less reductive technology-based vision of the past that also avoids mythologizing and exoticising the past	➢ Include lots of text panels ➢ Use lots of words ➢ Use technical terminology
Additional interpretation	➢ Depending on funding include tactile interactives that encourage comparisons with prehistoric people ➢ For a low tech more economical approach Include contemporary tactile elements such as furs or textiles or replica lithics ➢ For a high tech approach with more investment recreate a prehistoric living space, person or include digital comparative interactives	➢ Include high maintenance audio-visual or interactive technologies ➢ Include audio-visuals longer than 30 seconds ➢ Include text-heavy explanations of scientific techniques such as radiocarbon dating
Colour Scheme	➢ Use complimentary backing colours that juxtapose and emphasise the colour of the objects on display ➢ e.g Grey lithics against orange/ yellow ➢ e.g Yellow gold against dark purple/ black ➢ e.g Green bronze against dark pink/ violet ➢ e.g Orangey/ brown pottery against turquoise/ light blue	➢ Use similar colours to the objects on display ➢ Use earthy colours

Type of Feature	Do	Don't
Narrative framework	➢ Provide a linear route ➢ Situate visitors in chronology of displays with a pictorial timeline of global events ➢ Depending on funding timelines can utilise 2D images or embedded replica objects	➢ Present an open-plan space with no clear route ➢ Present material outside of chronological context ➢ e.g solely thematic displays
Thematic focus	➢ Focus on daily life ➢ e.g Recreate dwellings ➢ e.g People-focused questions to structure text panels	➢ Present a solely landscape/ site focused representation
Material culture on display	➢ Present a diversity of objects, even if they are not within the collection to present less restricted narratives by either incorporating visuals or casts/ copies of other objects. ➢ If it is not possible to present physical copies/ casts that take space away from internal collections due to pressures to display institutional collections incorporating visuals enable other narratives to be presented beyond the collections on display whilst promoting internal collections.	➢ Present cases full of pottery or lithics
Representation of gender	➢ Represent different groups in scenes working/ socialising together ➢ Include a greater diversity of people including all ages and individuals with disabilities	➢ Depict only men ➢ Depict men and women in stereotyped roles not supported by archaeological evidence

Type of Feature	Do	Don't
Representation of prehistoric periods	➢ Present the periods equally despite disparities in collections ➢ If this is not possible within the constraints of collections incorporating organic replicas or visuals can broaden narratives	➢ Treat the Stone Age as one homogenous period

Table 8.1. Summary of the do's and don'ts for creating engaging and representative prehistory displays based upon the visual and visitor-based data analysed in the thesis.

8.4 Future research

This study represents a broad analysis of prehistory displays in England but due to the dual-scale approach, as well as the wide focus on all of prehistory it was not possible to expand the data set any further within the thesis. It was not possible to record more than 173 museums, utilise more than 13 variables of display to analyse the recorded museums, collect visitor data from more than 6 case studies or more than 100 visitors at each case study or capture detailed 'fine-grain' data about individual periods of prehistory within the timeframe of the thesis. The broad focus of the thesis, however, provided an overview of public familiarity with prehistory, the current state of prehistory displays and their relative effectiveness for engaging visitors. The general trends recognised within the thesis provide the foundations for developing this data further in future research to continue advancing our understanding of public preconceptions and how to engage their interest in prehistory within the context of museum displays. There are several opportunities for expanding the scope of this research within or beyond England in future projects, a few of these potential avenues for enquiry are outlined.

The thesis demonstrated the practical issues associated with undertaking visitor-based research in smaller institutions that are rarely incorporated into research projects. Through the course of my research it was revealed that museums with a low visitor frequency required a greater time investment for collecting tracking

surveys and questionnaires. Thus any future research utilising a combination of tracking surveys and questionnaires must allocate appropriate time to collect the data and if possible collect data on weekends and in school holidays, as well as during the week to capture a wider sample of museum visitors. Furthermore, to better understand the trends already recognised by the thesis future research projects should focus on the individual research questions posed in the introduction separately providing the opportunity to gather more detailed data from larger data sets.

To gain a more detailed insight into preconceptions of prehistory for example, widening this research beyond museum visitors will ascertain whether the preconceptions identified in the thesis reflect general public preconceptions or if there are differences in familiarity and interests between museum visitors and non-visitors. Furthermore, a larger data set of participants can negate the influence of respondents' reticence to answer more critically-worded questions providing an increased number of responses to these questions and avoid the bias produced by a smaller number of respondents that inflate any quantitative or qualitative data obtained. To facilitate the interpretation of future visitor-based data and encourage a greater response rate a more restricted set of questions should be posed to visitors with more closed-ended questions.

To further explore the visitor temporal confusion articulated by visitor responses in the questionnaire future research should test visitor familiarity with core concepts/ events/ periods to identify what key areas of prehistory can be utilised to anchor visitors to displays. It was postulated in Chapter 4 that visitors are probably aware of certain concepts/ hominins relating to human evolution but may not be aware that these aspects of their knowledge relate to prehistory. It was identified that visitors possess anachronistic understandings of the term 'prehistory', this term was rather alien and confusing. To further understand visitors preconceived associations with prehistory requires a more directed focus. These aspects and themes often used to frame prehistory in museum displays need to be deconstructed and individually posed to the visitor. Questionnaires should ask visitors to outline their knowledge of

'human evolution', 'Neanderthals', 'First people', 'The Palaeolithic', 'The Mesolithic', 'The Neolithic', 'First farmers', 'First use of metal', 'Stonehenge', 'The Bronze Age', 'The Iron Age', 'Life before the Romans', 'Prehistoric sites' and 'The Celts' in open-ended questions. Responses to these questions with a wider sample of respondents could reveal more detailed insights about visitors pre-existing knowledge, associations with these concepts and familiarity with different periods of prehistory more explicitly.

The dual-scale methodology developed for evaluating displays and visitor engagements has the potential to be applied to other periods and geographical areas to broaden our understanding of current display trends and how visitors interact with and understand different periods. There is the potential to include different variables or an expanded series of display variables to interrogate trends within museum displays. An analysis of museum's websites or social media or the curator's qualifications amongst many other variables could also be integrated into any future analyses of prehistory museum displays or displays of other periods. The combination of tracking surveys and questionnaires within the thesis provided insights into visitor perceptions and engagements whilst the visual analysis of physical displays revealed representational trends. Together the influence of these representational styles upon visitor conceptions and engagements was then ascertained. There are therefore, numerous possibilities for utilising this dual-scale approach more widely within the British Isles or within another country or for a different period in future research.

8.5 Concluding thoughts

Prehistory is strange and unfamiliar to most museum visitors yet it has the potential to engage visitor's curiosity. The lack of written records and ambiguity of interpretation that characterise this period can be capitalised on to produce intellectually engaging displays that explicitly encourage the visitor to engage in the dialogue of interpretation. Furthermore, the lack of written records offers the opportunity for museums to incorporate more dynamic and innovative forms of

additional interpretation for contextualising displays, enhancing the relatability of the period and moving prehistory displays beyond the ‘mausoleum’.

References

Abadía, O and Morales, M. (2010). Redefining Neanderthals and art: an alternative interpretation of the multiple species model for the origins of behavioural modernity. *Oxford Journal of Archaeology,* 29 (3), pp 229-243.

Allison, J. (2014). *Orkney Museum 'future-proofing' the Neolithic galleries end of phase one report: market research analysis, 2014*. Internal Report. Unpublished.

ALVA (Association of Leading Visitor Attractions). (2013). 2012 *Visitor Figures*. Available at: https://www.alva.org.uk/details.cfm?p=598 (Accessed: 08.04.20).

— (2019). *Visits made in 2018 to visitor attractions in membership with ALVA.* Available at: https://www.alva.org.uk/details.cfm?p=609 (Accessed: 01.06.19).

Arnold, K. (2006). *Cabinets for the curious: looking back at early English museums*. Aldershot: Ashgate Publishing Ltd.

Art Fund. (2020). '*COVID-19 impact museum sector research findings, Summary report'* [Powerpoint presentation]. Available at: https://www.artfund.org/assets/downloads/art-fund-covid19-research-report-final.pdf (Accessed: 06.06.20).

— (2020). *'Headley fellowships'*. Available at: https://www.artfund.org/supporting-museums/programmes/headley-fellowships (Accessed: 10.05.19).

Arts Council. (2018). Available at: https://www.artscouncil.org.uk (Accessed: 10.04.18).

— (2020). Available at: https://www.artscouncil.org.uk/document/list-accredited-museums-uk-channel-islands-and-isle-man (Accessed: 21.03.20).

Ascherson, N. (2000). The museum of Scotland. *Public Archaeology*, 1 (1), pp 82-84.

Athelstan Museum. (2019). '*Stratigraphy wall at the Athelstan Museum'.* 4th February.

Bahn, P. (1998). *The Cambridge Illustrated History of Prehistoric Art.* Cambridge: Cambridge University Press.

B.A.R.B (Broadcasters' Audience Research Board). (2020). *Weekly top 30 programmes on TV sets (July 1998-Sept 2018*). Available at: https://www.barb.co.uk/viewing-data/weekly-top-30/ (Accessed: 11.05.20)

Ballard, S. (2007). 'Warriors and weavers: constructing British Iron Age identities in museums', in Hamilton, S, Whitehouse, R and Wright, K. (eds.) *Archaeology and women: ancient and modern issues.* California: Left Coast Press, pp 167-184.

Barclay, G and Brophy, K. (2020). 'A veritable chauvinism of prehistory': Nationalist prehistories and the 'British' late Neolithic mythos. *Archaeological Journal*, pp 1-31.

Barker, A. (2010). Exhibiting archaeology: archaeology and museums. *Annual Review of Anthropology,* 32, pp 293-308.

Barnard, A. (2012). *Genesis of symbolic thought.* New York: Cambridge University Press.

Barnard, M. (2001). *Approaches to understanding visual culture.* Hampshire: Palgrave.

Barrowclough, D. (2004). *Art and archaeology: unmasking material culture.* Cambridge: Department of Archaeology.

Batey, C. (1999). 'In touch with the past at Glasgow museums', in Denford, G. (ed.) *Museum archaeology-what's new?* 21, pp 19-23.

Baxter, J. (2005). *The archaeology of childhood: children, gender and material culture*. California: Altamira Press.

BDRC. (2009). *Research into issues surrounding human bones in museums*. [Report for English Heritage]. Available at: https://historicengland.org.uk/content/docs/research/opinion-survey-results-pdf/ (Accessed: 10.06.19).

Bennett, T. (2004). *Pasts beyond memory: evolution, museums, colonialism.* London: Routledge.

Berger, J. (1972). *Ways of seeing*. London: Penguin Books Ltd.

Berman, J. (1999). Bad hair days in the Palaeolithic: modern (Re)constructions of the cave man. *American Anthropologist*, 101 (2), pp 288-304.

Beusing, R. (2011). Archäologie im Schaukasten Untersuchungen zur Präsentation vor-und frühgeschitlicher Archäologie in deutschen Museen. Unpublished PhD thesis. The Philip University of Marburg.

— (2016). 'Dioramen in der prähistorischen Archäologie', in Gall, A and Trischler, H. (eds.) *Szenerien und illusion: geschichte, varianten und potenziale von museumsdioramen*, 32, Wallstein Verlag, pp 334-365.

Biers, T and Harknett, S-J. (2015). 'Separating artefact from fiction: using museum education and outreach to increase archaeology's relevance and impact on society', in Hinson, B and Jawliková, B. (eds.) Archaeology: myths within and without. *Archaeological Review from Cambridge,* 30 (2), pp 160-171.

Blinkhorn, E and Milner, N. (2014). *Mesolithic research and conservation framework 2013*. York: Council for British Archaeology.

Boast, R. (2012). Neocolonial Collaboration: Museum as Contact Zone Revisited. *Museum Anthropology*, 34(1), pp 56-70.

Bonnachi, C., Altaweel, M and Krzyzanska, M. (2018). The heritage of Brexit: roles of the past in the construction of political identities through social media. *Journal of Social Archaeology*, 18 (2), pp 174-192.

Booth, T. (2019). A stranger in a strange land: a perspective on archaeological responses to the palaeogenetic revolution from an archaeologist working amongst palaeogeneticists. *World Archaeology*, 51 (4), pp 586-601.

Borman, R. (1994). 'The fascinating world of Stonehenge': an exhibition and its aftermath', in Stone, P and Molyneaux, B. (eds.) *The presented past: heritage museums and education.* London: English Heritage, pp 179- 189.

Boyle, G. (2017). *'Mesolithic man with bow'*. 14th August.

BritainThinks. (2013). Public perceptions of - and attitudes to - the purposes of museums in society. [External Report for the Museums Association]. Available at: https://www.museumsassociation.org/news/03042013-public-attitudes-research-published (Accessed: 04.07.19).

British Museum. (1904). *A guide to the antiquities of the Bronze Age in the department of British and Medieval Antiquities.* Oxford: University Press.

— (1997). '*The new later Bronze Age and Celtic Europe galleries'.* [News Release]. 21st June.

— (1998). *A curator's guide to writing gallery information (incorporating the Design Office 'house style').* Internal document. Unpublished.

— (2007). '*New galleries at the British Museum'* [Press Release]. Available at: https://www.britishmuseum.org/about_us/news_and_press/press_releases/2007/new_galleries_open.aspx (Accessed: 9th August 2019).

— (2017). *History of the collection*. Available at: https://www.britishmuseum.org/about_us/the_museums_story/general_history/the_collection.aspx (Accessed: 9th August 2019).

— (2019a). *Annual Review 2018-19* [Press Release]. 8th July. Available at: https://www.britishmuseum.org/about_us/news_and_press/press_releases.aspx (Accessed: 5th August 2019).

Brophy, K. (2018). The Brexit hypothesis and prehistory. *Antiquity*, 12 (366), pp 1650-1658.

Brown, P. (2011). Us and them: who benefits from experimental exhibition making? *Museum Managements and Curatorship*, 26 (92), pp 129-148.

Bruce-Mitford, R. (1971). Envoi. *The British Museum Quarterly*. 35 (1/4), pp 8-16.

Bünz, A. (2012). 'Is it enough to make the main characters female? An intersectional and semiotic reading of the exhibition Prehistories 1 at the National Historical Museum in Stockholm, Sweden', in Back Danielsson, I and Thedéen, S. (eds.) *To tender gender: the pasts and futures of gender research in archaeology*. Stockholm: Stockholm University, pp 97-116.

Butler, B. (1996). 'Virginia Woolf, Madonna and me: searching for role-models and women's presence in museums and heritage', in Devonshire, A and Wood, B. (eds.) *Women in industry and technology from prehistory to the present day.* London: Museum of London, pp 19-27.

Cambridge Research Co-operative. (1983). The national survey of public opinion towards archaeology. *Archaeological Review from Cambridge*, 2 (1), pp 24-26.

Carver, E. (2009). *Stonehenge environmental improvements project (SEIP) audience research interpretation brief.* Internal English Heritage Report. Unpublished.

Casson Mann. (2019). *Great North Museum*. Available at: https://cassonmann.com/#!project/singleproject/18 (Accessed: 10.10.19).

Caygill, M. (1992). *The story of the British Museum*. 2nd edn. London: British Museum Press.

Chandler, B. (2016). Conversation with Felicity McDowall, 15th December.

Chase, P and Dibble, H. (1987). Middle Paleolithic symbolism: a review of current evidence and interpretations. *Journal of Anthropological Archaeology*, 6 (3), pp 263-296.

Chippindale, C. (2016). Neo-prehistory-exist. regenerate. repeat?. *Antiquity*, 90 (353), pp 1383-1386.

Chippindale, C. *et al*. (2014). New era for Stonehenge. *Antiquity,* 88 (340), pp 644-657.

Christian, A. (2019). Participant reactivity in an exhibition: the effect of overt observation on engagement times. *Visitor Studies,* 22(1), pp 67-83.

Clarke, D. (2000). Creating the museum of Scotland: a reply to Neal Ascherson. *Public Archaeology,* 1(3), pp 220-221.

Conkey, M. (2010). Images without words: the construction of prehistoric imaginaries for definitions of 'us'. *Journal of Visual Culture*, 9 (3), pp 272-283.

Cook, J. (1996). 'Mistaken about Eve? finding and representing women in the old Stone Age', in Devonshire, A and Wood, B. (eds.) *Women in industry and technology from prehistory to the present day.* London: Museum of London, pp 33-43.

Corinium Museum. (2020). Stone Age to Corinium. Available at: https://coriniummuseum.org/support-us/stone-age-to-corinium/ (Accessed: 29.05.20).

Corruchuga, J and Monforte, P. 'The new museum of Altamira finding solutions to tourism pressure', in Agnew, N and Bridgland, J. (eds.) *Of the past for the future: integrating archaeology and conservation.* Los Angeles: The Getty Conservation Institute, pp 177-183.

Cotton, J. (1995). 'Illuminating the twilight zone? The new prehistory gallery at the Museum of London' in Denford, G. (ed.) *Representing archaeology in museums*, The Museum Archaeologist, 22, pp 6-12.

Cova, E. (2010). Negotiating the past in the present: Italian prehistory, civic museums, and curatorial practice in Emilia- Romagna, Italy. *European Journal of Archaeology,* 13 (30), pp 285-312.

Crawford, S., Hadley, D and Shepherd, G. (2018). *The Oxford handbook of the archaeology of childhood*. Oxford: Oxford University Press.

Crawford, S and Lewis, C. (2009). Childhood studies and the society for the study of childhood in the past. *Childhood in the Past*. 1 (1), pp 5-16.

Cunliffe, B. (2013). *Britain begins*. Oxford: Oxford University Press.

D' Errico, F. (2003). The invisible frontier: a multiple species model for the origin of behavioural modernity. *Evolutionary Anthropology,* 12 (4), pp 188-202.

Davies, M and Heath, C. (2013). *Evaluating evaluation. Increasing the impact of summative evaluation in museums and galleries*. Available at: http://visitors.org.uk/wp-content/uploads/2004/01/EvaluatingEvaluation_November2013.pdf (Accessed: 19.06.18).

Daynès, E. (2009). Available at: http://www.daynes.com/en/exhibitions-hyper-realistic-reconstructions-paleoanthropology/croatia-3/krapina-neanderthal-museum-15.html (Accessed: 01.03.17).

DCMS (Department for Culture Media and Sport). (2019). *DCMS-sponsored museums and galleries annual performance indicators 2018/19.* Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/861070/REVISED_DCMS-Sponsored_Museums_and_Galleries_Performance_Indicators_2018_19_report.pdf (Accessed: 24.04.20).

— (2005). *Guidance for the care of human remains in museums*. Available at: https://webarchive.nationalarchives.gov.uk/+/http:/www.culture.gov.uk/images/publications/GuidanceHumanRemains11Oct.pdf (Accessed: 22.06.20).

De Jersey, P. (2017). '*Timeline on display at Guernsey Museum'*. 4th August.

Denton Corker Marshall. (2019). *Cultural + Civic: Stonehenge Exhibition + Visitor Centre*. Available at: http://www.dentoncorkermarshall.com/experience/cultural-civic/ (Accessed: 01.10.19).

Department of Education. (2013). *Statutory Guidelines: National Curriculum in England: History Programmes of Study*. Available at: https://www.gov.uk/government/publications/national-curriculum-in-england-

history-programmes-of-study/national-curriculum-in-england-history-programmes-of-study#key-stage-2 (Accessed on: 18.12.15).

Diamond, J., Horn, M and Uttal, D. (2016). *Practical Evaluation Guide Tools for Museums and Other Informal Educational Settings*. 3rd edn. Lanham, MD: Rowman and Littlefield.

Dinnis, R and Stringer, C. (2014). *Britain: one million years of the human story.* London: Natural History Museum.

Dixon, C and Munro, M. (2015). *Whitehorse hill: a prehistoric Dartmoor discovery evaluation*. Internal Report. Unpublished.

Dixon, H. (2019). 'Neo-nazis at the national Trust: how far-right groups are trying to 'take back' ancient sites'. *The Telegraph.* 09 August. Available at: https://www.telegraph.co.uk/news/2019/08/09/neo-nazis-national-trust-far-right-groups-trying-takeback-ancient/ (Accessed: 09.05.20).

Donnellan, V. (2015). *The role of collections of classical antiquities in UK regional museums: visitors, networks, social contexts*. Unpublished PhD thesis. UCL.

Dorset County Museum. (2020). *Donate*. Available at: https://dorsetcountymuseum.org/funding/ (Accessed: 29.05.20).

Doughty, L. (2005). *Stonehenge interpretation and learning strategy specialist focus groups report on key themes.* Internal English Heritage Report. Unpublished.

Eardley, A. *et al*. (2018). Hands-on, shoes off: multisensory tools enhance family engagement within an art museum. *Visitor Studies*, 21 (1), pp 79-97.

English Heritage. (2009). Planning submission for new visitor facilities and decommissioning works. *Environmental Statement, Non-Technical Summary*.

Available at: https://www.iema.net/assets/nts/Chris_Blandford_Associates/New_Visitor_Facilities_and_Decommissioning_Works_NTS_sept_2009.pdf (Accessed: 04.10.19).

— (2013). *Stonehenge Transformed.* Available at: https://www.english-heritage.org.uk/about-us/search-news/stonehenge-transformed/ (Accessed: 01.10.19).

— (2017). *Feast! Food at Stonehenge*. Available at: https://www.english-heritage.org.uk/about-us/search-news/feast-food-at-stonehenge/ (Accessed: 04.10.19).

Excell, K. (2016). 'Covering the mummies at the Manchester Museum a discussion of authority, authorship, and agendas in the human remains debate', in Williams, H and Giles, M. (eds.) *Archaeologists and the dead: mortuary archaeology in contemporary society*. Oxford: Oxford University Press, pp 233-250.

Falk, J. (1985). Predicting Visitor Behaviour. *Curator,* 28 (4), pp 249-257.

Farley, J and Hunter, F. (2015). *Celts art and identity*. London: British Museum Press.

Farley, J. (2017). Conversation with Felicity McDowall, 8th November.

— (2018). Curating 'Celts': lessons from the BM exhibition. To be published in *Displaying Deep History*.

Finlayson, C. *et al.* (2012). Birds of a feather: Neanderthal exploitation of raptors and corvids. *PloS ONE*, 7 (9), pp 1-9.

Fletcher, A., Antoine, D and Hill, J.D. (2014). *Regarding the dead: human remains in the British Museum*. London: The British Museum Press.

Friedman, A. (1999). 'Introduction to evaluation: how can we create effective exhibitions and programs', in Borun, M and Korn, R. (eds.) *Introduction to Museum Evaluation*. Washington DC: American Association of Museums.

Frieman, C and Hofmann, D. (2019). Present pasts in the archaeology of genetics, identity, and migration in Europe: a critical essay. *World Archaeology*, 51 (4), pp 528-545.

Frieman, C and Wilkin, N. (2016). The changing of the guards? European prehistoric collections and archaeology in the museums of the future. *Museum Worlds,* 4 (1), pp 33-50.

Frost, S. (2016). Conversation with Felicity McDowall, 15th February.

— (2017). Conversation with Felicity McDowall, 13th November.

Fusion Research and Analytics. (2013). *British Museum- Ice Age art evaluation and room 35 comparative analysis.* External Report. Unpublished report.

Gero, J and Conkey, M. (1991). *Engendering archaeology: women and prehistory*. Oxford: Blackwell.

Gerritsen, T. (2008). *Keeping the dead.* London: Bantam Press.

Gifford-Gonzalez, D. (1993). You can hide but you can't run: representation of women's work in illustrations of Palaeolithic life. *Visual Anthropology Review,* 9 (1), pp 23-41.

Great North Museum. (2008). *Our history.* Available via archived source: https://web.archive.org/web/20080706044909/http://www.twmuseums.org.uk/hancock/ourhistory/ (Accessed: 09.10.19).

— (2019). *Archaeology.* Available at: https://greatnorthmuseum.org.uk/collections/archaeology (Accessed: 09.10.19).

— (2019a). *About the Great North Museum: Hancock.* Available at: https://greatnorthmuseum.org.uk/about-us/about-gnm (Accessed: 09.10.19).

— (2019b). *Archaeology.* Available at: https://greatnorthmuseum.org.uk/collections/archaeology (Accessed: 09.10.19).

Greenblatt, S. (1991). 'Resonance and wonder', in Karp, I and Lavine, D. (ed.) *Exhibiting Cultures: The Poetics and Politics of Museum Display.* Washington: Smithsonian Institution Press, pp 42-56.

Gutwill, J. (2002). Gaining visitor consent for research: testing the posted-sign method. *Curator*, 45 (3), pp 232-238.

Haggis, D. (2008). Public archaeology and museums in Japan. *The International Journal of the Inclusive Museum,* 1 (4), pp 95-102.

Hakenbeck, S. (2019). Genetics, archaeology and the far right: an unholy trinity. *World Archaeology*, 1 (11), pp 517-527.

Harknett, S-J. (2016). Conversation with Felicity McDowall, 28th February.

— (2017). *Fitzwilliam Museum: Madonnas and miracles*. Tracking Final Report. Unpublished.

Harman, A. (2019). '*Stratigraphy timeline at Brent Museum'*. 31st January.

Harris, C., Ashton, N and Lewis, S. (2019). From site to museum: a critical assessment of collection history on the formation and interpretation of the British early Palaeolithic record. *Journal of Palaeolithic Archaeology*, 2 (1), pp 1-25.

Hayman, P. (2011). *New gallery for North Lincolnshire Museum.* Available at: https://www.attractionsmanagement.com/index.cfm?pagetype=news&subject=news&codeID=254413 (Accessed: 08.10.19).

Heimlich, J. (2015). The ethics of evaluation in museums. *Journal of Museum Education*, 40 (1), pp 20-26.

Hein, G. (1994). 'Evaluation of museum programmes and exhibits', in Hooper-Greenhill, E. (ed.) *The Educational Role of the Museum.* London: Routledge, pp 305-311.

Henshilwood, C and Marean, C. (2003). The origin of modern human behavior: critique of the models and their test implications, comments/reply. *Current Anthropology,* 44 (5), pp 627-651.

Henson, D. (2016). '*The meso-what? The public perceptions of the Mesolithic'.* Unpublished PhD thesis. University of York.

Hicks, D. and Stevenson, A. (2013). *World archaeology at the Pitt Rivers Museum: a characterization*. Oxford: Archaeopress.

Hill, J. D. (1989). Rethinking the Iron Age. *Scottish Archaeological Review*, 6, pp 16-24.

Historic England. (2010). *Research strategy for prehistory. English Heritage Thematic Research Strategies-Consultation Draft.* Available at: https://historicengland.org.uk/content/docs/research/draft-prehistoric-strategy-pdf/ (Accessed: 10.12.15).

Hill, R. (2008). *Stonehenge*. Cambridge: Harvard University Press

Hoffman, D. *et al*. (2018). U-th dating of carbonate crusts revels Neandertal origins of Iberian cave art. *Science*, 359 (6378), pp 912-915.

Högberg, A. (2007). The past is the present prehistory and presentation from a children's point of view. *Public Archaeology*, 16 (1), pp 28-46.

Hooper-Greenhill, E. (2000). *Museums and the interpretation of visual culture*. London: Routledge.

Hunter, J and Ralston, I. (2009). *The archaeology of Britain: an introduction from earliest times to the twenty-first century.* London: Routledge.

Iarossi, G. (2006). *The power of survey design: a user's guide for managing surveys, interpreting results, and influencing respondents.* Washington DC: The World Bank.

International Council of Museums. (2017). *ICOM code of ethics for museums*. Available at: https://icom.museum/wp-content/uploads/2018/07/ICOM-code-En-web.pdf (Accessed: 20.06.18).

Isaac, G. (2011). Whose idea was this? museums, replicas and the reproduction of knowledge. *Current Anthropology*, 52 (2), pp 223-224.

Ison, C. (2013). 'New Stonehenge visitor centre finally opens', *The Guardian*. Available at: https://www.theguardian.com/culture/2013/dec/17/stonehenge-visitor-centre-opens-english-heritage (Accessed: 07.06.19).

Jacobsen, J. (2016). *Measuring museum impact and performance: theory and practice*. Lanham, MD: Rowman and Littlefield. Reprint edition.

James, N. (2008). Repatriation, display and interpretation. *Antiquity*, 82 (317), pp 770-777.

James. S. (1999). 'Imag(in)ing the past: the politics and practicalities of reconstructions in the museum gallery', in Merriman, N. (ed.) *Making early histories in museums.* Leicester: Leicester University Press, pp 117-135.

Jenkins, T. (2014). *Contesting human remains in museum collections: the crisis of cultural authority.* London: Routledge

— (2016). 'Making an exhibition of ourselves using the dead to fight the battles of the living', in Williams, H and Giles, M. (eds.) *Archaeologists and the dead: mortuary archaeology in contemporary society*. Oxford: Oxford University Press, pp 251-267.

Jensen, E. (2015). Enabling city-wide audience evaluation: Plymouth artory metrics development. *Technical Report.* Warwick University.

— (2017). 'Gentle introduction to survey design for evaluation' [Workshop]. *Methods for Change*. London. 3rd February.

Joy, J. (2014). 'Looking death in the face: different attitudes towards bog bodies and their display with a focus on Lindow Man', in Fletcher, A., Antoine, D. and Hill, J.D. (eds) *Regarding the dead: human remains in the British Museum*, London: British Museum Press, pp 10-19.

— (2016). Hide and seek: what happened to ancient children? *British Archaeology*, 43, pp 42-47.

Joy, J., Gunn, I., Harknett, S-J and Wilkinson, E. (2016). *Hide and seek: looking for children in the past.* Cambridge: Museum of Archaeology and Anthropology.

Kamp, K. (2001). Where have all the children gone? The archaeology of childhood. *Journal of Archaeological Method and Theory*, 8, pp1-34.

Karp, I. *et al.* (2006). *Museum frictions: public cultures/global transformations*. Durham: Duke University Press.

Kavanagh, G. (1998). *Museums and the first world war: a social history.* London: Leicester University Press.

Kisiel, J. and Ancelet, J. (2009). Uncovering visitor conceptions of fossils and the fossil record. *Visitor Studies*, 12 (2), pp 133-151.

Lawrence, M. (2018). Conversation with Felicity McDowall, 25th June.

Lebovics, H and Boëtsch, G. (2018). Biology and culture at the reinvented Musée de l'Homme. *French Cultural Studies,* 29 (2), pp 95-119.

Leckie, K. (2011). *Collecting Swiss lake-swellings in Britain 1850-1900.* Unpublished PhD. University of Cambridge.

Levy, J. (2006). Prehistory, identity, and archaeological representation in Nordic museums. *American Anthropology,* 108 (1), pp 135-147.

Lewis, G. (2000). The history of museums. *Encycloaedia Britannica.* Available at: https://www.britannica.com/topic/history-of-museums-398827 (Accessed: 28.02.17).

Lillehammer, G. (1989). A child is born. The child's world in archaeological perspective. *Norwegian Archaeological Review*, 22 (2), pp 91-105.

— (2015). 25 years with the 'child' and the archaeology of childhood. *Children in the Past,* 8 (2), pp 78-86.

Lindauer, J. (2006). 'The critical museum visitor', in Marstine, J. (ed). *New museum theory and practice: an introduction.* Oxford: Blackwell, pp 203-225.

Lynch, H. (2007). *Prehistory: who cares?* North East Regional Museums Hub.

Mann, A. (2003). Imagining prehistory: pictorial reconstructions of the way we were. *American Anthropologist,* 105 (1), pp 139-143.

McBreaty, S and Brooks, A. (2000). The revolution that wasn't: a new interpretation of the origin of modern human behaviour. *Journal of Human Evolution,* 39 (5), pp 453-563.

McManus, R. (1997). Heritage and tourism in Ireland- an unholy alliance. *Irish Geography,* 30 (2), pp 90-98.

Mendoza, N. (2017). The Mendoza review: an independent review of museums in England. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/673935/The_Mendoza_Review_an_independent_review_of_museums_in_England.pdf (Accessed: 06.06.20).

Merriman, N. (1989). Heritage from the other side of the glass case. *Anthropology Today,* 5 (2), pp 14-15.

— (1991). *Beyond the glass case: the past, the heritage and the public in Britain*. Leicester: Leicester University Press.

— (1994). 'Display archaeology in the Museum of London', in Denford, G. (ed.) *Museum archaeology-what's new?* 21, pp 60-65.

— (1999). *Making early histories in museums*. Leicester: Leicester University Press.

Milner, N. *et al*. (2015). 'The Meso-what? The public perception of the Mesolithic', in Ashton, N and Harris, C. (eds.) No stone unturned: papers in honour of Roger Jacobi, *Lithic Studies Society*, pp 233-247.

Mirzoeff, N. (2002). *The Visual Culture Reader.* 2nd edn. London: Routledge.

Moore, J and Scott, E. (1997). *Invisible people and processes: writing gender and childhood into European archaeology*. Leicester: Leicester University Press.

Moore, R. (2013). 'Museum of the Civilisations of Europe and the Mediterranean (MuCEM) –review', *The Guardian*, 9th June. Available at: https://www.theguardian.com/artanddesign/2013/jun/09/museum-civilisations-europe-mediterranean-mucem-review (Accessed:15.06.20).

Morris Hargreaves McIntryre. (2008). *Touching history: an evaluation of hands on desks at the British Museum*. Available at: https://research.britishmuseum.org/pdf/Hands%20On%20Report%20online%2030-12-2010.pdf (Accessed: 26.04.20).

— (2016). *Celtic connections a summative report of Celts: art and identity at the British Museum.* External report. Unpublished.

Morris, S. (2018). 'Story of Wales': history museum's six-year revamp completed', *The Guardian,* 18th October. Available at: https://www.theguardian.com/uk-news/2018/oct/18/st-fagans-welsh-history-museum-revamp-completed (Accessed: 29.05.20).

Moser, S and Gamble, C. (1997). 'Revolutionary images: the iconic vocabulary for representing human antiquity', in Molyneaux, B. (ed.) *The cultural life of images: visual representation in archaeology.* London: Routledge, pp 184-218.

Moser, S. (1992). The visual language of archaeology: a case study of the Neanderthals. *Antiquity,* 66 (253), pp 831-844.

— (1995). 'Museums and the construction of an identity for archaeology: dioramas and the presentation of early prehistoric life', in Denford, G. (ed.) *Representing archaeology in museums*, The Museum Archaeologist, 22, pp 83-85.

— (1998). *Ancestral images. The iconography of human origins*. Ithaca: Cornell University Press.

— (1999). 'The dilemma of didactic displays: habitat dioramas, life groups and reconstructions of the past', in Merriman, N. (ed.) *Making early histories in museums.* Leicester: Leicester University Press, pp 95-116.

— (2006). *Wondrous curiosities: ancient Egypt at the British Museum.* Chicago: The University of Chicago.

— (2010). The devil in the detail: museum displays and the creation of knowledge. *Museum Anthropology,* 33 (1), pp 22-32.

— (2015). Reconstructing ancient worlds: reception studies, archaeological representation and the interpretation of ancient Egypt. *Journal of Archaeological Method and Theory,* 22 (4), pp 1263-1308.

Moussouri, T and Roussos, G. (2014). Mobile sensing, BYOD and big data analytics: new technologies for audience research in museums. *Journal of Audience and Reception Studies*, 11 (1), pp 270-285.

Museums Association. (2015). *Code of ethics for museums*. Available at: https://www.museumsassociation.org/download?id=1155827 (Accessed: 20.06.18).

— (2017). *Museums in the UK 2017 report*. Available at: https://www.museumsassociation.org/download?id=1219029 (Accessed: 06.06.20).

— (2018). *Museums in the UK 2018 report*. Available at: https://www.museumsassociation.org/download?id=1244881 (Accessed: 06.06.20).

— (2020). *Coronavirus: what impact is the pandemic having on museums worldwide?*. Available at: https://www.museumsassociation.org/museums-journal/news/26032020-coronavirus-pandemic-worldwide-impact-museums (Accessed: 06.06.20).

Museums Sheffield. (2017). *Beneath your feet.* Available at: https://www.museums-sheffield.org.uk/blog/2017/1/beneath-your-feet1 (Accessed: 08.10.19).

— (2019a). *History of Weston Park Museum.* Available at: https://www.museums-sheffield.org.uk/museums/weston-park/planning-a-visit/museum-history (Accessed: 25.09.19).

— (2019b). *Archaeology.* Available at: http://collections.museums-sheffield.org.uk/view/objects/aslist/342?t:state:flow=2cc9bcdc-e098-4314-bfd3-8d6488af2629 (Accessed: 08.10.19).

— (2019c). *Thomas Bateman.* Available at: http://collections.museums-sheffield.org.uk/view/people/asitem/items@null:242/0?t:state:flow=bf5d0a3d-12e2-44ee-badd-48d175d6979c (Accessed: 08.10.19).

— (2019d). *New galleries and displays now open at Weston Park Museum.* Available at: https://www.museums-sheffield.org.uk/museums/weston-park/planning-a-visit/new-galleries-and-displays-now-open-at-weston-park-museum (Accessed: 25.09.19).

Mygind, L and Bentsen, P. (2017). Reviewing automated sensor-based visitor tracking studies: beyond traditional observation methods?. *Visitor Studies*, 20 (2), pp 202-217.

NHM. (2015*). New human evolution gallery at the Natural History Museum.* Available at: https://www.nhm.ac.uk/press-office/press-releases/new-human-evolution-gallery-at-the-natural-history-museum.html (Accessed: 29.05.20).

Nichols, S. (1999). *Visitor surveys: A user's manual,* Washington: American Association of Museums.

Nicholson, R. (2017). Conversation with Felicity McDowall, 4th August.

North Lincolnshire Museums Service. (2015). *Collections development policy*. Internal Report. Unpublished.

Owen, J. (1999). 'Interaction or tokenism? The role of 'hands-on-activities' in museum archaeology displays', in Merriman, N. (ed). *Making early histories in museums*. Leicester: Leicester University Press, pp 173-189.

Padstow Museum. (2019). '*Skulls on display*'. 3rd February.

Parkin, A. (2017). Conversation with Felicity McDowall, 27th January.

Patterson, A. (2007.) "Dad look she's sleeping": Parent-child conversations about human remains, *Visitor studies,* 10 (1), pp 55-72.

Pearce, S. (1990). *Archaeological curatorship*. Leicester: Leicester University Press.

Pekarik, A. (2005). '*Visitor responses and behaviors in the Kenneth E. Behring Family Hall of Mammals*', National Museum of Natural History, Office of Policy and Analysis, Smithsonian Institution.

Perry, S and Johnson, M. (2014). Reconstruction art and disciplinary practice: Alan Serrell and the negotiation of the archaeological record. *The Antiquaries Journal,* 94, pp 323-352.

Petrov, J. (2012). Cross-purposes: museum display and material culture. *Cross Currents,* 62 (2), pp 219-234.

Pitt, F. (2015). Whitehorse Hill- compilation of feedback. Internal report. Unpublished.

Pope, M. (2018a). 'Urgent threat to Torquay Museum: What you can do to help', *Palaeolithic Network UK*, 28th January. Available e-mail: palnetuk@jiscmail.ac.uk.

— (2018b). 'Torquay Museum update', *Palaeolithic Network UK*, 27th February. Available e-mail: palnetuk@jiscmail.ac.uk.

Pope, R. (2015). 'The Celts: blood, iron and sacrifice'. *History Today*, 7th October. Available at: https://www.historytoday.com/celts-blood-iron-and-sacrifice (Accessed on: 27.06.20).

Porter, G. (1995). 'Putting your house in order: representations of women and domestic life', in Lumley, R. (ed.) *The museum time-machine: putting cultures on display*. London: Routledge, pp 102-127.

Pratt, E. (2015). 'It's all magical and made up really: negotiating between academic and alternative narratives of British prehistory', in Hinson, B and Jawliková, B. (eds.) Archaeology: myths within and without. *Archaeological Review from Cambridge,* 30 (2), pp 56-70.

Price, N. (2015). The new MOMU: meeting the family at Denmark's flagship museum of prehistory and ethnography. *Antiquity*, 89 (343), pp 478-484.

Purseglove, L. (2016). Conversation with Felicity McDowall, 20th January.

Raj, D. (1972). *The design of sample surveys*. USA: McGraw-Hill Book Company.

Renfrew, C. (2003). *Figuring it out: what are we? Where do we come from? The parallel visions of artists and archaeologists*. London: Thames and Hudson.

Roberts, B. (2020). Conversation with Felicity McDowall, 14th April.

Roberts, S. (2006). Minor concerns: representations of children and childhood in British museums. *Museum and Society,* 4 (3), pp 152-165.

Rushforth, R. (2003). The barrow knight, the Bristol bibliographer, and a lost English prayer. *Transactions of the Cambridge Bibliographical Society,* 12 (4), pp 372-392.

Said, E. (1978). *Orientalism*. London: Penguin.

Sayer, D. (2010). Who's afraid of the dead? Archaeology, modernity and the death taboo, *World Archaeology*, 42(3), pp 481-491.

Scarre, C. (2015). 'Parallel lives? Neolithic funerary monuments and the channel divide', in Anderson-Whymark, H., Garrow, D and Sturt, F. (eds.) *Continental Connections.* Oxford: Oxbow Books, pp 78-98.

— (2018). *The human past: world prehistory and the development of human societies*. 4th edn. London: Thames and Hudson Ltd.

Schubert, K. (2000). *The curator's egg: the evolution of the museum concept from the French revolution to the present day*. London: One Off Press.

Scott, E. (1999). *The archaeology of infancy and infant death*. Oxford: Archaeopress.

Scott, M and Guisti, E. (2006). Designing human evolution exhibitions. Insights from exhibitions and audiences. *Museums and Social Issues*, 1 (1), pp 49-68.

Scott, M. (2005). Writing the history of humanity: the role of museums in defining origins and ancestors in a transnational world. *Curator*, 48 (1), pp 74-89.

— (2007). *Rethinking evolution in the museum: envisioning African origins.* New York: Routledge.

Serrell, B. (1997). Paying attention: the duration and allocation of visitors' time in museum exhibitions. *Curator: The Museums Journal,* 40 (2), pp 108-125.

— (1998). *Paying attention: visitors and museum exhibitions.* Washington DC: American Association of Museums.

— (2020). The aggregation of tracking-and-timing visitor-use data of museum exhibitions for benchmarks of "thorough use". *Visitor Studies,* 23 (1), pp 1-17.

Shanks, M and Tilley, C. (1992). *Re-constructing archaeology: Theory and practice*. 2nd edn. London: Psychology Press.

Sheridan, A. (2016). Conversation with Felicity McDowall, 9th December.

Skeates, R. (2000). *The collecting of origins: collectors and collections of Italian prehistory and the cultural transformation of value (1550-1999).* Oxford: British Archaeological Reports.

— (2002). Speaking for the past in the present: text, authority and learning in archaeology museums. *Public Archaeology*, 2 (40), pp 209-218.

— (2005). *Visual culture and archaeology: art and social life in prehistoric south-east Italy.* London: Duckworth.

Sofaer Derevenski, J. (1994). Where are the children? Accessing children in the past. *Archaeological Review from Cambridge,* 13 (2), pp 7-20.

Sørensen. M. (1996). 'Women as/and metalworkers', in Devonshire, A and Wood, B. (eds.) *Women in industry and technology from prehistory to the present day.* London: Museum of London, pp 45-51.

— (1999). 'Archaeology, gender and the museum', in Merriman, N. (ed.) *Making early histories in museums.* Leicester: Leicester University Press, pp 136-150.

Spalding Gentleman's Society. (2019). *'Lithics on display'*. 29th June.

Steel, P. (2013). *British Museum most visited UK attraction in 2012*. Museums Association. Available at: https://www.museumsassociation.org/museums-journal/news/11032013-british-museum-was-uks-most-popular-visitor-attraction-in-2012 (Accessed: 08.04.20).

Stone, P. (1994). 'The re-display of the Alexander Keiller Museum, Avebury, and the National Curriculum in England', in Stone, P and Molyneaux. B. (eds.) *The Presented Past: heritage, museums and education*. London*: English Heritage*, pp 190-205.

Swain, H. (2002). The ethics of displaying human remains from British archaeological sites, *Public Archaeology*, 2, pp 95-100.

Tatham, S. (2016). 'Displaying the dead: the English Heritage experience', in Williams, H and Giles, M. (eds.) *Archaeologists and the dead: mortuary archaeology in contemporary society*. Oxford: Oxford University Press, pp 184-203.

Taylor, T. (2008). Prehistory vs archaeology: terms of engagement. *Journal of World Prehistory*, 21, pp 1-18.

Thackray, D and Payne, D. (2009). *Report on consultation on the request for reburial of prehistoric human remains from the Alexander Keiller Museum at Avebury.* Available at: https://historicengland.org.uk/content/docs/consultations/report-on-consultation-pdf/ (Accessed:10.06.19).

— (2010). *Avebury reburial request: summary report*. Available at: https://historicengland.org.uk/content/docs/consultations/avebury-reburial-request-summary-pdf/ (Accessed: 10.06.19).

Thrane, H. (1996). 'Prehistoric and Romano-British antiquities (rooms 35-40)', in J, Cherry and S, Walker. (eds.) Delight in diversity: display in the British museum seminar March 1995. *British Museum Occasional Paper*, 118, pp 13-15.

Torquay Museum. (2019a). *Our history.* Available at: http://www.torquaymuseum.org/about/our-history (Accessed: 07.10.19).

— (2019b). *Archaeology.* Available at: http://www.torquaymuseum.org/explore/explore-our-collections/archaeology (Accessed:07.10.19).

— (2020). *Help the museum raise £25,000 to ensure its future*. Available at: http://www.torquaymuseum.org/events/details/687/help-the-museum-raise-25000-to-ensure-its-future (Accessed: 15.06.20).

Trigger, B. (2008). *A history of archaeological thought.* 2nd edn. Cambridge: Cambridge University Press.

Tully, G. (2010). *'Answering the calls of the living': Collaborative practice in Archaeology and ancient Egyptian daily life exhibitions in western museums*. Unpublished PhD thesis. University of Southampton.

— (2016). Conversation with Felicity McDowall, 03rd November.

— (2017). '*Neolithic woman on display at Madrid's National Archaeology Museum*. 8th March.

— (2011). Re-presenting ancient Egypt: reengaging communities through collaborative archaeological methodologies for museum displays, *Cambridge Archaeological Review*, 26 (2), pp 137-152.

TW Research. (2014). '*The Celtic World' working title for an exhibition at the British Museum 2015-6 formative research to assist development*. [Powerpoint presentation].

UK Research & Innovation. (2019). *Feeding Stonehenge: provisioning henges and households in Southern Britain in the 3rd millennium BC.* Available at: https://gtr.ukri.org/projects?ref=AH%2FH000879%2F1 (Accessed: 04.10.19).

Vergo, P. (1989). *New museology.* London: Reaktion Books.

Walker, J and Chaplin, S. (1997). *Visual Culture: an introduction.* Manchester: Manchester University Press.

Walter, T. (2004). Body worlds: clinical detachment and anatomical awe, *Sociology of Health and Illness*, 26, pp 464-488.

Weiss, C. (1998). *Evaluation.* 2nd Ed. Upper Saddle River: Prentice Hall Inc.

Wengrow, D. (2010). *What makes civilization? The ancient Near East and the future of the West*, Oxford: Oxford University Press.

White, M and Pettitt, P. (2012). *The British Palaeolithic: human societies at the edge of the Pleistocene world.* London: Routledge.

Wilkin, N. (2019). Conversation with Felicity McDowall, 31st August.

Wiltshire Museum. (2020*). A Wealth of Knowledge: Unlocking a Decade of Archaeological Research*. Available at: https://www.wiltshiremuseum.org.uk/2019/12/15/wealth-of-knowledge/ (Accessed: 29.05.20).

Williams, H and Giles, M. (eds.) *Archaeologists and the dead: mortuary archaeology in contemporary society*. Oxford: Oxford University Press.

Witcomb, A. (2003). *Re-imagining the museum: beyond the mausoleum.* London: Routledge.

Wood, B and Cotton, J. (1999). 'The representation of prehistory in museums', in Merriman, N. (ed) *Making early histories in museums*. Leicester: Leicester University Press, pp 28-43.

Wood, B. (1995). 'Does size matter? effective presentation of archaeology in small museums', in Denford, G. (ed.) *Representing archaeology in museums*, The Museum Archaeologist, 22, pp 59-64.

Wood, B. (1996). 'Wot! No dinosaurs? interpretation of prehistory and a new gallery at the Museum of London', in Devonshire, A. and Wood, B. (eds.) *Women in Industry and Technology from Prehistory to the Present Day: Current Research and the Museum Experience.* London: Museum of London, pp 53-63.

Yalowitz, S and Bronnenkant, K. (2009). Timing and tracking: unlocking visitor behavior. *Visitor Studies*, 12 (1), pp 47-64.

Young, C., Chadburn, A and Bedu, I. (2009). *Stonehenge world heritage site management plan. English Heritage Report.* Available at: http://www.stonehengeandaveburywhs.org/assets/Full-MP-2009-low-res-pdf.pdf (Accessed: 04.10.19).

Zilhão, J. (2007). The emergence of ornaments and art: an archaeological perspective on the origins of "behavioural modernity". *Journal of Archaeological Research,* 15 (1), pp 1-54.

— (2012). Personal ornaments and symbolism among the Neanderthals. *Developments in Quaternary Science,* 16, pp 35-49.

'2018 reform of EU data protection rules'. (2018). *European Commission*. Available at: https://gdpr-info.eu/recitals/ (Accessed: 15.12.16).

'Britain's ancient capital: secrets of Orkney' (2017) BBC2.

'*The Celts: blood, iron, and sacrifice*' (2015) BBC2.

'The first Brit: The 10,000 year old man'. (2018) Channel 4. 18th February.

Index

The data analysed in the thesis is presented in Excel spreadsheets that are too large to present within the appendices included in the thesis. The following appendices were uploaded separetely:

- **Appendix A** Museum sample
- **Appendix B** Museum visits database
- **Appendix C** Record of refusals
- **Appendix D** Tracking database
- **Appendix E** Questionnaire node categorisation