Making Space for Curiosity and Innovation: Reshaping Sheffield Museums

By:

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Abstract

This collaborative doctoral project, in partnership with Museums Sheffield, examines a redevelopment project at Weston Park Museum from 2014-2016. This research addresses the question: "What is the relationship between adults' curiosity, meaning-making and innovation, and museum space?"

An ethnographic methodology was used including: 85 participant observation sessions; 9 interviews with 11 members of Museum Sheffield staff; a workshop with 13 members of Museum Sheffield staff; 130 observations of visitors in public gallery spaces; 70 write-draw submissions from visitors; and ongoing documentation of the museum redevelopment project. The collaborative nature of the research blurs the boundaries between researcher and research participants: museum staff contributing to the design and development of the research project, and the researcher contributing to the daily work of the museum.

The findings show that space is made by all museum users. Therefore, the curiosity, meaning-making and innovation activities of staff, visitors and those in-between each impact upon how space is made. In turn, the type, intensity, duration and location of these various activities is influenced by the institutional form of the museum generally, and specifically that of Museums Sheffield. Institutional curiosity shapes how a museum acquires new information, how it empowers staff and how it engages audiences. Institutional form also influences how meaning is made in the museum. Additionally, the context of a particular museum or other institution, in this case Museums Sheffield, is part of the specificity inherent in vernacular innovation.

This thesis builds three distinct contributions: a theory of institutional curiosity; the application of the concept of 'professional meaning-making' to a new context (i.e. the museum); and the identification of a new concept - vernacular innovation. The research findings also informed the knowledge held and practiced within the museum, and within Museums Sheffield in particular, such as through processes of prototyping new design with visitors.

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Throughout the thesis, Courier New font (this one) is used to indicate extracts from my ethnographic field diary. These extracts are a mixture of in the moment observations and later reflections.

Italic Calibri font (this one) is used to indicate direct quotations from research participants and documents.

Prologue: Arrival

I crossed the top of the bridge; down the other side and along the edge of an industrial estate minor road. There were wire fences, car parks and generic, unmarked warehouses all around. I referred to my instructions and picked out the one with the right coloured door - it looked more like a side door than the main entrance. I buzzed the intercom and, when it was opened, I felt like I was being welcomed into a secret society. The main door closed behind me and I was in a utilitarian entrance space. Right led to a toilet and kitchen, the left-hand wall featured posters about health and safety and possible pests, and straight ahead emerged into a small office space. This office space had bookcases laden with paperwork, three desks clustered together in the middle (shared by many more than three people who work here) and a selection of soft seating with a 1980s council staff room aesthetic. There were windows in the office wall and in the door which looked out onto the first section of the store. A huddled collection of paintings and filing cabinets, alongside wrapped objects - a space which didn't feel like it should be their permanent home compared to the ordered racks and cabinets of the other rooms I visited later. One might expect a museum store to aspire to be like a recently restocked supermarket: it certainly had the strip lighting and artificially controlled temperatures. But I think it is more akin to an attic: in the smell of stasis and presence of material objects which are loved, known about, but rarely put to use. Things don't conform to uniform packaging, piles of paper and assemblages of objects accumulate through the combination of different people, different teams moving things here and there, the gridlock of needing to clear this shelf, this table, to have space to process those things from the loading bay. The archaeology collections seemed to be accumulating faster than can be processed, faster than space could be made for them. Some of the larger objects were waiting to move up to the museum and into the gallery and then there would be twenty other objects crowding around and waiting to take their shelf space. Museums Sheffield is an interwoven collection, a curious assemblage, of objects, but also of people, places and ideas.

Chapter 1:

Establishing the Context

From exhibition content and gallery designs to researchers analysing the history of museums, the last two decades of both museum studies and museum practice have seen a growing preoccupation with cabinets of curiosity (Bann, 2003). Arnold (2006) and Bennett (1995) describe these collections of curiosities as the forebears to the modern museum; and contemporary museums transcending size and discipline have taken inspiration from these historic assemblages in the form and content of new displays. A permanent gallery at Leeds City Museum (Leeds City Museum, 2014), touring art exhibition "Curiosity: Art and the Pleasures of Knowing" curated by Brian Dillon (Dillon et al, 2013), and a comic temporary reinterpretation of collections at Hull Maritime Museum (Bailey, 2017), amongst many others, have all centred upon the idea of curiosities contained within a cabinet. However, concurrently museum practice has also taken a participatory turn with arguably a greater degree of co-production of spaces, exhibits and programmes than ever before. As people vie with objects as the focus of the 21st century museum, what do we understand of the relevance and importance of curiosities that are practiced over ones that sit upon a shelf?

Similarly, from funders criteria (Arts Council England, 2010; Museums Association, 2016) to sector events and politician's rhetoric (Eid, 2015:8-10), museums and their staff face frequent calls to deliver innovation. Yet this ubiquitous term often goes undefined. Does the process of innovation look the same regardless of the size or genre or location of the museum? And who gets to decide what outputs and outcomes truly deserve the label of innovative? These questions are unresolved for museum professionals yet potentially influence significant elements of their work, especially within a capital redevelopment project. As such, now is a pertinent time to consider the relationship between curiosity, innovation and the making of space in a regional museum.

Exploring the Terms

This project has focused on three concepts and their interrelationships with the making of space in the museum: curiosity, innovation and meaning-making. Firstly, curiosity is a word we might use every day, but which has multiple meanings. The Oxford English Dictionary (2016) defines curiosity in two ways: "1. A strong desire to know or learn something…2. An unusual or interesting object or fact". Both of these definitions have played a significant role in the shaping of museums, evident in their widely acknowledged educational function and their orientation around collections. However,

there are a broader range of curiosities which inform the workings of the contemporary museum. Previously, researchers in the field of visitor studies have attempted to measure museum visitors' curiosity through attention spans or question asking (Bunce, 2016; Falk and Dierking, 2013) and recent work on sociable forms of curiosity has considered museum programmes amongst other spaces (Phillips and Evans, 2016). This latter work of sociable curiosity could benefit from further exploration in relation to other museum spaces. Within this thesis, curiosity is defined and understood most broadly as a desire to know, and this will underpin further discussions as to how curiosity is manifest by individuals and by institutions in the context of the museum.

Secondly, the contemporary museum is under constant pressure to deliver innovation, though often without a thorough definition of what innovation means in the context of a redevelopment of museum spaces. Literature broadly identifies creativity as the development of new ideas, and subsequently innovation as their practical implementation (see Robinson, 2001; Boden, 1994). As a result, both innovation and creativity are relevant to museum design processes, though it is possible to elaborate on different forms of innovation drawn from Business Studies literature. Eid (2015) has sought to apply concepts of open innovation and social enterprise to museums, especially their development of digital approaches, and as such indicates a fertile area for further research looking at other forms of museum innovation.

Thirdly, meaning-making is another relevant concept which is connected with curiosity and innovation. The meaning-making process has been widely discussed in relation to visitors in the museum setting based on theories of social and material semiotics (see Falk and Dierking, 2013; Kress, 2010; Pearce, 1994). For visitors, curiosity may influence attention to materials from which meaning is subsequently made, and developments to one's understanding have the potential to lead to innovative products. However, there is scope to further explore its implications for space-making and its relevance to museum staff through this project. The literature surrounding these three concepts and their application in the museum setting will be considered further in Chapter 2.2.

Curiosity, innovation and meaning-making will be explored in this project through a museum geography: an examination of the spatiality of the museum. It will consider the physical and social spaces that make up the museum as a building, but also include the emotional context of it as a place and the connections between the museum site and other locations. As noted by Geoghegan (2010), previous geographical studies of the museum are relatively few, and this study seeks to contribute towards filling this gap.

The museum has been defined in several different ways, though usually centred around the presence of a collection of objects. The Museums Association (2014) asserts that museums "collect,

safeguard and make accessible artefacts and specimens, which they hold in trust for society". This sector-wide definition is reiterated in regional strategies with the collection as the defining feature of a museum (Yorkshire Museums Council, 2000: 4). The definitive nature of the tangible collection has become contested, though, in the growth of Children's Museums and Science Centres as institutions which collect and display concepts over artefacts - a problem explored by Pearce (1998:15). The broadest definition of "museum" is offered by Falk and Dierking (1992, 2013) who include almost all locations where a visitor may participate in free choice learning; aquaria to art galleries, science centres to historic houses. The visitor-centred approach to museum practice and studies has gained popularity in the UK gradually since the 1980s with the visitor often portrayed as 'consumer' (MacDonald, 2002). However, museum studies using the visitor-centred approach have not tended to account for the differences and nuances in the construction of individual spaces and the possible variations between a national or regional museum (Hooper-Greenhill and Moussouri, 2000:28). Additionally, the museum has previously been considered as an institutional form, but more often in analyses of the formation of early museums (for example: Bennett, 1995; Arnold, 2006; Kraft and Alberti, 2003) than in studies of contemporary organisations. An institution can be understood as a type of organisation, within which there are structures and discourses which dictate what that organisation might do and how it should be done. In this thesis, a museum will be understood primarily as an institution possessing a collection of objects and who displays them in order to provide a space for non-formal education.

The spaces of the museum have previously been analysed from several theoretical perspectives. Although Geoghegan (2010) discusses the current lack of museum geography, she also documents fertile areas of potential for research. Filling these gaps will necessarily demand us to build upon other disciplines already extensively entrenched in museum studies. Cultural studies have held sway in museology for a long time, drawing upon models of communication from mass media studies (Hooper-Greenhill, 1995) and Du Gay et al's (1997) 'Circuit of Culture'. In this approach, spaces were considered in their capacity to transmit information and knowledge within the museum as an educational institution. More recently this has been complicated with increasing interest in the social and affective aspects of museum spaces and the development of a more constructivist understanding of learning in the museum. MacLeod's (2005; et al, 2012) collected volumes, amongst others, offer diverse views on museum space and its creation which consider some of these social and affective aspects, though they are predominantly architectural in their origins. The architectural analysis of museums has produced a variety of studies: architectural histories of the museum as type (Giebelhausen, 2006; Magnago Lampugnani, 2006); Foucaldian approaches to the discipline of bodies and vision (Bennett, 1995; 2006); quantitative measures applied through space syntax (Hillier

and Tzortzi, 2006; Tzortzi, 2015); and more recent case studies on the application of design thinking (MacLeod et al, 2015). It is this latter approach which most heavily connects with the starting point for this project: the space of the museum exists in the individual's experience of it and thus can extend far beyond its physical boundaries, yet the materiality of the space impacts upon its construction whether it has been directly experienced or more distantly known. The review of literature in Chapter 2.1 will explore these areas of theory in more detail, but first it is relevant to consider the specifics of the chosen case study site.

The Research Site

The origins of Weston Park Museum and its collection can be traced back to the 19th century, though significant changes have taken place in the last 20 years. Museums Sheffield was established as an independent trust in 1998, taking responsibility for the operation of Sheffield's non-industrial museums and collections (Roodhouse, 2000:86). There has been regular instability over the last decade in their funding sources impacting on their operations (Museums Association, 2008; 2010 a,b,c; 2012; 2013; 2014 b,c), yet Weston Park Museum has benefitted from capital investment making new museum spaces and redeveloping existing ones during this period (Lewis, 2007). The museum closed in 2003 for an extensive redevelopment project funded by the Heritage Lottery Fund, subsequently reopening in 2006. The resulting spaces were extensively used by families and nominated for several awards. The end of the 20th century and the first decade of the 21st saw an importance placed on provision for children throughout museum practice and research and the UK labour government of the time sought to instrumentalise museums within an agenda based on education and social inclusion (see: Hooper-Greenhill, 1994; Sandell, 2002 and 2003; Dodd and Sandell, 2001; Lawley, 2003; Ellenbogen, Luke and Dierking, 2004). The changes within Museums Sheffield and Weston Park Museum reflected this wider political and sector context at the time.

The last five years have seen further changes to the political climate and priorities within the institution have shifted to react to these. With the scrapping of the Museums, Libraries and Archives government agency in 2012, along with the Renaissance funding programme, Museums Sheffield lost out on a significant income stream (Museums Sheffield, 2012). This inevitably impacted on the making of spaces within the museums, including Weston Park. The subsequent years could be described as tumultuous for the museum sector as a whole with national and international political events leading to staff reductions, museum closures and regularly changing priorities to tap into funding sources. The mood of those involved in the sector is perhaps summed up by this quote from an anonymous contributor to the Museums Association email newsletter in November 2016:

"Pity the hapless curator, trying to do the jobs of three people when half her colleagues have been made redundant, told she is elitist and irrelevant to today's museum (except when someone wants something done)."

At Weston Park Museum, the restriction of resources and the reduction in staff capacity after 2012 limited the scale at which spaces could be changed by staff. Nevertheless, continued high visitor numbers altered spaces through use, as the cumulative effect of individuals and groups impacted upon its fabric.

At the beginning of this research project, in late 2014, Weston Park Museum had sought out more opportunities to reshape its spaces, though still against a background of uncertain ongoing funding and political support. Museums Sheffield was awarded Major Partner Museum funding from the Arts Council from 2015 - 2018 (Museums Sheffield, 2015b) and new funding from the Heritage Lottery Fund was granted towards the 'Weston Park Museum: A Bright Future' project between 2014 and 2017 (Museums Association, 2014c). Thus, during the period of this study there were formal design processes within the redevelopment process, temporary exhibition and programme changes, as well as individuals changing the spaces through their use of them. This would be among the most extensive range of space-making processes available to observe within a regional city museum at this point in time. This research project observed these space-making processes in a general sense, though was designed specifically to respond to the priorities of and contribute to the institutional knowledge of Museums Sheffield and to answer a research question which evolved during the course of the project.

The Research Question

The aim of this research project was initially outlined prior to my involvement and then refined through my collaborative work with stakeholders. Firstly, representatives from the University of Sheffield and Museums Sheffield came together to set up the intentions for this project and the scope was broadly established as pertaining to curiosity, innovation and museum spaces. In the first months of this PhD I then worked with supervisors from both the museum and the university to refine the purpose and aim of this project. 'Adults' emerged as a key demographic who would be involved in and affected by the succeeding period of reshaping museum spaces and partially narrowed the focus. Additionally, creativity and meaning-making emerged as concepts heavily connected to both curiosity and innovation. Museums Sheffield's plans also included components of co-curation with local community groups, which offered scope for considering the making of space through design by both museum professionals and other individuals. Together, these influences contributed to the overarching question of this research project:

What is the relationship between adults' curiosity, meaning-making and innovation, and museum space?

This question is addressed throughout the following text and is broken down into a number of different areas and sub-questions which have given structure to the chapters and overall thesis. These are described in more detail in the methodology.

Overview of Chapters

Following this introduction are two chapters which together review the existing literature to establish what is already known or theorised about the making of museum space and its relations to curiosity, meaning-making and innovation. The first of this pair, Chapter 2.1, explores the literature about space and how it has been, or could be related to museums. Based on their relevance to museums, the chapter examines work on the concepts of materiality, place and flows. This chapter also considers existing theories of museum spaces as being made through use and the various actors involved in this process. The second, Chapter 2.2, seeks to do three things: firstly, to describe existing work on cognitive and tactile curiosity, as well as emerging thought around sociable curiosity; secondly, to identify the opportunities to extend previous work on meaning-making in the museum; and thirdly, to document how innovation has variously been understood as a product or a process, but with limited application to charitable institutions. Overall, existing literature has focused on children in relation to museums, curiosity and creativity, with a comparative lack of focus on adults. Chapter 3 details the methodology of the project and considers the component methods of this collaborative ethnography and their associated ethical considerations.

The next three chapters form the body of the ethnography with each taking a different concept as its focus. Chapter 4 gives a roughly chronological overview of the redevelopment process and explores how institutional curiosity, individual curiosity and curiosity-driven practices all play a role in the making of museum space, though in different forms and intensities at different times and in different spaces. Chapter 5 examines meaning-making as a way of breaking down the dichotomy that exists between museum staff and visitors and builds upon existing work by considering the professional meaning-making of museum staff. Chapter 6 evaluates the usefulness of identifying innovation as a product or as a process in the making of museum space. This chapter introduces the concept of 'vernacular innovation', recognising the importance of spatial-temporal context to the changes within an institution like a museum.

The last two chapters look to the ways forward and impacts of this research. Chapter 7 takes the form of a dialogue relating the ideas developed in this thesis to museum practice. The museum as an institutional form appears megalithic and to try and change it is a daunting task as it is anchored to

other national and regional institutions. This chapter explores how a museum changes and adapts over time by working with its existing form and current evolving staff team to build upon strengths and resources to enact slow and iterative changes. The final chapter offers concluding remarks and identifies potential avenues to build upon this research in the future.
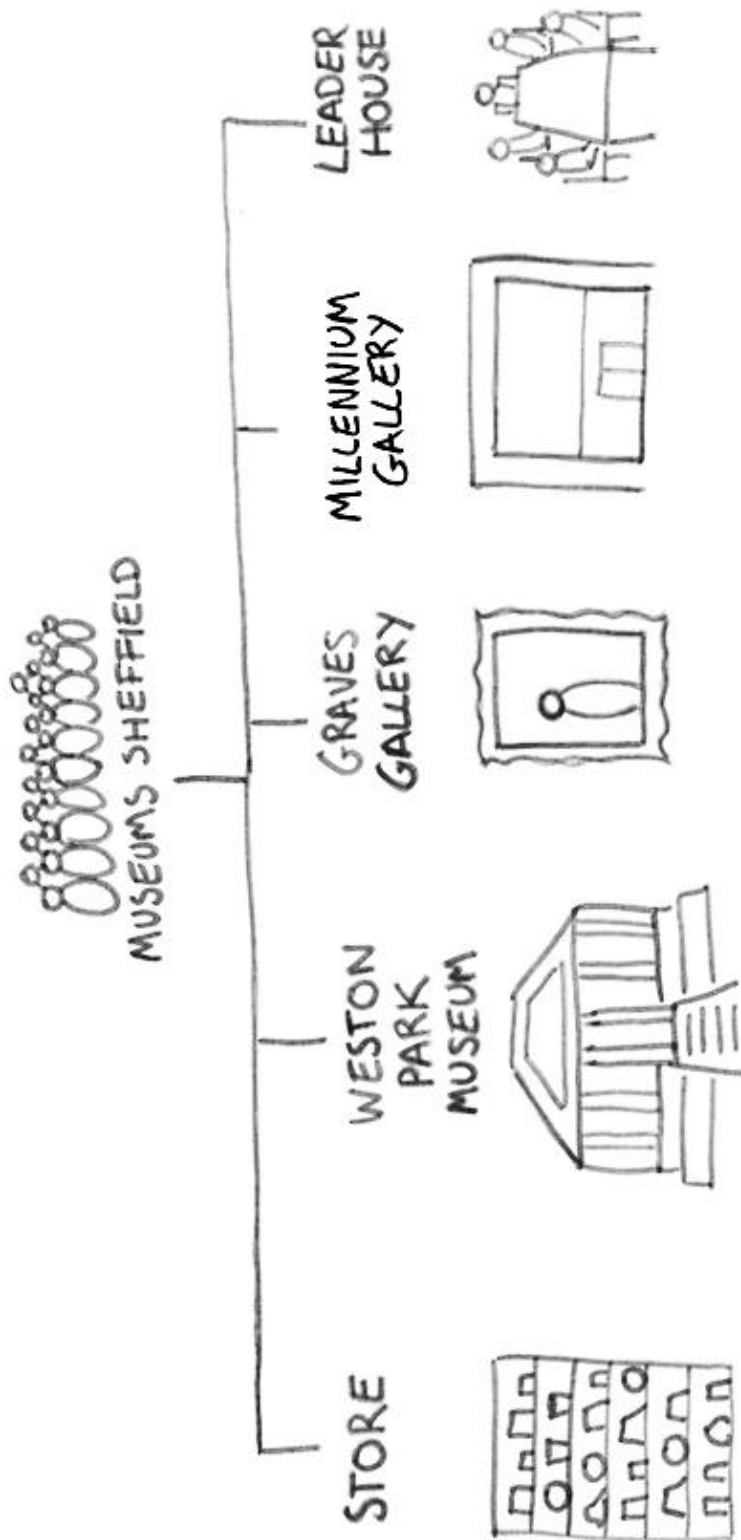
Figure 1 A diagram depicting the relationship between Museums Sheffield and its five sites.

Chapter 2.1:

Making Space in The Museum

Introduction

In its discussion of the making of museum space, a subject that affects both the public and private areas of the museum, this chapter will consider literature spanning many disciplines including geography and museology, as well as examples of museum practice from the UK and elsewhere. Within this there are two key questions to address: What are the types of space being made in the museum? And who are the actors involved in the making of these spaces?

Museology has undertaken a spatial turn over the last decade, with a great deal of work in this area drawing upon architectural thought (see MacLeod, 2005; Tzortzi, 2015). Additionally, museum related research has connected to urban, social and cultural geographies across a number of areas, such as: the role of the museum in urban regeneration (Bradburne, 1999; Shaw et Al, 2008); geographies of collecting (Alberti, 2002; Hill, 2006; Geoghegan, 2008; Patchett, 2008); connections between heritage and tourism (Crang, 1994; Graham et al, 2000; Lowenthal, 1985); identity formation (Desforges and Maddern, 2004; Till, 2005) and the analysis of museums through a post-colonial perspective (Duncan, 2005; Dixon, 2012, 2016) or national context (Knell et al, 2011). However, as reported by Geoghegan (2010), there are many areas of museum practice and museology that would benefit from the further incorporation of geographical thinking, including the largely under-studied area of 'behind-the-scenes' museum processes. Likewise, the museum provides fertile ground for the exploration of geographical methodologies and theories of space, place and identity (Geoghegan, 2010).

Many Forms of Space

In order to examine the spatiality of the museum, the term 'space' needs to be defined and explored in relation to how it has and can be applied to the museum context. Philosophers have often separated space as exists from space as it is experienced (Merleau-Ponty, 1967:243) and this has created a divide that runs deep within Geography. However, this binary opposition has been challenged and interrogated. Merleau-Ponty (1967:243, 275) identified space as the power which enables objects to be connected: for them to be perceived simultaneously. Lefebvre (1991:15) also rejected the idea of space as a container to be filled and considered space as a product. His ideas echo the culture/nature dichotomy, with the suggestion that social space is produced and takes over

pre-existing natural space, but offers a greater possible nuance with an "indefinite multitude of spaces" (Lefebvre, 1991:8). These include "geographical, economic, demographic, sociological, ecological, political, commercial, national, continental, global. Not to mention nature's (physical) space, the space of (energy) flows, and so on" (Lefebvre, 1991:8). More recently, Thrift (2003) has given a more concise list, dividing his introductory taxonomy of 'space' in human geography into four: empirical space, place, image space and block space. These underlying structures or philosophies of space inform how we think about its creation and use to this day and can be seen reflected in work addressing museum spaces. Hetherington (1997), similarly proposes three types of space visible in the museum: geometric, discursive and topological.

However, Rose (1993) and Massey (1994, 2005) have delivered influential feminist critiques of many of these previous constructions of space, including place, encouraging the discipline of geography to recognise a greater diversity of spatial experience based on identities and connections. Massey (2005:9) offers three propositions for space: firstly, that "space is the product of interrelations, as constituted through interactions"; secondly, that it features "contemporaneous plurality" and "coexisting heterogeneity"; and thirdly, that space is "always under construction". Furthermore, both Massey (2005) and Whatmore (2002) have initiated discussions around the role of non-human elements in place creation, with a particular focus on nature or physical geography and 'hybrid geographies'. Overall, these four propositions can offer a guiding structure for this project, and resonate somewhat with MacLeod's (2005) argument that space in the museum is made through use. Museum space involves the interactions of people with both objects and other people; it involves diverse individuals with different perspectives engaging simultaneously and making their own meaning attached to the location; and it can be understood as constantly made and remade, not limited to formal design processes. To that end, the discussion below will be grouped around three areas of relevant spatial literature: materiality, place and landscapes, and unbounded space and flows.

Materiality as Museum Space

In museum practice, materiality could be considered the principle focus. Materiality, the objects in a collection, is what sets the museum apart from other communicative media (see Hooper-Greenhill, 1995). It has therefore also been a key consideration in museum studies literature and within museum design practice. Colours, sizes, weights, floorplans with transparent glass cases and solid walls, the ordering of objects: these are aspects of materiality of the museum and they are often located within empirical or geometric space – a space which is assumed to be objectively observable. However, wider discussions of the significance of materiality, its interaction with people and its

political life, are taking place across many disciplines and these may be usefully applied to the museum context.

There is a growing interest in material culture and materiality and, within Geography, one 'high-profile' call came from Jackson (2000) in '*Rematerializing Social and Cultural Geography'* (Anderson and Tolia-Kelly, 2004:669). Jackson (2000) outlines two critical points for how studies of materiality should develop: not assuming the significance of materiality, instead focusing on when and how it makes a difference; but also identifying materiality as more than the social relations it affects. Jackson (2000) highlights a number of promising areas for material culture research in human geography including consumption cultures, digital spaces, actor-network approaches and interest in 'socially-constructed nature'. All of these areas have relevance to museums, demonstrating the potential applicability of Jackson's suggestions to research in the museum context (for examples see Hooper-Greenhill, 1995; Ciolfi and Bannon, 2007; MacDonald, 2002; Cameron et al, 2013). Tolia-Kelly (2011:153-154) describes the development of material geographies in the last two decades and argues that this work needs to go beyond 'surface' recordings and engage with the politics of the material to understand them as 'active and co-constitutive of their geographies, places, sites and spaces'. Furthermore, Bennett (2010) explains that, in many cases, calling upon materiality has overly equalized relations between human and non-human elements. Bennett (2010) and Tolia-Kelly (2011) advocate for an approach that extends past a 'stratified framework' to highlight the integrated and co-dependant nature of relations between humans and non-humans – with both constructed through materiality. The materiality of the museum is implicated in political processes and social relations and, as a result, research should focus on how and when it makes a difference.

Another field of recent research is the intersection of the material with the visual. Rose and Tolia-Kelly (2012) discuss a materiality that is fluid and unstable in meaning; it includes forms, rhythms and textures as well as considering the engagement between memory and matter (Rose and Tolia-Kelly, 2012). They argue that the material is visual and the visual is material with both going "beyond the ocular"; work in this domain requires all the senses and combines with the body, memory and history in analysis (Rose and Tolia-Kelly, 2012:3). These ideas resonate with the museum context which features material collections and immersive environments, whilst also placing an importance on the visual and practices of looking. Rose and Tolia-Kelly call for further "empirical, nuanced, alert" (2012:9) investigations into material and visual cultures that recognise that they are intertwined with "violent, dirty, messy matters of surveillance, governance, money, rights and bodies" (2012:4). They stress the need to focus on practice (what people do with things): both our own practice as researchers and research participants' (Rose and Tolia-Kelly, 2012). Practice within, and studies of,

the museum have been accused of 'occularcentrism' (Dudley, 2013) and actively going beyond this to incorporate the multi-sensory could yield new insights.

Engagement with materiality's role in shaping museum space has had limited reference to different scales to date. Most often the architecture of the museum building has been considered as the primary material focus. Giebelhausen (2006) considers the architecture of the museum to be defined by the relationship between container and contents in their discussion evaluating instrumental and monumental examples, focusing on surfaces and thus rejecting permeability. Lampugnani (2006) criticises modern museum architecture as being overly driven by consumerism and overshadowing the art it displays, limiting its role to an agent of urban regeneration. Both of these accounts seek to understand contemporary museum spaces within a historical sequence of museum architecture, treating the buildings as objects without interrogating the idea of whether the function of the museum as an institution has itself changed. In contrast, Macleod's (2005, 2015) work reflects ideologies from the 'New Museology' of the 1990s, utilising architectural thought on space to locate its production and use in relation to visitors. The authors in Macleod's (2005) edited volume, '*Reshaping Museum Space'*, reflect more diverse approaches to understanding the spatiality of the museum, and position architecture as a social and cultural product that is made through use. This description of museum architecture could be expanded to different scales, to consider how other elements of materiality are also social and cultural products, made through use in the museum.

In line with the growing interest in the field, the significance of materiality in the museum has been explored by recent studies addressing interactions with museum objects related to health and wellbeing. Dodd and Jones (2014:13, 26) suggest that collection objects can be used to "stimulate discussion, encourage creative thinking and reflect on personal identity", especially when used for tactile encounters. They cite other research which suggests that sensory engagement is a stimulus for cognition and emotional engagement, and able to trigger ideas or memories (Dodd and Jones, 2014). Furthermore, Chatterjee et al (2009) discovered two common responses to object handling: either people discussed their own ideas and experiences or were curious about the object. Positive feelings of wellbeing may have been derived from: the social interaction prompted by the material object; the sense of learning through both the body and cognition; or from the self-worth and value associated with the 'privilege' of handling museum objects (Dodd and Jones, 2014). Research in this area has largely focused upon outreach and education programmes where participants have been able to handle 'authentic' objects, though the conclusions and principles may be transferable. Such findings are indicative of interrelations between people and materials, and of the significance of aspects of materiality within the museum context.

In summary, materiality offers a powerful and emerging lens through which to consider the making of museum space. Researchers have often explored material elements in relation to the empirical space of the museum and its architecture, but there is an opportunity to work across and between disciplines to draw upon a growing interest in material culture (Anderson and Tolia-Kelly, 2004). Materiality is a form of space produced through its use in social and cultural practices, and it has been recognised as important for making meaning in the museum, recently in relation to health and wellbeing. To uncover the specifics and significance of its role, researchers should go beyond visual or surface readings and explore multi-sensory engagement with materiality. However, materiality is not the only form of space pertinent to the museum. There are diverse experiences and perceptions of materiality: the same colours, textures and arrangements will not be interpreted in the same way by each person. Materiality does not necessarily hold an objective meaning and, as such, it might be useful to also explore the geographical idea of 'place'.

Making Places and Landscapes in the Museum

Place, in a simplified sense, is the meaning that an individual or a group might derive from, or attach to, a location. At this basic level, place has been adopted beyond geography, including in museum studies. However, this widespread use of the term does not always reflect more recent critiques and developments of the concept. These more nuanced understandings of place have come from feminist re-imaginings, as well as from its consideration in relation to landscape, and relate to the museum as a place, as well as its role in constructing other places.

The development of 'place', particularly in opposition to 'space', grew to be a key concept within Humanist Geography in the second half of the 20th century. 'Space' became associated with scientific rationality and measurement, whereas 'place' offered scope for exploring the interpretation and significance created by humans (Rose, 1993). Tuan (1977) described space as movement and place as pause, creating a division between the former as a framework and the latter as being invested with meaning. Such works implied that place was a subjectively experienced thing, yet have been widely critiqued as not allowing for or representing diverse experiences. Within them, understandings of places were deemed to be universal (Rose, 1993). For example, how Tuan (1977) described and compared women's bodies sets them as an 'other' against the norm of male experience, assuming that male (also often white, able-bodied and heterosexual) experience can be representative of all experiences (Rose, 1993). In addition, Cresswell (1999:23) noted that places are "simultaneously geographical and social", implying they are affected by the interactions of human actors, and Rose (1993:41) suggested a definition of place as "a specific set of interrelationships between environmental, social, political and cultural processes". Massey (1994: 153-155) argued that there would never be a single sense of place, even socially held, as places are defined through

their associations and connections and, in later work, (Massey, 2005: 130) refined this sentiment to propose places as events located at a point in time and space where different agents in becoming, "stories-so-far", intersected. Those that didn't connect or intersect at this point would be disconnected, possibly excluded, from the resulting 'place' (Massey, 2005). Through this Massey (2005:9) sought to illustrate an understanding of space as a sphere of "contemporaneous plurality" and "coexisting heterogeneity". Drawing on this school of thought, we can see the museum as meaning different things to different people, at the same time or at different times; each of these may overlap considerably, slightly or not at all.

There is evidence that the understanding of place, as put forward by humanist geographers, has been adopted by museum researchers and practitioners, but there is less evidence for sustained engagement with these more recent critiques and development in the sector. Ciolfi and Bannon (2007:159) explicitly considered ideas of place from geographers, including Tuan (1977) and Merleau-Ponty (1967), in their research into museum spaces augmented with digital technologies. In their work, Ciolfi and Bannon (2007) advocate for constructing new spaces in the museum based on an understanding of subjective experiences, affect and associations that may alter how people behave, interact and make meaning. They conducted a total of six walk-throughs of the space they were going to augment in order to gain a subjective understanding of the space as a visitor (Ciolfi and Bannon, 2007). Whilst this method shows more engagement with visitor subjectivity than other design processes witnessed in museums (which rely on assumed prior knowledge), it is underpinned by the assumption that the experience of one or two researchers can represent the experiences of all visitors. Museums are increasingly concerned with creating an identity for themselves that reaches out to audiences, creating themselves as places through branding and marketing. Sometimes this encounters the same limitations, substituting a singular experience as able to speak to all audiences. Increasingly a variety of perceptions are addressed through 'segmentation': grouping audience members around particular characteristics or interests. Whilst it doesn't resolve all of the theoretical problems of assumed experience, and depending on the type of segmentation used (e.g. motivation for visit rather than strict age bands), it currently offers a more practical solution for institutional place-making in relation to diverse experiences of place.

The museum is experienced as a place, but it also plays a role in the construction of other places that might be further removed in time and space. This second form of place-making utilises a form of space that Thrift (2003:105) has labelled 'image space'. The places created in this image space are multiple and the relations between them construct a landscape. This might be specifically depicted, as in the use of maps with collection items or displays plotted against them (as at The Museum of Liverpool, 2015; and The Laing Art Gallery, Newcastle, 2015) or through place names and relational

descriptions given in interpretive materials. This idea of places as components within a wider landscape is put forward by Rodning (2010:180). Cultural knowledge and activities are utilised to assign meaning to spaces located within the landscape, transforming them into 'places' (Rodning, 2010). Representation within the museum, the display of associated artefacts and the reference through text and images, is one such cultural activity. The landscape, then, can be understood as a "cultural image, a pictorial way of representing, structuring or symbolising surroundings" (Cosgrove and Daniels, 1988:1) and the representation in the museum is not an illustration, but rather an integral part of the landscape's meaning. However, the landscape is not a singular understanding; much as was argued above for the multiplicity in understandings of place, it has been put forward that there are as many landscapes created as there may be people perceiving them (Jackson, 1989). Places and landscapes are not inert backgrounds of human inhabitation, they are created by, and in turn create, ways of being and living in an area over time (Rodning 2010:187). These actions may be produced, reproduced or challenged through the representations of the museum and they are transactions of materiality and meaning. As people engage with, contest and appropriate the landscape, it offers opportunities for the creation and contestation of their own identities (Bender, 1993). This takes place outside of the museum in the material landscape but also inside the museum through the landscape as "cultural image" (Cosgrove and Daniels, 1988:1), where people can combine it with their own lived experience to extend their understanding of the landscape in time, space and perspective. Museums vary widely in their focus: national to local, international cultural items to regional botanical specimens, but they all create particular landscapes through their collections. The connection is perhaps clearest to see in a local or regional museum, where the museum is a very present spatial part of the landscape it is creating.

Overall, there are clear examples of museum practice that have explicitly or unconsciously adopted the understanding of place from humanist geography, developed by theorists like Tuan (1977), although museums often have yet to engage with more recent critiques to the same extent. There is scope to further explore places, understood through interconnections and associations, and their contribution to landscapes and hybrid geographies in relation to the museum. However, there is a tension between stasis and dynamism in museum spaces that these terms might not currently fully explore, and therefore additional concepts are also needed to address this.

The Museum as a Point in a World of Flows

Space has often been positioned as the static element of human experience, in contrast to the dynamic nature of time. Yet, as discussed above, critiques of materiality, place and landscape stress interconnections and are calling for a recognition of the variability of space, suggesting that it has its own dynamism. This provides scope to consider spaces, including those related to the museum,

through new concepts that incorporate this, such as flows or unbounded space. The terms recognise the coming together of different agents to co-exist in some way and exact an influence on each other's experience, and respond to the idea of spaces as always in becoming (Massey, 2005), never made, always being made and remade in different ways.

Existing work in museum studies examining 'flows' has tended to focus on the dynamic flow of the visitor through time and space. The collections, architecture and other aspects of the museum are regarded as a mostly static background – potentially influencing visitor choices, but not 'flowing' themselves. A number of established quantitative techniques in architecture have been used to understand visitors flows such as 'directional splits', 'Tracking Scores' and 'Space Syntax' (Tzortzi, 2014; Hillier and Tzortzi, 2006). These studies have sought to identify "general principles underlying movement in museums" (Tzortzi, 2014:329) such as which way visitors tend to turn (which varies between cultures). Bitgood (2006) suggests that visitors will make movement choices based on architectural and curatorial aspects of the space, as well as personal factors (e.g. interests and prior knowledge). Overall, these studies stress the mobility of the public within a static environment created by curators, designers and architects.

One theory that has been widely considered within Museum Studies and that addresses the spatial activity of multiple groups of actors is that of contact zones. Clifford (1997:192) borrows Mary Louise Platt's term 'contact zone' which describes "the space of colonial encounters" where previously separated groups establish "ongoing relations" usually including conflict and inequality. Clifford (1997: 192-5) argues that applying this perspective to the museum transforms the collection into the frontier, made up of "an ongoing historical, political, moral relationship" involving the movement of objects, messages, money and people. Whilst Clifford's (1997) work focuses on anthropological museums, he suggests the 'contact perspective' can be used to understand the meeting of different socially distanced audiences within the museum. This perspective restores movement to both staff and visitors, as well as implying the mobility of collections and ideas, and draws attention to the structuring of these through unequal power relations. Key questions are raised about who gets to control the encounter or resultant actions. 'Flows' within the museum are not equally empowered, and through interactions can be shaped, enabled or blocked. Reference to the concept of the museum as a contact zone can implore us to consider the overarching power relations governing how people interact in the making of museum space.

If we are to see the museum as a space of the meeting of flows, then we also raise questions of whether those flows ever come to an end. Gielen (2004) begins to address this in outlining three different types of time that are used to portray the past in museums. Firstly, 'Local Time' is linear

and evident in museum galleries that divide objects into periods (Gielen, 2004:152). It is 'monochronous', fixing the story of the past, closing it off from intervention in the present and separating the visitor from the setting of the object (Gielen, 2004). This form of time may offer a meaningful context and solid narrative to the object, relying on the chronological succession that we are socialised in from an early age (Gielen, 2004). However, it also implies a flow of the object that has been suddenly cut at one point in time at an abrupt and preserved end, becoming static once in the museum. A 'Global Time' identifies connections between time and space, and follows similar principles in the closed-ness of the past, although in this case presentation simply depicts 'past-ness' rather than reference to specific period (Gielen, 2004). The most relevant conception of time in the museum, in terms of flows, is that of 'Glocal Time': an understanding of different temporal rhythms depending on the network to which we belong (Gielen, 2004). This acceptance of time meaning different things to different people and the awareness of multiple perspectives chimes with an acceptance that the past is always understood from our present location. The flows of the objects and of ideas did not stop. They may have slowed upon accession to the museum but they are still dynamic, and through them the presence of past people can be felt today – they are always in becoming.

The bringing together of different 'flows' from people, objects and ideas, though unequally balanced, speaks to Ingold's (2008) work on zones of entanglement. Ingold described the world as inhabited and "woven from the strands of [things'] continual coming-into-being" (Ingold, 2008:1797). The unbounded world is lived in rather than on (Ingold, 2008), stressing the interaction between this space of flows and the materiality. We can apply this logic to the museum to restore the dynamism of displays and architecture, so instead of seeing a gallery as completed and then consumed by the public, it is constantly made and remade through interaction with curators, educators, maintenance staff, visitors, its micro-climate and time. Movements leave traces (Ingold, 2008): whether those are smears on the glass case from looking closely or the gap left by an object removed for conservation. Ingold (2008) considered the human being, in fact any living organism, to be more than a single line. Their surface is a permeable surface like the world itself making the person a bundle of strands (Ingold, 2008) potentially shaped through the ideas and experiences accompanying identity and the practices and tools that control, clothe and decorate bodies. Objects and people in the museum then are already entanglements that further interweave through their interaction in this context. These flows are the stories-in-progress of different actors (Massey, 2005), lines of becoming without a beginning or end (Ingold, 2008). They interact to create a meshwork, not a network and, where they gather or circle a particular location, their movement creates a place (Ingold, 2008). Ingold's (2008:1808) ideas of places made from the "comings and goings of human

beings and other organisms", echoes Massey's (2005) ideas of places created through connections and disconnections.

In summary, thinking about museums as a space of flows, where experiences are built up as an interwoven fabric, enables a sense of dynamism. It positions museums as active and constantly developing, as well as also potentially responsive and resilient. The space of flows makes the museum adaptable yet structured, a malleable construction with solid foundations. It has implications for how we think about the visitors' experience and locating the museum in unbounded space requires a consideration of all the spaces the body engages with before, during and after the visit. The meaning drawn from the experience will be influenced by these elements (the toilets, shop, café, corridors, outdoor spaces and route to and from the museum) as well as from the displays in the galleries.

Museum space is made through use and the application of multiple lenses (materiality, place and flows) can give depth to our understanding of how it is made. The majority of spatial work in museum studies and practice to date has been informed by ideas of materiality grounded in empirical space – the structure of architecture, the details of size and measurement and resistance to wear and tear. There have been moves to adopt an understanding of place in research and in practice, yet often this has not fully addressed feminist and other critiques calling for a conception of place as holding different meanings for different people based on intersectional identities, connections and associations. In addition, this has fostered some engagement with the phenomenological experience of materiality but there is still much more work that could be done in this area. There is room to develop our knowledge and understanding through conceiving of the museum as a space drawing on Massey's (2005) ideas of place created through connections and disconnections. Such an idea allows for the exploration of the dynamic nature of museum space in relation to time, particularly in seeing the space as changeable (through use, programming and display renewal) and able to respond to contemporary needs, rather than as a fixed entity at the end of a development project. Engagement with or disconnection from the museum is a place-making activity, allowing us to understand the sense of place created within the museum as altered dependent on intersectional identities, prior experiences and connections. As will be further explored below, it also depends upon materiality as active in the making of space, rather than as a passive surface. For the purposes of this study, it will be important to consider all of these understandings of space alongside one another.

Who Makes the Spaces?

Throughout the history of museums, it has been common to envisage public display spaces as shaped by individuals or teams of curators and designers and subsequently received and consumed by visitors. A dichotomy between staff and visitor has been created with a focus on the human actors who, in museum practice, have been seen as the ones with the necessary agency to make spaces, and an assumption of an inactive or at least compliant populace. This is perhaps exemplified in Foucauldian critiques in the museum as a disciplinary agent (for example Bennett, 1995).

There are many theorists who have sought to redistribute this agency to an increased number of actors. Du Gay et al's (1997) discussion of the circuit of culture has been widely adopted in both museum research and practice and ascribes a central role to the visitor in being able to construct multiple meanings from presented materials. Understandings of socio-semiotics (e.g. Krautler, 1995; Kress, 2010) also present opportunities to see the consumption and reception of information in the museum as active meaning-making processes. Clifford (1997), in his description of museums as 'contact zones', explores the power balances between curatorial expertise and community experience in the contextualisation of collections. A 'contact perspective' (Clifford, 1997) has implications that potentially attempt to break-down the divide between public and private spaces in the museum and go beyond exhibition functions to consider people other than staff (such as source communities) as actors in shaping the museum as a wider institution. However, the unequal power relations between these groups are integral to this understanding (Boast, 2011). The range of actors can be broadened further still by Latour's (2005) proposed Actor-Network Theory: anything that changes the state of affairs can be considered an actor. The workings of the museum, and especially the need for particular types of space, are arguably affected by objects and collections, thus opening up our scope to also consider to what extent these non-human actors contribute to the making of spaces.

However, it is not just tangible people and things that affect museum space; there are also ideas, discourses and intangible institutional elements that play a role. Latour (2005) refers to these intangible influencers as 'actants' and the most obvious one of these is the 'museum' itself. The 'museum' is a social construction that would be non-existent without the people and objects that have shaped its biography and maintain it in the present, and the future imagined audiences that the objects are preserved for. There are museums as buildings, but the idea of what an individual museum is, and what all museums should be, has an important effect on the shape of its spaces. The 'museum' as an institution exists wholly within a collection of other agents, yet transcends them with a power and agency that may seem to operate independently of them. It offers a spatial,

temporal and political frame that influences the actions of people and objects, providing particular creative resources and restricting the use of others. MacDonald (2002) indicates this phenomenon, detailing how 'the museum' became identified as the author of an exhibition at the Science Museum, London, overlaying and controlling the individual preferences and styles of the curators at work. This practice is evident in the displays of most museums; the museum is the assumed author and the inscription of individual's names to an exhibition is a rare exception. This section, then, will consider how human actors, objects and ideas all contribute to the making of museum spaces.

People Making Museum Spaces

There is a diverse range of people, human actors, involved in the making of space within the museum. Some of these are explicit and expected, such as curators and designers employed by the institution, whilst others are positioned as shaping the space through its use, such as visitors. Others have a more removed role through funding and policy decisions at a regional, national or international scale.

A range of individuals are often involved in formal gallery design processes within museums. In her ethnography of the development process behind the 'Food' gallery at the Science Museum, London, MacDonald (2002) outlines a handful of actors that form the core team shaping what the space will become. These include museum employees, mostly curators, who have been seconded onto the project (all women), two men from an external design agency, and the oversight of the (male) museum director, as well as MacDonald herself who takes part in the team as a participant observer (MacDonald, 2002). Their influences are temporally and spatially located – the core internal team focusing on the project day in and out; the designers participating in periodic meetings and away days; and the museum director exacting an influence at one or two crucial meetings in his office (MacDonald, 2002). How they influence the final space, and how they relate to the other team members, is affected by individual identities including professional status, subject matter expertise and gender, all bound up within the wider institutional context and politics of the late 1980s (MacDonald, 2002). The core group of actors considered in this study are those that we would most readily expect to be part of the making of museum space, though particular cultures and practices within the Science Museum potentially make in clearer to delimit a 'team' than in other museum contexts. Interviews that I carried out with staff at Eureka Children's Museum, Halifax (Gwyn, 2015), and New York Historical Society, New York (Stevenson, 2015), for example, revealed a wider range of individuals who formed part of the team responsible for creating a new space. In both these cases panels of local children, as well as education staff, took part in formative evaluation to shape the space. Included within the broad team responsible for the 'All About Me' gallery at Eureka were funders, designers, administrators, consultants and contractors, as well as the visitor-facing

'enablers'. Museum teams have shrunk since the financial crisis of 2008, and combined with an increasing demand for high-quality and professional museum design, the formal process of making museum spaces now regularly involves employees with diverse job roles, including visitor services staff, as well as a greater range of specialist expertise from external sources.

In addition to the formal gallery design processes, visitor services staff alter and create museum spaces through their presence and the interactions they provide. Falk and Dierking (2000, 2013) argue that interactions with museum staff can alter the experience of space for visitors, such as through staffed handling tables and guided tours. Conversely, the material space of the museum can compel the visitor to interact with staff. Examples of this include entrance spaces at the National Railway Museum, York (2014), and Brooklyn Museum, New York (2015), which aim to channel visitors to a welcome desk and into a conversation with a member of staff. In both these institutions, entry fees are optional donations, though the interaction with a member of staff prompts a much higher donation rate than would be achieved by an inanimate donation box. Visitor services staff and the environment they operate within contributes to the social space of the museum.

Similarly, museum educators interact with visitors to make spaces for learning in the museum. The Space for Learning Partners (2015:1), in their handbook "for creating inspirational learning spaces", advocate for the provision of spaces for educational activities that are separate from galleries. They suggest that this allows the museum to be able to cater to the needs of the widest possible range of audiences (Space for Learning, 2015). However, physical accessibility needs to be complimented by the necessary human resources for this to always be the case. Nevertheless, the provision of a separate activity or school room within the museum, one that is organised by educational principles rather than curatorial ones, is increasingly common if not approaching universality in the UK. The making of these spaces through use may be more readily apparent than for museum galleries: they may never be open to the public, only experienced on school trips, or host lunch-time talks for adult audiences. In each case, the social dynamics of the event dramatically alter the shape of the space as experienced. Kenkman (2011) outlined some of the features of museum spaces as she makes use of them as an educator to provide students with a different learning experience from that of their usual classroom. They argued that museum space influences relationships through who gets to claim ownership, how the space is divided and marked, and its implicit rules (Kenkman, 2011). In the traditional classroom it would be clearer which space belonged to the teacher and which to the students, whereas they reported that in the museum the space is free for everyone to use: "Nobody ever asks 'Can I go there?'" (Kenkman, 2011:285). Both students and teacher are involved in the creation of a particular social space for the duration of the class. However, there are implicit rules of behaviour for the space that govern the whole group's behaviour, perhaps set out formally by

museum staff, or absorbed from wider acculturation and socialisation. Kenkman (2011) suggests, for example, that students avoid disturbing other visitors' spaces, communicate through quiet conversation and avoid touching objects even when they are explicitly allowed to do so. It is not simply that visitors to the museum have unfettered access to change the space with as much authority as museum staff, rather their behaviour is governed by understandings of what is appropriate or 'in place' (for example see Bennett, 1995). Through educational workshops and activities within the museum, it becomes apparent that both museum staff and visitors contribute to the construction of social spaces in the museum.

Outside of education programmes, visitors also contribute to the ongoing construction of social spaces in the museum during a visit, as well as increasingly through the engagement of individual visitors and community groups in formal design processes. The 'People's Show' concept developed through the 1990s as temporary exhibitions that democratise the type of 'culture' shown within the museum by involving communities in the curatorial process (Francis, 1996). Despite Butler's (1992) critique that museums refused to collect similar objects for permanent display, more recent collecting practices of social history museums include popular culture (Francis, 1996). Contemporary museums are progressively engaging in similar practices, either crowd-sourcing objects for displays (Weston Park Museum, 2014), ideas and knowledge from community groups for interpretation (Eureka, 2015), or responses to make up a dynamic element of an exhibition such as comment walls (Manchester Museum, 2015). Simon (2010) outlines the case for these participatory ways of working and the benefits they can bring for museums by explicitly involving visitors and communities in the design of exhibits. Though, regardless of their formal involvement, visitors have always influenced the design decisions made by museum staff through understandings of their interests and needs.

Overall, a diverse range of people contribute to the making of different types of space in the museum and not necessarily just those prescribed with an official role in a formal process. In much of the literature, a dichotomy is created between museum visitors and members of staff, though visitors, just as much as staff members, can affect the materiality, the flows, and the place-making of museum spaces. The roles, however, cannot always be neatly or permanently attributed to a certain taxonomic classification of people and the power may shift unevenly between them over time. Relations to the museum are changeable and there are many intermediary identities affecting the making of museum space which contradict the neat staff/visitor dichotomy suggested here.

The Role of Objects in The Making of Museum Space

Whilst usually the power and agency to shape museum spaces is attributed to human beings to varying degrees, the role of objects and other non-human agents is increasingly being recognised.

Latour's (2005) Actor-Network Theory describes a process for tracing interconnections and allows any thing that makes a difference to the course of proceedings to be considered an actor in that process. More specific examples of objects influencing the creation and experience of space, some drawing upon Actor-Network Theory, have been described by researchers working at the Science Museum. MacDonald (2002:153) details how objects and the gallery space "made their demands" in the creation of an exhibition. These related to both the amount and type of space needed and became apparent in difficulties the designers had in fitting them onto plans for the gallery and in the objects' refusal to go in intended locations during the install (MacDonald, 2002). Geoghegan and Hess (2014:12) similarly discuss how the location of one very large object in the store "was the result of careful planning and some luck", its sheer size dictating a specific configuration with the racking, yet its interest to researchers requiring it to stay in the London store (and not be relocated to Swindon). These authors also consider 'Object-love', an affective connection between people and objects that incorporates personal, institutional and national needs to care for material heritage, and identify it as a key force in shaping both public museum space and stores (MacDonald, 2002; Geoghegan and Hess, 2014). The roles of people and objects are inextricably intertwined, and as such the resulting spaces can never be attributed to human actors alone.

Collections and objects are central to the spatiality of the museum; they are what distinguishes it from other institutions (Pearce, 1994) and work in this area can therefore be applied to the making of museum space. Silverstone (1994) suggests that museum objects occupy both their present physical location, and the imagined space where they were previously significant, at the same time. Their materiality is in the present, but the image space or place they conjure could be anywhere along the path of their flow, their biography. Furthermore, Pearce (1994:2, 23) asserts that objects circulating in society are qualitatively different from those within a museum collection; in a museum the object is usually a sign, used to stand for a whole of which it is an intrinsic part, or deployed symbolically. This semantic perspective indicates the importance of materiality to the experience of museum space. Museum objects are polysemantic and can potentially be used to communicate ideas relating to multiple themes (Pearce, 1994). However, the meaning of the object for the viewer occurs in their interaction, affected both by the viewer's experience and disposition and also the object's content and characteristics, and such an interaction is able to cause transformations to both (Pearce, 1994). Whilst Pearce offers a highly structured view of how the meaning-making process takes place, it offers a useful initial framework for approaching an understanding of interaction between humans and objects and resulting meaning, and can be extended beyond museum objects.

Not all objects in the museum are part of the collection, but they still play a critical role in shaping the space. The objects that make up the architectural style communicate particular aesthetics and

associations; the objects offered as interpretative materials (labels, screens, panels) are often more explicit in their messages; and other objects contribute to the satisfaction of human needs whilst visiting. These objects may be uncooperative and pursue alternate affects. MacLeod et al (2015:325) discuss how the building, as an object, may inspire "feelings of curiosity, anticipation and awe" that are challenged by the existence of a security fence separating visitors until they reach the entrance. Here the object of the building and the object of the fence send mixed messages to those who perceive them: simultaneously calling for one to approach and remain distant. Falk and Dierking (2013), in contrast, explore how all spaces within a museum, and the objects they contain, can be utilised to support the messages the museum wishes to convey. They describe how sunscreen dispensers in the bathroom at a desert museum speak to messages of the harsh climate in the locale (Falk and Dierking, 2013). They also describe how Smith College Art Museum, Northampton, MA commissioned artists to design their bathrooms, thus blurring the boundary between gallery spaces and those intended to service human needs (Falk and Dierking, 2013); the bathroom furniture became objects to be looked closely at, not just functionally used. Similarly, the café at the Smithsonian Museum of the American Indian in Washington, DC, use the menus, the décor and the food to further visitors' understanding of Native American cultures whilst also utilising products and services from the communities the museum represents (Falk and Dierking, 2013). Here gustatory objects give consumers a multi-sensory engagement not possible with other museum objects, replenishing energy levels and thus altering subsequent spatial experiences, whilst also impacting on the spatiality and livelihoods of Native American populations across the continent. Each of these examples demonstrates how particular objects interact with human actors to make museum spaces through use.

The role of objects in shaping museum space also encompasses the material aspects that move beyond the walls of the building to create small pieces of 'museum space' in other times and locations. This includes outreach programmes which transport accessioned museum objects or handling collections to other locations, often to engage new or different audiences (for an example see Addington, 2010), as well as marketing materials and souvenirs purchased from a retail outlet within or associated with the museum. Falk and Dierking (2013) discuss the dual success that can be achieved from aligning the merchandising within a museum shop to address the predominant visitor motivations: economic success from increased retail turnover, and the increased sense of satisfaction on the part of the visitor. The materiality of many objects purchased or picked up (in the case of trails or results from interactive activities) can act as an aide memoir to reminisce about emotions, ideas and encounters that are associated with the museum experience. They may be designed in particular ways to engender particular connections and they increase the size and

dispersion of museum spaces as they are transported away from the museum. This merchandising then participates in the conditioning of visitor behaviour through its shaping of subsequent experiences of the museum space it creates in the visitors' home.

Museum spaces are also shaped by expectations of old and new. Whilst collection objects might be prized for their age, there are expectations from visitors of 'new' gallery furniture and facilities. MacDonald (2002:115) stresses that a certain "rhetoric of newness and difference" accompanies gallery redevelopment projects. At Eureka Children's Museum visitors expect a certain aesthetic: materials are chosen and maintained in order to minimise the signs of wear and tear (Gwyn, 2015). In other contexts, the 'worn' aesthetic or 'wabi-sabi', a Japanese concept, might be celebrated but, having paid an entrance fee to the museum, visitors expect exhibits to fresh; often showing more concern about this rather than the environmental sustainability of the materials used even in galleries which explicitly explore this theme (Gwyn, 2015). In effect, visitors are demanding the use of resistant materiality to hide the traces of their actions on the space and as a result shape it through the choice of materials.

The non-human actors, the objects and the materiality of museums, play a significant role in how spaces are used or developed, or how the sense of place is created. The power and influence they exercise may be considerable or negligible depending on the specific case or context and, most often, will be made visible through interactions with people.

Summary

This chapter has explored the conception of museum space through different lenses or theories, as well as offering a consideration of who we understand to be the actors involved in its creation, in order to offer suggestions and identify gaps that may inform this research project. The theories and intermediary conclusions considered above, in turn raise a number of other questions for further contemplation: Is it possible to design and create a space that is meaningful for a greater range of users? Can everybody simultaneously understand the museum as a place for them? What are the implications of seeing museum space as continuously developed through a negotiation between a range of actors? Is it possible to create museum spaces that fully deliver the design intentions of staff when those using the space have agency to change it?

The definition of space used in this thesis draws upon the propositions outlined by Massey (2005), including: space as produced through interrelations, featuring simultaneous plurality, always in becoming, and involving both human and non-human actors. Within Geography and other disciplines there has been a great deal of thought and debate around how we conceive of space, yet this has only partially been applied to the study of (and practice within) museums. This project

sought to consider the case study of a redevelopment of Weston Park Museum within three broad areas of spatial theory: unbounded space or the space of flows, place and place-making as understood through feminist critiques, and materiality as an integral component of space.

Finally, in relation to the actors involved in the making of space, it is clear that there is a firm theoretical basis for considering the role of humans (both staff, visitors and other stakeholders), non-humans (museum objects and other aspects of materiality) and institutional influences. The public use of museum space has been more extensively studied than 'behind-the-scenes' processes (Geoghegan, 2010). The most notable example of research into the creation of museum space is MacDonald's (2002) ethnographic study of the development of a single gallery at the Science Museum in London, a large national institution. This project sought to offer a comparative study of the development of several galleries based on different collections within a local museum in the northern English city of Sheffield.

The Office at Weston Park Museum

The Weston Park Museum office is open plan, though a collection of filing cabinets offer a barrier separating what has become known as "curators' corner". Whenever I visit there's some curious object or other lying about - a taxidermy fox on its back on a desk, a badger in a carry case or a toy Shrek in a belljar on the shelves. When I started my PhD I worked like a volunteer, hot-desking from one of many empty desks whenever I was in. Over time more staff have been appointed and my visits often coincide with team meetings meaning I am left with the two black sofas around the coffee table as the easiest place to set down my stuff and pass time between meetings. I'd chat and share ideas with whoever was in the vicinity. The office becomes a hive of activity at these times, then quietens as much of the crowd move into the adjacent meeting room with their agenda to progress a particular project or area of work.

There's a lot of windows on both the south and the north wall - meaning it gets really quite warm when the sun's out and there's a lot of bodies and computers on. It could be any kind of non-profit office - more character than a corporate one - except for the curious objects that crop up in unexpected places. Each work space is adorned with stuff that is meaningful to those who are based there, including reference materials or decorations that might encourage positive wellbeing or creative thinking. The shelves around the curators are filled with books and other research paraphernalia, those around the learning team have the colourful folders and boxes of resources reminiscent of a teacher's store cupboard, and those in between - project files with spreadsheets and budgets and marketing material. No area is precisely delineated, so these different material cultures blend and spread across the office too.

Chapter 2.2:

Contested Terms- Curiosity, Meaning-Making and Innovation

Whilst the preceding chapter has demonstrated that the space of the museum is about more than its building, this chapter addresses the complex and contested terms of curiosity, meaning-making and innovation and how these might be applied to the museum context. Conn (2010) suggests that museums are a rare type of space in contemporary society where we feel safe to exercise our curiosity, and to watch and interact with strangers. Furthermore, Falk and Dierking (2000, 2013) explore the many different motivations and itineraries that shape people's visits to museums and what they take away from the experience. They suggest that this may be as likely to be a social outcome as educational and that the physical context of the experience has a significant influence (Falk and Dierking, 2000, 2013). Different curiosities may bring individuals and groups to the museum. Whilst there they will make meaning from their experiences and, as a result, may lead to innovations. This chapter will explore the background literature surrounding curiosity and how this has been applied to the museum context, followed by similar discussions of the concepts of meaning-making and innovation.

Curiosity and the Museum

Curiosity is defined in two ways by the Oxford English Dictionary (2016): "1. A strong desire to know or learn something…2. An unusual or interesting object or fact". Between the educational functions and the focus on collections, museums demonstrate a relevance for both of these definitions. Yet the academic literature also describes a greater range of curiosities which have been, or could be, applied to the museum. The 'Cabinet of Curiosities' concept is seeing a revival, interrogated in the context of contemporary museum spaces (Bann, 2003), and approaches to identifying visitors' curiosity in the museum have suggested visible and measurable indicators such as question-asking and attention-spans (Bunce, 2016; Falk and Dierking, 2013). Different people, whether staff or visitors, adults or children, are able to practice different forms of curiosity in different spaces – sensory or cognitive, diversive or focused, in store rooms or activity rooms, and some of these have been more extensively studied than others. The possibilities in today's museums are diverse and yet they have been informed by the understandings and politics of past museums. This section will

consider the historic relationship between curiosity and the museum, before exploring who is able to be curious in the museum and how we might identify such curiosities. Throughout this thesis, curiosity is most broadly understood as a desire to know, or occasionally as objects which may instill such a desire.

The Historical Relationship

'Curiosity' meant different things at different times and in different locations (Phillips, 2015). Museums, from their earliest history, have been associated with curiosity, through their development from private 'Cabinets of Curiosities' to becoming publicly accessible collections. Pomian (1990) discusses curiosity as "a distinctive epistemic universe" in the early modern period, lying between the restrictions of religion prior to it, and science subsequently (in Bennett, 1995:40). Bennett (1995:40) suggests this form of curiosity was "the desire for a knowledge of totality acquired by means that were, ultimately, secretive and cultic". This was the form and period of curiosity which inspired the creation of many 'cabinets of curiosities', and which was eroded from the Eighteenth century as scientific principles came to the fore. The proliferation of museums in the Nineteenth century, supported by the educated members of universities and Literature and Philosophical Societies, was driven by a desire for scientific knowledge, particularly that which could be gained from sustained attention, or close looking (Kraft and Alberti, 2003). A focus on close looking and sustained attention could fit within our contemporary definition of curiosity (as has been sought to be measured through dwell time and sight lines) but many curators at the time were eager to establish the museum as a place for more than a 'mere' or 'idle' curiosity, which was often seen as being akin to wonder and spectatorship. The early museum was a site for a specific kind of curiosity: the acquisition of knowledge through scientific methods.

Arnold (2006) argues that the late 1800s and early 1900s saw a "period of specialisation" in which museum architecture played a critical role. During this time, the space of the building came to prioritise certain forms of curiosity: curiosity about other people (or people-watching) was enabled in some gallery layouts with the aim of encouraging visitors to be self-regulating of their behaviour (Bennett, 1995), and curiosity about objects could be pursued through locating museums alongside universities and other research facilities (Alberti, 2002; Arnold, 2006:90-92). Curiosity became linked to connoisseurship and public perception began to associate the museum with "the kudos of expertise" and "learned authority" (Arnold, 2006:242-3). Bennett (1995:39) argues that, at this time, museums were "reconceptualised as means for instructing the many", though the implication of this was a museum which serviced a few institutionalised forms of curiosity and expected the populace to conform, or at least be orientated, to these. As a result, museum spaces became organised in a way that enabled visitors to police each other through observation (Bennett, 1995). Scientific

rationality prioritised the common over the exceptional (the explainable object over the curiosity) and collections were ordered to aid the dissemination of certain types of knowledge (Bennett, 1995:41). This ordering was materialised both in museum stores and the process of cataloguing, but also in public museum galleries. The work of the museum was tied to the work of the academy and the delineation of new disciplines of study was paralleled in the taxonomic division of the museum (Arnold, 2006:244). Research of museum collections thus became allied to the methods, knowledges and curiosities of their respective disciplines (for instance Archaeology, Art History and Natural History) and museum spaces are still often organised on these taxonomic lines.

Throughout the course of its history as an institution, curiosity in the museum has been connected to power relations and processes of othering, particularly colonialism and orientalism. Arnold (2006:109) cites the entwined history of the museum with exploration, "inspired by intellectual curiosity as well as a physical desire to discover". The collection of material culture was a result of travel, but its display in Western European museums also enabled a form of travel for those unable to visit distant locations (Arnold, 2006). These objects were positioned as 'foreign' and 'exotic' curiosities and inspired questions as to their function (Arnold, 2006): how are these other cultures the same, how are they different? Objects became curiosities because of their elements of unfamiliarity and origins in 'other' cultures, thus becoming tools for reinforcing the difference or 'otherness' of these cultures. In many cases, the distance the objects had travelled across space became conflated with their journey across time, serving to position their source cultures as chronologically 'behind' the host context where they were displayed. This was a trade of intellectual curiosity for commodified curiosities. Arnold (2006) suggested this impacted the "new lands" by leaving behind monetary economies, though understated the enduring impact inflicted through colonial relations and constructions of race. Clifford's (1997) and Boast's (2011) application of the concept of 'contact zone' to the museum explored this further, as does a broader field of emerging research on the postcolonial museum. Overall, the majority of museum staff are white, across the whole UK sector and in the case study museum specifically (BOP Consulting, 2016). As a result, the spaces and curiosities imagined and created during this case study are overwhelmingly those of and for white people. Can these historic and harmful forms of curiosity be reshaped in the twenty-first century museum to encourage tolerance and collaboration for mutual benefit and to include more diverse ways of knowing and forms of knowledge? Whilst not directly the subject of this research project, discussions of relational and empathetic curiosity below may begin to partially address this question.

Who Can Be Curious in The Museum?

The historic relationship between museums and curiosities continues to affect who and what is seen as in-place or out-of-place in the museum. These discourses influence who can be curious and in what ways, dependent on various identities such as age. Curiosity is often associated with question asking, and question asking often with children, contributing to the perception that certain forms of overt curiosity belong to children (Leslie, 2014). Many theorists, particularly from the psychological tradition, have also positioned curiosity in relation to children, influenced by the work of Piaget and Vygotsky (Gade, 2011; Caulton, 1998). Piaget (1969) emphasised the importance of curiosity in childhood development, arguing that children are actively involved in the construction of their knowledge about the world through direct interaction with the environment (Hooper-Greenhill and Moussouri, 2000; Caulton, 1998; Pluck and Johnson, 2011). This is motivated by a sensory curiosity: the biological drive for children to understand the world through physical interaction with it. Caulton (1998:22) indicates that Vygotsky (1978) builds upon this idea with a social dimension, suggesting that children's learning "is culturally mediated, by a shared language and by contact with parents, family, friends and the media" (see also Hooper-Greenhill and Moussouri, 2000). Vygotsky (1978) understood children's cognitive abilities as being on a continuum between what they could achieve by themselves and what they could achieve with adult help, thus suggesting that the stimulation of curiosity by older individuals can extend cognitive abilities and assigns an important role to adults as mediators (Pluck and Johnson, 2011; Caulton, 1998). Piaget (1969) suggested that a child's curiosity will be highest when the observations they are making about the world are of a medium level of surprise (Leslie, 2014): a concept that links to Lowenstein's (1994) theory of 'information gaps'. Based on the principle of closure from Gestalt psychology, Lowenstein (1994) proposes that one's motivation to acquire information is greatest when it is most likely to close a conscious gap in existing knowledge (Pluck and Johnson, 2011). Studies have suggested that this form of cognitive curiosity, motivated by gaps in knowledge, is linked to measures of intelligence in children, though no similar studies have taken place to assess this relationship in adults (Pluck and Johnson, 2011). Museum practices aimed at making spaces more "family-friendly" in the last two decades have focused on the provision of tactile and multi-sensory interactive exhibits and the provision of information in simplified, streamlined or digital communicative forms. These practices reflect the understanding of children's curiosity as strongly sensory and adults as primarily cognitive and epistemic. As such, the inclusion of particular objects and their associated affordances in a space reinforce norms of whose curiosity is in-place or out-of-place in a specific museum space based on age.

However, existing work in children's curiosity in the museum can be used to inform our understanding of adults' curiosity as well. The positioning of curiosity solely in relation to child development has been widely critiqued, including by Zuss (2012) who argues that Piagetian theories "naturalised and universalised specifically bourgeois understandings of childhood and curiosity" (Phillips, 2015:156). Hackett (2012:14) suggests that Vygotsky's (1978) model of children learning from adults who "hold the knowledge about socially appropriate ways of being" is seen as more constructive and is more valued by adults (such as their parents and museum staff) than the learning from interactions between children and their peers. Based on Vygotsky's and Piaget's models, children are seen as adults-in-training, still to develop more advanced communication techniques and refined forms of curiosity and learning (Hackett, 2014: 14). In contrast, Kress (1997) argues that gesture, mark-making and the use of objects are meaning-making in their own right. If these forms of creativity and communication can be argued to be used by both adults and children, albeit to different degrees, then it is likely that forms of curiosity outlined as aiding child development are also existent amongst adults. Hooper-Greenhill and Moussouri (2000) state that lifelong learning is a necessity in contemporary society due to increased leisure time, an aging population and advances in technology. They claim that the 'motivation for self-learning', therefore, must be awakened in childhood and adolescence (Hooper-Greenhill and Moussouri, 2000), though Leslie (2014) cites the need for this to be additionally fostered and encouraged constantly throughout adulthood. In addition, Pink (2015) suggests that our understanding of the world, regardless of age, is drawn from our embodied sensory experience of it. This sensory data is obtained through emplaced experience (Hackett, 2014: 10) and where we are combines with who we are to structure our embodied experiences. It is likely that cultural and social norms influence the practice of forms of curiosity based on age and other identities. Having prior experience of museum spaces where touch was explicitly forbidden, adults now may be reluctant to explore this sensory curiosity in contemporary museum spaces, even when invited to (Kenkman, 2011). Children's museums are the most likely, amongst contemporary museums, to actively facilitate this way of knowing in their galleries (Classen, 2005). Whilst this is inline with touch's long history of being perceived as an infantile way to satisfy curiosity (Classen, 2005), it remains to be seen what effect this approach to design in contemporary children's museums may have on the adult museum visitor of the future.

However, visitors are not the only people who can be curious in the museum; museum staff also demonstrate different forms of curiosity. Geoghegan (2010) lists the behind-the-scenes world of museum staff as being relatively under-studied, though ethnographic work by MacDonald (2002) and Geoghegan and Hess (2014) touch upon concepts related to staff curiosities. MacDonald (2002) describes how curators' personal interests influence the process of gallery design and labels this as

an affective condition 'Object-Love'. Geoghegan and Hess (2014) further develop this idea through a discussion of their experiences of museum store-rooms. 'Object-Love' could be seen as closely related to curiosity: both an epistemic motivation to research, understand and communicate about a particular artefact, and a sensory one, including the sights, smells and touches one experiences through direct interaction with museum collections. The curiosities practiced by museum staff and volunteers may be numerous but there has been limited research in this area to date. As a result, there is a gap in the literature that this project may be able to address.

Emerging Forms of Curiosity

Studies examining curiosity in the museum have tended to focus on people's interest in objects. However, there are other forms of curiosity emerging in academic discourse which may be of relevance to the museum context, especially those that consider sociable aspects, or interest in other people, such as empathetic curiosity. For understanding present people, empathetic curiosity may take the form of direct question asking or other indirect methods (Phillips and Evans, 2016). Sennett (2012: 5-6) describes the importance of communication skills for finding out about others and subsequently being able to get along with them. These skills are both verbal and non-verbal, including expressions of empathy such as eye contact during an interaction (Sennett, 2012: 21). There are readily identifiable opportunities for museum staff to be empathetically curious in their attempts to understand visitor experiences in their creation or redevelopment of museum spaces. The museum also offers itself as a site for visitors' empathetic curiosity through the provision of a multi-sensory experience of material traces from other people's lives and practices, and of encounters with other people themselves.

Phillips and Evans (2016) connect empathetic curiosity to wellbeing through the 'Take Notice' strand of the New Economics Foundation's 'Five Ways to Wellbeing', and McEvoy et al (2014) adopts the term to support those living with dementia. Encountering other people, and getting to know them, may be seen as a therapeutic activity (Phillips and Evans, 2016) and museums are considered a rare public space where it is possible to meaningfully engage with strangers (Conn, 2000). Museums are increasingly engaging with programming aiming to support those living with dementia, with a notable example in this field being the House of Memories project at National Museums Liverpool. The project includes object loan boxes, training for carers and an app with digital representations of museum objects (Phillips and Evans, 2016). The "more-than-visual" aspects of the objects and resources are important for triggering both memories and curiosity (Phillips and Evans, 2016). Part of this is an empathetic curiosity, allowing the carer to understand the current feelings of the individual with dementia and also to develop a bond of friendship between them, which Phillips and Evans (2016) argue is easier to pursue in a public space than in relation to the emotionally intense

domain of the home. This potential to facilitate curiosity about other people is echoed by Dodd and Jones (2014) and Ander et al (2013) in their reports examining the use of objects with patients in a wider range of health settings. Museum spaces and objects have been evidenced as being an effective tool for developing empathetic curiosity between people present in the space, whereas museum practice may benefit from further exploration of how collections and displays could be used to engender or support empathetic curiosity about those who are more distanced, either across time, space or socially.

Similarly, museum spaces also present opportunities to pursue another sociable form: relational curiosity, or, being curious with other people (Phillips, 2015). The House of Memories project described above also encourages this form of curiosity as carers and those with dementia are able to pursue an interest and discussions about particular objects together. Phillips (2015) suggests that relational curiosity involves triangular relationships; the encounter with other people is shaped through a mutual investment in other objects, places, individuals, or ideas. There is scope for common ground to be found through these third-parties without people having to reveal private feelings or details, suggesting that relational curiosity can be a method for overcoming differences between or within groups (Phillips, 2015). Ander et al (2013) suggest that participants in their study, mental health service users, were able to explore the objects and develop their skills through facilitated workshops. Handling the objects facilitated an empathetic curiosity, but also a relational curiosity because they were participating together. Here the object becomes a tool for both the facilitators and the service users to build "feelings of confidence and competence" and develop new perspectives of the clients' lives (Ander et al, 2013:213), a "sideways mirror" (Phillips, 2015). Drawing on Massey's (2005) propositions for place, using objects to foster relational curiosity creates connections between individuals located in the space of the object. The object becomes a place through these connections, but one which is also multiplicitous in that it holds different meanings for different people simultaneously. Whilst the potential for museums to enable relational curiosity is being explored using museum objects in health and wellbeing projects, there may be a wider range of applications and spatial implications, including within museum galleries, yet to be explored.

There is a strong thread that runs throughout all of these various definitions and elaborations of curiosity – that of its connection to passion and interest. Kress (2010) argues that 'interest' provides an explanation for variations in attention to and interpretation of the museum experience. It may also be related to 'enthusiasm', as described by Geoghegan (2013), in that curiosity involves emotional affiliation to the person, place or thing, a desire to be knowledgeable about it and that it encourages certain socio-spatial interactions. Phillips (2015) describes curiosity as needing us to be

interested in or care about the subject matter and suggests that discussions of empathetic and relational curiosities challenge previous assumptions that curiosity need be an individual phenomenon. Therefore, there may be potential to consider how an institution can itself be curious through the systems, tools and values it employs.

One way in which museums, as institutions, are curious is in relation to their audiences as they seek to understand who is visiting and why. As such, audience segmentation is a tool or system that may relate to a museums institutional curiosity. The majority of these have traditionally used demographic data as a core organising principle, particularly age or area of residence. Visitor's individual curiosity, and motivations more generally, has only had a limited inclusion, such as in 'Audience Spectrum' commissioned by Arts Council England (2016) from The Audience Agency. In contrast, Morris Hargreaves MacIntyre (2016) have created an international segmentation system called 'Culture Segments' which divides audiences into eight. These are entitled: Enrichment, Entertainment, Expression, Perspective, Stimulation, Affirmation, Release and Essence (Morris Hargreaves MacIntyre, 2016). They argue that it can be used to create deeper engagement and stronger relationships through an understanding of "people's deep-seated cultural values" (Morris Hargreaves MacIntyre, 2016). An individual's curiosity is part of these cultural values. Whilst this segmentation model can help to predict the broad experience visitors will be looking for in the museum, it can't address the specifics of what individuals will be drawn or attend to; this is perhaps too varied and diverse to be reduced. Such an approach is also firmly located in visitor studies and there is no comparative system, in practice, for understanding how the curiosity of staff varies. Theoretical suggestions, such as Howard's (2013) multiple lenses of perception as applied to landscapes, could inform this project's work on museum spaces under development. Howard (2013) suggests that individuals become trained or socialised, based on several different characteristics to perceive landscapes in certain ways. This could be translated to museum staff, and this project will explore if their training and professional development has potentially led them to be curious in certain ways.

Indicators of Curiosity

Whether sensory or cognitive, sustained or divertive, questions are seen as a crucial part of curiosity. Psychological studies have used question-asking as an indicator of curiosity (e.g. Bunce, 2016), and Leslie (2014) explores the difference between types of questions by dividing them into puzzles and mysteries. Puzzles have a limited answer and result in the thrills associated with closure; they are addressed through closed questions such as "how many?" and "where?" (Leslie, 2014:80-1). Mysteries, by contrast, are complex and could theoretically be explored forever; they are open questions of "why?" and "how?" (Leslie, 2014:80-1). Leslie (2014) suggests that question-asking

varies between people with adults asking less questions than children and, much like our broader understandings of curiosity, between times and places. He suggests that the enlightenment was the age of the question yet, in the 21st century, technology and an abundance of answers makes it easier to ignore gaps in knowledge (Leslie, 2014). However, rather than Leslie's implied lack of questioning, it may be that questions are just asked differently in contemporary society. If answers are almost always at our fingertips then perhaps we are more focused on pressing questions, rather than a wider accumulation of knowledge held internally to be called upon later. This approach, though, may have ramifications in relation to how we access and hold resources that enable us to be creative and innovative.

In order to formulate a question, we must be aware of the existence of something which we do not know; an idea which resonates with Lowenstein's (1994) information gap theory. Inan (2012, in Phillips, 2015) suggests that our curiosity is structured by language: we must be aware of our ignorance and able to articulate it. To ask a question, likewise, we must recognise our lack of knowledge, but we also need to imagine different possibilities and accept that knowledge can be gained from other people (Leslie, 2014), not just children learning from adults as in Vygotsky's (1978) theory. Leslie (2014) stresses that we are dependent on other people to provide answers and to fuel our curiosity. However, it is important to broaden this understanding; knowledge can be gained from other sources, from traces left by people and semi-permanent forms of communication, and from aspects of materiality. For instance, Zuss (in Phillips, 2015) suggests that questions can be sparked through sensory experiences and this speaks to our question of whether objects or museum design can encourage curiosity. In addition, Leslie (2014) cites four main reasons for the absence of question-asking: not wanting to look ignorant, a lack of time, discouraged by cultural norms, and a lack of necessary skills. Museums have the potential to overcome some of these barriers to question-asking. For example, the 'Curiosity Zone' at the Life Science Centre, Newcastle (2015), includes direct questions in its textual interpretation to verbally encourage a sensory form of interactive question-answering. This direct and overt prompt can be built upon through the possible questions generated by assessing the material resources available to explore. Similar principles could be applied in other museums.

As well as 'question-asking', studies to identify curiosity in museums have looked at another observable behaviour: attention or dwell time. Tzortzi (2014) reports that some variation in the viewing rates of museum objects "are likely to be due to the attraction of exhibits", suggesting an ability to prolong attention inherent in some objects. The attempt to objectively measure the 'holding power' of museum objects has been particularly prevalent in the US and is informed by practices from behavioural psychology. Falk and Dierking (2000) draw on this understanding in

considering curiosity as a purely divertive behaviour based around visitors' interest in the new. In this regard, they hypothesise that first-time visitors are the most curious, drawn to the greatest array of objects, with regular visitors and staff members being familiar with much of their surroundings and therefore their attention span is influenced by factors other than curiosity (Falk and Dierking, 2000). This line of thinking is derived from the work of Berlyne (1966) in psychology. Berlyne's (1966) experiments led him to the conclusion that there is an ideal amount of new-ness to an environment for attracting a person's curiosity and thus attention. Whilst presenting an overly restrictive definition of what could be considered curiosity, this hypothesis is a potentially useful observation for understanding spaces for curiosity in the museum. Such spaces could most successfully promote a divertive form of curiosity (including cognitive and sensory elements) if they have sufficient orientation and subscription to conventions whilst also presenting new information, objects or experiences. This links to existing examples of museum practice around open storage: a growing movement to ensure the greatest number of museum objects are accessible to the public at their convenience. Brooklyn Museum (New York City, 2015) and the National Railway Museum (York, 2015) have such open storerooms with the objects arranged on labelled shelves and limited interpretation accessible via computer terminals or online catalogues. The experience is orientated to a sensory curiosity as the object is available to be known almost exclusively through a visual experience of it. At the Museum of Science and Industry (Manchester) the windows of their storage space are curated along particular themes explaining some of the museum practices of collections management and conservation, and at Leeds Discovery Centre members of the public are taken around the store as part of individual or group guided tours. These latter two examples introduce narratives through text or speech that may add another layer to the visitor's curiosity about the objects on display. Each subscribes to museological conventions whilst increasing visitors' exposure to new materials.

Motivations for visiting have been thought to influence what is learnt from the museum experience, and curiosity is likely to be among these motivations. This learning might be derived from the displays, but also encompasses sociable forms of curiosity – learning derived from other people. Falk and Dierking (2000) argue that learning in the museum is nonlinear, motivated by individual dispositions, and involves choices as to where, when and what to learn. People enjoy, and therefore are more likely to choose, activities that connect to their interests, and Falk and Dierking (2000:22) locate 'interest' as "a psychological construct that includes attention, persistence in a task, and continued curiosity". People choose how they exercise their curiosity in the museum based on "a wealth of previously acquired knowledge, interest, skills, beliefs, attitudes and experiences" which in turn influences the meaning made from the experience (Falk and Dierking, 2000:87). The social

composition of the group also influences meaning-making. Falk and Dierking (2000) point to limited findings which suggest social factors are particularly important for adults in the museum often dominating what is taken from the experience. However, there is a lack of research looking at adult groups in the museum (Falk and Dierking, 2000), which this project may serve to address.

From the preceding discussion, it is clear that there are many diverse conceptions of curiosity that are relevant to the museum and its practices. These have been informed by past understandings, yet have the potential to be remade, reinterpreted and utilised to address the context and needs of contemporary society. Certain types of curiosity and certain curious people are often thought of as more in-place than others in the museum, but contemporary revision of the envisioned purpose of museums could change these. Previous work in the field of curiosity has been dominated by a focus on individuals (often children) and associated cognitive and tactile modes. As a result, there is gap in the literature to be addressed by considering sociable, institutional and adult forms of curiosity. Curiosity is here understood in terms of motivations, selection and direction and forms part of the meaning-making that happens in the museum. It is shaped by the biography of the actor. In the museum, this might manifest in the objects selected for a display, how long is spent interacting with them or the itinerary of a journey through museum spaces.

Meaning-Making in the Museum

More than just formalised and measured 'learning', meaning-making is intertwined with curiosity, creativity and innovation. If curiosity is connected to motivations and the pursuit of new information, the process of meaning-making is how the acquired information and experiences are translated into new knowledge and understandings (Falk and Dierking, 2000; Mason, 2005; Silverman, 1995). This concept also connects with innovation, as the application of new knowledge and understandings in meaning-making resonates with phases of incubation, insight or illumination in a creative or innovative process (Haner, 2005; Wallas, 1926). As a result, it is important to consider meaning-making within this research as it pertains to a process connecting the terms of curiosity and innovation embedded within the research question. This rich and messy process of meaning-making has been widely discussed: understandings of visitors' meaning-making have drawn heavily on semiotic theory since the rise of New Museology in the 1990s, but the meaning-making of staff may be better understood in the context of emerging discussions of professional meaning-making.

Visitors' Meaning Making

Previous work on visitors' meaning-making in the museum has been informed by theories around social and material semiotics. Theorists suggest that a person's interests, agenda, prior experiences

and feelings, as well as their current social context, all shape their attention and, as a result, influence which particular elements they engage with and their starting point for making meaning (Kress, 2010; Silverstone, 1994; Krautler, 1995; Pearce, 1994). In the museum, semiotic theory suggests that meaning is conveyed by the positioning and affordances of different materials which can be considered as signs or symbols. For instance, collection objects are othered by their location behind glass and interpretive devices depend on formats and materials we are familiar with from everyday experience (Krautler, 1995; Pearce, 1994; Silverstone, 1994). The elements that are attended to are then subject to the semiotic work of transformation and transduction to produce a new sign or understanding (Kress, 2010). According to Kress (2010) and Pearce (1994) this work is creative and involves the combination of existing worldview and new information. New information in the museum often comes from objects and "the effect of the object is to modify or change the viewer, so that [the viewer] is a slightly different person from the one [they were] before" (Pearce, 1994:26). The conventional semiotic understanding suggests that the sign complex, the content to be communicated by the museum, is first sketched by a rhetor (probably a curator) before being elaborated on by a designer and then given material form by a producer (Kress, 2010). However, this is complicated by participatory affordances in the museum that transcend the distinction usually made between the producer and the consumer and assign a more active role to the visitor (Kress, 2010; Krautler, 1995; Pearce, 1994; Mason, 2005). Silverstone (1994:173) argues that the affective qualities of the museum are created through collaborative creative work in the "potential space" and the visitor is invited to complete the work to create their experience. The actor, whether visitor or staff member, is active in making meaning from the semiotic resources on display in the museum. These may be redisplayed to others, if one has an opportunity to, or retained internally.

However, different museums, different galleries within museums and even different sections of a display might use varying structuring logics that can overlap and compete (Silverstone, 1994). Museum objects are also polysemantic (Pearce, 1994), indicating the complexity of the museum as a form of communication. A single object may be used and combined with other elements to create a whole variety of different signs, and this act of combination may be materially created by a curator or cognitively drawn by any observer. Understanding the museum as a semiotic system aligns it as a provider of opportunities for meaning-making, though semiotic theory could be seen as overly structural and to date its application has been limited to museum visitors, with little work relating to other stakeholders.

Professional Meaning-Making

The meaning-making practices of individuals employed within an institution are sometimes markedly different to those of a more general public. As a result, the meaning-making of museum staff can perhaps be more usefully understood through the concept of professional meaning-making. However, work in this field is relatively limited. One recent publication, by O'Donovan (2015), examines professional meaning-making in the banking sector and details three propositions for professional meaning making. Firstly, that we are conditioned by experience and that meaning-making transcends professional and private spheres; secondly, that professional meaning making imposes structure on "what we perceive and thus on how we operate"; and thirdly, that professional practice can be limited by a lack of conscious engagement with professional meaning-making and the associated unquestioned acceptance of "cultural and business related beliefs, values and theories" (O'Donovan, 2015:13-14). Whilst O'Donovan (2015) focuses on individual processes of meaning-making, other authors have highlighted the role of collective and collaborative work in the professional environment. Noble and Henderson (2010:8) discuss how meaning is made through a collaborative research process and suggest that meaning-making takes place both individually and collectively. These processes of meaning-making may challenge traditional methods of working in a particular profession, in this case researchers, and can both constrain and enable individuals (Noble and Henderson, 2010:8). The findings and arguments from both of these examples may transcend the specific fields of professional practice where these studies were conducted. As such we can seek to apply them to the museum context to understand the meaning-making of museum staff.

Other researchers have engaged with this concept in relation to the professional development of teachers and parallels may be found with the professional development of museum staff. Forsman et al (2014) discuss a collaborative research project which considered teachers' professional development. They suggest that teachers and school-leaders engage in meaning-making through identifying the current state of affairs and by considering challenges that emerge in their everyday professional practice (Forsman et al, 2014:12). Often, meetings would be used as an opportunity to do this reflection in an unstructured way (Forsman et al, 2014:12). However, overall they found schools lacked space and time allocated to conscious meaning-making and teachers needed a catalyst; in this case, the collaborative researcher performed a catalytic role (Forsman et al, 2014:12). Museums, like schools, may use meetings as an opportunity for meaning-making amongst staff, though are also likely to lack time and space allocated for reflection due to the pace and nature of museum work. O'Donovan (2015:13) asserts that an awareness of personal and professional meaning-making is a critical step towards increasing the complexity of meanings made. He draws upon Kegan (1994) to describe an evolutionary model where the structure or inner logic at each

level overcomes the limitations of the previous simpler ones. Thus, an awareness of one's own meaning-making processes can help to deepen, broaden and add nuance to the meaning's made, offering a greater understanding of the task or field and potential for innovation. These authors suggest this is more likely to be the case if time and space is made for staff to consciously reflect.

The connection between meaning-making and professional practice has been indicated by many authors across several sectors. O'Donovan (2015) has demonstrated its relevance to the banking sector, Gould (2010) and Coffin and Donohue (2011) to academia, and McTighe and Tosone's (2015) work considers the professional meaning-making of social workers in New York. Like the studies described above, McTighe and Tosone (2015) also found that social workers' meaning-making transcended the boundary between the personal and professional and had subsequent effects on professional practice. Overall there is scope for this thesis to apply this existing and emerging work on professional meaning-making to the museum context.

Spatiality of Meaning-Making

Constructivist models of learning have assigned an active role to visitors and, as a result, the lines between the production and consumption of museum spaces have been blurred. However, previous models for museum learning have not been suitably adaptive to consider both how curators, in gallery design projects, and visitors, in their use of museum spaces, make meaning spatially. This spatialised meaning-making can be considered in relation to our three spatial concepts from the previous chapter: materiality, place and flows.

The materiality of the museum is important for meaning making as it partially creates the experience. Kolb (1984) describes experience as a transactional relationship between a person and their environment; it is a fluid and interpenetrating relationship that changes both. The environment, in this sense, includes the materiality of the world. The person doesn't live their life on a surface, but rather dwells within the museum (see Ingold, 2008), making changes to the space as they engage their own curiosity and creativity within it. Some traces are erased by others' actions: the cleaning of smears from close looking; the collection of discarded handouts; and the resetting of abandoned interactives. Others are more indelible, such as wear patterns on carpet and furniture.

Place is also an ever-present concept in meaning-making. Falk and Dierking (2000) argue that "all learning is influenced by the awareness of place" and that humans locate each thing they come across within a context shaped by prior experience. Studies suggest that we rely on our prior experience to know what to do with the affordances of a museum space; a first-time visitor needs more orientation and way-finding whereas a frequent visitor's attention moves straight to the exhibition content (Falk and Dierking, 2000). Museums can also contradict our prior experience of

similar institutions, our sense of museums as a type of place, to produce affective and emotional results. MacLeod et al (2015) report on one such instance of this at the Imperial War Museum North, Manchester, where the architecture of the building seeks to intentionally disrupt visitors pre-existing expectations of museums. Uneven walls and floors, the choice of resistant materials and a structure made up of silos and small rooms within a large open space (rather than a progression of gallery spaces) is "intended to unsettle, disorientate and confuse" (Macleod et al, 2015:317-319). Historical objects are interspersed with art and cinematic experiences with the intention of encouraging visitors to be curious and ask questions (Macleod et al, 2015: 319). Our understanding of the museum, as a type of place but also as an individual place, shapes what we do there (including our curiosity) and the meanings we make as a result. Familiarity in spatial design can facilitate access, though elements that introduce discomfort demonstrate the possible influence of architecture on the meanings made as a result.

Making-meaning in the museum also relates to the spatial concept of flows. Meaning-making in the museum is often associated with slow movement or being stationary (Hackett, 2012: 10) and, increasingly, museums are offering spaces to 'pause' for this reason (Heumann Gorian, 1995). However, meaning can be made through co-existence of different actors in time and space, regardless of their speed. Hackett (2012, 2014) argues that children can as readily make meaning in the museum through movement as they can in sedentary reflection: an argument which can be equally applied to adults. Ingold (2008) describes how the flows of different actors combine to form a meshwork, and I propose that this formation can be a meaning-making activity as each actor comes to draw a route or connections in relation to other people, objects and environments.

Innovation, Creativity and the Museum

An examination of the literature and a survey of museum practice, uncovered a close relationship between innovation and creativity and considering both of these terms simultaneously has offered insights. Ken Robinson is a notable researcher in the field of education for creativity and innovation, and his definitions have been drawn upon by other authors. Robinson (2001) defines creativity as the "process of developing original ideas that have value", and considers innovation to be "putting new ideas into practice". This definition of creativity is echoed by Kozbelt et al (2010:20) in the Cambridge Handbook of Creativity where creative ideas are deemed to be those that are original and useful. Similarly to Robinson's (2001) definition, Haner (2005:289) joins creativity and innovation together as a continuous process, with the latter referring to stages of implementation. In contrast, Edensor et al (2010:10) prefer to separate creativity from "economic instrumentality" and rather define it as the improvisation where people adapt to the circumstances around them. Across these

definitions, both creativity and innovation involve a process of change and adaptation, usually with elements of newness. These terms have clear connections to the design process – of exhibitions, of buildings or of programmes – and to museums as institutions. Looking first at creativity, the concept can be broken down into different types before considering museum design as a creative process. Secondly, innovation can be examined through a variety of models and a selection of these will be evaluated here.

Types of Creativity

Wallas' (1926) model for the creative process offers four phases that have been foundational for subsequent work in this area; these four stages are: incorporation, incubation, insight and verification. These stages involve divergent, followed by convergent, thinking and the creation of an outcome. Boden (1994) divides such outcomes of creativity into two main types: Psychological (P-creativity) and Historical (H-creativity). P-creativity is a valuable idea that the individual hasn't had before themselves, whereas H-creativity happens when it is the first time in history that this valuable idea has occurred (Boden, 1994). All H-creativity is also, necessarily, P-creativity (Boden, 1994). This division is perhaps overly binary and simplified, as histories are drawn at different scales; an idea will very rarely be entirely new in the history of the global population, but there is something more than P-creativity at work when an idea is encountered for the first time in a particular industry or locality. The museum, positioned as an institution of education and of cultural preservation, can be understood as promoting moments of H-creativity whilst encouraging moments of P-creativity. An idea is valued if it is "praised, preserved, promoted" and the choice of which ideas fall into this category is relative to a culture (Boden, 1994:77). What counts as creative in the museum will vary between different sites at different times; creative activities in a small, regional, volunteer-run history museum will look very different to those at large, national art museums. But both may be governed by wider cultures inherited from political climates, funding frameworks, understandings of national identity and the museum's institutional form. Boden (1994: 90) argues that our world model is made up of rules which govern the conceptual space available to us; creativity always references these rules in some way, either through their identification, mapping, exploration or transformation. The creative process might be: combinational, bringing together different parts of the conceptual space; exploratory, finding the limits of the conceptual space; or transformative, dropping or negating a constraint to develop new areas of conceptual space (Boden, 2015). Visitors in the gallery and staff working behind the scenes often engage in exploratory creativity: exploring the extent of a topic in collections research or preparation for an exhibition; or through experiences of new subject matter within museum displays. Both groups of adults may also engage with combinational creativity, through the juxtaposition of objects and ideas in curatorial practice or a

visit's itinerary. However, the opportunities to engage in transformative creativity may be more limited. New curatorial practices amongst museum staff may be one example of this, and such outcomes are often associated with innovation.

Creativity in Museum Design and Use

The design of museum spaces offers an example of a creative process that is firmly rooted in the museum context. Kress (2010) describes the design of exhibitions as involving choices that are influenced by the museum as an institution, the curator as a person and by the assumed interests of the visitor. The choices made in exhibition design are based on specific aims, some explicit and others implicit, to present objects, tell stories and to achieve social, cultural and political purposes (Kress, 2010). Furthermore, the creative process is social, negotiating the demands of multiple stakeholders, requiring creative ideas to be validated as such by a wider group. This view aligns with MacLeod's (2005) claim that museum architecture is not just the product of the architect, but is, in fact, a social and cultural product which is constantly produced and reproduced through its use. Previous research into museum architecture has focused on buildings as objects and has prioritised the notable examples (MacLeod, 2005) – those which could be deemed as displaying H-creativity and possibly labelled as transformative – such as the Pompidou Centre in Paris and the Guggenheim in Bilbao. Instead, MacLeod (2005:12) argues that more research needs to be done examining the design process in 'provincial museums' and how active stakeholders negotiate varied conceptions of museum space and agendas. By examining the design process within a regional city museum, this project has scope for identifying types of and opportunities for creativity that may exist in such a context.

Models of Innovation

Many definitions of innovation focus on the application of new creative ideas (See Robinson, 2001; Haner, 2005; Moultrie et al, 2007; Chesbrough et al, 2014). Yet variations exist in that innovation may be considered the whole creative process including application, or it might only be thought of as the outputted product. As this project seeks to follow a process of creating spaces, theories of innovation as a process are likely to be the most pertinent. A variety of these relevant theories of innovation as a process can be drawn from economics, business and management studies, and systems thinking. Leslie (2014:171) argues that "creativity doesn't happen in a void" and that opportunities for innovation are increased by the accumulation of knowledge across generations, knowledge which is stored in information systems like museums, libraries and the internet. Therefore, by increasing access to diverse stores of knowledge we can facilitate innovation in museum practice and wider society.

The idea of utilising knowledge stores resonates with 'open innovation', a concept for businesses developed by Chesbrough (2003, 2006, 2012) which may have relevance to museums. Open innovation suggests that creating multi-directional channels of communication both within and with those outside the organisation can accelerate and improve the process of change (Eid, 2016). Chesbrough (2012: 21) differentiates between two models of open innovation: that of 'outside-in', where external ideas are brought into a process, and of 'inside-out', where unused ideas are shared with a wider range of people. The museum could provide spaces for both of these forms. However, this work has largely focused upon models of capital accumulation within the for-profit sector and a model which suggests constant linear progression. Initial attempts to relate this theory to non-profit and charitable organisations are only starting to be made and Eid (2016) offers an example where it has begun to be applied to the museum.

Chesbrough and Di Minin (2014) have more recently introduced the idea of 'social innovation' which stems from his work on open innovation. Whereas open innovation focuses on the source material for creativity, social innovation is primarily concerned with outputs which offer "effective solutions to pressing social problems" (Eid, 2016). Stanford Center for Social Innovation (2016) defines social innovation in relation to the product, as "a novel solution to a social problem that is more effective, efficient, sustainable, or just than current solutions". Once again, Eid (2016) is amongst the first to explicitly relate this to the museum context, thus there is potential for this study to expand upon our understanding by applying emerging theories to another empirical context. The Young Foundation (Murray et al, 2010) describes social innovation as a six-stage process: prompts, proposals, prototyping, sustaining, scaling, systemic change. Furthermore, Schaffer (1994) argues that innovations are more likely to be adopted by a wider group, when they are seen as a choice to make rather than a leap and may result from the luck of being pivotally situated at a moment when the creative ideas generated had a receptive audience. Existing theories stress the social aspects of innovation, both as a process and in the products. As the spatiality of the museum is also intrinsically social, theories of social aspects of innovation could be expanded upon through application to the museum context.

The definition of 'innovation' depends upon the context in which it is being used and the aims of those applying it. Few studies to date have explicitly developed understandings of innovation in the museum context. Amongst these, Vicente et al (2012) argue that, for the museum, innovation usually relates to one of three things: technological innovation in the visitor experience offered, technological innovation in museums management processes and innovations to organisations structures and processes. Elsewhere, Eid (2016) adjoins both open innovation and social innovation with ideas of social enterprise, a hybrid business model including both financial and social bottom

lines, to create a "Museum Innovation Model" as a planning and evaluation tool (Eid, 2016). Developed in the USA, this model responds to contemporary demands on museums to operate in more commercial ways whilst retaining a focus on the underlying social function and value of their organisation. Whilst this is one useful way of understanding innovation in the museum environment, it is premised on a vision of the world involving continual improvement and progression, with the repetition or return to previous ideas depicted negatively. As a result, there is significant scope to further contribute to this body of literature through this project.

Working definitions for this project reflect the interconnected nature of creativity and innovation. In summary, creativity involves acts of creation, where resources are called upon, combined and used to generate the 'new'. Innovation is a subsequent or additional process of adaptation and application. It takes the creative product and applies it in situ as a modification of what has come before. Accepting the existence and validity of creativity and innovation at a wide variety of scales – from the individual to the institutional to the global – will enable this project to reflect upon their application in this case study of Weston Park Museum.

Summary and Contribution to Knowledge

Whatever precise formation of the museum we envisage, it is possible to see it as a space with potential for curiosity, meaning-making and innovation. These three terms are contested, with many possible definitions. Yet this controversy is precisely why they can offer such rich potential: enabling the museum to align with more people's interests and fulfilling the needs and motivations of an increasingly diverse society. In this thesis, the examination of curiosity will centre upon the notion of interest or the desire to know; meaning-making is understood as a personalised activity which can be influenced by identities such as age and profession; and innovation is understood as being inextricably linked to creativity, though requires an element of application.

Based on the explorations in this chapter it is possible to identify two potential contributions to knowledge that could be delivered through this project. Firstly, there is scope to further explore forms of adults' curiosity, particularly empathetic and relational curiosity, building upon the work of Phillips (2015), McEvoy et al (2014), and Phillips and Evans (2016). Empathetic curiosity is necessary for myself as a researcher to come to understand the internal and 'in the moment' experiences of other people. It will therefore be a necessary part of the research informing my data collection from museum staff, visitors and other stakeholders. Relational curiosity is also a critical concept in this collaborative research project; academia and industry, researcher and museum staff, working together on a project to find shared understandings. Again, it may also appear in the data collected – how do adults interact to make meanings together in the museum?

Secondly, this project will explore the relations between meaning-making and the making of space in the museum. It will build upon Falk and Dierking's (2013) work looking at visitors' inference of meaning from spaces, and MacDonald's (2002) comparison of the process that went into creating such spaces and subsequent visitor experience of it, by considering how the use of space and the meanings created in it have influenced the re-development of spaces. That is, seeing the process as iterative, but messy, and understanding prior use as influential to redevelopment with spaces always developed in relation to what pre-existed them.

The contemporary debates surrounding the terms used in this project have influenced the research questions as well as the wider methodology. In order to achieve these possible contributions to knowledge, the methodology and specific methods must be aligned with what it is we seek to know. The process of aligning these will be discussed in the next chapter.

What Are You Doing Here?

Wednesday 10th June 2015:

I contributed to the meeting but only after the item on the agenda where I was asked to contribute. It opened a door for me. I previously felt I didn't have any authority to input. I gave examples and commentary on others' ideas. This was clearly seen as an adequate creative contribution as speaking to [Project co-ordinator] after the meeting, I am 'allowed' to come…as long as I contribute – I mustn't just sit and observe as people feel 'watched'. Now I feel a pressure to come up with ideas and contribute to each meeting segment on Tuesday to earn my space in the room. There was a joke today about "Now we've found a role for you" as I was able to reach to turn the projector on. I have a distinct sense that people including [Project Manager] and [Project co-ordinator] are as unclear about my identity/role in museum processes as I currently am.

Chapter 3: Methodology

At a broad level this project is an ethnography of how spaces are made in the museum. MacLeod (2005) argues for the understanding of museum space to be developed, from that of being the product of a designer or architect, to that of a social and cultural product constantly made and remade through use. Rather than delineating this project, then, as looking at spaces in development or in use, we can instead understand it as looking at the whole process of making museum spaces in both public and private contexts and how this might interact with the concepts of curiosity, meaning-making and innovation. This chapter is divided into three sections: the first looks at the theoretical background to the project's methodology; the second details the overall research design guided by the research question and sub-questions; the third section explores each of the methods used in turn, for data collection, analysis and dissemination, and discusses how each contributes to answering the research questions.

Theoretical Background

The nature of the subject matter, museum spaces and practices of curiosity and innovation, has ontological and epistemological implications for this project. This research is underpinned by an interpretivist understanding of reality: that is a belief that reality is constructed through an individual's perceptions. The understanding of museum space established in the preceding chapters defines ideas of place, materiality and unbounded space that exist in the experiences of people, both individually and socially. To come to know those spaces, and the subject of this research, I can experience them myself and illicit information from others about their experiences. Research into museums and their spatiality connects to multiple disciplinary traditions as museums have developed alongside these: including architecture, visitor studies, education, theatre, film, animation, museum studies and other design disciplines (MacLeod et al, 2015). Key established areas of debate and theory include framing the museum as a text and trying to understand visitors through approaches from behavioural psychology and statistical analysis.

The dominant framework for thinking about museums in the 1990s and 2000s centred upon the idea of institutions as a form of constructed text and a focus on the narrative of spaces continues to be pervasive. However, this can be complicated by placing emphasis upon visuality and materiality alongside the narrative. Cultural theorists such as Hall (1980) influenced the theorisation of preferred and oppositional readings (Mason, 2005) and the adoption of the 'circuit of culture' (Du Gay et al, 1997) in relation to the museum. Semiotics also played a significant role in the subsequent identification of the museum as text evident in a wide selection of key 'New Museology' publications (for example: Hooper-Greenhill, 1994 and 1995; Pearce, 1994). Whilst these analyses have been influential, they have focused on the narrative and textual qualities of the museum with little consideration of the importance of the visual and material. Rose (2012) offers suggestions for how visual methodologies can further enhance our analysis of the museum context. Rose (2012:43)
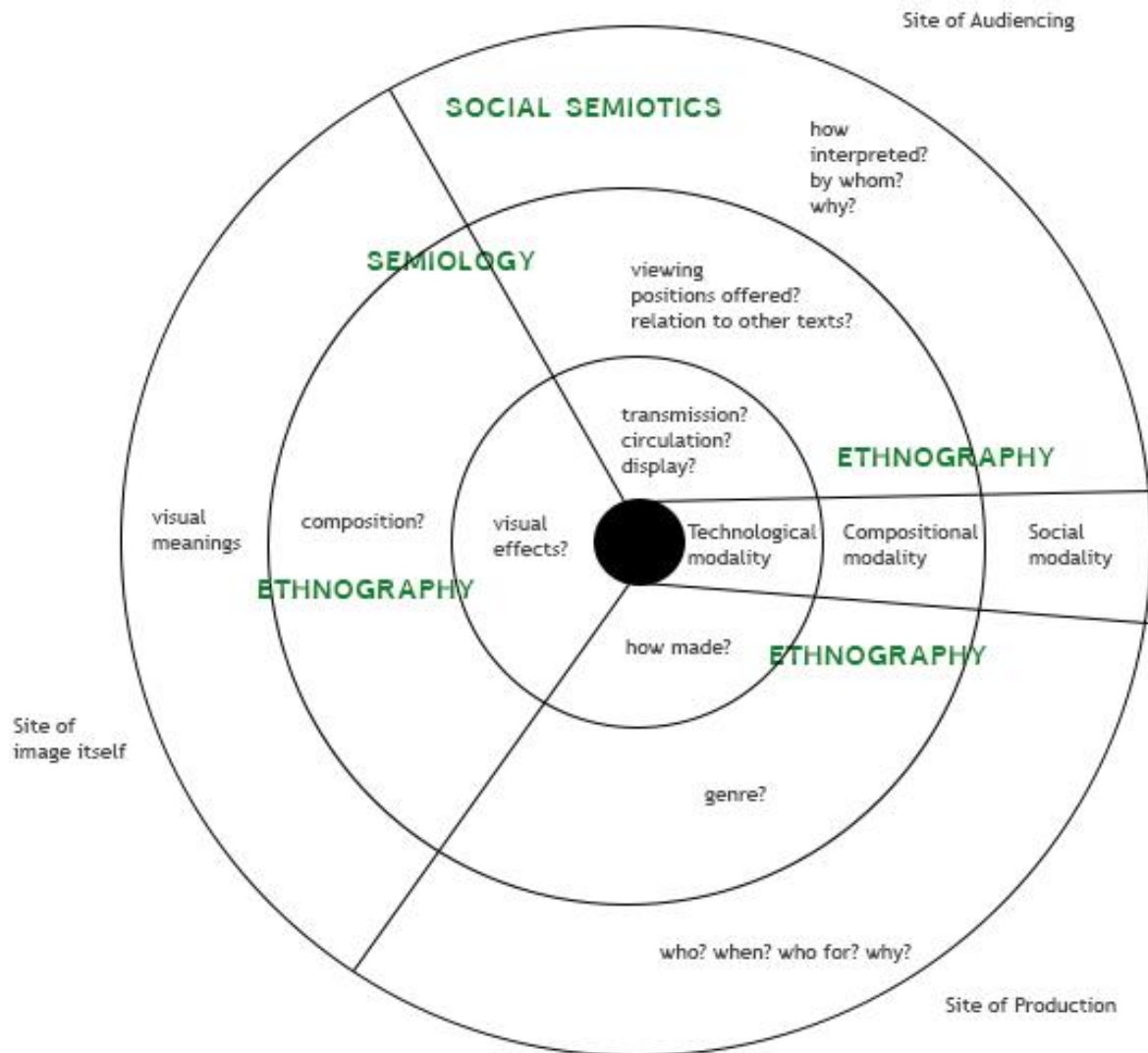

Figure 1. Adapted from Rose 2012 - diagram outlining possible visual methodologies.

presents a model for interpreting visual materials (such as the museum) that aligns them to the intersections between three sites (production, image and audience) and three modalities (technological, compositional, social) – Figure 1. This project is interested in the production, the museum as image and its audiencing across all three modalities, therefore Rose's (2012) work suggests that ethnography would be a useful methodology to pursue (see figure 1). Elsewhere, Rose and Tolia-Kelly (2012) call for more empirical investigations into intersecting visual and material cultures. To do this, they argue that such research has to engage all the senses and needs to focus on practice; what people do with things is fundamental to understanding the visual and the material (Rose and Tolia-Kelly, 2012: 3-4). Ethnographic work has the potential to deliver this desired focus on practice.

More broadly, there is a strong case for the usefulness of ethnography in geography which is succinctly summarised by Herbert (2000: 550):

> "ethnography is a uniquely useful method for uncovering the processes and meanings that undergird sociospatial life. Humans create their social and spatial worlds through processes that are symbolically encoded and thus made meaningful. Through enacting these meaningful processes, human agents reproduce and challenge macrological structures in the everyday of place-bound action. Because ethnography provides singular insight into these processes and meanings, it can most brightly illuminate the relationships between structure, agency and geographic context."

This project has a distinct interest in the process of making museum spaces and how elements and outcomes of such a process are meaningful. Therefore, ethnography offers a useful methodology for this research. However, it is a methodology that has faced several critiques, including its relationship to theory and the ability to make generalisations as a result. Nader (2011:211) asserts that ethnography is a theoretical endeavour as it involves "the analysis of a set of facts in their relation to one another". Furthermore, Wilson and Chaddha (2010) argue that ethnography can engage with theory in both inductive and deductive ways. I will be using theory deductively within this ethnography to build upon existing theories that have been generated in other contexts including large-scale, often quantitative, studies of visitors' use of space (e.g. Falk and Dierking, 2000, 2013; Tzortzi, 2014) and previous studies of 'behind-the-scenes' museum spaces, which have focused on sites with national remits (e.g. Geoghegan and Hess, 2014; Macdonald, 2002; Yaneva, 2009). I will also be turning to theory to inductively "inform the interpretation of data" collected (Wilson and Chaddha, 2010:3). As a result, my ethnography will be grounded in theoretical insights both deductively, in the formulating of research questions and activities, and inductively, in the

interpretation of the findings. A further critique is the suggestion that ethnography cannot be used to make wider generalisations. However, Herbert (2000: 560-561) addresses this by suggesting four possible routes: using a site that may stand in for other cases; utilising comparative analysis; combining quantitative and qualitative analysis; and/or using ethnography to explicitly improve upon theories that already exist. To that end, the use of ethnography in this project will enable me to engage in generalisation as the institutional form of the museum may allow for some of my conclusions from Weston Park to be applied elsewhere: a site that may stand for other cases as somewhere to speak from (MacDonald, 2002). Geoghegan (2010) has identified a lack of analysis of private spaces and processes within museums, a field that has begun to be explored through several ethnographic studies conducted by geographers, anthropologists and architects (Geoghegan and Hess, 2014; MacDonald, 2002; Yaneva, 2009). This ethnographic project will be complementary to existing work, improving upon existing theories and extending the range of cases to which such theories can be applied.

Research within the museum context also places priority on understanding the experiences of visitors. Within her study at the Science Museum, MacDonald (2002) used visitor tracking and interviews to consider the visitor experience after the opening of a new gallery. These methods, alongside questionnaires, have been used extensively by other researchers within the Visitor Studies field. Often drawing upon theories from behavioural psychology, investigators using visitor tracking have reduced curiosity to proxies of attention and dwell time (Falk and Dierking, 2000). If we wish to investigate curiosity and other phenomena in more experiential terms, then such reductive observed measurements may prove a hindrance. On the other hand, the use of questionnaires has been critiqued for the unreliable nature of visitors' self-reports on their behaviours (Herbert, 2000). Therefore, there is a need for both the observation and self-report of visitor's experiences. However, this must utilise a reflexive approach to identify how curiosity, meaning-making and innovation may be represented and made observable.

This project's methodology, and as such its findings, were additionally influenced by my own professional and personal identities and experiences. Working collaboratively with a museum offered opportunities to consider the production and audiencing of museum space and also to be sensitive to power relations within the research, a growing concern in academia. Hoggart et al (2002: 264) suggest that researchers have demonstrated such sensitivity by studying one's own culture, analysing one's own practices and doing work that others want and need. My training as a researcher came from undergraduate studies in Geography and Archaeology and postgraduate teaching from a department of 'World Art Studies and Museology'. These disciplines, archaeology and museology especially, operate with a permeable yet nonetheless existent distinction between

academic and professional practice. Having worked in museums and a historic house, I had a pre-existing familiarity with the norms and values of a 'museum professional', thus facilitating an ethnographic approach at Weston Park Museum as somewhat of an insider to the field. Though graduating into the field in 2012, austerity measures were being keenly felt in the cultural sector, which had a significant influence on the development of my professional identity. Short-term contracts involving work in other sectors and notably the turn to a research role with the start of this PhD all gave me a sense of being on the periphery of my museums profession, never quite having broken into it fully. Despite this, other parts of my identity facilitated access to areas within the museum and my relationships with other museum staff. I fitted in as I am white, educated to a university level and perceived as female, though the success of this identity position is perhaps somewhat indicative of the lack of diversity within the museum profession as a whole. During ethnographic fieldwork, I straddled and alternated between feeling an insider or outsider amongst the research participants and as such further discussions of my positionality are necessarily threaded throughout the findings.

Research Design

The specificity of looking at Sheffield museums was established by the priorities and locations of the institutional partners in this collaborative project: The University of Sheffield and Museums Sheffield. However, previous research into modes of learning, exploring and meaning-making in museums has tended to focus on either science centres or art museums (Hooper-Greenhill and Moussouri, 2000; Tzortzi, 2014). Furthermore, there has been limited research looking at spaces in "provincial" or regional museums as researchers tend to focus on large institutions with national or international audiences (MacLeod, 2005). As such basing this research in a mid-sized regional museum service had significant potential to contribute new understandings. The decision was taken, a few months into the partnership, to focus on the 'Weston Park Museum: A Bright Future Project': a Heritage Lottery Fund financed redevelopment of six spaces. This project offered a scale of spatial reshaping unparalleled within Museums Sheffield during the timescales available, yet one which offered a scenario comparable to many other museums: a capital design project within a civic museum. I came into the project at phase 2, when definite funding was confirmed, and after initial consultation and design work had already been completed. The 'field' for this research existed from April 2015 until December 2016, and I worked collaboratively with staff and visitors at Museums Sheffield to understand the process of making spaces, becoming an active participant in it too.

As a collaborative research project, I also needed to respond to the priorities of the partner organisation, Museums Sheffield. Over the past decade Weston Park Museum has successfully

established itself as a 'family-friendly' museum with high numbers of children amongst its visitor figures. However, within the case study period, the cultivation of adult audiences was considered a priority. Previous research has prioritised school children and family groups (Hooper-Greenhill and Moussouri, 2000) and there is a corresponding lack of analysis of adult visitors (Falk and Dierking, 2000). Geoghegan (2010) also suggests that there is an opportunity to further develop our knowledge of the behind-the-scenes processes of the museum. Across the museum sector, there is also an increasing interest in participatory practices and co-curation with the public or community-based organisations. This was evident at Weston Park Museum through partnerships with community organisations to curate displays, offering an opportunity to explore this pertinent area. Previously, priority has been given to examining the designated gallery spaces, although key works from Falk and Dierking (1992, 2013) on the visitor experience and MacDonald (2002) looking at exhibition design, amongst others, have established a precedent for the importance of the experience of spaces set within a wider context. Working in a participatory way with communities blurs the boundary of staff/visitor that it is so easy to habitually divide people into, and also the boundary of public and private space in the museum. My position as a researcher also straddled these boundaries and, as a result, ethnographic methods would enable me to gain insight into how binary thinking is often inadequate in regards to museum users. As such, this project will contribute to our knowledge in these areas by considering both behind-the-scenes and public making of space in Weston Park Museum, Sheffield, with a focus on adults.

Having established the potential fertile areas for making new contributions to knowledge, this research project adopted the overarching research question:

What is the relationship between adults' curiosity, meaning-making and innovation, and museum space?

This is then broken down into four sub-questions:

1. *What is the relationship between adults' curiosity and the making of museum space?*
2. *What is the relationship between innovation and the making of museum space?*
3. *How does adults' meaning-making, connect to their curiosity, processes of innovation and the making of space in the museum?*
4. *What do our understandings of these relationships mean for the development of museum practice?*

Driven by these questions, a methodology based around qualitative methods, including ethnographic ones, offers us a way to explore spatial experiences of the museum and processes of

curiosity, meaning-making and innovation. The subject matter and methods speak to the practical requirements of this collaborative project and draw upon my positionality as a researcher, utilising it to facilitate the project.

The individual methods were chosen based on their relevance and applicability. The use of ethnographic methods, such as participant observation and interviews, created a longitudinal aspect giving the chance to observe curiosity, meaning-making and innovation as they developed over time. Using these methods 'behind-the-scenes' allowed me to gain the trust and understanding of museum staff, enriching the data collected about their experiences and providing me with data collection opportunities that would have otherwise been inaccessible. An arts-informed method, Write-Draw, was used to identify the internal subjective experience of visitors and examine moments or themes of curiosity, meaning-making and innovation. Visitor-tracking identified the observable behaviours that could be linked to these three concepts. Undertaking these observations offered a comparison, distinguishing between what people report they do and are observed as doing. Each of the methods used within the final research design will be discussed in more detail below.

MONTH	PARTICIPANT OBSERVATION	INTERVIEWS	WRITE-DRAW	VISITOR TRACKING	KEY PROJECT MILESTONES
May 2015					Meetings with designers
June 2015					
July 2015					
August 2015			Pilot		
September 2015					
October 2015					
November 2015					
December 2015		x 5			
January 2016					First galleries close
February 2016					
March 2016					
April 2016					
May 2016					
June 2016		x 1			
July 2016					
August 2016					
September 2016					
October 2016					All galleries reopen
November 2016		x 3			
December 2016					
January 2017		Workshop			

Table 1. A chart of research methods by month and key moments in the project chronology.

Ethnography

Ethnography is a method, or group of methods, that "examines behaviour which takes place within specific social situations, including behaviour that is shaped and constrained by these situations, plus people's understanding and interpretation of their experiences" (Wilson and Chaddha, 2010:1). Ethnography can include a variety of different qualitative, and sometimes quantitative methods, that each address this overarching purpose, and this ethnographic study of the process of designing and creating spaces within the museum was made up of three individual methods: participant observation, interviews and documentation. A full list of the ethnographic data collection activities is provided in Appendix 2. Ethnographic methods were used between the 14th May 2015 and 10th November 2016, a total of 18 months. Data for this project came from a total of 98 participant observation sessions which offers an average of five or six each month. However, in reality there were greater concentrations of activity during the second half of the project. Sometimes I would be interviewing or working with an individual curator, whereas other sessions took place during meetings with over 20 members of staff in attendance.

The choice and combination of these methods came, in particular, from two authors who have both previously written about their involvement in museum design processes: MacDonald (2002) and Yaneva (2009). Rose (2012) suggests that ethnography can be used to examine the production of the visual form, the visual form itself and its audiencing, therefore it is a particularly appropriate group of methods to use for this case study. Within the project I am considering participant observation as involving my participation in the museum design process generating data in the form of notes, illustrations, minutes and records of communications. Good participant observation also needs to use other methods for the triangulation of findings (Hoggart et al, 2002), and as such interviews form a separate ethnographic method conducted at particular moments within the process, recorded and transcribed. In contrast to MacDonald and Yaneva, I am approaching documentation through photography and the collection of visual materials associated with the process as a specific method with its own rationale. Each of these presented their own practical and ethical issues.

Participant Observation

Participant observation was used to understand the complex process of designing and creating museum spaces by participating in and observing others within such a process for an extended period of time. It is a method which prioritises proximity to the subject matter over distance and objectivity (Laurier, 2010:116). Undertaking this method, I was attentive to themes of curiosity, creativity and innovation and sought to identify the different actors who played a role in shaping the space. I began the process as an outsider, there merely to observe and, over time, became a

member of the team involved in aspects of design and decision making. This was perhaps more rapid than would be possible for other researchers due to my prior experience in the museum profession and the privilege afforded to my positionality. Laurier (2010:118, 125) argues that good participant observation requires real participation in the situation and that being a 'local' offers advantages for seeing how and why things are done in a particular way. Furthermore, Thrift (2000) argues that one should be an observant participant, not just a participant observer, in order to emphasise the materiality of human action and understand practice through undertaking it (in Hoggart et al, 2002). As I attempted to gain insight into the experience and roles of others, whilst reflecting upon my own experience and role in the process, empathy became a crucial skill. Wattchaw (2013:95) argues "one who is committed to the journey towards empathic insideness, may reveal a unique insight into a place that surprises even the locals, because it rings true." However, it is also crucial to remember that any research finding is only a partial account because there are limits to our empathetic curiosity: we can only know as much about another as they choose to reveal to us (Hoggart et al, 2002:263). There is also a degree of meaning lost and created through the act of translation, be that from observation to writing or from local vocabulary to academic prose (Hoggart et al, 2002:262-3).

Whilst being present for the participant observation developed my own understanding of the themes of the project, these experiences also needed to become tangible data that could be reflected back on in the future to allow reflexivity and documentation. In this way, writing and imagery from and about the redevelopment project became the representation of the experiences I had participated in and observed. These included my notes from meetings and other activities 'in the field', my reflections made later upon a collection of experiences (both written and drawn), meeting minutes, other official museum documents, and artefacts of my own involvement, such as label templates and designs. Wattchaw's (2013:95) comments on the relationship between representations and place or landscape seem pertinent to this:

> "How we then represent our experiences in art or text…will tell us a great deal about how much we have learned. The act of representation…is a process of cultural meaning making. It will be a never-ending task. As we change the place and it changes us, so too will our representation of our experiences in the landscape continue to evolve through time."

Being dyslexic and dyspraxic, I prefer working in visual and kinaesthetic ways. My representations of the place, and the changes it was undergoing, were thus created in a certain way because they were created by me. As Laurier (2010: 121) suggests, initial field

notes can be cryptic, dull and hastily scribbled, and often need transcribing into a more legible form. Many of my notes made whilst actively participating in the gallery installation fit within this category and were written out later that day or week with more detail and later reflections (figure 2).
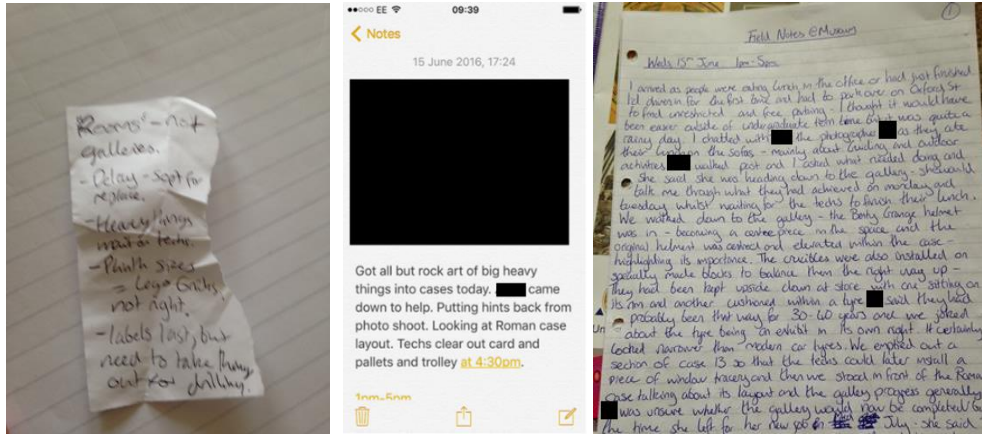
Figure 2. From left: Notes scribbled on a scrap of paper, quick notes recorded in a phone, longer form field notes written up after the event.

However, in meetings there was usually no need for this process as there was a greater opportunity for me to record details, as well as official minutes. My notes and my reflections were almost always written by hand, with pen on paper; whilst the official minutes of the meetings were created digitally by the project co-ordinator on a laptop. Not only did our positions and purpose in the meeting change what we recorded, but also the medium we were using. I inserted sketch diagrams where it seemed pertinent but the paper filled in as time went on; if the conversation returned to a topic I would have to restate it or use asterisks whereas, in typing the minutes, new notes could be inserted anywhere at any time. The accumulation of data within this research project also echoes the final sentence quoted from Wattchaw above: how the space is represented looks different in later representations than earlier ones, but it is also made up of the ever-increasing total collection of representations. Hindsight can provide analytical insights; though, it is important to avoid letting this colour earlier representations too significantly.

Working within a museum office environment, several practicalities governed how I conducted my participant observation. I was 'in the field' on a regular basis from April 2015 until November 2016. This took the form of being present in the museum for a varying amount of time each week. Within the process, I had an agreement with the museum to be able to attend a number of different meetings: 'Project Team' meetings took place about once per month; 'Gallery Development'

meetings involved specific teams of curators for individual galleries and varied in frequency; and
'Design Day' meetings involved curators and the project management staff meeting with the
designers once a month from April until September 2015 with specific meetings for individual
galleries. A full table of data collection activities is included in Appendix 2, and a short summary of
participant observation activities is described in Table 2.

GALLERY	ACTIVITY	ROLE	DATES	# OF OCCASIONS
All	Project Team Meetings	Observer / Input findings from research	11/06/2015 – 10/11/2016	14
All/Art and Archaeology Focus	Design Day Meetings	Observer / Participant in Archaeology meetings	14/05/2015 – 22/09/2016	5
Archaeology Gallery	Gallery Design Meetings	Participant	08/06/2015 – 18/05/2016	16
Archaeology Gallery	Participation in Curation of Gallery	Akin to 'Curatorial Intern' – assisted with curation of gallery including responsibility for Romano-British cases	02/07/2015 – 22/10/2016	34
Art Gallery	Gallery Design Meetings	Observer / Input findings from research	09/06/2016 – 22/09/2016	13
Art Gallery	Participation in Curation of Gallery	Researcher – assisting with prototyping visitor research methods	05/05/2016 – 16/05/2016	2
All	Other Meetings	Participant discussing research findings	15/03/2016	1

Table 2. A summary of participant observation activities.

Initially I attempted to follow all the spaces, though it soon became apparent this would generate an
unwieldy amount of data and involve a time commitment that would be difficult to sustain. By May
2015, I took the decision to focus on the archaeology (History Lab/Beneath Your Feet) and art (About
Art/Picturing Sheffield) galleries in detail whilst retaining an overall awareness of the rest through
the regular Project Team meetings. I was also able to negotiate my attendance at a meeting with the
community-based organisation co-curating part of the archaeology gallery. Early in the process in

Summer 2015, I would attend specific meetings averaging just an hour or two each week and occasionally bring reading or other research related work to do from the museum office in between. By late spring 2016, when I was involved in the final stages of delivery of Beneath Your Feet, I would be at the museum for up to three full days a week: participating in meetings, writing and editing labels, prototyping interpretation materials with visitors, and assisting with the installation of objects in the gallery. Real collaboration requires a 'give and get' relationship; I gave the use of my skills and offered an extra pair of hands when needed and in return the museum staff were generous in their conversations with me and access to different parts of the process. This is a principle of participatory research advocated by Kesby et al (2005). Museum staff gave me the opportunity to take ownership of two cases within the Beneath Your Feet gallery focusing on the Romano-British period of Sheffield's archaeology. The experiences of participating in research, writing, design and installation processes for these cases gave me first-hand experience of the practices other curators were undertaking. Despite the ad hoc nature of my presence in the museum office, over time I became accepted as a sort of consultative member of museum staff with a remit for providing insight from research and assistance with design software. This was facilitated by the high proportion of other staff who themselves were on part-time and temporary contracts, thus making my variable presence not unusual.

Interviews

The second ethnographic method involved a series of interviews with museum staff. These interviews offered insights into individual staff member's perspectives on the process of spatial redevelopment and built upon and informed findings from the participant observation. In this form of interviewing there are a series of predetermined themes or questions but a conversational approach is taken allowing the exploration of issues important to the participants (Longhurst, 2010:103). Hoggart et al (2002: 205) argue that they are an appropriate method for examining "complicated relationships or slowing evolving events", such as those examined within this research design.

Whilst dialogue with museum staff also featured heavily in the participant observation, the interviews were set apart by their format and structure. I conducted semi-structured interviews in December 2015 and again with some individuals in 2016 during or after the installation of the new galleries (see Table 3). I created a list of questions forming a guide for all interviews in 2015 (see Appendix 3) to define and identify where and how museum staff understood curiosity and innovation in their own work during this design process. My questions in the 2016 interviews were adapted and targeted to participants as I sought to discuss emerging themes from my analysis.

PHASE	PARTICIPANT	DATE
2015 – DURING DESIGN STAGE OF PROJECT	Project Manager	December 2015
	Project Administrator	December 2015
	Visual Art Curatorial Team	December 2015
	Archaeology Curatorial Team	December 2015
	Social History Curator (Email)	December 2015
2016 – DURING THE INSTALLATION STAGE OF PROJECT	Archaeology Curatorial Assistant	June 2016
2016 – AFTER THE GALLERIES REOPENED TO THE PUBLIC	Learning Officer	November 2016
	Project Manager	November 2016
	Social History Curator	November 2016

Table 3. Semi-structured interviews conducted within the ethnographic project.

These acted as a framework from which other conversations were pursued as they naturally developed, enabling me to follow the curiosity and meaning-making of the interviewees. In the interview, knowledge is created by the interviewer and research participant together and it is possible for increased insight if the researcher is positioned as knowledgeable on the subject (Hoggart et al, 2002:208, 210). In many of the interviews, references were made to prior knowledge and experiences we had shared beforehand. The differing relationships and associated power dynamics between each of the participants and myself, and within the staff team, affected the direction and content of the conversations, an observation that has been raised by Hoggart et al (2002:219). Each interview became an audio-recorded conversation, later transcribed, that demonstrated a relational curiosity between myself and the research participants as we sought to think together about the design process and its effects.

Documentation

The third ethnographic method was documentation. As a researcher, I generated a visual record of spaces throughout the process of development, creating an archive enabling me to reflect later on material changes to the gallery which gained significance. The photo-documentation can be divided into two different portions. The first includes images taken using a shooting script during a specific session before the redevelopment using a digital SLR camera. A shooting script is a list of prompts or questions used to systematically record the research subject (Rose, 2012: 301-4). The photographs I took were very consciously framed in relation to questions and prompts and aimed to create a series

of high quality images covering the entire public museum space. The second are images taken throughout the duration of the project, with either a digital SLR camera or iPhone (whichever was to hand), to record moments of change or development in the materiality and visuality of the spaces being studied. They were often taken quickly, as part of another activity that took me into a 'behind-the-scenes' space; in their hasty composition and framing, and occasional lack of focus, they are more reminiscent of fragmentary sketches. These photographs more closely align with Hoggart et al's (2002:284) equation of photography as a form of field note. Both offer a data set of researcher-generated imagery that can be compared to other visual recordings of the process authorised by the museum.

In addition, other visual documents created by the museum, along with their digital or tangible materialities, were collected throughout the period of the research. Hoggart et al (2002: 279) suggest that it is important to collect documentary evidence as part of an ethnography as it can contain key insights into the subject. The materials collected include examples of how the museum chose to represent the development in progress to different audiences: in reports to funders, to followers on Instagram, to visitors in the museum lobby. They also include aspects of the museum's materiality and visuality which possibly influence how spaces were used: trails, event listings, and newsletters. If photographs are a form of visual fieldnotes, then these objects are materialised fieldnotes, albeit some of them digital. The importance of retaining something of the original form, beyond representation or interpretation, echoes Thrift's (2000) suggestion that theories of practice need to pay attention to materiality (in Hoggart et al, 2002).

Ethics

The use of all of these ethnographic methods requires a thorough and continuous reflection on ethics. Longhurst (2010:211) suggests there are two main ethical issues associated with interviews: confidentiality and anonymity. Alongside the other ethnographic methods, these become wrapped up with questions of consent. Whilst the museum as an institution had consented to become a collaborative partner in the research (through their participation in the bid for funding for this project), specific informed consent was needed from all the individuals who would be identifiable through their role in the project. There was only one project co-ordinator or project manager, for example, and so it would be impossible to sufficiently anonymise the data and analysis without losing crucial context. As the rapport and relationship between myself and the research participants was critical to the success of the project, I decided to take a staged approach to obtaining consent underpinned by the central tenet of 'do no harm'. At the start of the project I was introduced to staff members as a researcher from the university, my identity was never covert during the participant observation. When taking photographs, I would avoid allowing an individual to be identifiable in any

image unless I had explicitly asked them before I took the photo. Permission to take notes was tacitly granted in meetings. Formal written consent was then obtained as part of the protocol for interviews as the audio recording of voices attributed words to specific individuals rather than just my interpretation and subjective recording of them in notes. At this point, I made sure that all research participants understood that they could withdraw data about themselves that had been collected at any point. By the end of the process I obtained written consent forms from all the individual staff members who may be identified within the dissemination of my research, as well as having negotiated ongoing consent verbally with all research participants.

Sensitivity to power dynamics was another important ethical consideration. This has been explored in relation to interviews (e.g. Hoggart et al, 2002) but they affected relationships through all the ethnographic methods. I wanted to democratise the project and use the research to address the needs of the participants. Initially I took this research participant as a singular entity, 'the museum', able to be represented through a single person appointed to the project as a supervisor to reflect their interests, though over time this simplistic view needed to be adapted. There were multiple staff members with diverging, and sometimes conflicting, viewpoints on the purpose and remit of my research. I needed to reflect on how I could best utilise my resources and research design to address these. In the final stages of the project, I undertook two activities to ensure the findings presented in this thesis were reflective of these diverse perspectives within Museums Sheffield. Firstly, all quotations selected for inclusion verbatim were sent to the research participant who said them for their consent to use them within the text, but also to allow them an opportunity to edit what they had said. These edits rarely changed the meaning of a quote and more often simply resulted in more concise extracts to be used more suited to the written context than the spoken one they were originally delivered within. The second activity involved collaborative supervisions with members of staff from the museum's senior leadership team where we considered drafts of the chapters and discussed how these related to their experience within the institution, identifying areas for further development.

In summary, the ethnographic component of the research was made up of three individual methods: participant observation, interviews, and documentation. These methods together addressed the research questions in relation to the 'behind-the-scenes' actors and processes for making museum spaces. In addition to these, other methods were needed to examine and understand how curiosity, meaning-making and innovation manifest themselves in public museum spaces.

Visitor Studies

To complement the ethnographic research, which allowed me to go 'behind-the-scenes' at Weston Park Museum, I also employed methods to collect data from visitors in the public spaces. To do this, I conducted two different methods: visitor tracking and write-draw. These methods are perhaps not always intrinsically ethnographic, though in this case the data they generated was intended to support a wider ethnographic project. As the project developed and the unique contributions that could be found from the data on museum staff became apparent, the data on visitors offered more value as a comparison or contrast for processes of curiosity, meaning-making and innovation. My process of undertaking visitor research within the museum became a key component of my participant observation of the world of museum staff: it empowered me with specific knowledge that enabled me to build relationships of trust across the institution. Here then, these two methods are valuable for what they can tell us about visitors making museum space through use, and comparisons with have staff undertake the same process, but also in how they were able to facilitate my deeper engagement with staff and their processes of spatial design.

Visitor Tracking
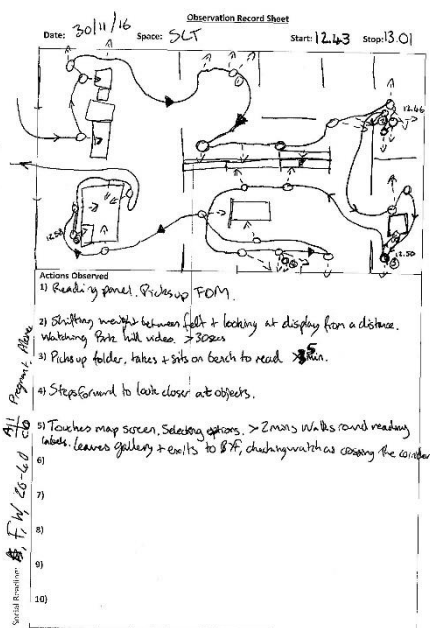
Figure 2. An example of a completed visitor tracking sheet with elements of the gallery drawn in as the individual interacted with them.

Firstly, visitor tracking was used to record how adults behaved in the public spaces of the museum: where they are observed by others and may be forced to interact. It is another form of participant observation, though much more aligned to the idea of 'observer as participant' (Junker, 1960) than the more active forms of participation described above. I was overtly conducting research and did not attempt to become a 'visitor', though my visible presence enforced elements of participation in that I was interacting with, and thus influencing, those present. I collected data about where adults went and what they did to examine whether any observable behaviours possibly demonstrated curiosity, meaning-making or innovation and to consider how these may be influenced by social factors. This method focuses on the site of audiencing, utilising Rose's (2012) framework, and the social modality. Based on these priorities, the method aligns with work on social semiotics (e.g. Kress, 2010). Visitor tracking has been used widely within museum practice, but often inspired by positivist psychological models

where visitors were mapped against a floorplan and timed to analyse the holding-power of exhibits in terms of minutes.

In order to align the method to an understanding of museum space based on materiality, place and flows rather than geometric or architectural space, a number of adaptions needed to be made. These adaptions included altering the method to fit with my theoretical perspective, as well as considering several practical factors. I carried out these observations before and after the redevelopment, as well as a few observations during gallery closures for redevelopment work. In total 151 visitor tracking sheets were completed. The sheets (the template used can be found in appendix 6) aimed to capture the poetics of visitors' movement in space and their interactions with other people and the materiality of the gallery. As such, movement was recorded against a blank template, not a pre-drawn floorplan as the visitors' perception of the space is likely derived from the elements they attend to only. A similar method was used by Hackett (2012) to record the movements of children in a gallery space from a video recording, and other projects have used video to capture people's interactions within museum space including work by Kress (2010). I was interested in capturing the movements and behaviours of a diverse range of adults using the museum and thus not focusing in on the micro-gestures of a small number of research participants which video recording is more suited to. In this study the recording was made in real time, thus offering a more sketch-like capture of movement than one made from a video recording that can be paused and rewound. I scheduled observation sessions across a variety of days of the week and times of the day, both before and after the redevelopment. A full list of research activities can be found in Appendix 2, and a summary of the visitor tracking observations is in Table 4.

	MUSEUM SPACE	# OF OBSERVATIONS
2015 – PRIOR TO REDEVELOPMENT TOTAL = 82	History Lab	31
	About Art	27
	Sheffield Life and Times	7
	What on Earth	6
	Treasures	6
	Arctic Worlds	5
2016 – AFTER REDEVELOPMENT TOTAL = 48	Beneath Your Feet	9
	Picturing Sheffield	10
	Sheffield Life and Times	21
	What on Earth	8

Table 4. Summary of Visitor Tracking Observations.

Observations took place across a range of weekdays. I avoided weekends as the number of people in the space would make it more difficult to conduct an observation and initial sessions indicated there was a wide variety of behaviours and demographics represented by weekday visitors. Sessions usually lasted for less than two hours at a time and included more than one space to reduce my fatigue and resulting inattention. I positioned myself within a space and recorded the first adult to enter the space once I was set up with my materials each time. The visitor tracking sheet included a box to record the route of the visitor through the gallery as well as fields for annotations on observed visitor behaviours and notes on the demographic and social context of the visitor. For these latter notes, I recorded what I assumed to be the visitor's gender, age range, ethnicity and the number of adults and children they were visiting with. Many of these notes were of limited use as they were my interpretations of internal identities and were neither specific nor accurate. However, they did provide me with the ability to differentiate between types of groups which offered very different social contexts for a museum visit, for example those leading school groups versus adults exploring the museum with children they were related to, or adults experiencing it on their own, compared to those with a partner or friends.

By looking at the materiality and the flows (and behaviours) of actors within the spaces, this section of the methodology sought to consider how curiosity, meaning-making and innovation might be visible or visibly enabled in the museum. These observations contributed to answering questions around the qualities of spaces for curiosity, meaning-making and innovation, but only gave partial insight into the experience of visitors which was influenced heavily by my subjective observations. As a result, another method was needed to understand visitors' internal experiences.

Write-Draw

The Write-Draw method was used to identify aspects of the visitor experience within museum spaces that are explicitly, or within the researcher's framework of, curiosity, meaning-making and innovation, as described or depicted by visitors themselves. In its simplest description, Write-Draw involves posing a question or prompt which participants are then asked to respond to both verbally and visually. It is a formalised method that has been used across a variety of academic disciplines and builds upon emerging evaluation practice used in museums.

The Write-Draw method originated in health education research in the 1980s, though has been adapted for use across a wider range of disciplines (Williams, Wetton and Moon 1989). A more comprehensive history of the method has been described by Angell et al (2014) aligning its growth in popularity to a desire to conduct research 'with' rather than 'on' participants. Angell et al (2014) advocate for the addition of a 'Tell' phase where participants are asked to discuss their responses in

an interview or focus group. However, the practicalities of recruiting visitors within the museum made including this element in a formalised way difficult due to space available, the amount of time visitors were willing to dedicate and background noise ruling out audio recording. Instead any comments volunteered by participants about their responses were captured in field notes.

In this research study, Write-Draw data collection was conducted on three occasions and a protocol for its use was established. In August 2015, a pilot session took place, divided into two halves to allow the trial of different variations. I collected 21 responses across the whole pilot session. Using findings from this day (see template in Appendix 5), subsequent sessions took place in October 2015 (24 responses), before any of the spaces closed for

Figure 3. A table set up for collecting write-draw responses from adult visitors.

refurbishment, and in November 2016 (25 responses), after all of the spaces had reopened to the public. On each occasion, I had a table set up in the foyer space of the museum between the exit, the shop, the café and the galleries (figure 6). I approached adult visitors as they were about to leave the building to capture their experiences at the end of their visit. There was one exception to this where the visitor approached me as they entered the museum and chose to complete the response card during their visit. On the table was a prompt 'What did you do at the museum today?' along with participant information sheets, response cards, pencils and a submission box. I also printed out simplified cards for children to occupy them so that I might obtain more responses from adults visiting with children but these were not submitted to the research project. I handed each participant an A5 card with the side prompting them to draw facing up, and the side for a written response and some demographic information facing down. Before completing it, I asked them to read the participant information and tick boxes on the card to confirm I held the copyright and right to display their response. I chose to ask participants to provide their age band, their gender and ethnicity, and whether they were visiting with a child that day to offer some contextual information to the responses. Submitting the card in the submission box was taken as consent to participate as outlined on the participant information sheet. As a method, Write-Draw originated in health education research, though there is a clear precedent for its use with arts audiences and in the rich meaning-making environment of the museum.

Ethics

Both of these visitor research methods needed a careful and ongoing engagement with ethical principles and using the Write-Draw method required a reflection on a number of ethical issues around participation. I did not want to negatively detract from the visitors' experience and it is possible that by using this method I encouraged participants to reflect and develop a deeper connection with the museum. Within the pilot session I trialled collecting demographic information both through my own observations and through specific fields to complete on the cards. The latter was ultimately preferable as it offered more nuanced insights into participants' identities and avoided misclassifications. Within the responses there were several sections that were left blank, including the written or drawn elements. This highlighted the importance of collecting data in multiple modes as some people may be able to more readily or prefer to express certain ideas in writing or drawing only. Pridmore and Lansdown (1997) suggest that asking for both written and drawn responses generates an increased number of ideas than one singular form alone, reiterating this point. Whilst I was trying to capture responses from adult visitors, many of those whom were visiting with their children involved them in the process of filling in the card. Some asked for the child's view on what they did at the museum and transcribed it and others gave the pencil directly to the child, especially for the drawing response. I suggest that this was indicative of the research activity being seen as part of the museum experience and those adults who had come to the museum specifically for their child's learning or entertainment continued that by involving them in this activity. These submissions were still considered alongside the other 'adult' responses as they represented a different way in which a group of visitors chose to create representations of their experience and there was an assumed consent given for the child's participation through the later submission by the adult. Many other visitors, when approached, declined to participate and I maintained a list of reasons given within my fieldnotes. The most commonly cited reasons were children and needing to take them somewhere for food or further entertainment, or an imminent appointment, usually at one of the nearby hospitals. The latter of these, combined with the content of some of the responses, indicated some of the unique motivations to visit that exist for Weston Park Museum, largely passing time before, during or after medical treatment. Keeping fieldnotes of the data collection sessions was particularly useful for this method as insights were generated from the circumstances of people's participation or not, as well as from the data itself.

Undertaking observation in public spaces also required several ethical considerations. Having discussed matters of consent with both the partner museum and the university, both agreed that observing visitors within the public spaces of the museum would not need their prior verbal or written consent. I was clearly visible and identifiable as a researcher with my university identification

when undertaking visitor tracking and remained within a single gallery: if a visitor had questions they could approach me and I would provide them with information on the study and if they wished to not be observed they could move on to a different space. As Tzortzi (2014) proposes, an individual may reasonably assume that they would be observed by staff or other visitors in a public space like a museum, so recording details in an anonymised way can be done with tacitly assumed consent. Within museum studies, particularly stemming from the work of Bennett (1995), the influence of this expectation of being observed on visitor behaviour has been widely discussed. Whilst in other contexts it may be considered that the presence of the researcher could significantly alter the behaviour of those being observed, in the museum it is likely that behaviours I observed are similar to those exhibited in the presence of any museum staff: a condition which can be expected to exist most of the time.

Data Analysis

When interpreting the data, the chosen approaches had to be appropriate to multiple modes to address both verbal and visual components. A combination of thematic analysis, and semiotics thus informed the process of coding and subsequent analysis. Semiotics, and social semiotics to understand the audiencing, necessitated the inclusion of both signifiers and the signified as codes. Practically, both visual and verbal data were assigned codes using NViVo software. These included what Cope (2010:440) refers to as "first level descriptive codes" and "second level analytical codes". The coded data and overall list of codes were then used to identify emerging themes. These themes were based on similarities and differences and were constructed by reading across a range of different data sources, including comparing data from museum staff with that from museum visitors, and not just within a single source (Cope, 2010). However, the process was not always this linear.

As a longitudinal and collaborative process, I began the initial coding and analysis of data simultaneously to data collection. Cope (2010:442) suggests that more rigorous conclusions can be reached when the research phases are intertwined, though in this case it was necessitated by time limits. Initially, I had hoped to work collaboratively with museum staff on the coding process but, due to their workloads and personnel changes at the museum, in the end this proved to be infeasible. As a result, my own writing and re-writing, drawing and re-drawing played an important role in the analysis. Hoggart et al (2002:265) suggest that the form of writing can influence the claims to knowledge derived from it and that authors have experimented with their writing style to highlight the partiality of any account and suggest multi-vocal exchanges. By reworking and reflecting upon the data using different verbal and visual approaches I aimed to preserve some of

the multiplicity of perspectives during a phase of the research undertaken by myself as a solitary researcher.

Within the stage between analysis and writing up, there was the necessary activity of selecting moments from an immense ethnographic archive to illustrate and structure the outputs. Herbert (2000) highlights the interpretative nature of ethnography as a regularly levelled critique, but counters this by suggesting that, through ethnography, social scientists have needed to develop their awareness of the interpretative activities involved in all scientific practice. To that end, within this project, extracts were selected that spoke to moments where curiosity, meaning-making or innovation were implicated in the ongoing dialogue between structure and agency within the museum as an institution. In addition, as this project sought to break down the dichotomy drawn between staff and visitors, I also looked to the collection of extracts which demonstrated moments of transgression between public and private spatiality, including the variable permissions I had to inhabit different spaces. The massing of these moments came together to form an overall description of the redevelopment process narrated from my position as a collaborative researcher and sought to contribute to wider theory building.

Overall, the main forms of coding included semiotic and thematic analysis. These were also used during processes of re-writing and re-drawing. Recurring themes were then identified and these leant themselves to segments of the overall case study to be used in this thesis and to illustrate the findings for dissemination.

Dissemination

The dissemination of findings is considered here as part of the methodology due to its integration in the collaborative relationship. Working closely with a partner organisation over a longer period of time, with a significant amount of participation in the process on my part, caused an interweaving between what could be considered data collection and what would be considered the dissemination of findings from the research. The provision of expertise and insight was an important currency for fostering a productive relationship between myself as the researcher and Museums Sheffield staff. Whilst this project was not formally set out as practice-based, it influenced how it was undertaken. As the methods employed necessitated participation in the practices of museum design, some of the earlier findings and emerging themes were shared through the form of practice as the project progressed. As in 'Practice as Research' approaches, both the enquiry and the resultant knowledge takes the form of the practice (Nelson, 2013). Notably this includes the adoption of prototyping techniques based on resonances between this museum practice and all three concepts of curiosity, meaning-making and innovation, as well as my curation of a segment of the display in 'Beneath Your

Feet' and graphic design work undertaken across all of the redeveloped gallery spaces. Whilst these activities were a part of my participant observation, they also addressed the needs and interests of the research participants. Other findings were disseminated formats to be utilised by museum staff and visitors, such as the 'case for support' generated for the fundraising team, visitor personas created to encourage design-thinking approaches, and the workshop format explored further in Chapter 7.

Museum staff were involved in the duration of the project, from their original collaboration on the application to the AHRC through to input in the final development of this thesis. A member of museum staff was appointed as a co-supervisor: initially Laura Travis (Head of Visitor Experience) for the first year of the project, and subsequently Sian Brown (Head of Collections), due to periods of maternity leave. This role allowed regular communication and the consideration of the museum's priorities and perspectives throughout research design, data collection, analysis and dissemination, as well as the dissemination of research findings back to the museum as they emerged. Furthermore, during the writing up of this research, all individual staff members had the opportunity to review and revise their verbatim quotations to ensure their accurate representation having been translated from spoken conversation to abbreviated written text. This process additionally allowed them to see how my conclusions and proposals were drawn from their own thoughts and practices.

In summary, the dissemination of this research has taken multiple forms. As part of my collaboration with the museum, the conversation about my research has been ongoing and constant. Findings from this piece of research have also been shared with wider forums of academics and museum practitioners, as well as written up in the form of this thesis. As a collaborative project, the dissemination of findings throughout the duration and for their utilisation in museums practice was equally important to the dissemination to academic peers to further knowledge and debates around curiosity, meaning-making, innovation and museum spaces.

Summary

The strength of this project is the level of access the researcher was afforded to the behind-the scenes processes within the museum. This therefore is the focus of the ethnographic account that makes up the chapters which follow, with the perspectives of others (visitors and other stakeholders) offering comparison and contrast as they were sought out as they impact on the making of space in the museum: influencing staff actions and altering publicly accessible spaces.

This methodology addresses gaps in academic literature, building upon foundational works across museum design, museum pedagogy and visitor studies and utilising this opportunity to further develop arguments within these fields. The specific questions guiding the research have been

influenced by this literature, and by the collaborative partnership with Museums Sheffield. This project sought to understand practices of curiosity, meaning-making and innovation within museum spaces and thus leant itself to an investigation based on my own participation in such practices and attempts to observe others. Ethnographic methods have been used by MacDonald (2002) and Yaneva (2009) to examine museum design processes and visitor-tracking is widely used in museum practice for evaluation. Write-Draw has less of a precedent within museum research, though it has been successfully used in other disciplines to capture subjective lived experience of other phenomena. Therefore, including it within this project builds upon the use of similar practices in informal museum evaluation, increasing its rigour to demonstrate its use as an academic research method.

Each of the chosen methods presents its own ethical considerations. Many have involved extensive reflections on matters of consent: who gives it, how and when; and reflexivity around how my own positionality influenced the data collected. Ultimately the ethical decisions made centred on the principle of 'do no harm'. The research aimed, wherever possible, to avoid negatively influencing the experiences of visitors in the museum or staff in their place of work. However, as a collaborative project, I sought to use my methodology to positively contribute to the work of the museum (through my time and expertise), to the activities of individual staff members (by providing access to university resources), and to the experience of visitors (by using methods that have been argued to enhance a cultural experience through opportunities for reflection).

Overall, the chosen methodology was constructed around a consideration of museum spaces as a visual and material phenomenon. Drawing on Rose's (2012) *Visual Methodologies,* this chapter has set out the potential to develop a fuller understanding of the sites of production and audiencing of museum spaces, as well as the spaces themselves, through a combination of qualitative methods: many ethnographic and several that generate visual data. By giving insight to all three sites, these methods can offer us an understanding of the role of curiosity, meaning-making and innovation in the museum as institution, its constituent spaces, and their design and use. A significant contribution of this project is to describe and analyse the interactions between structure and agency in the institutional context of the museum whilst considering how this interaction is influenced and impacted by curiosity, meaning-making and innovation. An account of this is offered through the subsequent chapters.

Curiosity in the Museum Store

My second visit to the store was to do some research on the Roman objects for the case I was working on. I'd looked up their records on the computer database thinking that was the extent of knowledge about them: that it would have been digitised. In fact, there was much more on paper (in two different filing cabinets spread out within the store).

The first was for just archaeological collections - I looked to find each object number and whether there was a corresponding manila envelope. It was like the anxious wait for the post to see if you got into the school of your choice - thick ones were positive, thin ones could go either way and no letter, that was a disappointment. The biggest trove of documents were for the lead pig and the Roman patera - there had been a lot of correspondence for each over the last 50 years - mainly archaeologists, historians and metallurgists writing about them, researching them and testing them. The envelopes looked fairly fresh but had probably encased their contents for at least a decade now. One envelope smelt of old books, and wiry copperplate handwriting referenced dates in the early 1900s.

The second bank of filing cabinets I investigated held index cards, tightly crammed into the drawers. These were handwritten for the earliest collections, but typed on a typewriter for the bulk of archaeological material, which had been deposited after the university finished their excavations at Brough. Their neat order and level alignment suggested they weren't disturbed often either. Many simply repeated the info on the computer database, but I did uncover a couple of details that hadn't been digitised. The Curatorial Assistant added these to the database and spoke of the richness of the collections that hadn't be adequately explored yet - particularly in reference to Brough.

Chapter 4:

Curiosity in the Museum as Institution

This first of the four discussion chapters explores the relationship between adults' curiosity, their desire to know, and the making of space within the museum. Space in the museum is made through its daily use (MacLeod, 2005), by staff as well as by visitors, contractors, researchers and others. The 'Bright Future' project, the capital redevelopment project at Weston Park Museum that was the focus of this ethnographic research, was a collection of these daily space-making activities and curiosity influenced them in various ways. Taking a broadly chronological approach, this chapter will consider the different phases of the project, the appearance (or invisibility) of curiosity in each phase and the significance of each of these. Overall it outlines how curiosity took different forms and intensities at different times and in different spaces.

Introducing Curiosity

In their Heritage Lottery Fund bid, in Autumn 2014, Museums Sheffield identified themselves as a place for curiosity:

> *"Weston Park Museum has been a phenomenal success and is an inspiring place for families and children to explore their heritage and satisfy their curiosity."*

> *"The Museum is a place for curiosity and learning; it is a repository and platform for the research and recording gathered by community and special interest groups, students and historians…By catering more for independent adult needs, we will begin to change existing perceptions from some visitors and potential visitors, that the Museum is 'not for them'…"*

It must be acknowledged that the presence of this research project, centred around questions of curiosity and innovation, inevitably played a role in increasing discussions and the overall presence of the terms during the redevelopment. However, museum staff identified the relevance of visitors' and community members' curiosity to the project as a whole, as well as a focus on this concept that pre-dated my presence as a researcher.

> **[December 2015, Interview, Project Manager]** *"Curiosity was a word when we were writing the first stage bid that I was like…'We need to get curiosity in here.'…I think if you don't have curiosity and you don't have those questions and thoughts, then…how do we create a kind of a vibrant city I suppose, so that curiosity is all to me what a museum should be like…I don't like the*

kind of cherish-y thing of the cabinet of curiosity and that idea of the, the rich man sitting in his…study…stroking his objects. Absolutely, that's what I hate, but I think everybody should be able to have those experiences…So curiosity kind of came in from there"

[December 2015, Interview, Project Co-ordinator] *"Every time you've asked, say a community group to be involved, say to choose an object to go on display or create some text or do a loan…that won't work if they haven't got that curiosity there about well, what is it? What will I give and what will happen?...There's no point in doing that if they don't think other people will be curious to look at it, yeah, you know, it's the sort of perception that there is going to be that desire there…and obviously they might be very curious to see how whatever they've loaned will then go on display…"*

[December 2015, Interview, Project Manager] *"[Visitors are] all looking for something to provoke curiosity whether that lasts for five minutes, or whether it stimulates further strain of thought that goes somewhere else, you know, we're all looking for that, we're all looking to be, umm, to be stimulated and, that's what curiosity is about isn't it?"*

[December 2015, Interview, Archaeology Curatorial Assistant] *"The gallery space needs to create a sense of curiosity to draw people in. So by having highlight objects and interesting looking displays it'll hopefully pique people's interests…it's a way of drawing people in…curiosity's kind of important with archaeology because…we know what things are, but a lot of people will look at an archaeology display and not have any idea of what any of it is."*

Curiosity was understood as a desire to know that inspired attention and question asking in the museum. When asked what role curiosity had played in the first half of the process of developing the new galleries, museum staff described how important curiosity was to the role of a curator.

[December 2015, Interview, Project Co-ordinator] *"There's…all the people who are working on it, rather than the visitors, those people who've been, come in and been employed on like collections assistant, research roles, you know, for them they've explored objects and collections that probably have never been explored before…by very nature of being a researcher you have to have plenty of curiosity or you wouldn't get anything from searching this stuff about these objects."*

[December 2015, Interview, Art Curatorial Assistant] *"I think just as a researcher…you have a natural curiosity, you want to find out more… one of the things I'm looking at when I'm looking at paintings is how…aspects of the painting can be used to appeal to…younger visitors…anything*

that's kind of strange or quirky or appealing in some sort of slightly different sort of way and in an imaginative kind of way rather than…a sort of appreciation of art kind of way…"

[December 2015, Interview, Social History Curator] *"My curiosity usually appears as - what do we have in the collection? What IS that? What else can I find out about it? What other items are there in Sheffield (with individuals and institutions)? And wherever else the research leads…"*

'Curiosity' in these extracts is centred around a desire to know and to pay attention. This curiosity about collections objects and their stories was identified as an important part of the research remit of the curator. Additionally, within this redevelopment process, museum staff thought about how they could use the objects, their knowledge and their own curiosity to inspire curiosity in others.

If we understand curiosity as a desire to know, this is difficult to see and observational fieldwork risks only documenting events and practices which might be expected to be curiosity-driven. Such evidence does not prove an underlying desire and thus other methods are needed to probe these motivations. Practices can be understood as what is done and how. Geographers have used theories of practice to move passed the dichotomy of structure and agency by emphasising "the ways in which social agency is constructed in various sets of social processes" (Goodwin, 1999:41). Whilst not directly drawing upon these theories, this thesis suggests museum visitors use practices to explore and staff use practices to complete the daily requirements of their employment. For both, some observable practices have a reported connection to curiosity using visible and measurable indicators such as question-asking and attention-spans (Bunce, 2016; Falk and Dierking, 2013). Therefore, we might record close looking and question-asking as curiosity-driven social processes evident in the museum, but the observation of these practices does not fully illuminate how social agency is constructed within them. As such, this research also used interviews with museum staff, documentary analysis and the Write-Draw method with adult visitors, though these still only capture curiosity where it was expressed. Each of these methods was used to examine the meaning and significance of such behaviours in more detail in order to understand the relationship between adults' curiosity and the making of museum space.

Within the bid document it was acknowledged that the current museum focused more on provision for children and families, yet there was a desire to increase the appeal for 'independent adult' visitors through the redevelopment. These sentiments were echoed in interviews with museum staff.

[December 2015, Interview, Project Manager] "…*for me it was all about encouraging people to be curious about the world around them…curious kids become interesting adults, it's as simple as that*"

[December 2015, Interview, Project Co-ordinator]: *"I think there's definitely going to be a more clearly defined adult offer…for adults coming without children, for example, I think what they might take away might be quite different to now…rather than it just being somewhere that you only come when you've got small children."*

There was a desire to develop from a place perceived as only for children and families to one that offered something for adults visiting on their own. Underlying this proposed change was a suggestion that adults and children might be curious in different ways. In the 1990s and 2000s museum practice and research were widely concerned with 'child-friendliness' and the political regime instrumentalised the museum for education and social inclusion (see: Hooper-Greenhill, 1994; Sandell, 2002 and 2003; Dodd and Sandell, 2001; Lawley, 2003; Ellenbogen, Luke and Dierking, 2004). These contexts influenced the design installed at Weston Park Museum in 2006. More recently though, staff report that some visitors perceive the museum to be overly child orientated. The colours, materials, and style represented a period of museum practice and design that specifically sought to address the curiosities of children: to draw their attention, to be tactile and robust, and to simplify ideas presented. This succeeded in making Weston Park Museum appeal to families (Hickling, 2008), yet staff suggested some felt this had been to the detriment of adult visitors. Curators reported that the approach to label writing during this development had offered certain challenges. Long texts were associated with an older form of museum practice that was not child friendly and so, in the 2006 design, labels were limited to 30 words, severely restricting the verbal information conveyed. Pearce (1998) argues that interactivity and learning by doing are central to museums designed for children. However, this doesn't necessarily prevent their appeal to adults. Rather it is the aesthetics and content employed to deliver these that create a sense of place either 'for children' or 'for all ages'. By 2014 museum practice and research in the UK recognised this challenge, erupting into mainstream media with debates about whether children should be banned from museums altogether (see: Hewett and Birkett, 2014; Stradeski, 2014). As a more measured response at Museums Sheffield, there was a rethinking of 'family-friendly' that was evident in the intentions and, ultimately, the delivery of the new galleries. This case study at Weston Park Museum offers an example of how museum practice and its relationship to and understanding of curiosity has changed over the space of a decade.

Prevailing ideas about 'curiosity' and museums have broadened from the previous focus on children's physical explorations, though elsewhere have become focused instead on a resurging interest in 'Cabinets of Curiosity' and their ability to incite wonder in adults (Bann, 2003; Hoare, 2014). Geoghegan (2010) has identified a gap in the literature that relates to museum staff and behind the scenes processes in the museum. As such, there is a lack of research into the curiosity of museum staff. Through this case study at Weston Park Museum there is potential to draw upon emerging work on sociable curiosity to further understand the curiosity of both adult visitors and staff. Phillips (2015:3) outlines two forms of sociable curiosity and defines these as "wondering and finding out about others, which I shall call empathetic curiosity, and being curious (about ideas, things, or others) with them, which I shall call relational curiosity". Both of these forms may be evident in the making of museum space and will be explored further below.

Phase One: Sociable Forms of Curiosity

As a researcher, I wasn't present at the museum during Phase One, from initial discussions to the confirmation of funding. However, the role of curiosity during this period was touched upon in later interviews with staff and documentary evidence. The process of understanding the needs and interests of visitors was described in the bid to the HLF in late 2014:

> "Our internal research and observation informed the development phase of A Bright Future. HLF support at Stage One enabled us to...fund external audience and design consultants to test our ideas and help develop our plans. We have listened to visitors and the community, to our peers in the city and beyond, to our main funding bodies and the HLF, and we have shared these discussions internally to create a compelling Activity Plan..."

The 'we' in this quotation references the museum as an institution, made up of its body of staff yet personified as greater than the sum of its parts. Whilst individuals contributed to the design of questions and prompts, the audience research and engagement process is a demonstration of the museum, as an institution, pursuing a sociable curiosity about its audiences.

From the evidence presented by staff and in documentation, it appears that these earliest stages were organised around an empathetic curiosity: a desire to know and find out about museum visitors. Within limited timescales, staff reported that the questions asked of visitors were strongly directed by what the funding body wanted evidence around. The report from the audience consultants used what was learnt about museum visitors in the form of quotations from focus group participants. These quotations were "selected because they articulate the view of majority and are not a minority perspective" as reported in the report from Wafer Hadley in 2014. A subset of these

quotations were then used within the final bid to support the museums' case and aligned to themes and points considered pertinent to the Heritage Lottery Fund:

> **[late 2014, Final HLF Bid]** *"It doesn't change. Once you've seen it, you've seen it." (Retiree, Audience Consultation 2014)*

This extract was used to suggest support for investment in displays that could be changed regularly and easily.

> **[late 2014, Final HLF Bid]** *"I've been coming to this museum since I was small myself and I've brought my children, and then my grandchildren have come, and I love it. I think it's serving a need in the community, as a meeting place if nothing else." (Retiree, Audience Consultation 2014)*

This quotation was used to evidence the importance of the museum to the people of the city.

> **[late 2014, Final HLF Bid]** *"The people of Sheffield have a growing appetite for information about the city's forgotten heritage - we need to satisfy that hunger" (Ron Clayton, Local Historian)*

And this opinion was used to demonstrate the demand for the display of more objects from the museum's archaeology collection. Most of the documentary evidence suggests a process where Museums Sheffield collected specific information about their audiences, who they were, but also what they liked and disliked, to support the funding application. This process demonstrated the museum to be curious about its visitors, but afforded little power for visitors to understand and shape the museum in return. Structures and deadlines stemmed from both internal processes within Museums Sheffield as an institution, but also other institutions upon which this project depended such as funding bodies. These deadlines and structures created a sense of momentum with the power to reduce the agency of individuals, or at least their perception of it, and staff articulated that these elements of the process didn't take place exactly how they would have liked them to: individuals would have liked to have engaged with visitors and non-visiting audiences more substantially or significantly.

Whilst the overall institutional structure suggested a preference for an empathetic approach, individual staff members attempted to work relationally: that is, they sought to engage more deeply with visitors**.** This was evident in examples from the Picturing Sheffield gallery. The data begins to illustrate the complexity of the situation when institutional structures supported empathetic curiosity but individual staff members saw themselves as relationally curious. There was friction between individual curiosities and institutional forms. Driven by the quantity of relevant objects in

the collection, the initial proposal of a visual art gallery about Victorian paintings was put to a focus group in 2014.

> **[December 2015, Interview, Art Curator 2]** *"Our initial concept to do the Victorian gallery…but from the feedback from the visitors and the focus groups they weren't entirely sure about how that was going to work, and after the success of the exhibition 'Picturing Sheffield' that…was quite clearly the way, they thought that it would be quite good an idea to go that way…They wanted to keep [the focus groups] kind of neutral so that the visitors could feel that they could actually be really honest about what was there at the moment and what was actually what they wanted I think. And I think it was a good idea actually as I think we got their honest responses."*

The curators suggest an aspect of working together with the visitors to find a solution and suggest that the focus group participants had power to communicate their honest views by working with an external consultant. The curators assign a narrative which reads as though the focus group participants led with the idea of 'Picturing Sheffield'. Elements of this narrative are supported by the documentary evidence:

> **[April 2014, Wafer Hadley Focus Group Report]** *"The idea of replacing About Art with a display of Victorian paintings was widely rejected across the groups as being too limited and at odds with the rest of the museum."*

> **[Late 2014, Final HLF Bid]** *"Really positive - I like the idea that the gallery would focus on images of Sheffield and its identity and I think it would appeal to a range of different ages."* (Audience Consultation 2014)

However, other members of staff indicated a greater force of control and direction asserted by the museum. In another recollection, it was 'the museum' who put forward the proposal of 'Picturing Sheffield' for consideration in a second round of audience consultation with the question – do visitors like or dislike this idea? The importance of the link to the city and for the gallery to feel a coherent part of the whole museum seems to have emerged from several sources: from museum staff across departments and from visitors in the focus groups. The institutional structures of the museum supported empathetic curiosity about visitors' opinions on ideas developed by staff members, though sometimes, with enough individual will, this began to resemble a relational curiosity where stakeholders engaged in making spaces for themselves to be curious about the subject and the process alongside staff, albeit temporarily. The narrative constructed by the visual art team provides an insight into their motivations; the institutional structure tended towards an

interest in finding out about the audience, whereas a curator could attempt to extend this and to engage the audience based upon their individual curiosity and practices. This thesis attempted to identify these latter two forms of curiosity alongside the institutional.

Phase One: Curiosity-Driven Practices

It is probable that not all practices that are deemed to be 'curiosity-driven' occur out of an individual's psychological state of curiosity, but are informed by curiosity none-the-less. That is, a practice of finding out new information may variously be motivated by the institution's desire to know or the individual's desire to know. For museum staff, the form that a practice takes is influenced by established norms, in particular the professionalisation of the practices of museum staff. Knell (2011:10) states that the professionalisation of museum staff results in agreed, correct ways of doing tasks, though it has the potential to stifle creativity. The professionalisation of museum staff, working to national and international norms, has resulted in a community of practice influencing the form that some practices take, including that of curiosity. Bennett (1995) suggests that visitor's behaviour in the museum, their practices, are influenced by Foucauldian principles of observation with individuals offering discipline of their own and others practices through the potential of being observed. We can understand the professionalisation of staff's curiosity-driven practices in a similar way. Thomas (2016) argues that curiosity is a key practice of curatorship, and one that is not currently always used to its full potential. The curiosity of curators has been structured by the profession and the rules of the individual institution, in many cases, directing the possible ways in which it is currently enacted. In this way, it has become detached from the necessary relationship to individual curiosity otherwise underlying practices like question-asking or close looking, though some connection often remains.

During the writing of the final bid and in the interim months before the initiation of project team meetings and collaboration with designers began, curators were tasked with collating a list of objects to be installed in each new gallery. In the construction of object lists, we can see the interplay between institution, individual psychological state and these disciplined practices.

> **[December 2015, Interview, Art Curator 2]:** *"It was down to me and [Collections Manager] picking the objects that would go in it and how many works we wanted and so on"*

> **[December 2015, Interview, Archaeology Curatorial Assistant]**: *"I think a lot of the things have gone on the object list because of curiosity, because something is interesting to look at and it's got an interesting story to tell."*

The curatorial teams articulated feelings of control over this task and the importance of curiosity to it. The task itself was set within the institutional and project structure, yet curators had relative freedom to pursue their individual curiosity by investigating the objects in their care and formulating combinations to communicate this knowledge within the gallery setting. The importance of sensory experience to this task is underscored by the importance of our sensory experience to knowing the world. Pink (2015) argues that people of all ages draw their understanding of the world around them from their embodied sensory experience of it. It has been reported that adult visitors are often reluctant to explore their sensory curiosity within the museum (Diamond, 1986; Kenkman, 2011), but this is not the case for staff members, particularly curators, who are expected to have a sensory engagement with objects as part of their collections management responsibilities. Geoghegan and Hess (2014), drawing upon MacDonald (2002), outline the concept of 'object-love' as a motivational force impacting upon a staff members' relationships with museum objects. This 'object-love' encapsulates the sensory and cognitive curiosities pursued by curators in constructing the object list.

> **[December 2015, Interview, Archaeology Curator]** *"If you're sort of thinking about curiosity as…there's something interesting to say about something, I know…we haven't picked everything on 'oh that looks nice', it looks nice to us, but that's because we get excited about the story behind something."*

For each object, curators were required to make a decision about its inclusion that was based on what was known about it, as well as how it looked and felt, whilst it was difficult to unravel these from individual feelings of connection and ownership between curator and object. In this task, individual interests and emotions fed the sensory curiosity employed in this task, more than institutional frameworks and values.

However, the setting of deadlines within the project and the sheer size and variety of the collections created limitations, frustrating some members of staff and influencing which objects were ultimately included.

> **[December 2015, Interview, Archaeology Curatorial Assistant]**: *"I think…refining is quite a good way of putting it, because basically in the gallery you start with your collection of half a million objects, then you refine it down to the sites that you think need to be included, the star objects and the most important stories…"*

> **[December 2015, Interview, Social History Curator]**: *"Some parts of the development felt rushed for me because of being away on maternity leave during the bid. I missed part of the*

creative process at that stage and had a lot of catching up to do. I personally find it hard to be creative under time pressure, as I am more of a 'ponderer'."

With constraints on time, curators had to prioritise by drawing upon individual and institutional knowledge of important sites and events or sections of the collection that they thought the visitors would be most interested in. Staff reported that many objects chosen within the redevelopment of the Archaeology and Visual Art galleries were previously on display or had been encountered and known about by the curator prior to the project, for instance through temporary exhibitions. Loewenstein (1994) argues that our motivation to uncover new information about a subject, our curiosity, is greatest when we can foresee it closing a conscious gap in our existing knowledge. In this way, the imposition of a deadline could serve to focus curators on pursuing curiosity in a way that would fill moderate gaps in knowledge and offer a sense of closure. Different galleries worked to different timescales. As Social History was programmed as the first to reopen, it is perhaps not surprising that this curator felt the most rushed and frustrated. Additionally, her interview responses suggested the she was perhaps unable to reach a sense of closure about her object list in the time available or unable to complete practices with the degree of creativity she desired of herself. The institutional structure given by a deadline offered constraints to what could be feasibly achieved and the amount of new knowledge embodied in the object list. Although it also served a productive purpose in focusing attention on objects which could be better understood and thus reinterpreted within the resources available. The construction of the object lists at this stage of the project involved an interwoven relationship between the institution, individual's curiosity and professionalised practices.

Whilst it is tempting to celebrate all forms of curiosity as observed in the museum, the concept has a long history of exploitative results requiring us to consider the ethics of these particular forms and instances. Curiosity has been variously understood as both a virtue and vice across history and different geographical contexts (Leslie, 2014). Phillips (2015:19) suggests that sociable curiosity can objectify, exploit and intrude upon the lives of others, offering benefits to the curious person (or in this case institution) possibly at others' expense, but that "it is nevertheless possible to identify other expressions of curiosity that are ethically robust, or at least ethically reflexive". It is perhaps easier for individuals than institutions to practice such reflexivity by asking questions and taking actions that seek a more equal balance of power, enable others' curiosity about the process, and consider the consequences. At this early stage of the project, tentative approaches to reflexivity emerged in individuals' desire to pursue a relational curiosity, yet this was limited by institutional structures. The structures and values of the museum as an institution dominated the most visible examples of curiosity in Phase One.

Phase Two: Institutions and Incuriosity

Further to the potential for curiosity to be exploitative outlined above, it therefore can be established that curiosity is not always a positive activity. Similarly, incuriosity need not always have negative connotations. However, if curiosity is understood as a catalyst to a creative process (RSA, 2012), incuriosity may constrain that subsequent creativity. Institutional systems play a critical role in supporting curiosity throughout the process of making museum space. These systems were able to scaffold very open forms of curiosity in some areas of the project at Weston Park Museum but restricted and directed it in others. May 2015 saw the start of a formalised calendar of meetings: meetings of the whole project team once a month and those focusing on individual galleries in between, as well as monthly 'Design Days' where each gallery team met in turn with the external design agency. These scheduled events, with tasks to be progressed between each, structured if, how, when and where curiosities could be pursued. I understood this process as attempting to co-construct answers to the question "what could this space be like?" amongst a team of curators and design agency consultants.

Patterns of communication between curators and designers affected their ability to be curious together. One example of this became evident in a meeting about the Archaeology gallery.

> **[16/06/2015, Fieldnotes]:** The designers have been thinking about the mix of chronology and thematic in gallery. They have brought a different proposal to the meeting - bringing the two big cases from the end walls to form a linear timeline in the centre of in the gallery. They present a rough sketch. The designers feel it gives a 'strong sense of time' and 360 degree views of timeline, as well as more flexibility with thematic areas. Museum staff taken by surprise at new design.

> **[16/06/2015, Meeting Minutes]:** "***Discussion of new design***…*[Project Manager] - Too linear? Lost clusters. [Curatorial Assistant] – doesn't give more space in timeline. Would it be enough space for timeline? How wide are cases, 800 or 900? Sized to glass kiln. Would make more space for objects. Benty Grange helmet would be framed between two cases as in middle of chronology. What happens to the corners? Where could tent fit? Uncased large items could replace cases in window wall chronology. [Project Manager] - Too open a route, how to hold people's interest. [Designer] - Windows quite dominant. Concerns about consistency of display. How to get visitor flow right? Which theme would people engage with first? Want to engage people in an object not a graphic at the start. How to keep interest. First option – you see everything in one go – does this lack wow moments? Feature*

cases against walls lack draw and impact. [Project Manager] - Two cases in middle not
enough. [Curator] – window cases could become more semi-permanent. But would bits at
sides just be add-ons…What are we saying in first area? How tall are feature cases – not
higher than 2.5 metres…Feature cases will change less – will changing elements become less
visible by making these into the perimeter. Yes, inevitably. Length of feature cases fixed
*with regards to space for access. 9 metres collectively not including gap. **What do we want***
***the gallery to do?** – need to be clear on this – allowing people to explore themselves and give*
them the confidence to do this. Where are the stepping stones to move them through?"

Rather than building upon the ideas that had come before in an expected fashion, this discussion
returned to a fundamental starting question *"what do we want the gallery to do?".* The significant
change in the proposal created an opportunity to reveal and articulate the discrepancies between
the sense of place envisioned by the museum staff and that envisioned by the designers and to
investigate whether the intended materiality could enable the desired place and flows. This sparked
curiosity amongst those present in the meeting, pursued through a dialogic exchange. Sennett
(2012) considers dialogue as a form of exchange that can allow the understanding of others' ideas
and ways of thinking, without the necessity of closing this gap and sharing a conclusion. If dialogue is
a form of exchange that allows us to engage with other people in order to come to know them, it fits
with Phillips (2015:3) definition of relational curiosity. Dialogue can be a methodology of problem-
finding (Sennett, 2008 and 2012). The project was framed through the bid to the HLF as needing to
deliver spaces that were better than those which existed before:

> **[September 2014, Final HLF Bid]** *"Weston Park Museum: A Bright Future will bring more of*
> *the city's collections to more people and create inspiring, sustainable new displays, allowing*
> *audiences to engage with their heritage. The project will make strategic improvements to the*
> *Museum which protect earlier investment and build on its overwhelming successes to date.*
> *At its heart is a focus on enhancing visitor experience and increasing access to Sheffield's*
> *extensive collections of Archaeology, Natural Sciences, Social History and Visual Art…Visitor*
> *numbers will increase and be sustained through regularly changing displays and*
> *accompanying activity."*

Thus, within this timebound process, there was an anxiety about solving problems, as well as finding
them. Sennett (2012: 18-19) suggests that such resolution and problem solving can be found in
dialectic exchange. Relational curiosity, I propose, is a problem-finding activity and one that can take
place through dialogue – the suspension of the need for agreement and clear, immediate shared
decisions in order to explore the potential and the scope of the subject. However, my observations

at Weston Park Museum suggested that the institutional structures underpinning a project-based way of working preferred problem-solving and the dialectic exchanges needed for that. An institutional structure that supports relational curiosity finds a way to relieve the pressure for resolution and decision-making, at least for a short while.

Ultimately, through dialogue, this meeting enabled a clearer articulation of how each stakeholder was envisioning the gallery at this point in time. However, how this dialogue was conducted over a longer time period, for example the lack of continuous communication between meetings, created frustrations.

> **[December 2015, Interview, Archaeology Curator]**: *"The meetings with the designers, that has been really difficult because it has felt like pulling teeth…when you're just talking about something you need to be able to see it and when you don't see it and you don't see it with enough time, you don't have enough time to consider – is this actually how we want it…that meeting where the designers did the radical new plan of the gallery…and just presented it to us and we sat there stunned and…all of us were thinking: we're not sure we like it, but is that because you've just thrown it at us?...it's got to be much more of a back and forth process and…you need them to be sending you things so that you can say yes or no..."*

On some occasions museum staff felt that the ability to digest new ideas before having to discuss them would have led to a more productive dialogue: the Archaeology curator appeared to be curious about the design and wanted to come to know the designers' perspective on it, though also expected them to be curious and work relationally with her *"…much more of a back and forth process…".* In addition, more time was also felt to facilitate dialectic exchanges within meetings to align each individual's understanding of the gallery's progress so far: *"…so that you can say yes or no…".* To enable a sense of progress through dialogue, Sennett (2012) suggests that skills in listening and responding become critical. If dialogue supports relational curiosity, then progressing the dialogue through listening, empathy, power-sharing and negotiation could also support curiosity. At times, communication broke down and individuals' understandings of the project and where their interest may take it next diverged and conflicted. When the ideas presented were too new, too large to be digested in a short space of time, they became a barrier to this mutual curiosity-driven endeavour. Similarly, an overly slow pace of change with regular revisiting of old ground, as museum personnel changed, could stall curiosity (and creativity) through boredom. As museum staff rejected the proposals they felt unnecessary or too radical, and constraints of budget and time began to dominate discussions and visions for the space, they reported that the designers' interest in the project appeared to become stalled or stifled.

Whereas there was evidence of an empathetic institution in Phase One, such evidence was lacking in the meetings with designers. However, evidence of an institutional relational curiosity was appearing in other concurrent activities. Visitors weren't directly involved or represented within these meetings, and the initial report (by now a year old) was referred to in lieu of acquiring any feedback on ideas as they developed. Institutional structures did not require such activities to take place, and individuals were not inclined to pursue it independently. Whether this was from a lack of resources to do so, or the lack of value placed upon such an activity, the lack of curiosity about visitors and other museum users during this phase of the project ultimately led to the homogenised construction of visitors and their needs within the design meetings I observed. In the meetings with designers from May to September 2015, discussions of accessibility were reduced to wheelchair users, and adults and children were considered to be homogenous categories, leading to designs for 'ideal' visitors rather than in response to curiosity about real and diverse ones. As this part of the process favoured dialectics over dialogue, it also replaced empathy with sympathy. Sennett (2012)
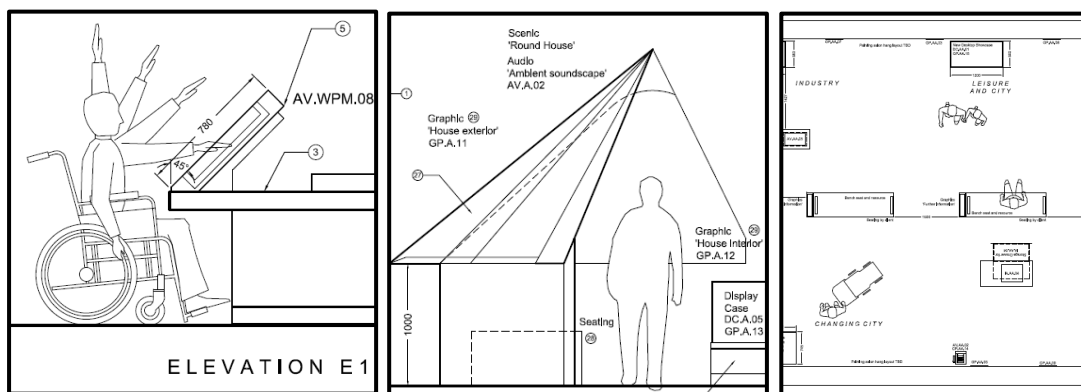

Figure 4. Illustrations of wheelchair users, adults and intergenerational groups within the designers plans for spaces at Weston Park Museum (October 2015).

proposes that sympathy reduces differences and focuses on the elements which allow us to see others as akin to ourselves, whereas empathy requires an imaginative leap to more fully consider what it may be like to be different. I suggest that empathy also requires the acquisition of knowledge to inform this imaginative leap: elements of sociable curiosity. Museum staff and designers became sympathetic to visitors: wheelchair users, children and adults would be viewing things from different heights (Figure 1) but, when described, all were iterations of the same being (with children as not quite yet proficient adults). Thus, a gallery element would work for all of them if it was physically accessible. This sympathetic approach renders curiosity unnecessary as it presumes we can understand others wholly through our own existing experience. This is a misapprehension and thus sympathy is an inadequate tool for working with diverse audiences: we need empathy and the curiosity which underpins it.

Outside of the formal design meetings, there were other spaces that supported curiosity during this period of the project. One such example is offered by the engagement with the friends group of a local heritage site in a co-curation project. On the 22nd July 2015, I observed their visit to the Museums Sheffield store. Museum staff engaged in dialogue with members of the community group structured around shared and individual curiosities: What could they each learn about Wincobank Hill? What else did each know about the archaeology of the city? The group's visit to the stores and the curators' visit to their meetings and the hill itself afforded opportunities to utilise curiosity-driven practices (asking questions, looking closely, etc.) to: satisfy one's thirst for knowledge; to understand what curators think should go into an exhibit and what these engaged visitors want from one; and to collaboratively create plans for the display. The museum and its staff were not incurious about visitors; this interest and endeavour for reflexivity and a democratisation of display planning was evident in other areas. Institutional structures at Weston Park Museum were successful in facilitating curiosity amongst other groups which would suggest that there was potential for the interaction between the curators and designers to have taken place differently. However, the structure of the design interactions was partially inherited from external institutions, particularly funders. Other design processes have included a continued element of empathetic curiosity about visitors within the gallery design process (for example by including an 'audience advocate' within project teams as at The Science Museum Group); or by visitors being brought into the process directly (such as in the co-curation process at Derby Museum). As it stood, the curators held the responsibility to consider the interests and needs of visitors, without the resources to ensure they had up to date information, whilst also representing their own interests and those of the collection objects.

At institutional and individual levels, the evidence suggests a strong relationship between, if not a prerequisite for, empathetic curiosity leading to relational curiosity. This relationship is also dependent on certain practices, for example question asking. Phillips (2015) suggests that empathetic curiosity can involve an individual posing direct questions, whereas relational curiosity can be less overt. This preference for indirect and concealed curiosity, like Sennett's (2012: 20-23) suggestion of the use for the subjunctive, can be seen as an element of contemporary British culture. Yet there is sometimes a need and often a place for directness. Indeed, the evidence from this case study suggests that one needs to be a little bit empathetically curious about others and understand their role and the context of their perspective in order to enable one to be relationally curious with them. In other words, one needs to be direct and ask questions in order to establish the shared interest or relational curiosity that you are subsequently pursuing. Without the empathetic curiosity as a catalyst, it becomes more difficult to establish a relationship through relational curiosity. With

the changes to museum personnel, this lack of direct empathetic curiosity impacted upon the relationship between the curators and the designers, as well as upon my role as a collaborative participant in the redevelopment.

Throughout the six months of working with the designers, and particularly in the very earliest meetings, my presence was not understood by everyone, and led to individual and group discomfort. This discomfort posed a barrier to expressions of curiosity, as it seemed people were more cautious about what they said and did in front of me, and the lack of understanding of my role prevented my collaboration. It is perhaps inevitable that in the early part of any partnership productive collaboration is the most difficult, though the speed at which different parties get to know each other varies. I believe that the museum staff did possess empathetic curiosity about who I was and what I was doing there, as it emerged later on in the redevelopment, but they were reluctant to practice it. My role was seen as being established by the senior management within Museums Sheffield and, whilst my presence wasn't always understood, it wasn't questioned. Most staff accepted my attendance at meetings, though those who saw themselves as having more authority channelled their discomfort into a challenge of it.

> **[09/06/2015, Meeting Notes]:** *"[Project Co-ordinator] mentioned (before the meeting) that [Project Manager] wonders if I should be at every meeting - whether I constrain the design process."*

However, as I became more involved in enabling the completion of tasks within the project it created opportunities for staff and me to get to know each other.

> **[02/05/2016, Fieldnotes]:** I felt like I was revealing expertise that people didn't previously associate with me. This was particularly felt when I was talking to [Project Manager] about learning theory and interactives, and with [Archaeology Curatorial Assistant] when I spoke about smoke filling the roof of the roundhouse as a way to preserve food and they suggested that I should have perhaps written the information panel for that exhibit.

During the first six months of my involvement with the project, there was a reluctance or inability or lack of opportunity to address this curiosity immediately and directly. Operating as a practitioner in non-formal education environments, I often used structured 'ice-breaker' activities that give permission for a direct form of empathetic curiosity designed to enable a subsequent period of working together. I am left to wonder whether if I had presented myself more directly, or staff had

asked more direct questions about my role, would we have found an 'ice-breaking' catalyst for a more productive relationship and powerful relational curiosity sooner? Just as this happened in regards to my role, it may have also been happening between the curators and the designers, hindering their ability to understand each other and thus to pursue a relational curiosity.

The scope and energy for curiosity during this phase of the project was also impacted by how curiosity-driven practices variously engaged or ignored materiality, for example a lack of close looking at objects. There was a neglect of curiosity about collection objects in favour of concerns about the materiality of new design elements: things that could be changed. This is evident in the designers' lack of encounters with the objects and the high proportion of meetings that were restricted to the meeting room. On occasions, when objects were brought to the meeting or the meeting brought to the spaces, I reflected on these priorities.

> **[16/06/15, Fieldnotes]:** We were nearing the end of the timeslot to talk about the Sheffield Life and Times gallery and the box had sat in the middle of the table patiently waiting through the bulk of the meeting. Debating the envisioned materiality had taken precedent, until the weight of the agenda had lifted and there was space for curiosity to rear its head. "What's in the box?" somebody finally asked. [Curator] opened the box of boxes she had brought along. Inside the plain cardboard box from the museum store was a wider array of boxes, different colours, different materials. She flipped back their lids to reveal shiny metal discs. Medals for the new sport display we'd just been discussing. The designers were taken with the beauty of their individual boxes. Would they be going on display? Probably not – the story was in the medals themselves.

> **[14/05/15, Fieldnotes]:** We were 30 minutes ahead of schedule, and as the Picnic Space was just along the corridor from the meeting room we had plenty of time to go and examine it in person. We walked as a group into the picnic area itself. [Visitor Experience Manager] reiterated the need for a bright colour choice, bright, probably a shade of magnolia, but definitely not "soul-sapping" like the current one, which we were now able to take in. Conversation broke off into smaller groups and the designers wondered if a wall was structural.

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They realised the actual size of one of the doors –
contradicting a comment they made earlier...[Visitor
Experience Manager] filled me in on the changing use of this
space, it'd been the picnic space since 2006 but prior to that
it was actually the museum office…Standing in the space, the
materiality of it prompted new thoughts for the current design
process, as well as more meandering thoughts about how it had
come to be in its present state.
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Embodied experience is important for learning (see Dewey, 1938 and Kolb, 1984): both in developing an understanding and also generating questions and sparking curiosity. Staff reported that earlier on, in Phase One, the designers had visited the store and seen some of the objects to inform the initial designs used within the funding bid. However, within this next phase of the project the embodied experiences, connecting curious individuals with the museum's existing materiality, were limited in occasions and duration; the extracts above mark exceptional moments rather than regular occurrences. Instead, priority was given to the materiality of the new elements, the controllable and changeable.

This was understandable as the gallery sought to be able to work with any objects from the collection. Though, as this collaboration continued it emerged that the curators' and the designers' curiosities and their visions for the gallery as a place were rooted in different experiences and expectations of materiality.

> **[December 2015, Interview, Archaeology Curatorial Assistant]**: "*I think it's the collaboration with different groups, mainly with the designers, that's been the challenge because we're from quite different sectors that work and think differently. I think some of our best collaborative thinking has happened when we're in the physical gallery space, because we've had these meetings around a boardroom table and we look at the plan which can be tricky for me to visualise and then we'll go down to the gallery after the meeting and it's amazing how actually going into the space helps.*"

The Curatorial Assistant articulates the benefit felt from trying to visualise the designs within the existing galleries, though meetings didn't routinely move to these spaces, only if there was deemed to be enough time. This lack of opportunities for embodied experience within the relational curiosity lead to inadequate case designs, addressing the visuality but not the materiality of the objects. For example, designs proposed that very heavy objects would be mounted near the top of the case from the back board, creating almost impossible technical challenges. The direct experience of an object

was held by the curators and was not always shared by the designers, even though written information such as weights and materials had been communicated in a written form. The structure of the meetings and design process didn't enable this knowledge or awareness to be easily passed from one participant to another.

Curiosity can only flourish in appropriate moments, if there is a balance between structure and agency or openness. The formal design process during this phase imposed a tight structure on the design activities and thus constrained curiosities. In October 2015, the design agency provided the museum with annotated floor plans and elevations for each gallery and particular interactive elements, as well as layouts for some cases. The task, of creating these designs through a series of meetings, had the potential to be an ideal opportunity for curiosity. However, a number of institutional and individual limitations occurred and this period became marked by incuriosity: the reduction of visitors to homogenised groups; the lack of sociable engagement with materiality; and a lack of understanding of others' roles, including mine as a researcher. Curiosity stalled and through subsequent activities it became apparent that the designs did not fulfil their purpose. Most were revised and developed by the curators and through later conversations with makers and contractors, community groups and visitors where new curiosities were established in the materialisation of the space, including the development of interpretation.

Developing Interpretation: Balancing Curiosities in Research

The practice of writing interpretation materials demonstrates the need to balance three domains of curiosity in the making of museum space: epistemic, sociable and tactile. The process of researching and writing interpretation for the galleries was undertaken mostly individually or between partnerships of curators and collections assistants. It required epistemic curiosity, an interest in the subject matter, but demanded that to be honed and managed to particular ends. Gade (2011:49) suggests that epistemic "curiosity denotes an interest in phenomena for their own sake" and as such this definition resists the idea of instrumentalisation. Instead the research and development of interpretation, like other forms of writing, required a balance of curiosity about the subject matter alongside an interest in the visitors and audiences for the finished product: a combination of epistemic and sociable curiosities. In addition, the specifics of the museum environment and its collections required these writers to also demonstrate an interest in objects, understood and pursued through tactile curiosity. In Autumn 2015, I took on the responsibility for the Romano-British cases: researching the archaeology of the region, grouping objects, writing labels and proposing a case layout.

These three domains of curiosity were ultimately constrained or trained through institutional influences and this was evident in how I performed the tasks compared to the curators. With less conflicting demands on my time, I had more freedom to pursue epistemic curiosity than other members of staff. Thomas (2016) proposes curiosity as the curators' method of research, though at Weston Park Museum I believe the opportunities for this are far more limited than at Thomas' own research-focused and university-based institution. At Weston Park Museum, curators have multiple responsibilities, including acting as collections managers and exhibition designers, reducing the time they have for collections research. Initially, on the 28th July 2015, I was presented with a list of five themes and set a deadline to prepare a doubled sided A4 summary by the end of August. I knew a fair amount about Roman Britain, though lacked the specifics about the Sheffield area during this period. Based on Loewenstein's (1994) information-gap theory, it was a clear gap in my current knowledge that I had been made aware of and thus curiosity spurred me on to fill it. As the object list developed and plans for the gallery advanced over the next year, the thrill of the chase inspired me to create and answer questions about the objects, many of which were previously unfamiliar to me. I reflected on this in particular after the Curatorial Assistant introduced me to a new object in April 2016 that she wanted adding to the case.

> **[11/04/16, Fieldnotes]:** I spent two hours at Weston Park and another two at home that evening starting to conduct research into an inscribed fragment of Quern stone. I saw a picture and had [Archaeology Curatorial Assistant]'s drafted label text but some avenues would have been easier to rule out had I seen the actual object...

The intrinsic motivation and reward of curiosity began a process that lasted a couple of weeks as I sought to find a definitive answer to the meaning of the inscription on this fragment of Quern stone. This level of investigation into one single object's inscription could not usually be afforded by a curatorial team of two who shared responsibility for half a million archaeological objects. Research activities, like many others within the museum profession, require time and money and the structures that currently provide these are geared towards immediate outcomes and outputs and not those intangible developments that accumulate across years and decades. My investigations yielded over seven pages of notes as I explored different possibilities, though ultimately resulted in the tiniest of changes to the proposed label text.

Before: *"This fragment of quernstone is inscribed with the name SATURNINI - Saturn."*

After: *"This fragment of quernstone is inscribed with the name of its owner SATURNIUS."*

Whilst my own epistemic curiosity encouraged me to expand my knowledge of the subject with nuance and detail, when it came to synthesising this for the display I had to return to questions of audience, voice, space and attempts to envisage what other people might find interesting.

Figure 5. Prototyping labels for the Romano-British case with visitors in March 2016.

The differences between my approach and those of the curators I worked with were also evident in regard to sociable curiosity. As a researcher, it seemed natural to me that I would also need to address my questions about what visitors would want through another form of research. To satisfy my curiosity about objects I needed to consult sources about them, but I could address my curiosity about visitors by asking them directly. To that end, I sought to prototype my labels for the Romano-British cases with museum visitors. In March 2016, I pinned them to the hoarding and asked for feedback (Figure 2).

[23/03/16, Fieldnotes]: One visitor said the Romans was 'his thing' and welcomed the additional facts for the diploma that weren't in its previous interpretation - that the original was made of bronze...The visitor who spotted the proofing mistakes spoke about the literacy level, he thought it was quite high with words like counterfeiting, but this was a good thing as the museum was supposed to educate and the tone was generally clear and succinct. Even in a directed task very few visitors read all the text, most read some sections or scanned from a distance…Many visitors said the text was interesting.

This activity gave me information about the specific labels (such as spelling mistakes) but also an insight into how visitors used the interpretation and why they were visiting. Stockdale and Bolander (2015) suggest that formative evaluation in the museum enables the articulation of visitor expectations of an exhibit or display and thus, once applied, can ensure the final outcome will meet or exceed these. Although, when I proposed to undertake further prototyping for this gallery with labels written by others, staff were reluctant to share their works in progress. Reflecting on this reluctance at the time, I wondered whether the curators placed a higher priority on their curiosity about the subject matter and about the objects, than on trying to understand the audience. However, my reflections at that point did not consider the differences in confidence and skills around research methods. Whereas my background gave me the skills to approach research from people equally to archival materials and documents, the curators' roles more often asked them to

generate knowledge from the latter sources than from human subjects. Visitor research is something that the museums sector is only recently asking of curators, and learning a new skill or approach when bound to tight deadlines is not easy, even if one has an interest in doing so. By prototyping, visitors may propose ideas that are tangential or even conflicting with each other and it is a time-consuming task to unpick these and what they might mean for your work. For Beneath Your Feet, understandings of visitors had been homogenized in the previous project phase and to diversify and complicate them now perhaps appeared unnecessary and counter-productive. However, some staff did engage with activities asking visitors for their opinions, and perhaps additionally felt less pressured by the timescales. I worked with the Art Collections Assistant to conduct two focus groups on labels for the Picturing Sheffield gallery; she has a background in learning roles across various museums and as such was quite comfortable working directly with the public and Picturing Sheffield would be the last gallery to reopen thus had some of the longest timescales to work within. Some actions can be seen as indicative of an interest or curiosity, though the reverse is not necessarily true. Just because an action was refused or abandoned doesn't mean that there was always a lack of interest, rather I believe there were several other complicated factors influencing whether sociable curiosity was pursued and how. These factors include the influence of institutional structures, which is explored further below.

In developing interpretation materials, most museum staff addressed their sociable curiosity about the audience indirectly and by using proxies. As well as back of house staff, the front of house visitor assistants and a group of museum volunteers proofread labels and gave feedback. They became a testing pool standing in for diverse visitors. There was the potential for the proof-reading group to become an echo-chamber had it only been made up of those with similar perspectives but, in this instance, it included individuals with a variety of backgrounds. The task also provided an opportunity to spark curiosity about the objects (see figure 3) and about the back of house workings of the museum, giving those involved a sense of engagement and belonging.
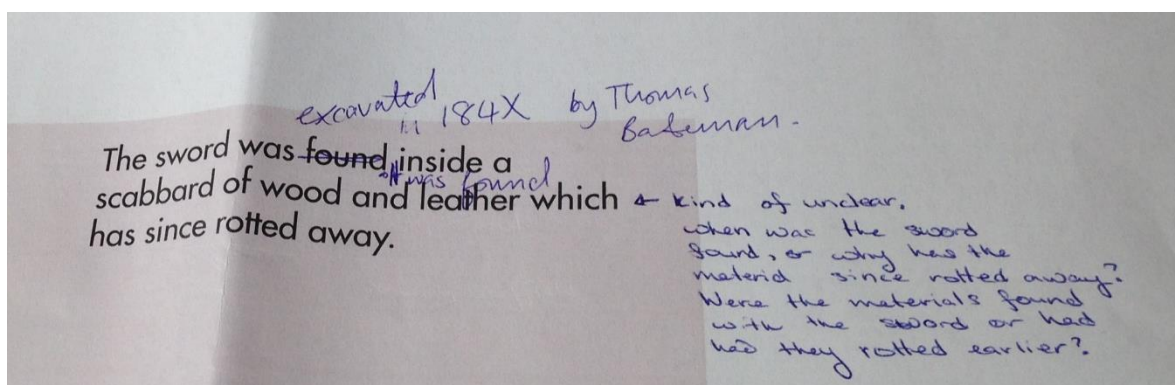

Figure 6. An example of curiosity-driven practice such as question asking evident in proof-reading notes.

By pursuing one's curiosity about the audience in a way that directly asks individuals, whether volunteers or visitors or other staff, for their opinions, it can also serve to spark the curiosity of those individuals and inspire a sense of belonging. Whilst individuals may desire and attempt to pursue this curiosity through engagement, a relational curiosity, museum practice more often in the past has worked from institutional structures that are not designed to support this. Simon (2010:323) argues that "promoting participation in a traditional cultural institution is not easy". Therefore, organisational change takes an extended period of time, especially in a museum which can be a conservative.

Both similarities and differences appeared between my own and curators' tactile curiosities. During the first six months of writing interpretation, including my first draft of a case layout, I did not handle a single object that would be going into the case. In contrast, the other curators had the possibility of access to many of them at the store. Geoghegan and Hess (2014: 445-456) note how an object exists in many forms in the museum: "physically on a shelf or on display; as a catalogue entry; and a technical file in the documentation centre". In my initial research, I was restricted to working with just one of these forms for many objects: the information presented on the object list. When I then explored their catalogue entries and rifled through paper files in the cabinets, they became knowable to me in new ways. When I handled the objects themselves, in January 2016, this sensory experience inspired new thoughts and reawoke old interests. Having been distanced from the objects, I had found it easy to exclude from the

Figure 7. Packing Romano-British objects at the museum store ahead of their transportation to Weston Park Museum in January 2016.

display those that I couldn't make easily fit, but now, close to them, I was swayed by the Curatorial Assistant's simple arguments about why they should stay. Being able to touch the objects as I packed them to travel to the museum (Figure 7), ignited the object-love discussed by MacDonald (2002) and Geoghegan and Hess (2014). The ability to touch and explore the materiality of the objects was important to their interpretation, as demonstrated by my material questions about the quernstone fragment described above, but also presented the possibility to derail the whole writing process: museum objects possess a potential for magic and wonder that emanates from their materiality and exerts its own force over activities. I do not mean that they could, on their own, reverse my will, but rather that something about their material existence, with my permission, was able to bend my logic. Previously I had found it easy to stick to deadlines and synthesise the information I had found, and hadn't understood the additional difficulties museum staff had faced with this task. Object-love is the peculiarity that makes the task much harder: instead of a dispassionate report, it becomes a biography of a dear companion. With this additional force it then becomes harder to rebalance the epistemic, sociable and sensory curiosities as it is overly easy to be curious about material objects, especially amongst museum professionals.

Overall, the output driven process of creating interpretation materials for the museum required a balance of three domains of curiosity with each offering strong incentives: the intrinsic reward of filling gaps in knowledge, a sense of social duty, or the allure of materiality. Effective, engaging and relevant interpretation requires the authors to be curious about the subject matter, about the potential readers and about the collection objects and the final gallery; and to apply these within a framework for what needed to be produced. This activity draws upon debates and understandings of epistemic, sociable and tactile curiosities, and cannot be defined by one alone. The demand for multiple foci of interest must also contend with the parameters of time and materiality, draw upon skills that must be learnt and honed through practice, and be informed by institutional influences.

Installing the Galleries: Curiosity Out of the Case

The installation of furniture and objects within the galleries can be seen as a crucial moment when the space is 'made', as it is a period of dramatic change to the materiality. During this phase, museum staff assumed a role akin to craftsperson or maker, where curiosity and materiality are fundamental. Sennett (2008) suggests that the maker creates a dialogue between their material practices and their thinking, which over time forms habits and a rhythm of alternating problem-finding and problem-solving. As materiality was changed, staff had to respond to it and work with it or against it to progress their designs, and in turn these changes could fuel curiosity by creating subtly new experiences. For instance, the packing and unpacking of collection objects raised new

questions and provided new knowledge for me as I worked collaboratively with museum staff. Through this collaboration, I was apprenticed as a curator (Figure 8). Sennett (2008) proposes that all skills begin as bodily practices. Thus, in the museum the bodily practice of engaging with objects is the starting point for meaning-making, learning and constructing knowledge. The bodily practices of caring for the collection are where curators begin to develop their curatorial skills, and where the curator is differentiated from other museum professionals. The learning officer and the technician also depend on bodily practices for their craft, but ones that are subtly different from those of the curator. When these bodily

Figure 8. An image of myself at work in the Beneath Your Feet gallery demonstrating my curatorial role. This image was taken to be shared on the museum's instagram account.

practices do not go entirely as expected, such as when the objects are resistant or the outcome is ambiguous, it presents an opportunity to further develop one's understanding of the craft (Sennett, 2008). It is in these moments when curiosity provides a motivation and questions (what happened and why?) and answers are sought by thinking through the body. Tactile curiosity in the handling of objects can provide training for the body of a museum professional as it is honed with techniques of problem-finding and problem-solving. It would be instinctive for a member of the public to grasp a cup by its handle and come to know it as one may know similar objects in one's daily life, but the curator is trained to avoid this as the handle may have the weakest joint and grasping it in such a way may have ramifications for the preservation of the artefact. The museum professional's bodily practices and tactile curiosities are trained together as these ways of knowing form a framework for what may be known.

In addition, the materiality of objects often influenced individual adults' curiosity, or at least curiosity-driven practices. The physical properties of an object could dictate how it is handled and ultimately where it ends up in the museum. This can be seen at Weston Park Museum as materiality affected the narratives that ultimately became encoded within the Romano-British case I worked on. As the Roman brooches were already mounted together from a pre-existing display, I took it for granted that they should stay this way. Their existing physical association through the form of the mount became the foundation for a narrative association; instead of exploring the specifics of the different find sites, I began by placing them within a theme of 'style and fashion' alongside hairpins and jewellery. As the installation progressed, though, it transpired that these labels took up too much space and a reorganisation was needed. At this point these objects joined the theme on 'daily life'. They arguably were part of people's quotidian existence during the period, yet this move

changed the narrative around them. Whilst 'style' and 'fashion' indicated these objects were interesting for their designs and aesthetics, 'daily life' instead suggested their value was in their functional use. These material concerns influenced the questions I asked about the objects, how I structured my knowledge about them, and how I sought to inspire others' interest in them. Other objects needed to be placed in certain locations due to their weight. Despite designers' intentions that the lead pig could be mounted in the periphery of the display near the top of the case, its weight (48kg) necessitated its location on the base plinth with 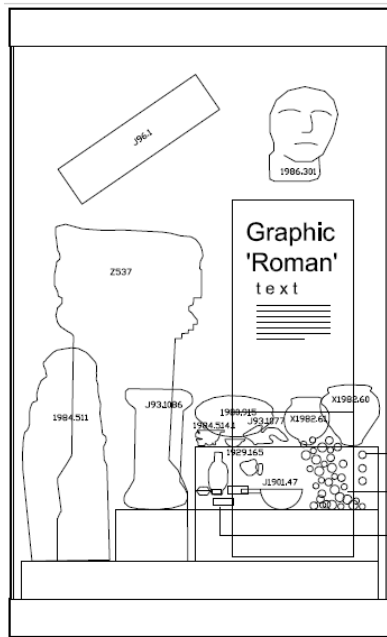reinforcement (Figure 9). Whilst it's aesthetic qualities wouldn't have inspired me to centrally locate this object within the case's narrative, its weight and the resultant need to place it front and centre in the display influenced the course of my research. Its relocation raised the questions of: what is so interesting about this object and what can I say about it?

Figure 9. Left – the designers' proposed case layout with the lead pig (J96.1) and Hathersage head mounted near the top of the case. Right - the final case layout with the lead pig and Hathersage head resting on the base of the case.

Through further research into Roman lead-mining and by reading numerous archaeological reports, I became engaged with a mystery to uncover exactly where this lead mining was conducted, with conflicting cases for where such a site might be. The sheer weight of this grey oblong object led me into this investigation. The resistance of museum objects has been noted in previous studies at the Science Museum, London: Geoghegan and Hess (2014:456) describe how one particularly large object, a radio transmitter, was located in the store through "careful planning and some luck" and how interaction with it was structured by the presence of asbestos. Similarly, MacDonald (2002) notes that materials made their own demands during the design and construction of the Science Museum's Food gallery.

> "They did so on quantitative (how much space?) and qualitative (what kinds of space and qualities?) grounds, and also in concert with curators' own rather particular affective relationships with them. Not only as the designers struggled to find spaces on their tissue

paper plans, but also later in the actual physical encounter with gallery space, objects and exhibits sometimes refused to go where it had originally been hoped that they might." (MacDonald, 2002:153).

As objects exert influences over where we may place them or how we may interact with them, they influence how we may know them and our interests as they develop. At Weston Park Museum, as objects were relocated or furniture reinforced to meet the emerging demands of the materiality, alterations were made to the narratives being written into the space. Our curiosity opens up a dialogue with materiality in place such that we may not always get the answers we anticipated or were looking for, and may not be able to communicate these as clearly as we intended. Materiality and curiosity worked together to form individual and collective knowledge and the presentation of this within the gallery.

Technicians and curators exercised their ability to work with, rather than against, this material resistance – including the need for tactile curiosity – to accomplish their aims through problem finding and problem solving.

> **[22/09/2016, Fieldnotes]:** *The discussion moves on to also collecting an object that needs a plinth. Speaking of plinths [Head Tech] wants to talk about the plinth for the perspective box – "What are the dimensions?". [Project Co-ordinator] says "it's here, you can measure it?". [Collections Assistant] adds the plinth will need a box for the spare pieces. [Project Co-ordinator] suggests they are too heavy to just bolt on a label holder, so needs to be a built box. [Project Manager] does a doodle of what she is envisioning. [Project Co-ordinator] goes to get the box and the sets of slides for [Head Tech] to look at. [Project Manager] says the box needs to be big enough for two sets of the slides at once – [Head Tech] Should they sit on the tabs? It will need to be on the front not the side as it's not deep enough. [Head Tech] asks "What height do you want?" Is it going to be in front of a wall or a case? – [Project Manager] "It's freestanding" – [Head Tech] counterweighting? – [Project Manager] "We want it so that we can move it but the public can't easily." What about table height or is that too low? All join in this discussion – what about wheelchair users, kids or older adults who can't bend*

easily? Various heights of 72cm, 90cm and 95cm for the plinth
are discussed and in the end 95cm is settled on.

Observing the technicians at work, they were the members of museum staff who are most akin to Sennett's (2008) description of a craftsperson. Interacting with them in meetings and in the fabrication of the gallery, I saw the rhythm of their work emerge. The technical team and other contractors used questions to aid them in both finding and solving problems. Their responsibility was for the materialisation of another's vision and so they employed dialogic skills to establish and understand the vision of the curators, and dialectic approaches to rectify this with what they understood to be feasible. They were guided by interests in the practical and the material (how heavy is it? How do we move it?), but also by an interest in what the gallery space was intended to achieve and how that might be obtained. Sennett (2008) argues that "resistance and ambiguity can be instructive experiences" and in this project these were met in their colleagues' ideas and vision and in the materials themselves. Curiosity, then, played a role in investigating possible ways to work with this resistance and ambiguity: to find a new route for creativity. Curiosity and creativity are strongly connected, but in this instance the curiosity evident in these moments was fundamental to the creativity that directly succeeded it.

Practices can be trained or limited by the institution, but elsewhere are also used to resist institutional constraints. This seemingly contradictory role is part of a complex relationship between the curiosity of an institution, the curiosity of individual adults and curiosity-driven practices in the making of museum space. Being able to engage with the materiality of objects, of furniture and of the gallery itself, meant that curiosity and curiosity-driven practices were channelled to support problem-finding and problem-solving during this section of the redevelopment project. Furthermore, the addition of new collections objects or new human actors to a situation, especially when not museum staff, and the creation of new projects all could provide opportunities for individual and collective agency to resist institutional structures.

Going Public

As the galleries were gradually opened to the public, it might be tempting to see this as an end to the making of the space with a convenient sense of closure. Rather, this simply marked the end of one phase in the life of the space and the beginning of another; one where a greater number and variety of people could make space for their curiosity. The museum places a priority and importance on the division of public and private space with certain activities restricted to one or other area and this divide echoed in the binary division of staff and visitor. Some people, though, occupy identities in-between or shifting across this dichotomy, and so too are s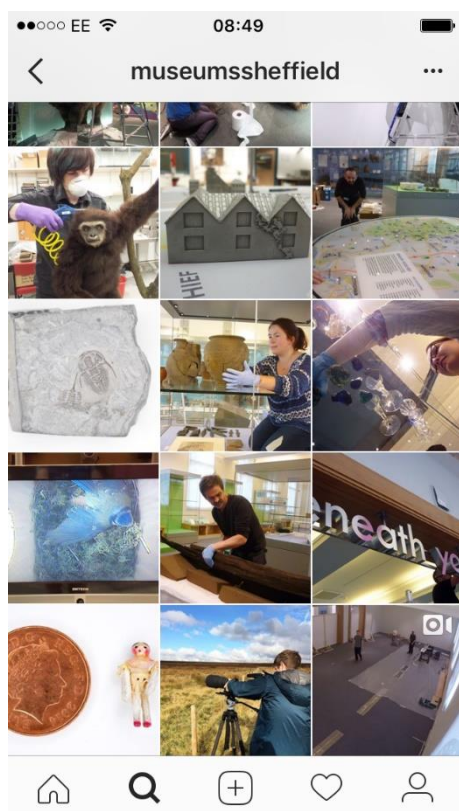ome spaces in the museum variously public or private. The boundary between public and private is blurred in the gallery space that is closed to the public whilst the rest of the museum remains open. Limitations to physical accessibility, such as barriers and hoarding, were used to indicate the temporary privatisation of spaces and coded indicators and elements of visibility demonstrated the future public space that would exist and encouraged curiosity amongst those currently unable to access it. On the hoarding itself, on other banners within the museum, and on the gallery webpages, wording was used to indicate when the gallery space would return to the public domain and to give an indication of what the space might be like. A similar sense of the change happening in private space was conveyed through the images shared digitally with museum stakeholders; the information and representation given in these was intended to give a partial picture to inspire curiosity for once it reopened (Figure 10). In April 2016, transparent cases were installed in the smaller openings for

Figure 10. Museums Sheffield Instagram account with a selection of images indicating aspects of staff activities.

Beneath Your Feet, and also later on for Sheffield Life and Times; these windows into the private space of the gallery under construction were effective at enticing curiosity, evident in the behaviours and comments made by those who peered through them. These various methods created spaces for curiosity in the formation of knowledge gaps that individuals might hope to fill, which resonates with Loewenstein's (1994) information gap theory of curiosity.

These methods also had the potential to create a curiosity that was impatient and some, such as the visibility through the glass case 'windows', may have encouraged what was seen as a transgression of private space by members of the public.

> **[01/06/16, Fieldnotes]:** As I approached I saw two children going through the door in the hoarding into the under-construction archaeology gallery. I went up to the door and said "sorry this gallery is closed" in as polite, yet authoritative tone as I could muster. The older girl (about 9 or 10 years old) said they had seen the roundhouse (she pointed to it) and wanted to go and play in it. Under my gaze they left the gallery and went back to the open gallery opposite…I went up to the office to eat lunch and relayed the story to one of the curators – the story was a cute tale of an irresistible curiosity, but she worried about the health and safety ramifications with a lot of tools lying around.

The separation of public and private space mirrors the separation of visitor and staff identities, though whereas the permanently private spaces of the museum are guarded by locks and security systems, this temporarily private space was not truly inaccessible; usually somebody would be present in the space, but a door in the hoarding could be opened by anyone. The real indicators of the unfinished and thus private nature to the gallery space were encoded in the materiality, such as construction materials lying around. These were not necessarily interpreted as such by the children, especially in a museum where doors had been used in the past specifically to invite curiosity, entry and discovery. In contrast, I did not encounter any adults attempting to make the same entrance. Adults, rather, limited themselves to observing through the glass cases and I overheard their comments as they discussed the gallery's progress. The restriction of physical access can heighten curiosity as it creates a gap in our knowledge that we have a desire to fill. People who experience this restriction, I suspect, may ultimately utilise different curiosity-driven practices in their exploration of the space.

To understand how visitors' curiosity was used in the making of museum space, we can observe their various practices, uncover possible curious motivations and look to other theorists on how they are influenced by the institution. This heterogeneous group of individuals employed a variety of different practices and demonstrated many different forms of curiosity. However, there was continuity in this diversity in observations both before and after the redevelopment. Curiosity-driven practices were negotiated within the social context of the visit and included: question-asking, close looking, a quality of attention and focus, changes in the direction of movement, and 'hunt-mode' seeking to close information gaps. Each of these practices had different effects on the space. Furthermore, the practices that one chooses to participate in are likely influenced by many factors, including individual background and prior knowledge, as well as the space itself.

However, I believe looking in more detail at visitor motivations, revealed through visitor observations and the Write-Draw method, may offer some insight; visitors who come for different reasons and purposes will most likely be curious in different ways. Falk (2006) divides the motivations for adult museum visitors into five categories: Explorers, Facilitators, Professionals/Hobbyists, Experience Seekers, and Spiritual Pilgrims. Whilst it is acknowledged that these categories may not account for all visitors (Falk et al, 2008) they offer a starting point for addressing how visitor motivation might manifest in curiosity-driven practices. 'Explorers' are interested in taking in their surroundings and thus may have a visit that is marked by changes of direction as they pursue what makes them curious in the moment. The readily identified family audience at Weston Park includes 'Facilitators' who seek to inspire their children's curiosity through question-asking and directing their attention. This group also aligns with a tendency, including amongst museum Visitor Assistants, to assume that curiosity is a trait of children alone. Additionally, there are other kinds of 'Facilitators' at Weston Park Museum: those showing around friends or relatives visiting from out of town. Their movement, question-asking and attention is structured through the social context of what they perceive their guest to be interested in. The next category, of 'Professionals/Hobbyists', speaks to Geoghegan's (2013) work on 'enthusiasts'. They may visit on their own, potentially using 'hunt-mode' to search through the displays for connections to their interests, but also come for specialised events and programmes and, when part of a group, are most eager to be engaged in collaborative projects. Whilst Falk's (2006) categorisation was designed to be transferable across museums, not all motivations will be as prolific at different types of institutions. 'Experience Seekers' are most likely tourists, yet with most tourism to Sheffield focused on the neighbouring Peak District, this type of visitor is less numerous at Weston Park Museum and hard to identify in my observations. The final group, 'Spiritual Pilgrims', are perhaps most akin to the 'Independent Adult' audience that the redevelopment sought to attract. They come for a sense of wellbeing, rather than the acquisition of knowledge, but curiosity still has a role to play. These visitors come in social groups (with friends, on a date or with relatives) and are empathetically and relationally curious: they ask questions, draw each other's attention, and develop the bond between them through the museum, using objects like a "sideways mirror" (Phillips, 2015). Falk et al (2008:57) suggest that "a successful museum visit is one that allows an individual to enact the traits, roles, attitudes and group memberships associated with one or more of these categories". These categories influence the traits and practices of curiosity and thus a successful museum visit allows an individual to pursue their curiosity, use the museum and make space within it, in a way aligned to their motivation for visiting.

Overall, the making of the space at Weston Park Museum did not cease when the new galleries were converted from private to public space. Neither was this an end of spaces for many different forms of curiosity. Both visitors and staff continued to use their curiosity and curious practices to shape the public spaces of the museum, and will continue to do so.

Defining Institutional Curiosity

Broadly speaking, we can consider curiosity as a motivation to acquire information: a desire to know. Theorists in the field of psychology have connected this to a motivation to fill gaps in our existing knowledge (Loewenstein, 1994) and to an environment that provides a comfortable, yet alluring, number of new elements (Berlyne, 1966). Whilst research in this area has overwhelming focused on individual psychology, these gaps plausibly also exist within institutional knowledge and organisations may seek out new information to fill them. As such there is scope for a theory of institutional curiosity.

I define institutional curiosity as: the desire to know within an organisation and is found in the existence of values, systems and events which enable the filling of gaps in institutional knowledge. These values and systems are established through the intertwined processes of professionalisation of staff and the institutionalisation of the museum. Knell (2011:10) depicts these in largely negative terms, suggesting that the professionalisation of staff in museums has established "firm internalised systems of belief" and the process of institutionalisation has served to "swamp creativity" (Knell, 2011:10). There is value to the first claim in terms of understanding the relationship between a professional staff member and the institution they are part of, though there is arguably potential for institutionalisation to scaffold creativity as much as stifle it. Whilst Knell (2011:10, 11) claims that professionalisation has allowed "tasks to be done properly", it has also set up staff practice in opposition to the amateur or the "non-professional Other" with a resulting influence on perceptions of how the public should be involved in the museum. There may be a tendency to assume that institutional means incurious, but rather here the institutional values are instead influencing the form that curiosity may take. The pursuit of institutional curiosity will generate new knowledge and is likely to cause the institution to adapt and change. Contemporary museum practice, since the popularisation of new museology theory, often tries to find a balance between an interest in objects and an interest in people and these are the two main areas where new knowledge may be generated in a museum. Museums possess longstanding systems for processing new knowledge relating to their collections, yet there are fewer precedents for handling information about visitors and staff.

Therefore, sociable forms of institutional curiosity are of particular interest to the museum in contemporary society as they underpin the generation of knowledge about people who use the museum. As mentioned above, Phillips (2015:3) defines sociable curiosity in two forms: "wondering and finding out about others, which I shall call empathetic curiosity, and being curious (about ideas, things, or others) with them, which I shall call relational curiosity". Phillips (2015) considers these concepts predominately in relation to individuals or groups of individuals. However, they are also arguably demonstrated by institutions, such as Museums Sheffield. Institutional forms of sociable curiosity will include some individual actions but also require structural systems and organisational values to support these. Institutional empathetic curiosity requires structures and values which demonstrate an interest in *knowing about an audience* and relies on passive data collection methods. It is typified by questions such as 'Who are our visitors?', with implications of an 'us and them' divide between staff and other museum users. In contrast, institutional relational curiosity requires structures and values that demonstrate an interest in *engaging an audience in order to come to know them* and brings together staff, visitors and consultants in a co-constructed process with power distributed amongst all involved. This curiosity is interested in questions such as "What should the museum be like?" and affords all voices an ability to respond. Both empathetic and relational curiosities were evident in institutional forms during 'The Bright Future' project, though to different degrees and at different points in the process.

Summary and Conclusions

Gade (2011:49) suggests that curious institutions are the result of curious individuals, rather than the cause of them. However, based on the discussion in this chapter, I argue that within the museum there is a much more complex relationship between curiosity-driven practices, individual and institutional curiosities. Museum staff, visitors, designers, contractors, researchers and a whole host of others contributed to the making of museum space through their curiosities (their interests and what they care about) and through their curiosity driven practices (such as by asking questions and looking closely). Their level of influence varied between the different roles and resultant power relations: staff curiosity was structured by institutional norms and visitors' curiosity more significantly contributed to the making of space once opened to the public. As a researcher, I perhaps had the greatest freedom to pursue my curiosity, wherever it took me, throughout the project. Although, my 'researcher' identity was not fixed and my role, as well as others' perceptions of it, changed considerably over the course of this process. There was an uncertainty about my presence during meetings with designers that relaxed over time as I developed a mutually beneficial relationship. By the public unveiling of the spaces it felt as though I was accepted as part of the 'team'. As research participants became akin to colleagues, withdrawing from this ethnographic field

felt akin to leaving a job. Although this phase of the research presented its own new moments for curiosity: individual staff members and the institution are curious about my findings, and whilst I seek to satisfy that interest I begin to ask: 'where will my curiosity take me next?'.

Curiosity may standalone as an activity but, as demonstrated by its use within the formal space redevelopment, it often comes at the beginning or during broader creative and meaning-making processes. My curiosity as a researcher has been creatively crafted into this thesis, conference presentations and a variety of other outputs and many moments of curiosity discussed above lead to tangible outputs or intangible new ideas: reports from visitor consultations, object lists and gallery floorplans developing and changing over time, and new perspectives on objects in the collection. Each of these provided a resource for meaning-making, to be discussed further in the next chapter.

In summary, current emerging thought around sociable forms of curiosity, both empathetic and relational, has a strong resonance in the museum setting. The museum, as a place for curiosity in both public galleries and private workspaces, offers an opportunity to develop our understanding of what it means for an individual or an institution to be curious and the connections between the two. What emerged throughout the process was the importance of an individual's ability to enact curiosity-driven practices in their use of space as a significant contribution to broader institutional curiosity-driven agendas. By finding a balance between the individual control and agency and institutionally structured facilitation of curiosity, the museum can draw upon its spatial relationship to and within the city to encourage curiosity for the benefit of civic life.

[December 2015, Interview]

[Visual Art Collections Assistant]*: I think just as a researcher…you have a natural curiosity, you want to find out more, so researching paintings and having at least 63 of them to look at…that's a good example of how my curiosity is piqued…*

…

[Visual Art Curator 2]: *But then there's also other people associated with the process, like we have a wonderful volunteer…who is, he actually works with [Natural History Curator] on…geology and natural history things, but…he's fascinated by the now and then as well, he's very technologically capable having worked in IT for many years and he's fascinated with old maps. So… he's taken up a new hobby recently, in the last six months which is looking at…the landscape and the positions of various landmarks on historical, mostly nineteenth century paintings and…transposing a sort of modern day scene, so what it's like today…He's really had his curiosity stimulated by…being involved in the visual art department and he's not that much of an art buff really he said to me the other day…*

[Visual Art Curator 1]: *yeah, he's more interested in the history of the city, isn't he, and the…working out, mapping…*

…

[Researcher]: *And how did that come about, did you approach him as a volunteer or did he overhear something, or…?*

[Visual Art Curator 2]: *I think we were talking to him, there's a painting in our collections store…it badly needs conservation and it's got bits missing but he kept walking past it and he's like "I'm sure I know where that is" and anyway he decided to do some work around this, trying to work out where it was. Because he kept seeing it everyday and just kept getting curiouser and curiouser about it and eventually he showed me this document with maps and pictures of all the different buildings and everything and I kind of, that's when I thought "ooh, I know what you'd like to do", and I showed him some of the works. He was more excited…when it had something with the industries in it, or the railways or aspects that I knew he'd be interested in…I've shown him a few…like out kind of towards Heeley and the more rural ones and he's not quite been as excited about those. But the ones that he's done, like Montgomery Tavern…where there's a real history behind it so he's got into all the political aspects of Montgomery Tavern and he's just…yeah, so he's loved doing that.*

[Researcher]:*…How will that information be used in the gallery…?*

[Visual Art Curator 2]: *…We're hoping to use some of that in the Find Out Mores, but it'll probably go towards labels as well…Because I think that's one of the things that the visitors are going to…quite enjoy looking at how things have changed, especially if there's people like [Volunteer A] coming to the gallery…so we'll probably condense the information down a little bit, but it'll be nice to actually show some of the maps and some of the different art works he's found that are in those pictures…*

Chapter 5:

Making Meaning in the Museum

Introduction

Having examined their curiosities during the museum design process previously, this chapter explores the relationship between how adults make meaning and how they make space in the museum. The adults involved with this research project assumed a variety of roles: some were casual visitors, others were museum staff with many years of services, and a few were volunteers or community groups involved in one aspect of a new gallery. As an ethnographer, I also had regular opportunities to reflect on my own meaning-making activities and relative role in the design and construction of the museum spaces. To address these various roles, this chapter will first consider existing literature on museum visitors and discuss the implications this has for both adult museum visitors and, to a certain extent, museum staff. The second section will go on to consider what new theories we might need to develop in order to more fully explore the meaning-making of museum staff. The final section seeks to add nuance to our understandings of how adults make meaning in the museum by dismantling the dichotomy that has been drawn between staff and visitors by reflecting on my own role, as well as those of some volunteers.

Visitors' Meaning-Making in the Museum

The perceived role and facilitated activities of the museum visitor have changed with developments to educational theory. Previously, the museum was envisioned as a venue that imparted knowledge to those who read the labels and looked at the objects but, increasingly, a more constructivist understanding is being applied (Hooper-Greenhill, 1995, Mason, 2005). The use of 'learning', in relation to the museum, implies that the visitor is meeting externally set or prescribed objectives, whereas 'meaning-making' implies an agenda shaped by the visitor through their experience (Heimlich and Horr, 2010:60; Carlsen, 1988). Heimlich and Horr (2010:60) observed that visitors to zoos and aquaria created meaning from "object(s), the contexts in which the exchange is occurring, and the specifics of the moment…when an observation, insight, or instance is held as an explanation of what is observed and is concurrently seen as a possible reality outside the individual's construction." The same process takes place when experiencing art or archaeology collections. A visitor's life-stage and social role contribute to determining what a person is attentive to (Cross, 1983), and it is this combination of things attended to and how they are experienced that may lead

to the development of new meanings and creative ideas. This literature (Cross, 1983; Hooper-Greenhill, 1995; Carlsen, 1998; Mason, 2005; Heimlich and Horr, 2010) suggests that instead of seeing a limited number of formally sanctioned behaviours as visitors' meaning-making in the museum, there is potential meaning-making in any mode of encounter with objects, materiality or other people. Adults' meaning-making in the museum might involve reading texts and deep close looking, but may also be evident in movement, in touching and handling, in drawing and writing, in conversation, and in participating in all sorts of programmed and spontaneous activities.

This is highly connected to the spatiality of a museum: visitors use the space, including its resources and their affordances, to make meaning whilst simultaneously remaking the space through these same actions. In recent literature, constructivist learning theory has assigned a more active role to the visitor and considers the impact of prior experience, identities and dispositions on what they learn and how they behave (Heimlich and Horr, 2010:60). Visitors' meaning-making can involve the use of resources within the space that have been designed for this purpose, as well as other elements of the social or material context (Falk and Dierking, 2000; Mason, 2005). This active engagement between visitors and the museum aligns with the propsoal that the space is made through its use (Macleod, 2005), as well as within the formal design process.

Adult's Meaning-Making and Semiotics in the Museum

There is a wide body of literature that theorises visitors' meaning-making in the museum through the context of social and material semiotics. Researchers working in museums have suggested that a visitor's attention is shaped by their existing interests, agenda and social context for the visit, previous experiences and emotions, and, as a result, these influence how and where they make meaning (Falk et al, 2008; Kress, 2010; Silverstone, 1994; Krautler, 1995; Pearce, 1994). Visitors' age-based identities and how these are enacted within the museum spaces were relevant at Weston Park Museum, especially those identities of 'adult' and 'child', and the relational identity of 'parent'. The following examples from the visitor tracking show the routes adults, visiting with different groups, took around the 'Beneath Your Feet' gallery in October and November 2016.
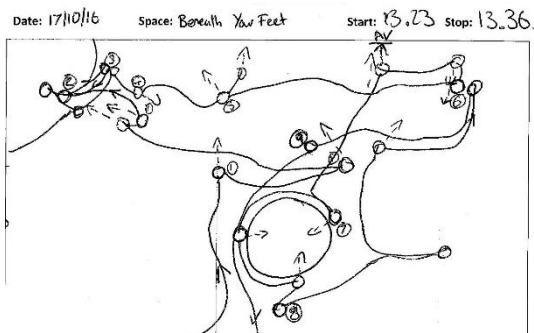
Figure 11. Route of an adult visiting with a school group.
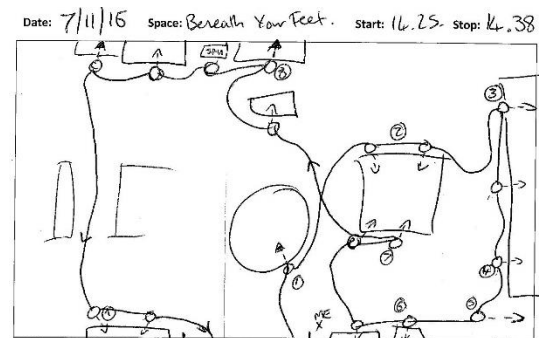
Figure 13. Route of a younger adult visiting with one other adult.
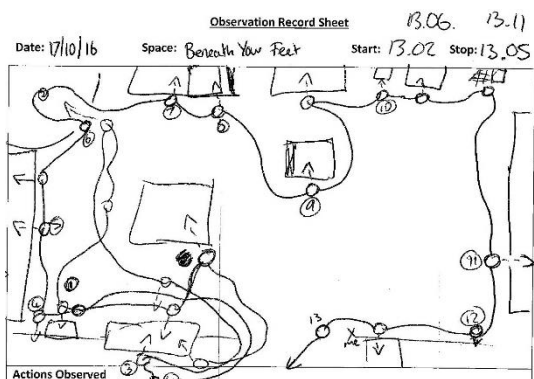
Figure 12. Route of an adult visiting with one other adult
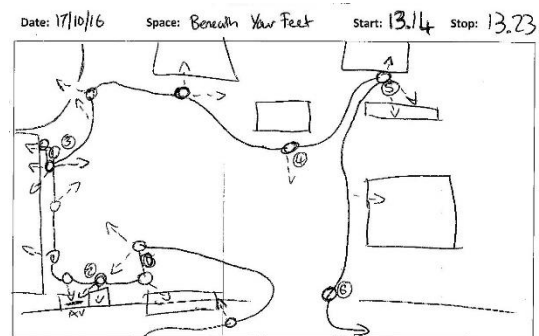
Figure 14. Route of an older adult visiting alone.
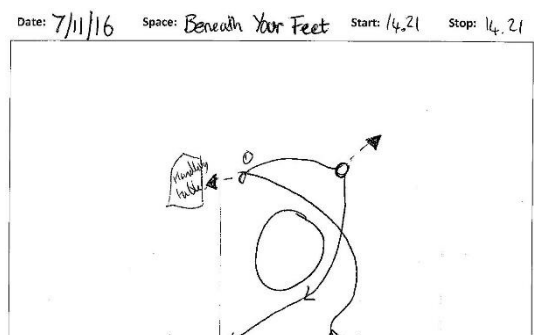
Figure 15. Route of an adult visiting alone.
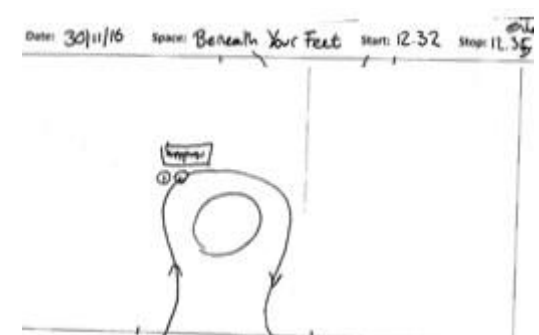
Figure 16. Route of an adult visiting with one child.

Similar patterns of movement, interaction and possible meaning-making activities were observed from both adults visiting with and without children. Adults visiting in social groups (either all adults or a combination of adults and children) tended to spend varying, but significant, proportions of their time engaged in meaning-making activities that involved other members of the group. In figure 1, the adult moved between groups of children and talks to them about or takes photos of what they are doing. In figure 3, the two adults appeared to be on a date and looked at objects together whilst engaged in a conversation almost constantly. In contrast, the adult represented in figure 4 was visiting alone and how they made meaning in the gallery was seemingly more structured by the

affordances of the space – they moved chronologically around the exhibits with their attention and meaning-making practices influenced by their individual interest and motivations. In figures 5 and 6, similar patterns of movement were created and similar meaning-making practices were observed. However, it is likely that different meanings were created. In figure 5, the adult is guided by their own individual curiosity – they were drawn to the handling table, interacted with a few objects and then left the gallery again when nothing else draws their attention. Whereas, the adult in figure 6 led a child over to the handling table and engaged them in a conversation about the object there. When the child then suggested they were hungry, the adult lead them out of the gallery and towards the café. Falk et al (2008: 68, 72) suggest that some adults use the museum environment to reinforce their sense of being a 'good parent', but that this could variously mean that an adult or a child set the agenda for the visit. From the data collected during this project, I believe it is also possible to see other adult identities enacted through the museum visit: for example being an attentive date or a good friend acting as a tour guide to a new place. At Weston Park Museum, this directive role in groups of visitors was fluid and changeable: it shifted between individuals in the group (whether adults or children) as they moved through the museum. Heimlich and Horr (2010:59) suggest that, regardless of who is leading the visit, visitors are more likely to articulate the museum experience as a learning opportunity for children rather than the adults within the group. This articulation was something I observed at Weston Park Museum: adult's meaning making during a visit was strongly influenced by the presence of children, though not necessarily in a simple or straightforward way.

Field work at Weston Park Museum demonstrated the importance of considering questions of motivations and desires, alongside those of age-based identities, to inform our understanding of adults' meaning-making in the museum. Museum staff demonstrated an understanding that adult visitors made meaning in diverse ways: sometimes in the same ways as children and sometimes differently. The resources for adults meaning-making changed through the redevelopment to better fulfil the desires and motivations of adult visitors, and one example of this is the dressing-up costumes. Regardless of whether they were visiting with children, I observed adult visitors using the dressing-up costumes both before and after the redevelopment process. However, the clothes provided before were all in children's sizes and the clothes provided after the redevelopment were designed so half would be the appropriate measurements for adults. How visitors wanted to make meaning in the museum wasn't changed by the redevelopment, but what did change was how they were enabled to.

Materiality and aesthetics were important, and in other instances there was a subscription to the idea that resources for independent adult visitors (those visiting without children) needed elements

that indicated they were not for children. In the development of adult trails, this was considered in the visual design as well as in the tone and complexity of the text.

> **[September 2016, Focus Group Report]:** *"The [trail] text was particularly successful when it was playful. Humour was a powerful way to connect people to the objects, as one participant said: 'the jokey little snippets […] take you in a bit deeper, give you a connection'…Some participants felt the language was correctly pitched, inviting and accessible without being patronising." "Several people felt that the language level was pitched too high, with complex sentences which had to be read several times to be understood and the use of terminology with no explanation (e.g. barrow and torc)."*

In designing the trails, staff acknowledged that they needed a different aesthetic to the pre-existing trails aimed at children and inspiration was taken from other trails designed for adults. However, some elements of this content were more successful with staff colleagues and focus group participants than others. The label of 'adult' had implied a homogenous visitor group, but the focus group report and staff comments indicated the diversity of these individuals and how they want to make meaning.

> **[September 2016, Focus Group Report]:** *"When developing the trails further, it would be useful to consider the individual visitor's starting point – are they a local, regular visitor looking for something extra or a new visitor or tourist who wants an introduction / overview to Weston Park Museum?"*
>
> **[November 2016, Interview, Learning Officer]** *"I don't know if you [researcher] recall a meeting you and I were having about talking to focus groups and questions we should ask them and there was a point where you went 'shall we ask them about trails and if they need them?' and I went 'well, no, because I've been employed to make trails…so I assume that's done' and…now I just keep thinking 'really? No-one asked that question before'…so one of the constraints was that I was employed to make trails and actually nobody had asked if they wanted trails…"*

Whilst the latter quote contains a degree of hyperbole as some consultation activities did take place to establish an interest in trails for adults, these comments suggest the importance of considering how adult visitors want to make meaning during their visit and their motivations for coming to the museum. The feedback from the focus group and the interviews with staff members suggest that by considering visitor motivations in more detail, creative resources might be developed that better facilitate adult meaning-making in the museum using an understanding based on material semiotics.

However, they also indicate some of the structural constraints stemming from the museum as in institution and the design process. The funding for this project was time-limited. With more time and further rounds of audience consultation, a series of trails could have potentially been designed that more substantially addressed how and why independent adult visitors' motivations and supported their desired meaning-making activities. But the funding needed to be spent by a deadline, including a fixed-term contract for the staff member responsible for designing them. This resulted in a move away from the creation of trails and, instead, the development of a book of stories about the museum's collections: a more conventional meaning-making resource for adults, but one which Museums Sheffield had not previously created.

Previous work on children's meaning-making in the museum, drawn from social semiotics, has considered how this interacts with the making of space. As such, this could inform our understanding of this interaction in relation to adults as well. Hackett's (2012, 2014, 2016) work on children's meaning-making has highlighted how particular meaning-making behaviours or practices influence the making of space. Whilst observing museum visitors, I saw the spaces used in many ways to make-meaning. This included expected practices such as reading, looking, drawing and talking, as well as meaning-making through movement.

> **[August 2015, Fieldnotes]:** I heard a short and repetitive
> piece of music, it evoked Parisian café culture on a hot
> summer's afternoon and a gentle breeze blowing through the
> hair of picnickers sheltering in the shade of leafy trees
> along a river bank. This is the background music to the scene
> I encountered – a man in his sixties, performing a ballroom
> dance with a little boy, as a woman looks on, amused. Parading
> on the banks of the Seine. The music ended, almost too
> abruptly, and they collect up their pushchair and walk
> onwards.

The music was emanating from a box on the wall, triggered by a button that any visitor could push and a favourite of children. It was provided as a form of aural interpretation of one of the paintings on display; to act as a sound track for looking. But these visitors were more orientated towards the social occasion and to interactions with each other, rather than with the collection object. Hackett (2012, 2014, 2016) argues that children's movement within the museum is a mode of their meaning-making. If adult visitors are also moving in the museum (with children or on their own) then it must be a mode of their meaning making too. If we extend this to all adults' meaning-making in the

museum, we can also perhaps begin to dismantle the divide between public and private spaces by considering the adults who can move between them.

Rather than meaning-making practices being solely related to the age of the individual, there is a greater complexity influenced by identities and motivations. Falk and Dierking (2000: 87) suggest that meanings made in the museum are affected by and dependent on individual motivations behind visiting as well as "previously acquired knowledge, interests, skills, beliefs, attitudes and experiences". Heimlich and Horr (2010: 62) argue that motivations are strongly linked to what adults take away from their visit: not just the meaning made in the moment, but also the enduring memory of the experience.

Data from the Write-Draw method offers some indications of the variety of visitor motivations, knowledge, interests and attitudes at Weston Park Museum. When prompted to write about what they did at Weston Park Museum, responses included:

> *"Think happy thoughts"* **[August 2015]**

> *"Soak in Sheffield's past"* **[August 2015]**

> *"Learn"* **[August 2015]**

> *"I came to review the Sheffield Life and Times Project in the museum for a module as part of my History MA"* **[October 2015]**

> *"It is half term from school and me and my daughter like to come to the museums because it is a lovely place and it is free"* **[October 2016]**

These five extracts indicate some of the diversity of motivations adult visitors articulated as part of their explanation of what they did at the museum on that day. These quotations indicate motivations that were emotional ("happy thoughts"), spiritual ("soak…") or educational ("learn"), as well as variously being for themselves as individuals ("…my History MA..") or as part of a relational and social identity ("…me and my daughter like to…"). Whilst these motivations could be as diverse as the number of visitors themselves, it is perhaps impractical or overwhelming to understand each visitor as a true individual and therefore attempts have been made to create pragmatic groupings of possible visitor motivations. Falk et al (2008: 75) suggest that "identifying the public's identity-related motivations for visiting museum-like settings offers a promising approach to dealing with the problems of audience heterogeneity". For Falk et al (2006) these 'identity-related motivations' are divided into five categories: explorers, facilitators, professional/hobbyist, experience seekers and spiritual pilgrims. The descriptions of each of these support the idea of visitors having diverse, but

clustered, motivations for visiting museums and subsequent meaning-making strategies. These categories have been tested through empirical research with museums, science-centres, zoos and aquaria in the USA, and whilst they have been able to incorporate most visitors' motivations there are still some who are not represented by this scheme (Falk et al, 2008: 73). Falk's intention was to create categories that represent the motivations of visitors at a diverse range of museum-like institutions. Instead it may be more feasible or useful to develop a model limited to a single institution which can account for its specific content, such as Weston Park Museum.

Differences Between Adult Visitors and Museum Staff

Through the ethnographic field work of this project, there is evidence of differences between how adult visitors and museum staff make meaning in the museum. As a result, existing theories of visitor meaning-making are often lacking in their applicability to staff meaning-making practices. All adults' meaning-making in the museum is controlled by institutional, as well as wider societal, discourses and moral values and this is evident in discussion of damage within the museum environment. There is potential for meaning-making strategies to cause harm, but the criteria for damage are implicitly established through discourses and in relation to the museum as an institution. The rules that govern how one may use the public gallery spaces are different to those applied in private spaces only accessed by museum staff. Whilst a degree of disorder and mess is created by certain tasks in private museum spaces and galleries closed for redevelopment, this tolerance disappears when they are made public (see figures 17, 18, 19 and 20 and appendix 7).

Figure 17. August 2015 – History Lab (open to the public)

Figure 18. February 2016 – De-install of History Lab

Figure 19. June 2016 – Install of Beneath Your Feet

Figure 20. October 2016 – Beneath Your Feet Open to the Public

In preparation for opening, entire days were set aside for cleaning and tidying. However, these processes of cleaning and tidying public spaces took place to a lesser degree on an ongoing basis and can be related to discussions of surveillance and control over visitor meaning-making and the moralization of public space.

> **[July 2016, Fieldnotes]:** The Chatsworth Tree open diorama often looked slightly different with features removed and returned as they were damaged or fixed. But today there was a striking, yet subtle, change. In the midst of the artificial grass was a bright orange toy frying pan, standing out in contrast to the muted greens and browns around it. It couldn't help but draw my eye, deposited by a child who got bored of it or an adult who wrested it from their grip for improper use, or perhaps purposefully inserted in a playful juxtaposition. A Visitor Assistant spotted it in the same moment and plucked it from the display. 'They leave things anywhere' they said, returning the object to the kitchen display nearby.

Visitors appropriate spaces and make them their own in the moment, but over time the museum staff hold the authority to erase these alterations as they see fit. Here the potentially meaning-making action was transgressive – it caused mild annoyance – but it wasn't considered irreversible as the pan could be easily relocated. The Visitor Assistant had a clear expectation that visitors should tidy up after themselves and put resources back where they found them; there was an expectation that they would police themselves and frustration that this was not the case. The line between what

museum staff perceived as creativity or vandalism could be quite narrow, largely relating to whether its effect on space could be easily hidden or repaired.

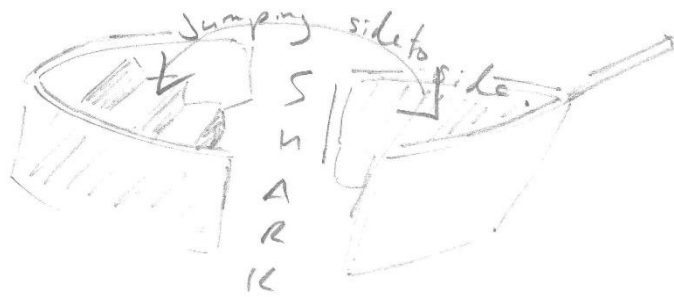Another example was highlighted by the views and actions described by a Visitor Assistant in an interview and by a visitor in response to the Write-Draw method. The Visitor Assistant expressed their frustration that some families treat the museum "like a crèche" with, even after the redevelopment, there being "too much for children".

Figure 21. A drawn response from one visitor describing the game played with their children in the Treasures gallery.

They suggested that they'd rather that the boat feature, where children can dress up and climb on a ship, was a more discrete reading area in one corner. This Visitor Assistant felt that the museum was a place for learning and it was not a space for active play. Alternatively, some visitors see the museum as an experiential space and a very appropriate location for active play as demonstrated by responses to the Write-Draw method (see Figure 21). This father and his two daughters invented a 'Shark' game to be played by jumping from one side of the boat to the other and proudly shared his representation of the game when I asked what they did at the museum that day.

These two examples, of interactions with the pan and with the boat, indicate the role of both affordances and governmental power in how we understand the differences between the meaning-making of visitors and staff. Firstly, Falk and Dierking (2013:47) describe the affordances of the museum as a whole as "a sense of what museums are like and how and why they would like them". At the level of an exhibit, affordances have found a relevance in the creation of museum spaces through Norman's (1988) work on user-centred design. In this context, 'affordances' "refer to the directly perceivable properties of objects that determine how they could possibly be used" (Allen, 2004:21). This conception of affordances as the interpretation of multiple possible uses aids us in understanding how and why visitors make meaning in many different ways from the same resources. Achiam et al (2014) describe contrasting theories of affordances which additionally explain the discrepancies between how staff intend or desire for museum exhibits to be used, and how visitors actually use them. These include Gaver's (1991) variation of false and hidden affordances: false affordances being those which we perceive to exist but don't, and hidden affordances being those that do exist but are not obvious to our perceptions (Achiam et al, 2014:

463). Achiam et al (2014) also explain some of the variation between staff member's intended affordances and those perceived by visitors through the idea of 'situated semiotics': "Objects seem to 'suggest' different actions to us, because of the way we relate to them in different situations". Museum staff and the diverse range of museum visitors all relate to the museum and its constituent spaces in different ways and, as a result, they may perceive different affordances from the same exhibits. Some of these affordances are communicated by wider societal discourses around the museum as an institution, though a few are confused by the proliferation of hands-on elements in the contemporary museum, and others will not be learnt without prior experience of an individual institution and its rules.

Secondly, Bennett (1995:22, 24) described museums as an example of the governmental power outlined by Foucault whereby three levels of space are used to achieve "permanent and developmental and regular and repeatable effects" concerning visitor behaviour. These three levels of space include: a social space which is accessible and enables visitors to emulate each other's behaviours; a representational space whereby the museum's exhibits seek to also educate visitors; and a space of bodily observation where surveillance influences one's practices (Bennett, 1995:24). These spaces work together to influence meaning-making in that individuals are likely to adopt the meaning-making practices of others, seek to often make the 'right' meaning coded in the materials on display, and feel that some meaning-making practices are more acceptable than others, depending on who is present to observe them. Visitors will contest and resist these norms and potentially enact a range of meaning-making practices looked upon unfavourably by museum staff (such as those examples given above). Although, overall, staff have a greater agency and authority in their meaning-making practices that are sanctioned in the museum and an associated ability to construct discourses of how individuals should behave. As such there may be elements of the meaning-making processes of museum staff that cannot be adequately described by the existing theories relating to the meaning-making of museum visitors.

Although staff had an ability to restrict affordances to suggest which meaning-making behaviours and, to an extent, which people were seen as 'in-place' within the museum, within the interviews and conversations, they demonstrated a desire to make spaces and displays that met the needs of a diverse range of people.

> **[December 2015, Interview, Project Manager]** *"What we did when we asked people…to go into the spaces…was to actually think about...how the spaces worked for people, and I think once they actually went into spaces and saw how they worked or didn't work for people, that was a bit of an eye opener to a lot of people. Things we expected and knew, but actually once*

they'd really observed it you couldn't move away from it. So maybe people became less attached to some of those concepts because they acknowledged that they hadn't worked…For me…it's not about increasing the visitor numbers, it's about increasing the diversity of the people who visit. So…if we had less repeat visits but more…wide ranging…that to me would be good as long as they come, maybe less frequently, but they…come back…"

Amongst the staff team there appeared to be a recognition of the need to make the museum work for a diverse range of visitors. However, the transformation from rhetoric to practice was only evident in relation to some elements of the redevelopment project. Where it required decisions or actions that only involved one individual or a small team, it was more likely that actions would be taken to ensure the accessibility or inclusivity of the spaces and meaning-making activities within these. This is demonstrated by the inclusion of braille panels and tactile elements around the map in 'Sheffield Life and Times' and in the subtitle scripts written for videos across the museum. These subtitles were transcribed by volunteers in response to a call from the Volunteering Manager for additional tasks.

> **[19/07/2016, Meeting Minutes]:** *"Volunteers - Any tasks to [Volunteering Manager]. Volunteer hours are slightly down. Transcriptions of films could be done by volunteers – [Digital Officer] to speak to [Volunteering Manager]."*

These two examples occurred in contexts where there wasn't necessarily an explicit aim to deliver an accessible resource. The Social History Curator considered the inclusion of these elements as an inevitable part of the design (visitors had liked to touch the previous three dimensional map) and the transcription of the films was addressing a separate project aim: ensuring a target of the number of volunteer hours was reached. In contrast, activities that required actions involving institution wide processes were not always successful. An agenda item of 'Access', to discuss how the spaces and their resources could be made accessible, was set for every monthly project team meeting and discussions under it were recorded in the minutes.

> **[11/06/2015, Meeting Minutes]:** *"Access - Access awareness group planned but too early in process as yet. Will look at designs and text when planned. May only need to meet a couple of times; invite front of house managers and learning team; [Project Co-ordinator] to represent project. Offer any contacts you feel should be invited to [Project Co-ordinator]."*

> **[03/07/2015, Meeting Minutes]:** *"Access - No update at present."*

[13/08/2015, Meeting Minutes]: *"Access - Group were unsure of progress regarding access group. [Project Manager] to speak to [Project Co-ordinator] on return from leave."*

[20/09/2015, Meeting Minutes]: *"Access - Will be scheduled in after designs complete."*

[12/11/2015, Meeting Minutes]: *"Access - Still not underway as no capacity to organise this currently. Will have to take place later. Graphic panels and text feedback – this will be by a wide ranging text proofing group. [Project Manager] will bring this up at heads of service group; need some non-expert input. Access awareness is around broader displays."*

[10/12/2015, Meeting Minutes]: *"Access - Still hard to find something for an external access group but will involve them in the future."*

[14/01/2016, Meeting Minutes]: *"Access - Still very little to ask an opinion on."*

[02/02/2016, Meeting Minutes]: *"Access - Screens have been made more accessible. Volunteer proof reading will look at accessibility."*

[01/03/2016, Meeting Minutes]: *"Access - Without detailed designs it is difficult to get access feedback. In Kelham Island this Saturday there is a conference about access in museums…details if anyone is interested…Autism training was very useful for Front of House team and if funds allow this may be extended to other staff. [Visitor Experience Manager] to share…notes which were very thorough…Useful info includes example of putting objects on display which are not to be touched – this invites difficulties for the Front of House staff. Next South Yorkshire Museums Forum is about access, June 2016. [Project Manager] to see if budget can be found."*

[14/04/2016, Meeting Minutes]: *"Access - No trialling of physical things but proof reading with volunteers."*

[12/05/2016, Meeting Minutes]: *"Access - This is mainly proof reading due to our capacity."*

[09/06/2016, Meeting Minutes]: *"Access – [Three Staff] attended South Yorkshire Museum forum with focus on access. A variety of strategies were discussed. [Project Co-ordinator] to share notes."*

[19/07/2016, Meeting Minutes]: *"Access - No update at present."*

Even though, on occasions, specific tasks associated with this element of the project were allocated to one person, no single individual held full responsibility for accessibility initiatives within the project. Individuals did not consistently place priority on addressing the accessibility of spaces

seemingly because the institutional structure did not ask them to prioritise it. Individual galleries thus approached accessibility in different ways and at different points in the process. The commitment to accessibility and inclusion was not embedded in the project's way of working in a way that would lead to a connected approach to accessibility across all the galleries. Even though it was assigned as an agenda item from the beginning, more detailed thinking and possible solutions around visitor's needs and resulting meaning-making activities at an institution-wide level did not appear in my observations until much later in the project. The external design team would usually be expected to take a lead on some of these activities which was not the case during the 'A Bright Future' project. During the engagement with designers, the accessibility needs of visitors was largely reduced to provisions for wheelchair users (see discussion in Chapter 4). Institutional norms and the structure of the design process influenced how museum staff made space and how accessible the resulting spaces were for visitors with different abilities and approaches to meaning-making.

In summary, there are similarities in how both adult museum visitors and staff make meaning and space through their experience of the museum. This meaning-making could take any number of forms from mark-making to movement, and drew upon elements of the material and social context of the museum: both those intended to convey meaning and those not (Cross, 1983; Hooper-Greenhill, 1995; Carlsen, 1998; Mason, 2005; Heimlich and Horr, 2010). How people make meaning and the outcomes from this all vary depending on identities and motivations, including those associated with age – being an adult or a child (Falk et al, 2008). Meaning-making is controlled by the interactions between the individuals' agency and wider messages and resources provided by the museum, others inhabiting the space and from wider discourses acquired from elsewhere in society. The 'A Bright Future' project offered subtle changes to the resources provided by the museum, but it would be impossible for it to fundamentally change how individuals make-meaning in the museum environment within such a project and timescale. By referring to existing literature and looking at the data collected through fieldwork at Weston Park Museum, it is evident that there are existing theories which substantially account for and aid our understanding of adult visitors' meaning-making practices. In contrast, whilst these theories can also be applied to museum staff to a certain degree, there are differences that require us to look for additional theorisation from elsewhere.

Staff Participation in Professional Meaning-Making

In the previous section, it has been established that museum staff, in contrast to visitors, have more choice over their meaning-making practices at the museum, yet the practices they choose to undertake are often more limited in diversity than museum visitors. This difference can partially be accounted for by the reasoning that museum staff's meaning-making practices are trained through

the development of a professional identity and through participation in an established community of practice. By considering how staff developed and settled upon new ideas within the design process at Weston Park Museum, the definition of a professional form of meaning-making can be developed, which describes more generally how staff make space and meaning through their use of the museum. Within the redevelopment, there were constraints which everybody worked within, such as the overall layout of the building, as well as the different levels of agency and decision-making opportunities afforded dependent on an individual's specific role. These variations were negotiated over the course of the redevelopment within the context of the institution, much as visitor actions and identities were. Institutional structures and norms influenced how, when and where staff members made-meaning through their daily tasks, though, unlike visitors, they were afforded a more visible platform to communicate these meanings to others. Museum staff are also required to perform tasks to established professional standards. Thus, their meaning-making practices become professional.

I define it as professional meaning-making when individuals draw meaning from an experience in a way that is structured by institutional expectations, professional identities and the collectively understood and practiced strategies within a community of practice. In the museum, this community of practice draws heavily upon the visual and the material. O'Donovan (2015) has previously explored professional meaning making in relation to banking and Noble and Henderson (2010) have undertaken similar work with education professionals and researchers. However, the concept of professional meaning making is particularly pertinent to the museum context: museums spatialise meaning in their form and in how people move through the space (Wineman and Peponis, 2010) and, therefore, the staff responsible for their design participate in the generation and articulation of meaning as a significant proportion of their work. Hakamies (2017) discusses how Finnish museum professionals use the metaphor of an ideal museum worker in the construction of their professional identities and as a comparator to enable them to feel a sense of belonging within a community of practice. Through the example of Weston Park Museum, the relevance of professional identity to the meaning-making of museum professionals in the UK can additionally be explored.

Firstly, professional identity is important to structuring staff's meaning-making practices in museums, and conversely staff's meaning-making practices serve to develop their professional identity. This professional identity draws upon ideas of proficiency and belonging, which are both developed by individuals over time. Evidence of this can be found in data from my own experience as a participatory ethnographer. In creating interpretation for the 'Beneath Your Feet' gallery I encountered many moments where I, personally, felt hindered in my meaning-making practices by a lack of experience. The specifics of practices in the museum, for example how one writes labels, are

learnt and they are not always explicit. I had not previously written labels for Museums Sheffield and whilst the interpretation strategy offered me some rough guidelines, a lot of questions remained. I was comfortable with the research task but issues arose when deciding how many labels to have in total. This was a question shared by the Curator who was also writing labels for the first time at this particular museum.

> **[03/11/2015, Meeting Minutes]:** *"Text writing – on-going but challenging... [Curator] needs some steer on label structures."*

> **[03/11/2015, Fieldnotes]:** How much space for writing? Look at InDesign templates. Up to curators to decide but need a more structured conversation on what is expected and conventions. What is a graphic panel? Not all have text on them – designer-speak = all are graphic panels. Talk to other curators for guide.

This conversation included the clear articulation of questions: How should I do this? Yet provided me with an answer that was less than definitive: it's up to you to work this out, possibly through conversations with colleagues. There are recent additions to, and variations between institutions in, how curators approach the interpretation and care of collections, including how they make meaning from them through their employment. These can create a discrepancy between what one sees as their professional competencies as a curator and what a museum asks them to do under the same banner. On occasion, in their comments, staff would separate themselves from the museum, indicating that they felt apart from the institution. Sometimes a need for advice or training would be articulated, as demonstrated by the questions in the above extract. I interpreted this as charting a course to obtain the required knowledge or skills to resume their identity as a professional once again. I was afforded a little more compassion from others and myself in terms of expectations of what I would already know as I was positioned as a student or a novice and not necessarily as a member of the community of practice of museum professionals. However, I too felt this sense of disconnection at times when I was unable to find or access the right tool, or when my lack of employee status was brought up in relation to how I was making-meaning. Wenger (1998: 166-171) would perhaps describe my situation as one of 'peripheral non-participation' as a newcomer to a particular community of practice. To develop a sense of belonging and competency and to build up my professional identity, I would perform meaning-making practices in a certain way, attempting to emulate those who I felt embodied the professional identity I was trying to learn. These findings are echoed by Hakamies (2017) whose research examines ethnographic interviews with museum staff at national museums in Finland in order to establish how the concept of an ideal museum professional

is used to create a community of practice. Hakamies (2017) suggests that this concept is rooted in nostalgia and enables museum staff to construct their identities based on undertaking practices in a traditional or ritual way. In my participatory research at Weston Park Museum, I developed my sense of belonging to a community of practice and resultant fledgling professional identity by finding and recreating these established practices – including one's around meaning-making.

In addition, an individual's professional identity and their meaning-making practices were also influenced by other identities which, in turn, impacted upon accepted norms within the community of practice. The museum is not isolated from wider society and more systemic attitudes relating to age, gender and ethnicity, as well as hierarchies of management, influenced the ongoing negotiations of an individuals' role or place within the organisation and their meaning-making practices. In an interview, the Project Manager illustrated how gender affected her role:

> **[December 2015, Interview, Project Manager]:** *"I mean, the word that I hate people using about women is 'bossy'. Part of the role is leading, and if that's what bossy means to some people then I'm not going to change that, but I think quite frankly you do need to have that – a focus on what needs to happen and ensuring everyone is moving in the right direction."*

She indicated that her approach to some practices, such as decision-making, was framed negatively by others due to her gender identity. Societal conditioning of dominant groups, especially when their dominance is challenged within a particular context, industry or workplace, poses a barrier to sociable curiosity and introduced additional conflicts into the process through the devaluation of others or oneself. The museum workforce is usually dominated (in numbers) by white women and at Museums Sheffield they make up the majority of staff from part-time Visitor Assistants to the Chief Executive. The combination of leadership hierarchy and wider societal norms of gender and ethnicity create conflicts within negotiations of power in the museum sector. Museum staff are constantly negotiating multiple personal identities within the structures offered by the institution, which may encourage or discourage certain practices and create dominant trends within the meanings made (see Golding, 2009; Sandell and Nightingale, 2012; Adams and Koke, 2014). These need to be accounted for alongside professional identity in our understanding of how staff make meaning in the museum.

Secondly, the institutional nature of the museum, and its associated norms, also play a role in the professionalization of staff meaning-making practices. Institutional structures variously support or prevent the social triangle. Sennett (2012) describes the social triangle as a model of three things needed to enable successful working together: earned authority, mutual respect, and cooperation; and suggests how elements of everyday diplomacy can contribute to each of these three. To

successfully work together, Sennett (2012) also describes the need for two types of conversations: dialectic and dialogic, outlined in chapter 4. In the institutional norms of the museum, which partially draw upon contemporary western project management processes, there is a need for mutual understandings to be established in order to progress the work. Thus, many instances of the dialectic form of conversation can be found in the professional meaning-making that took place amongst staff at Weston Park Museum.

A 'Picturing Sheffield' meeting from March 2016 offers an example of a dialectic conversation facilitating the social triangle in the development of an interactive activity.

> **[22/03/16, Fieldnotes]: [Curator]** wants it for small children to play with but **[Project Manager]** and **[Learning Officer]** express concerns that it can't be the same as the dolls house already in the Sheffield Life and Times Gallery. **[Learning Officer]** suggests that it could be changed to blocks with images on each which could be combined to make a Norwood Hall facade…**[Curator]** says 2 year olds like to "push the button". So **[Project Manager]** suggests button pressing option – but it will be expensive so there will be a limited number of rooms. **[Curator]** asks "Does one room add anything to the gallery?". **[Curator]** and **[Collections Assistant]** are more taken with the idea of building blocks …Dolls house proposal is abandoned, **[Curator]** and **[Collections Assistant]** are going to look at developing a new brief for the blocks.

In this meeting, prompts created a space to explore the differences between individuals' ideas and worked towards a singular action or decision using a dialectic approach facilitated by the Project Manager. She facilitated this approach by suggesting compromise courses of actions as possibilities for other participants in the meeting to react to. There was evidence of mutual respect, authority earned by the Project Manager through everyday diplomacy, and a desire for co-operation on all sides which enabled Sennett's (2012) social triangle. The scale of the design object under discussion or the perceived low level of risk (due to it being just a small element of the overall project) may have impacted upon the productiveness of the exchange for meaning-making and for progressing the project. This extracted exchange is indicative of the pattern of conversation performed by various staff members across many different meetings. Thus, this evidence suggests that dialectic conversations and their contribution to the social triangle are useful for analysing the professional meaning-making practices of museum staff.

Further evidence demonstrates how the social triangle can aid our understandings of professional meaning-making across the project, not just within a single meeting, and the role of dialogic conversations to support this. Throughout the process, when decisions were being formalised and actions decided upon, there was a negotiation of power. The Project Manager sought to enable staff to feel ownership over the spaces they were working on by supporting both problem-finding and problem-solving, activities which required both dialectic and dialogic exchanges.

> **[December 2015, Interview, Project Manager]:** *"I could still see a lot of stress right now on certain things, but just to see the ownership grow and…that…takes time and evolution…whilst I need to do my job which is about helping to focus and making sure that they are creative, so asking…'really?' Or…thinking "umm, maybe not the best way to be spending our money" or whatever it might be, but actually…all I'm doing really is supporting those ideas coming through, and yes, sometimes I need to take things in a slightly different direction to where the team might have been going but my role is really about guiding and…kind of supporting in a way that helps achieve our goals."*

Sennett (2012) argues that the everyday diplomatic techniques needed to maintain earned authority are a form of performance, and one which often requires dialogic exchanges. The Project Manager thus performed these techniques through exchanges that included subtle challenges, or validations, of where the team's ideas were headed: what new meanings they were developing from the collections, how these meanings were being formed, and which of these new meanings they wanted to communicate to visitors and how. These often came in the form of comments referencing either budget or deadlines or both:

> **[08/06/2015, Meeting Minutes]:** *"[Project Manager] suggests collating a list of what is wanted and then work from that and see how much we can afford in budget."*

Over time this repeated reasoning contributed to staff members' maintenance of ownership over the space that was being created, even as it moved slightly away from the vision of the place they held in their mind.

> **[December 2015, Interview, Visual Art Curator 2]** *"Yeah, so a lot of stuff, I think, has been removed but more for financial-based reasons than…"* **[Visual Art Curator 1]** *"…design, yeah."* **[Visual Art Curator 2]** *"…design reasons."*

This strategy enabled staff to largely feel control over their area of project whilst the project manager was able to feel control over the project as a whole. As such, it can be seen as a strategy of everyday diplomacy based on Sennett's (2012) description. As described above, everyday diplomacy

can contribute to all three elements of the social triangle. As the institutional norms of the museum require collaborative working between specialist professionals, everyday diplomacy performed through dialogic exchanges across a project enables these individuals to understand each other's meaning-making practices and work together successfully.

The meaning-making of museum staff is made professional through institutional norms. These norms require collaboration and, increasingly, project-based working. The latter relies upon dialectic exchanges to progress areas of work, whilst the former is dependent upon spaces for dialogic exchanges to enable individuals to empathise and understand their colleagues. Both depend upon the social triangle to enable successful working together. However, questions remain regarding the balance between dialogic and dialectic exchanges in museum practice and institutional structures and this will be explored further in Chapter 7.

Thirdly, these meaning-making activities draw upon both the visual and the material in ways that are influenced by professional identities and institutional structures, and that form a community of practice. Similarly to visitors, as explored above, the meaning-making undertaken by staff is also space-making, and so professional meaning-making concurrently makes spaces in the established ways of a community of practice. Silverstone (1994: 164) argues that the meaning of a material object is communicated through how it is displayed, where it is located and any accompanying text, as well through "the imaginative work of the visitor". The role of museum technicians in this process was discussed in interviews and the relationship between meaning-making, curiosity and creativity also came to the fore.

> **[June 2016, Interview, Archaeology Curatorial Assistant]:** "*The techs have been incredibly creative…for each object they've taken the object out of its box or bag, looked at its shape, looked at how fragile it is, and come up with a custom solution for how that object can best be displayed…that's an…incredibly creative process, and equally through discussion with us…they worked out how the cases as a whole can best look. Their practical and artistic experience helps to convey the particular themes and stories that me and the [Archaeology] curator want to run with.*"

In order to develop a creative solution to mounting objects and case layouts, the museum technical team employed their sensory curiosity to understand the materiality and the parameters they were working within. These combined with the meanings made by the curators through research and interpretation and resulted in a visual and material product intended to communicate these meanings. However, these material elements were created using practices shaped by a museological community of practice: for each *"custom solution"* it was taken as a given that this would involve

them being mounted in a case or on a plinth in a way that minimised any lasting impact on the objects materiality.

Whilst the dialogue between creative professionals constructed much of the meaning displayed, elements of the materiality, including the collection objects going on display, also asserted their own influence over meaning-making practices.

> **[December 2015, Interview, Archaeology Curatorial Assistant]** *"It's only when you get the objects out…look at their size and shape and think about how they might best be displayed…you decide what you want to say about them…because really every decision…very material aspects of the objects affect everything, so the weight and size of something might affect whether you can display it or whereabouts, whether it can fit in your particular theme because we had limited space and so much we could potentially say."*

Geoghegan and Hess (2014: 12) discuss how particular objects ended up in their current locations within the Science Museum stores due to aspects of their materiality – their size, unwieldiness or elements of their construction. They describe how, by conducting research into a single object through repeat visits, the researcher became "part of a three-way network between object, environment and viewer that generated meaning through a series of dialogues" (Geoghegan and Hess:10). Such material factors also affect how, where and when collection objects are put on public display, resulting in possible meaning-making activities for both staff and visitors. The materiality of the objects interacts with the materiality of the space it will occupy (lighting, humidity levels, dimensions of cases and their openings) as well as with the will and intentions of those making the space. One particularly influential object was the Bronze Age Canoe displayed in 'Beneath Your Feet'.

> **[08/06/15, Meeting Minutes]:** *"Conditions in the gallery are being recorded currently but it is still difficult to know how well the canoe will respond to the conditions until it is in. Close monitoring will be needed. A conservator specialist needs to have a look at the canoe and this is in the schedule…Plan how you will change the display to accommodate removing the canoe."*

> **[07/01/16, Meeting Minutes]:** *"We discussed additional lights previously but these would reduce display space…Light rods would have made difficulties fitting canoe in."*

> **[01/06/16, Fieldnotes]:** During the afternoon three technical team staff, [Curatorial Assistant] and I had a long discussion about getting the canoe into the case…building a mount,

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cutting down the rods under the bottom shelf and doing the
drilling for the things on the backboard that will go over it.
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The canoe, as a large and delicate object, exacted a significant influence over the meaning-making practices that went on around it. Its material form influenced when tasks were done, in what order, where it would ultimately go and how long it would stay there, far more that the stories and possible meanings it could convey. As museum professionals form a community of practice that engages so heavily with material forms, the nature of materials thus exerts a strong influence over the practices that are conducted. As such there are subtle variations in the professional practices, and thus meaning-making activities, amongst museum staff who work with different materials: between curators, learning officers and marketing managers, but also within these groups as a curator of natural history will need different practices to a curator of visual art.

Professional meaning-making also draws upon a sense of visuality drawn from previous professional experience. Visual experience informed decisions, and lines of reasoning demonstrated how visual elements could conjure up a sense of place. Several conversations about gallery colours evoked this connection with sense of place.

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[22/09/15 Fieldnotes]: "Graphics - blue and yellow on
graphics. Blue Bauman, matched to wall paint colour. Generally
don't like shade of yellow comparison to baby/calf poo -
preference to go more gold/mustard and less greeny. Chose
Pantone 123."

[08/10/15 Fieldnotes]: "Colours - not sure how got to final
colours proposed. "swimming pool" - want brighter/zingier -
current proposal 'drab'."
```

Much as it can be expected that research using written texts (both online and printed) shaped the stories created around different objects, visual inputs (what people had seen in the visuality of the object, in other museums or elsewhere) were used and reworked to inform the meanings-made in the new galleries. Visuality and materiality were important to professional meaning-making as staff were inspired and influenced by the material and visual elements of objects, of other museums visited, of the spaces they worked within and of their wider lived experience. The meanings made from them were subsequently visualised and materialised themselves in the form of the finished galleries.

Throughout this section, the concept of professional meaning making has been explored in relation to the museum. I define professional meaning-making as: an individual drawing meaning from an

experience in a way that is structured by institutional expectations, professional identities and the collectively understood and practiced strategies within a community of practice. This professional meaning-making rarely took place alone as staff engaged in exchanges, negotiating meanings with their colleagues, as well as in partnership with the visuality and materiality of objects and spaces. These negotiations also took place with other stakeholders who had complicated, non-staff identities. We can understand how adult members of staff make meaning in the museum by drawing upon emerging understandings of professional meaning-making. However, not all adults who engage with the museum's spaces are either staff or visitors and further explorations of the meaning-making practices of those who fall outside of these two groups may allow us to further theorise how adults make meaning in museum spaces.

Complicating the Binary: In-Between Identities

If we understand space as made through use in the museum and meaning-making as an activity that transacts with space, the divide between staff and visitor thus becomes complicated as both groups participate in these activities, albeit in sometimes differing ways. There are various in-between identities, including those of researchers, that could aid an understanding the fluidity of the relationship between an individual, the institution and the making of space. Within this project there were other groups engaged in collaborative practices, such as museum volunteers, community organisations involved in co-curation, and myself as a collaborative researcher. Each could exercise different forms of meaning-making within their particular role in making museum space. Overall, relational identities to the museum are complex, fluid and negotiated and these identities affect how individuals can make meaning in any given moment. In this section, I will explore some of these opportunities through a reflection on my own role.

Identity, motivations and sense of belonging played an important role in shaping how I both made meaning and made space in the museum. Looking back on the different ways in which I made-meaning, I might attribute them each to different parts of my identity. Analysing my data and writing a presentation for a conference, I was firmly a researcher. Asked my opinion on label holders by the technical team in the latter stages of installing the 'Beneath Your Feet' gallery, I felt almost a member of the curatorial staff. Wandering around the V&A, for example, I was once again a visitor. Falk et al (2008: 57) argue that I am trying to understand my role or actions by attributing these "identity-related qualities or descriptions" to myself in different contexts. With hindsight it is easy to compartmentalise – I was one thing then and another thing at another point – but throughout the project all of my actions, including my meaning-making practices, took place within a negotiation of multiple concurrent identities.

In contrast to other university researchers who had worked with Museums Sheffield, the collaborative set up of this project created different opportunities for me to make meaning. Just a couple of months into my participation at project meetings I was approached with a question of how I was affecting others' practices.

> **[June 2015, Fieldnotes]: Tuesday 9th June** = [Project Co-ordinator] suggested that [Project Manager] thinks my presence may "constrain the design process" and they don't know if I should be at design meetings…At the end of this meeting [Project Manager] asked for my input of inspiring interpretation examples for Wednesday…**Wednesday 10th June** = I contributed to the meeting but only after the item on the agenda where I was asked to contribute – it opened a door for me…I previously felt I didn't have any authority to input. I gave examples and commentary on others' ideas. This was clearly seen as an adequate creative contribution as speaking to [Project Co-ordinator] after the meeting, I am 'allowed' to come…as long as I contribute – I mustn't just sit and observe as people feel 'watched'. Now I feel a pressure to come up with ideas and contribute to each meeting segment on Tuesday to earn my space in the room. There was a joke today about "Now we've found a role for you" as I was able to reach to turn the projector on. I have a distinct sense that people including [Project Manager] and [Project Co-ordinator] are as unclear about my identity/role in museum processes as I currently am.

Where and how I was able to makemeaning was controlled by how I saw and how other people perceived my role, responsibilities and expertise. Other researchers, who have previously used Weston Park Museum as their research site, have been limited to the public gallery spaces if studying visitors or to supervised visits to the museum store if their focus was on collection objects. The accounts of MacDonald (2002), Yaneva (2009) and Geoghegan and Hess (2014) perhaps indicate that it is a mixture of chosen research questions, ethnography as a methodology, and the role of the collaborative researcher that creates a particular spatial experience, which transcends both public and private spaces in a different way to museum staff. Early on in the project, before I had established my role and my purpose for being there was fully understood, my interactions were largely limited to the schedule of meetings and observations in the public galleries. However, from

the latter half of 2015 through to late 2016, my research became more embedded in the process for certain galleries. In the case of the archaeology gallery, my expertise was acknowledged by the curatorial team and led to mutually beneficial meaning-making. In the research and initial label writing I was trusted with a free reign, though structured by the 'Interpretation Strategy' from which everyone worked. In contrast, my involvement with 'Sheffield Life and Times' was more limited. The social history curator, I think, saw this gallery as outside my remit and therefore I didn't have a responsibility to produce outputs for her. These perceptions of what I could or should be doing within the project influenced the resources I used and the meanings I made.

Staff members most closely affiliated my role to that of the other volunteers and they were appreciative of the time I could dedicate to assisting them with tasks. In an email (September 2016) one curator assured me there was no hurry, I didn't need to come in especially and I could make the label template next time I was there. Another curator, in a conversation on the same day, remarked on how it was funny that the one person not paid to be there was the first to the project team meeting. Whilst intended as positive comments, they served to remind me of my different role and how my time (and meaning-making) was valued differently to that of a paid employee. However, my role was also different to that of other museum volunteers. Like a volunteer I needed to be let into the private part of the building by staff, but volunteers would be met and usually supervised by a staff member for the duration of their activities. Over time I was granted more freedom over where I went in the building and what I could do there. Whilst installing 'Beneath Your Feet' I would collect a spare set of keys and pass freely between the public spaces and private corridor and office. There were some limitations, which may have come more from my own sense of where I belonged than any explicit rules. I never went into the collections store room or the technicians workshop unless with a member of staff, but I had no reason to. My meaning-making in regards to working with collections objects was also usually directed by curatorial staff though, like the volunteer described in the extract preceding this chapter, I was able to undertake follow up research away from the store as much as I wanted. Walking around the public areas of the museum, visitors would rarely draw any distinction between anyone they perceived as working for the museum – volunteers, myself or paid employees were all grouped together. Visitors asked me questions about where toilets were or handed me items of lost property; it didn't matter how I might be positioned within the institutional structure.

With members of staff it was a more continual negotiation of status and authority as we experimented with who could ask who to do what. Holmes and Edwards (2008: 156) discuss two common ways of conceiving of museum volunteers in academic literature: either as unpaid workers within an economic model or as dedicated visitors who undertake volunteering as a leisure activity.

They suggest that volunteers should be seen as part of the museum's audience rather than workforce, but acknowledge that "volunteers are both producers and consumers of the museum product using their leisure time to immerse themselves in the museum culture in order to maximise the interests they have in this area and to contribute to sociocultural exchange". Volunteers have potential to make meaning in ways akin to both museum visitors and, to a lesser extent, museum staff. However, they are not necessarily subject to the same processes of professionalisation. In contrast, as a collaborative researcher, I was seen more as potential member of staff with both academic and museums sector communities of practice influencing my meaning-making from my experiences.

With my in-between identity of collaborative researcher, I was involved in the curation process, but not as a curator and in a different way to the community organisations involved in the project. Via discussions of availability, I was granted access to objects and the museum's off-site store to make meaning by writing the interpretation and designing the layout of the Roman cases. Similarly, the community organisation co-curating a case in 'Beneath Your Feet', Friends of Wincobank Hill, were also granted access to the store, although their experience of it was more structured with the curatorial staff directing the session. Whilst the numerous locks and codes meant my movement through the space and access to objects was conducted by staff members, in contrast to the Friends of Wincobank Hill, I was left in particular spots unsupervised while I carried out a task – searching through filing cabinets of notes and object records or packing Roman objects into boxes to be transported to the gallery. Both myself and the community organisation were co-curators making meanings and influencing which of those were ultimately displayed in the gallery. Our roles and identities delineated our ability to access a variety of resources and enabled us to use them to create meanings for display. This echoes Davies (2010: 316) finding from her study of co-production in temporary museum exhibitions. Across a range of museum types, she found that a division of 'insider' and 'outsider' related to how individuals were involved in the co-production process: insiders took on more of a producer role, whereas outsiders were primarily consumers of content and experiences (Davies, 2010: 316). This delineation can be understood as a spectrum where my role was considered as more of an insider than the Friends of Wincobank Hill. Both of us made meaning through our experiences, but the degree to which these meanings were purely personal versus our ability to embed them within a gallery's design greatly varied.

Overall, the institutional structure exacts an influence over these space-making and meaning-making activities: rather than an individual making meaning against a framework of space, an individual makes space and meaning against a framework of the institution. Throughout the duration of my research, my position in relation to the museum as an institution was continually fluctuating

between 'insider' and 'outsider'. Using ethnography, I aspired to becoming something akin to a local, to feeling I belonged within the museum because, as Laurier (2010:125) suggests, this level of participation affords the advantage of understanding how things are done and exactly why something might be done in a certain way. Within some moments, I did achieve this, though as time passed and I reflected on what I was doing, I returned to my outsider-researcher identity. 'Staff' and 'visitor' alone imply that one is either inside or outside of the institution, whereas my experience demonstrates this as a spectrum with points in-between. Similarly, authors who discuss ethnographic methods, including participant observation, have identified a greater range of positionalities than an inside/outside or participant/observer binary (Hoggart et al, 2002). Occupying museum space can be considered akin to such experiential research methods and thus all individuals, not just researchers, might have a more complex relationship to the institution. None are bound entirely by the structure, yet neither do any have unlimited agency; one's relation to the institution influences the likelihood of performing certain meaning-making practices.

This focus on in-between identities offers up scope for further research into how space and meaning is made in the museum, and the balance between institutional structure and individual agency. Staff vary between full-time and part-time, freelancers and contractors, newly appointed and those who have been in post for many years. Visitors may be coming to the public galleries for the first time or may regularly attend talks or programmes. Individuals move between these categories with new hires, redundancies and retirements. Volunteers and community groups, who are offered a tantalising glimpse of the behind-the-scenes workings of the museum, sit along a continuum: more insiders than visitors, more outsiders than staff. As a collaborative researcher, I too negotiated this line with the resources I accessed to fuel the meanings made through my research, as well as with how I contributed to the making of museum space.

Summary and Conclusions

This chapter goes beyond existing literature by developing our understanding of the meaning-making practices of adult museum visitors, and by building upon emerging theories of professional meaning making and relating these to the museum context. But looking at meaning-making in relation to space-making in the museum allows us to challenge the prevalent dichotomy of staff/visitor applied to adults in the museum, and there is further work that needs to be done to understand the relations between meaning-making, space-making and those whose identities fall along a spectrum between staff and visitor. By breaking down the divide between staff and visitor, and exploring a wider range of identities, we may be able to extend the relevance and accessibility of museum space and alter the power dynamics that influence how it is made: contributing to its

resilience and relevance in contemporary society. The museum is always more than one person and the social dimension is critical to how meaning-making takes place there. Collaboration is a vital practice requiring relational curiosity between individuals, staff or visitor, volunteer or researcher, in order to facilitate the shared creative process. Even when the meaning made is dramatically different for each person involved, an understanding of those with whom we share the journey enables the sharing of resources, the sparking of inspiration and an affective bond between those involved. This affective bond might be seen, at least partly, as the feeling of belonging that contributes to our regular return to the space and this encircling action as place-making, as described by Ingold (2008). Through collaboration, through curiosity and through creativity we make the museum meaningful as a place.

However, questions remain: can the museum provide the necessary resources to ensure the space is accessible for all from a diverse population to make meaning in ways in which they feel comfortable whilst simultaneously challenging individuals to engage their empathetic curiosity, to see things from another's perspective and make meaning in new ways? Can it serve the motivations of visitors whilst igniting an interest in something unexpected? I attempt to answer some of these questions in the next chapter by considering open social innovation and reflective practice as part of a wider exploration of the relevance of creativity and innovation in the products and the process of redevelopment at Weston Park Museum.

[November 2016, Interview]

[Researcher]: "*…looking at the displays and the process I feel there's been changes in how the museum represents Sheffield, particularly in relation to the displays that are 10 years old. And as wanting to, covering a wider area, representing the city as being diverse, rather than Sheffield as one place. Was that intentional? Do you think that's come from more of an ongoing process and it's just kind of appeared because there's been that 10 year gap?*"

[Project Manager]: "*I think it's because you've got different people with different view points. I think… my vision from the beginning has been about this site being authentic in its claim of being about Sheffield from prehistory to the present day, and to do that you've got to think about what Sheffield is and that includes, it's not a one size fits all…*"

[Researcher]: "*Yeah.*"

[Project Manager]: "*And some of the feedback we got from visitors as well, just absolutely honed in on displays like the, 3D map….The 3D map that we took out of the museum, people liked the idea of that map, but they didn't like that map because it only showed the city centre and so actually that just references exactly what you're talking about…we're a different organisation…I feel really passionately that our collections are owned by Sheffield. They're not owned by us, they're not owned by the council, they're owned by Sheffield. And actually what does that mean and how do you get that out there. If you think that, and that is shared at Chief Exec level. It's really important that you do have that viewpoint and so I think that probably does make you move in a different direction…act in a different way I'd say kind of…celebrating the positives of Sheffield, yeah…Even, well it's not just the positives, it's, you know, this is your place. Civic pride and our role and how we foster civic pride is really key as well. I think your city museum should be a one stop shop for what your city means…*"

[Researcher]: "*And do you think that's different to 2006, that idea of being 'The City's Museum'?*"

[Project Manager]: "*Yeah, I think museum thinking was different then…I think…the whole place-making that the government's set makes people think differently…I think some of that stuff like around that kind of early 2000s and the thinking there…was really valid in that working with communities and learning programmes. I come from a place of…how does working with this community develop our collections for the future…how does it work two ways, you know… it's not us doing something for them, it's how do you work together and I think a long term understanding of how you develop partnerships and how you develop relationships in the city and how you are connected…is important there.*"

Chapter 6:

Innovation as Product and Process

Introduction

[December 2015, Interview, Project Manager]: *"I hope [the map] becomes the example of innovation that I think it will, but I'm not going to put pressure on that. If you say 'oh, we're going to be innovative here' you undoubtedly will not be innovative at all…and it's almost over selling yourself anyway isn't it? Is innovation not for somebody else to say?… Actually is it true? Because innovation, as a process…we've done something different which is innovative…in terms of internally, but actually as an end result: is that something that's innovative?… That's not our call really at the end of the day, we can hope and we can try and all we can do I think is ensure that we have innovation in our processes…to try and reach that but I don't think that end goal is something that you can be too prescriptive about."*

Whilst contemporary policies and discourses seek to identify globally innovative things, products or outputs, it is arguably more useful to focus on innovation as a process and the innovative qualities of product as it is implemented in the museum context. This can enable us to: highlight how museums as institutions are not constant over time; how their development and space-making is non-linear; and to facilitate the deconstruction of the staff/visitor dichotomy. Innovation is a slippery term that is simultaneously unclear about what it precisely means and who can legitimately use it, as suggested by the extract above, whilst also being used ubiquitously to confer value on certain ideas, practices and products in contemporary society.

This chapter will first look to the literature and explore how innovation has been defined, before turning to explore the usefulness of a concept of vernacular innovation in the context of this project. The second half of the chapter will consider four intended innovative products within the redevelopment of Weston Park Museum and how these each demonstrate various processes of innovation.

Defining Innovation

The literatures of creativity and innovation are deeply intertwined with limited distinction between the two made in some instances. Therefore, it is important to consider the two alongside one another but also to distinguish between them. Both Kristensen (2004) and Haner (2005) consider creativity and innovation as part of the same phenomena within commercial organisations: a

process of idea and product development. Whereas, Robinson (2001:1) distinguishes between creativity as the "process of developing original ideas that have value" and innovation as "putting new ideas into practice". This latter distinction is one that carries through into models of innovation such as those developed by Chesbrough (2012): creativity is part of an innovation process, and this process requires the application of new ideas in some form of practice. These definitions will be explored further through their application to the museum in this chapter.

Theories of creativity and innovation as a process, or processes, have expanded rapidly in the last two decades but are only just beginning to consider possible applications in not-for-profit and public sectors. Innovation involves the successful implementation of creative ideas, often by an organisation (Amabile et al, 1996: 1155) but also by individuals. Whilst Wallas' model of the creative process was published in 1926 and some of the earliest formal definitions of innovation date back to the 1930s (Puccio and Cabra, 2010), in the Twenty-first century there has been an "explosion of interest" in 'open innovation' (Chesbrough, 2012: 20). Open innovation is defined as "the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation" (Chesbrough, 2006: 1). The scale and extent of the openness of the innovation process varies and Chesbrough (2012: 21) differentiates between models of 'outside-in': bringing external ideas into a process; and 'inside-out': sharing unused ideas with others. The museum can potentially provide space for both forms.

A Theory of Vernacular Innovation

The importance of context (social, political, economic, temporal) to this process of innovation came to the fore in my research. There was something specific about this research taking place in Weston Park Museum, Sheffield, and when it did, that meant creativity and innovation emerged how they did. To further develop our understanding in this area, an extension of the concept of vernacular creativity to better illustrate a vernacular form of innovation may prove useful. Most definitions of innovation stem from business and management studies and have overlooked their application outside of the private sector (Chesbrough and Di Minin, 2014: 2). Therefore, as a public cultural institution, there are limitations to how these principles can be applied to the museum. Instead, we can develop an alternative model of innovation that focuses on creative solutions to meeting the needs of staff, visitors and other stakeholders. By exercising empathetic and relational curiosities, and by welcoming creativity, museums can create spaces that meet the continually changing needs of users through innovation: that is, a process of evaluating, building upon and adapting current practices and resources in a certain context.

The situatedness of innovation can be better recognised if we consider it in a vernacular form, as has already been attempted by theorists looking at creativity. Burgess (2006) defines vernacular creativity as everyday creative practices which fall outside of the cultural value systems of high culture and commercial practice, and which are locally specific, placing importance on the geographical, material and cultural contexts in which they take place. Building upon this definition, I propose that we can also consider innovation in a situated way, in particular if we consider those creative practices that lead to products or change and adaptation outside of the dominant value systems of commerce and capitalism.

The idea of vernacular creativity derives from a pre-existing debate amongst academics working on different types of creativity. One such researcher, Boden (1994) identifies creativity as two main types: Historical (H-creativity) and Psychological (P-creativity). She describes P-creativity as a valuable idea that is new to the individual and H-creativity as the first time a valuable idea has occurred in history (Boden, 1994). Richards (2010: 190) describes the concept of everyday creativity as "human originality at work and leisure across the diverse activities of everyday life". Whilst this appears similar to vernacular creativity on the surface as it most likely takes place in vernacular settings, it is grounded in psychological creativity and significance at the level of the individual. In contrast, vernacular creativity suggests that creativity cannot be divided along such binary lines; there is a need for a form of creativity that has significance at a social level, but which is directly grounded in a geographic, material and cultural context and which does not always conform to dominant cultural value systems. Weisberg (2012:6) echoes the work of Boden (1994) by suggesting that for something to be creative it has to be new "at least for the person who produces it". He goes on to create the distinction that "innovation is a new idea that is brought to the marketplace as a new product" (Weisberg, 2012:6). Theorists generally agree that innovation involves a product or the implementation of a new idea (Amabile et al, 1996; Chesbrough, 2012) and this is what marks it apart from creativity. Though, the implementation discussed most often refers to capitalist market principles and little work had been done on how creative ideas may be implemented as innovations in other ways, such as in public and charitable institutions. As such, further work could extend existing theory on vernacular creativity to innovation.

I propose that vernacular innovation, in the non-profit sector, can focus on contextualised creative processes where the outputs are applied in a specific locale to enable an organisation or institution to more effectively, sustainably, efficiently and justly meet its social aims. In this case, it is important to consider how innovation took place within Weston Park Museum, Sheffield, and not just museums generally. The vernacular can resist institutionalised discourses of innovation: it can reject the idea of linear progression and adapt to a world of ebbs and flows, and it can prioritise social aims

over capital accumulation. It can also begin to break down the binary divide between staff and visitor as it can be practiced by any individual using the museum relative to their own role. Applying the idea of a vernacular form of innovation to museums can overcome the limitations that an understanding of innovation based on technological advances brings; the quality, materiality and social impacts are relative to the community that will feel the benefit.

The idea of the 'vernacular' can also recognise the role of individuals and their situatedness within the institution without assuming their complete assimilation to it. It could aid our understanding of the city museum as for local populations and enable museum practice to better address the needs of all users: visitors, staff and others. At Weston Park Museum, we can identify this in the co-curation practices with local community groups. Co-curation is already widely practiced within the museums sector and is a form of co-production: a broader approach relevant to the arts, heritage, education, government and industry (Davies, 2010:305-306). Co-curation activities have taken place within Museums Sheffield previously, but at this point in time there was a change in scale and frequency and attempts made to mainstream it within the institution. This marked a change in how Weston Park Museum was opened up to its direct users and the adoption of these co-curation programmes is a reaction to the place-making political agenda that has effected the funding bodies of the museums. Additionally, it offers up an example of how the institutional form gives a context for the process of innovation, but one that can be resisted with individual agency: influencing, but not dictating the final form of the product. It includes an increasing presence of multi-vocality within the displays, as community organisations were given some room to use their own 'voices', and works towards a democratisation of access to and ownership of the collections. Community group members were able to make use of private museum spaces, both the physical spaces of the store and the social spaces of the design process. These co-curation practices offered one example of how the concept of vernacular innovation can help us to understand both processes and products of innovation in the museum context.

Innovation: Processes and Products

The concept of vernacular innovation informs the selection of other examples from the Weston Park Museum redevelopment, each of which illustrate the importance of examining processes of innovation in the museum setting alongside their products. Interviews and staff observations highlighted four main products (though several are intangible concepts) that were most often labelled or considered as possible innovations situated within this particular museum. Firstly, the use of maps within the museum, which was thought about and developed during the project. Secondly, an innovation of the museum's audience by changing who visited the building and when. Thirdly, the

principles of flexibility and the inclusion of more objects on display. And finally, the establishment of Weston Park Museum as telling the story of the city. Looking at the processes of developing each of these possibly innovative products additionally expands upon how processes of open innovation, social innovation, and reflective practice can be observed within a museum redevelopment.

Mapping in the Museum

The use of mapping in the museum, and certain maps in particular, were proposed as innovations in interviews with staff (see the extract at the start of this chapter), though precedents for each form were found elsewhere and informed their development. As such, this demonstrates a process of open innovation that took place within the project. Within Weston Park Museum, maps are an orientating feature for visitors that communicate something about the museum's relationship to the city. The new map display in Sheffield Life and Times was designed to address many perceived failings of the city-centre model created in 2006: restricted coverage of the city area; limited interactivity and a structure that dominated the gallery entrance blocking views of other exhibits. This was potentially exacerbated by limited references to city suburbs or outlying villages across the other galleries, with no particular connections to the city drawn in 'About Art' and a subtle allusion of a map used as a graphic on the 'Found Round Here' display in 'History Lab'. Overall, in the 2006 design, Sheffield was positioned as a singular place focused on the city centre. The texture of the landscape was somewhat minimised and the place of 'Sheffield' collapsed across time and space. Whilst this evaluation directly influenced the form and function of the new Sheffield Life and Times interactive map display, it also fed into thought processes in other galleries and mapping practices throughout the museum as a whole. Further inspiration was also gathered from outside of Museums Sheffield: elsewhere in the museum sector and contemporary culture.

The process of open innovation evident at Weston Park Museum used ideas and feedback from outside of the project team. Members of staff took part in visits to conferences including gatherings of the Society of Museum Archaeologists and the Social History Curators Group, as well as targeted visits to other museums. The Archaeology Curator and Curatorial Assistant took a trip to The Collection (Lincoln, Lincolnshire) in summer 2015, which was referred to many times within the subsequent design process.

> **[28/07/2015, Fieldnotes]:** "From their trip to Lincoln, [Archaeology Curator] liked the use of small objects blown up as images on the labels. [Curatorial Assistant] also liked colours used in cases in Lincoln. She reported that there was no particular theming, but that it went with the objects."

> **[08/10/2015, Fieldnotes]:** "Colours…The curators want it to be 'brighter' and 'zingier' and think that the current proposal is 'drab'. There was some reflection on the need to work out the reasons why they wanted things a particular way – in this case they were inspired by their visit to The Collection in Lincoln and the use of colours there."

These visits were an opportunity to gather inspiration and for staff to make sure their lines of thinking matched expectations and current practice within the sector. The Archaeology curators brought up this idea of inspiration from outside informing innovation during an interview.

> **[December 2015, Interview, Archaeology Curator]:** *"It isn't necessarily just the current space that you're reacting against or reacting to. And I certainly know that other members of the project team went and looked at other museums and we did the same – we went to Lincoln"*

> **[Curatorial Assistant]**: *"Every museum you go to"*

> **[Archaeology Curator]:** *"Partly to reassure ourselves that…we were on the right lines…there were things there that we liked, I think that's kind of inspired the choice of…brighter [fabric]…because we actually saw how nice it looked."*

The curator articulated how a specific aspect of the gallery's final materiality was directly influenced by an identifiable outside source. However, the curatorial assistant also suggested that the decisions they made were influenced by all of the museums she had ever visited, though in a less direct way. Sometimes an experience was sought out in order to obtain knowledge and ideas in response to a particular scenario, as was the context of the visit to The Collection. Alternatively, memorable aspects of specific previous experiences could be applied to new contexts and problems in a way that is similar to Falk and Dierking's (2000) description of how visitors learn and apply knowledge from their museum experience. Diverse and specialised previous experiences and planned activities could generate new ways of thinking about a situation or decision. Sometimes this knowledge was held by or could be obtained by staff directly, but at other times it might require involving another individual with specific knowledge in the project. Whilst the evidence here demonstrates how this happened in relation to colour choices, it is likely that similar experiences informed the decisions made with regards to map elements.

In the 2016 design, the idea of geographical coverage and representation became a key concern across several galleries. The curatorial team for 'Picturing Sheffield' discussed the extent of the 'Sheffield' they were trying to represent:

[December 2015, Interview, Art Curator 2]: *"Back in time, our earliest one was kind of 1830s…and at that point actually, Sheffield was quite small so when you look on the maps, there really wasn't much of it so there probably isn't that much out there that is any earlier than that…And then area wise, we kind of focused on, I suppose what you'd actually count as Sheffield, so we didn't really go into Derbyshire…"*

[Art Curator 1]: *"The city region, is it called the city region? The wider city region or something?...Because there's a few elements that might count as Rotherham now so…just past Meadowhall and things."*

[Art Collections Assistant]: *"There's also, I mean, Dore used to be in Derbyshire as well, so we have got a painting of the quarry in Dore, but we figure that's allowed…There's a lovely painting in the store…of Walter Bell's Derbyshire Quarry but it was just too far out."*

In their choice of paintings, the curators for this gallery sought to represent "the wider city region" basing their choices on the boundaries existing today, rather than using contemporary definitions of Sheffield from the date of the paintings. In this way, they suggested that those who feel an affinity to Sheffield as an over-arching place now reside across a larger geographical area and thus expanded upon the territory covered by this city museum to connect with them.

Figure 22. The map at the centre of 'Beneath Your Feet', Weston Park Museum, Sheffield.

Similarly, the new map and model in 'Sheffield Life and Times' extended to cover the city region, and the circular map placed at the centre of 'Beneath Your Feet' placed Sheffield at the centre of a landscape extending across South Yorkshire, North Derbyshire and North Nottinghamshire. This latter map (Figure 6) was intended specifically as an orientating feature and the first thing visitors would be likely to encounter upon entering the gallery. The extent of the region covered by the map visualised the geographical origins of the majority of the museum's archaeological collections and was shaped by political events and social connections over the 140-year history of the institution. The prominence of the Peak District speaks to the richness of the museum's prehistoric collections and the Peaks' importance (versus the contemporary city centre) as the focus of human activity in that period. But it also reflects the role of individuals, such as Thomas Bateman, in the formation of the collection and more contemporary policies that see

archaeological materials from North Derbyshire deposited with Museums Sheffield. Overall, this map demonstrated the 'throwntogetherness' (from Massey, 2005) of the collection creating the museum as a place in itself, whilst visualising the connections it has with other places and other times.

The different uses of mapping across the redevelopment project each sought to highlight and contribute to a narrative of the diversity of Sheffield by referencing a multitude of places and communities within it. In each gallery, working with different types of collections, the use of mapping was subtly different: maps might come before or after the objects in the visitor experience and different styles and technologies were employed. These various uses and designs were drawn from the different experiences of those involved in their design, external ideas brought in through elements of open innovation and the demands of the collections themselves.

As well as the change of purpose and increased prevalence of maps to support the desired narrative, the choices of technologies and styles used featured both changes and continuities between the 2006 design and the 2016 redevelopment. Piehl and Macleod (2012) argue that the importance of graphic design in museum interpretation is often overlooked. They argues that elements of the visual environment in the museum impact on the way it is experienced (Piehl and Macleod, 2012), and this can also be extended to include other elements involved in the creation of maps, such as three-dimensional models and touch screen technologies. In the Sheffield Life and Times gallery,

Figure 23. Maps within 'Sheffield Life and Times', Weston Park Museum, Sheffield. Left: 3D model, image, button interactive and touch screen installed in 2006. Centre: Map including 3D model elements, images with captions, braille panels and touch screen installed in 2016. Right: View of touch screen and gallery context as installed in 2016.

several changes and consistencies can be observed within the map exhibits. Both iterations included models of buildings, graphic representations of the city, interactive elements and a touch screen with additional content.

However, the configuration and content of these changed significantly. In figure 23, the earlier exhibit, you can see different elements which aren't necessarily experienced together: a historic

image of the city, a model of the city centre with touch buttons to light up particular sites, and a touch screen containing images of the city of the far left. The later exhibit, combines several of these elements through their location together on the table, although the touch screen could still be considered separate. The new tactile elements were designed to be hardwearing and low tech (whereas the buttons and lights could easily malfunction) and would be experienced simultaneously to the map graphic as they were incorporated within it. Whereas the previous image and model focused on buildings as landmarks, the graphic style used on the new map, as well as on the map in Beneath Your Feet, used modern roads as the primary orientating feature. This style also incorporates contemporary trends and influences from outside of the project team, a particularly evident one being the animals inspired by the Minecraft franchise on the map in Beneath Your Feet.

The use of mapping at Weston Park Museum can be argued as one of the main innovations of the redevelopment project. The process of its development and the final products give evidence of Chesbrough's (2012) open innovation, as ideas were drawn upon from outside of the project team. It also speaks to the development of a theory of vernacular innovation as these new ideas have been implemented in a way that spoke to the needs of the geographic, material and cultural context, yet outside of the dominant value system of the market. From the early stages, there were intentions that a new interactive display in 'Sheffield Life and Times' would more effectively meet the needs and interests of both museum visitors and staff, and this learning was also used to inform other gallery designs. The mapping practices now used at Weston Park Museum create a topographical representation of the city and region, using a variety of different forms and technologies in relation to different collections. Plotting collection objects on a touchscreen map, even one capable of showing different periods, is not unique or revolutionary across the wider museum sector – similar displays can be found in Liverpool, Manchester and Newcastle amongst others (which were possibly drawn upon in inspiring design choices). However, combined with the other new maps in the museum, it marks an innovation for this museum and in how the collections are positioned in relation to the city of Sheffield and its current inhabitants.

Developing Audiences

Another possible innovation was the development of the audience through changes to the social spaces offered by the museum. From 2006 to 2016, the museum was widely seen as catering primarily to children and families, as demonstrated by the aesthetic styles used in the museum, the nominations for 'family-friendly' awards and visitor feedback. However, during 'The Bright Future' project, there was a clear goal to engage more with a variety of adult audiences. This was a process of vernacular innovation: museums elsewhere and in the past have been designed almost exclusively

around adult audiences, the new offer here was grounded in the material, cultural and geographical context of Weston Park Museum.

Through this area we can also examine how a process of social innovation may be being attempted in the museum context. Social innovation is defined as "a novel solution to a social problem that is more effective, efficient, sustainable, or just than current solutions" (Stanford Center for Social Innovation, 2016). Eid (2016) expands upon this definition in relation to the museum, and suggests that this social aspect should be apparent in the process of development as well as within the outcome reached. Based on these definitions, social innovation in the museum can be understood as working towards new solutions that better address the needs of the museum's public.

In order to change perceptions of who could make use of the museum's spaces, staff sought to embed messages about who the museum is for through the displays and through programming. The intent to create spaces which encouraged particular demographics of visitors on particular days of the week was clearly articulated by museum staff and recorded in the minutes of meetings.

> **[01/07/2015, Meeting Minutes]** *"Norwood Hall doll's house. Moveable. Idea of toddler Tuesdays and adult quiet times."*

> **[14/01/2016, Meeting Minutes]** *"Trialling certain days of the week for toddlers or independent adults is still to be discussed...Timescale for this TBC. Maybe an adult discussion group will be trialled. Numbers could be limited by seating available."*

> **[14/04/2016, Meeting Minutes]** *"Lunchtime talks – Talks are part of adult rolling programme of activities on a Tuesday. Once per month. Other Tuesdays in month will have craft activity, book group and discussion group."*

> **[19/07/2016, Meeting Minutes]** *"Adult programme for [Weston Park Museum] fleshed out – weekly art club with six week blocks…Plus weekly changing rota of curator talks, book club, monthly friends' tour of some kind; plus open-mic style sessions of rotating local groups or projects. May badge this up as 'Sheffield Life'. Looking at ways of making this accessible to visitors."*

> **[10/11/2016, Meeting Minutes]** *"Adult programme – capacity issues…pulled some programme together. Adult Tuesdays."*

Some programming for younger children already took place at Weston Park Museum, though these were scheduled on various days of the week. The redevelopment project aimed, in part, to encourage more 'independent adult' visitors and thus this was a preoccupation for discussions about

new programming. The Project Co-ordinator and the Learning Officer spoke to staff at Exeter Museum about their approach to a similar segregation of audiences, and it was held as an example to aspire to by some staff. It was seen as an innovative solution that could be replicated to address the deficit of appeal and programming for adult audiences.

Whilst potentially innovative, the underlying principles have a number of unresolved ethical questions, which resonate across the history of museums as institutions. Such a practice bears a resemblance to the principles Ruskin adopted in one of the first museums in Sheffield and contains elements of the moral righteousness he demonstrated. When Ruskin founded St. George's Museum in Walkley, Sheffield in 1875, he did so with the purpose of giving the working-class people of the city access to objects which he deemed beautiful so that they may improve themselves (Barnes, 2011). He located the museum on a hill towards the west of the city so that a family might rise above the dirt and smoke of the city by climbing the hill on a Sunday afternoon and the opening times were specifically devised for this purpose (Barnes, 2011). A similar ethos is explored in more depth by Bennett (1995) in his Foucauldian analysis of the museum: the large public museum was a space to see and been seen, where the uneducated could learn refined behaviours from their social superiors through emulation. Yet enforcing such a strict code through surveillance delineated who was in-place in the museum and who was not: one could aspire to be 'in-place' through adapting one's behaviour and learning the social rules, but large segments of the public were not welcome to come without such observances. A paradox seems to be created where the museum attempts to be inclusive, and achieve social innovation, through exclusion. The identification of social problems (and their solutions) is always rooted in contemporary prevailing values and ethics. Social innovation suggests that something good is being done for society, but the term is problematic when we begin to examine who gets to define what 'good' means. Different individuals, communities and cultures hold different views on what is ethical behaviour and these discrepancies can be exposed within the museum. Gabriel (2016) highlights how principles considered to be ethical in the past (such as eugenics) would be rejected by many today, thus suggesting the problematic nature of defining social innovation across time periods.

It is these problematic notions that are evident within the institutional structures of museums and that, to an extent, underpin the desire to segregate visitor groups through programming initiatives. At the heart of it, advocates of this approach are attempting to address real concerns that it is impossible to meet everyone's needs simultaneously. However, by grouping audience segments in this way and designating particular days, it short circuits attempts at inclusivity and this is where a critical engagement with social innovation, informed by a commitment to institutional empathetic and relational curiosity, could be beneficial. By designating Tuesdays as the day when the needs of

adult visitors will be addressed, even if it is the day that logistically best suits the schedules of these 'adult visitors', it demonstrates Bennett's theories of surveillance, behaviour and discipline. On this day a particular subset of people will be particularly enabled to feel 'in-place' in the museum and perhaps other groups will try and behave to their particular social rules, or will in fact feel so out-of-place that in future they'll decide they'd rather visit on another day, when the social rules of the museum favour their desired behaviours. It is a fraction more accommodating with the temporal flexibility changing who may be the most 'in-place' at any given point in the week, but the main critiques fundamentally remain.

We may consider this development of audience provisions as a social innovation as it is partially a more efficient approach to inclusive access to public collections, yet there is a huge amount of remaining potential for a more just or sustainable solution. The existing binary opposition of staff and visitors creates a paradigm for museum theory and practice whereby space is understood as being made by the former for the latter: in this case staff always belonging in the space and then enabling different segments of visitors to belong at different times. Our understanding of social innovation in the museum is currently based on this paradigm, with staff creating just and sustainable solutions to address the needs of diverse visitors. However, MacLeod (2005) argues that we should recognise all as contributing to the making of museum space through use. A more egalitarian understanding of all as both makers and users of the space could transform the ability to enact social innovation in the museum: envisioned as everyone having the ability to contribute to the meeting of other people's needs whilst also being able to meet their own. This would also speak to Eid's (2016) suggestion that the social innovation should be inherent in both the process and the product of innovation.

A better solution could be understood as based on Massey's (2005) theorisation of place over humanist geographers' such as Tuan's (1977). Rather than seeking to make the museum as a singular place meaning the same thing to all individuals in a given moment (e.g. Tuan, 1977), a more innovative approach needs to be reflexive of who is included, what connections are made, and how stories-in-progress intertwine in the museum (e.g. Massey, 2005). This is prevented as the museum as an institution seeks to retain power and control over place-making by engineering the social context. In contrast, a more just social innovation requires a commitment to thrown-togetherness, the dispersion of power to enable visitors to make a place in the museum for themselves at any time. The traditional core functions of a museum are conservative and risk-averse, potentially creating barriers deterring the adoption of truly democratised and participatory methods of making space in the museum. Whilst it might seem (or be) impossible to create a museum as a space where

everyone can always find a place for themselves, it is an ideal that publicly funded institutions should perhaps strive towards.

In support of this ambition, I developed a series of nine visitor personas and presented these to the museum through a design-thinking task during a workshop in January 2017. I drew upon previous museum practice around segmentation models (Morris Hargreaves MacIntyre, 2016; Arts Council Engalnd, 2016), informed by theories of identity-related motivations in the museum (Falk et al, 2008) and the approach of creating personas for user-experience development in digital industries. Whilst the personas do not fully resolve being able to cater to a truly individual bundle of motivations, curiosity, prior experiences and abilities, they do offer a starting point for design-thinking in the development of museum spaces that has been tailored to the context of Weston Park Museum. Such an approach has scope for further exploration, drawing upon theories of social innovation as detailed in this chapter, combined with current work on design thinking by MacLeod et al (2015).

Flexible Display Systems

The creation of flexible display systems that would allow for a greater quantity of the collection to be on display at any time and for new displays to be made with limited financial and staff resources, was identified by staff as another potential innovation. This demonstrated a change to ways of working for Museums Sheffield staff at the Weston Park Museum site and was intrinsically linked to a process of innovation through reflective practice.

> **[December 2015, Interview, Project Manager]:** *"…that's the point of this flexibility and sustainability, is that we have changed, and we can learn, and we can add…there's not one way."*
>
> **[December 2015, Interview, Archaeology Curatorial Assistant**] *"…that flexibility is so important so people keep coming back and things will change more readily."*
>
> **[December 2015, Interview, Archaeology Curator]**: *"The difficult thing when you asked about whether you can picture what it's going to look like – well you can't and you kind of just have to take a leap of faith and go for it. But the good thing about the flexibility is, if it turns out a year down the line there's a case that we hate and the visitors hate…you can plan in to change that, you're not saying 'that's it fixed for the next 10-15 years because we can't change it unless we change the entire gallery'."*

The idea of flexibility, and the ability to continuously adapt the displays with minimal resources, became embedded within staff members' articulations of the purpose of the project. It was

mentioned in interviews, in meetings and written up in the minutes, though this is unsurprising as it represented one of the aims within the bid for funding to the Heritage Lottery Fund and thus a central underlying principle of the project. Flexible systems had previously been installed at the Millennium Gallery site in the redisplay of the Ruskin collection in 2011 and of the Metalwork collection in 2015, but barriers in the existing gallery designs had prevented their use at Weston Park Museum until this scale of redevelopment was possible.

Reflective practice offers us explanations for how processes of innovation may take place, especially when these are grounded in learning drawn from prior experiences. Definitions of reflective practice are offered by a variety of educational theorists and psychologists. Gibbs (1988) describes a process of reflective practice consisting of six stages: description, feelings, evaluation, analysis, conclusion and action plan. Similarly, Kolb (1984) saw linkages between a combination of processes connected to learning from experience and understood learning as based on reflective practice. As a researcher, I engaged in an explicit process of reflective practice, an example of which can be seen in the following extract:

> **[12/04/16, Fieldnotes]:** I arrived 5-10 minutes early for the gallery meeting…It feels like I gained several insights from the meeting today even though I am feeling groggy and jet lagged and finding it difficult to concentrate. Hopefully by Thursday, when I am in the office at the museum all day, I will have a clearer mind. Perhaps the insights that I feel I am gaining now are because I have refined and specified what I am looking for and I can be more aware of them having tried to take in everything from the meetings previously.

In my journal entry, I attempted to include the elements from Gibbs (1988) cycle of reflective practice: description "I arrived…"; feelings "groggy and jet lagged…difficult to concentrate"; evaluation and analysis "Perhaps the insights…"; conclusion "I gained several insights…"; action plan "By Thursday, when I…". I wrote at least weekly reflections on my participation and thoughts throughout the process, collated together in the field diary. By asking myself to record the details of a situation, whilst present in the museum, and then evaluate, analyse, and explore the implications of it in a mental and physical space more removed from the site, I generated insight and ultimately aimed to create innovations through my research at the museum.

In project team meetings, staff would be asked to reflect on the progress of their part of the redevelopment, and towards the end of the project staff were expected to reflect on the galleries and identify areas that could lead to future innovations (including the development of new displays).

[December 2015, Interview, Project Manager]: *"I want there to be the odd surprise in there…kind of like the thing that I thought would look crap looked brilliant, and the thing that I thought was gonna look brilliant looked crap… I say to my team that at the end of a project, an exhibition, whatever it might be, if you don't reflect that you would've done something differently, then…you've failed, you've missed the point, haven't you, because you learned nothing. So I don't expect them to be perfect, but that's the point of this flexibility and sustainability, is that we have changed, and we can learn, and we can add…there's not one way."*

Reflective practice formed a central focus of how the Project Manager expected staff to develop new ideas and to continue to bring new elements into the spaces even after the project had ended. Combined with an explicit commitment to flexibility within the displays, the project manager also sought to advocate for reflective practice in order to reduce some of the pressures she thought could potentially inhibit creativity and innovation (see extract at the start of this chapter). Spaces were created for museum staff to engage in reflective practice. Some of these instances took place in meetings, where agenda items or questions were used to prompt reflective thinking.

[08/06/2015, Meeting Minutes]: *"Think about good ideas you have seen elsewhere – what works well?"*

[28/07/2015, Meeting Minutes]: *"List of places – think about chronological and geographical spread and refine it."*

Often these prompts were successful in providing immediate social space or inspiration for later reflection, though sometimes they were met with resistance.

[08/09/2016, Fieldnotes]: Going around the table to share important updates on work in progress. When about half way round, reach one curator who answers 'What do you want me to say?'. The Project Manager counters this with 'What do you want to share – what's burning?'.

When social spaces are created there is still an element of individual choice regarding how one responds to or engages with it. This might include the choice to reflect in a particular way or attempts to avoid it. Le Cornu (2009) explores the process of reflection as based on both internalisation and externalisation and how this relates to the construction of self. She argues that the process of reflection should ultimately result in existential change, but that this process cannot be considered complete until the, potentially difficult, stage of externalising the meanings resulting

from reflection has taken place (Le Cornu, 2009: 291). The extract from my field diary above is an example of the Project Manager attempting to enable this final stage of the reflective process for other staff members within the context of a larger, institution-wide, process of innovation that was the 'Bright Future' project.

In one part of the project, reflective practice was used to identify ways in which to improve the flexibility and content of display spaces. To update the displays more easily and regularly, the materiality of the galleries needed to facilitate these new practices. During meetings many decisions were made in reference to the flexibility that the final choice would afford.

> **[08/06/2015, Meeting Minutes]:** *"Still want a suite of larger and smaller cases which can float between galleries as required, including a smaller 'highlight' object case. Consider the largest object you might potentially like to display and work to that. Double cubes are likely to be most flexible size, and probably not a tower case. It is a large space and we want to create a sense of presence."*
>
> **[03/02/2016, Meeting Minutes]:** *"[Project Manager] steers towards a neutral grey for future flexibility."*

Case dimensions, colour palettes and other aspects of the gallery materiality were decided upon in relation to the potential for future development and adaptation. Although it was the case constructions and incorporation of interpretation materials that offered a particular innovation to enable flexibility. For example, in the previous 'History Lab' gallery, one case was notably inflexible as it was built into a dividing wall and thus could never be moved. Interpretation was provided on a metal plinth in front of the case: adhered in a way that would be difficult to change what it said and with the unfortunate side effect of preventing the case from being opened. The contents of this case, and their interpretation, went largely unchanged between 2006 and 2016. For the largest cases in the 'Beneath Your Feet' gallery, clear alterations were made based on this previous experience. The two largest cases were both demountable and could be relocated, though they are bolted to the wall for stability and the likelihood of them moving is slim. Space was planned in front of the case to match the style of doors enabling staff to have relatively easy access to the objects inside. Interpretation was also mounted on reusable label holders meaning new designs and information can be printed to replace current labels. These design elements clearly demonstrate a process of learning from previous challenges.

Museum Sheffield's adoption of flexibility is not a unique approach. Rather it represents an innovation in the materiality able to support new ways of working at Weston Park Museum as a vernacular innovation. The desired change was driven by the current material and socio-economic

context of the museum. The display of a greater proportion of collections with greater opportunities to change displays is underpinned by the social purpose of the museum as belonging to the people of Sheffield and drew on inspiration from outside sources as another potential example of open innovation. Similar principles have been adopted elsewhere, notably at Kelvingrove Museum in Glasgow where discrete display units based on stories are intended to enable a redisplay of 50% of the display space every six years (Fitzgerald, 2005). The desire to display more objects in the public domain also speaks to trends of open storage that are visible across museums internationally, such as at the Brooklyn Museum (New York), the National Railway Museum (York), and the Museum of Science and Industry (Manchester). There was widespread support amongst the museum staff for the principle of being able to increase public access to the collections and within the current funding climate this is certainly an innovative practice that is being adopted by museums nationally and internationally to address sustainability concerns. Adaptations to materiality in order to facilitate the possibility of future changes were perhaps the easiest step and more time is needed to see whether there is sufficient space and capacity for staff to accomplish the bold agenda of display renewal through continued reflection of the strengths and weaknesses of existing displays.

The Story of Sheffield

The final innovation, changes to the narrative presented by the galleries and the museum overall, draws upon the others discussed so far: mapping used as a communicative medium; the selection of objects along with their quantity and frequency of display; and attempts to direct particular messages to particular audiences. Therefore, as an innovation, the adaption of the stories of Sheffield told can be seen as resulting from a series of other changes and alterations within the museum.

Weston Park Museum does not present a single story, rather the different displays, galleries, objects and people come together (or don't) to create unique or similar narratives. These will vary depending upon an individual's interests and prior experiences. Unlike some other communicative mediums, the city museum is firmly part of the phenomena it seeks to represent and as such has the clear potential to change how people view and experience the city. The embeddedness of the museum within the landscape can be seen in a few prominent objects within the museum that wouldn't feature within representations of the city except for the longevity of their presence within the museum: these objects include Snowy the polar bear and Ancient Egyptian mummies. In many people's imaginations, these objects are part of the story of Sheffield because they have been in Sheffield for as long as they can remember and thus have become 'of' this place. But despite the possibility of the museum to become a static representation of itself over time, there is an impetus for it to respond and represent changes in the surrounding city. Over a decade the materiality of,

flows to, from and within, and the sense of place of Sheffield have all changed and will likely continue to change in the future. Near the end of the project, museum staff began to talk about the idea of 'Sheffield' as the connection between people and objects, particularly when discussing the handling table and a resource for adult visitors. Discourses across the local media and amongst local people have moved from a singular focus on the city's white working class industrial heritage to recognising the diverse contemporary communities, industries, and activities that make up Sheffield. As these discourses change they filter through to the stories the museum chooses to represent, both in their content and the way they are communicated. The galleries and displays created as part of the redevelopment have elements that demonstrate movement towards portraying Sheffield as a topographical and pluralised landscape, and seek to enable more visitors to both find their own and understand others' perspectives of Sheffield.

The way in which a gallery was designed contributes to structuring how visitors make meaning there and the narrative they draw out: the details of its materiality; the place curators want it to be; and how it attempts to structure the flows of people. The narratives interpreted from a gallery, can therefore potentially be altered by changing aspects of its materiality, its sense of place or the flows around it. An example of this can be seen in how the design of the 'Beneath Your Feet' gallery attempted to influence how the archaeology of Sheffield is understood. Originally, the design for this gallery focused on a largely thematic structure within a timeline of Sheffield's archaeology located within just two, albeit large, cases at either end of the gallery. Over time, this structuring principle was altered to its ultimate layout.

> **[June 2016, Interview, Archaeology Curatorial Assistant]:** *"I think what…we have done, we've used the space and the position of the cases and the gallery to try and give people a sense of the…sweep of time…the previous gallery really removed objects from their historical contexts, so things were dotted around and it may have mentioned in the label what period an object was from but it wasn't immediately apparent to people…By using the…physical boundary of the gallery, so by using the external wall as a kind of loose timeline, hopefully…the use of that space will make the chronology, either obviously or maybe just subliminally a bit clearer to people…And it's kind of punctuated by the subject panels, which introduce the new periods, but even if you, I imagine a lot of people won't read those, even if you just wander around, perhaps subliminally you might get an idea that you are seeing things that…become more and more developed."*

The curatorial team placed significance on the chronological ordering of cases around the perimeter of the space to convey a construction of time as linear and the past as closed and separated from

the present, albeit with continuities and differences across periods. The focus on Sheffield enabled an articulation of what Gielen (2004) calls 'Local time', a simplified narrative of what was taking place here, with occasional references to 'Global time', what was concurrently happening elsewhere. The curatorial assistant articulated a desire for visitors to make meaning in relation to the objects representing continual and progressive development leading up to the city as visitors would experience it today.

However, other elements included within the final design speak to Gielen's (2004:156) concept of 'Glocal time': "an understanding of the past as being given meaning through 'an ever-moving present'." Thematic cases in the centre of the gallery, a small case for the display of recently excavated archaeological archives, co-curated displays with a local 'Friends' heritage group and several instances of 'yet discovered' or 'we think' in label texts all served to enable visitors to question the content presented to them. Despite the importance staff placed on having a dominant linear chronology within the gallery, the design considered possible future developments. The precise transition between time periods was only marked by subject panels that could be easily altered and replaced. Rather than a polished singular form resistant to dispute and adaptation, the gallery approached ideas of flexibility: through reflection and through inputs from outside sources, our knowledge and understanding of the city's past might change and the space may need to change with it. Overall, the narrative of Sheffield presented by the museum changed from one that identified it as a singular point within a larger world, to one that gave it a topography, attempted to accentuate different perspectives and visualise its 'throwntogetherness' (Massey, 2005).

Each of the four possible innovations discussed in this section was vernacular, a product of the situated context, at this time in Weston Park Museum, and each was the result of a creative process that sought to develop something, at least partially, new. The changes to mapping, the recognition of different audiences, the need for flexibility, and the changes to the story of the city, all reflected changes to dominant narratives about Sheffield or pressing concerns and debates within the museums sector. This change wasn't about being the first museum to ever do something, but reflected the situatedness of Weston Park Museum and the need for subtle shifts in response to the changing context of museums as institutions and landscape of the city it is embedded within. As a museum, Weston Park embraced practices and trends of multi-vocality. As a constructed image of the city, components and framings were adapted to reflect emerging understandings and ideas about the place, and about what it means to be a place. In understanding this change as a vernacular innovation, it is less about scalability and rather requires an evaluation of the relevance and importance of the change within a context.

Summary and Conclusions

By focusing on innovation as a vernacular process, situated in a particular context, we can better understand its relationship to the making of museum space – in this case at Weston Park Museum from 2014-16. Who gets to say whether a new space is innovative, and within what context, is contested. Demands from funders for global cutting-edge practice may not be reasonable or achievable and, therefore, the idea of 'vernacular innovation' could hold potential for museum planning, as well as applications within wider heritage, arts and culture organisations and even social enterprises. By focusing on creating spaces that meet the needs of users (through formative and summative evaluation, building upon and adapting current elements) the museum can become a space for, and institution built around, continual innovation. Vernacular innovation, building upon vernacular creativity and incorporating open social innovation models and theories of reflective practice, recognises that the museum changes over time in a non-linear fashion and facilitates the deconstruction of the staff/visitor dichotomy that currently exists in the making of museum space.

Whilst this chapter, and its two predecessors have considered the empirical data gathered from Museums Sheffield over the course of the redevelopment project to generate theoretical ideas and development, the relevance and use of these can only be tested through attempts to apply these back to museum practice. The final analysis chapter will take elements from these emerging theories of institutional sociable curiosity, professionalised meaning making and vernacular innovation and expand upon them in dialogue with museum staff.

[01/06/16, Fieldnotes] Transgressions and Trust

As I approached, I saw two children go through hoarding into the archaeology gallery. I hurried up to the door and said 'sorry this gallery is closed' before they could get more than a few feet. The older girl (9 or 10ish) said they had seen the roundhouse (she pointed to it) and wanted to go and play in it. I assume the boy (aged 5 or 6) was her brother. They left the gallery and went back to Sheffield Life and Times. As I pulled the door closed a visitor assistant came over who had seen me but not the children. They didn't recognise me but realized the situation from the staff lanyard in my hand and the children walking away. I was easier to spot over the top of heads of lots of children who were in Weston Park Museum for half term.

[11/01/17, Workshop with Museum Staff]

[Decorative Art Curator]: *"I think if you asked the average member of the public…should you touch things in a museum, most of them would say 'no'. They'd say 'I don't think you should let people touch things'…"*

[Project Manager]: *"It just takes one, doesn't it."*

[Decorative Art Curator]: *"Yeah, like 'I'd be fine with it but I wouldn't trust someone else with it'. If we put everything on display and see if it breaks or not, people would be horrified and think we weren't doing our job…"*

[Project Manager]: *"But imagine it…saying you could touch everything…one of the reasons that I wouldn't want to touch something is…give me a bloody dodo bone or something and I might break it…and carry that around for the rest of my life? Jesus no…There is something you take on in your professional life where you are incredibly careful but actually as an individual-"*

[Chief Executive]: *"Most people are."*

[Archaeology Curator]: *"Yes, but equally, percentage wise, all you need is one percent of our visitors who don't actually realise how significant a dodo bone is or a child who doesn't really differentiate and they're waving it around or dropping it, or people just accidentally drop things, and it shatters and you cannot replace it. That's fundamental, that you cannot replace it."*

[Natural History Curator]: *"…there will be 0.01 percent of the members of the public out there who will see something, they'll want it, they'll take it and you can't say that that doesn't happen because it happened, many, many, times. There is an issue of trust going on here, because all it takes is someone with a felt tip pen to draw moustaches on all the artworks."*

[Chief Executive]: *"Oh well, now there's an idea."*

[Natural History Curator]: *"It happened. There's a catalogue card in I think it's 1940s, there was a kid that was prosecuted in this museum for drawing spectacles I believe on one of the artworks. I don't know which artwork it was off the top of my head."*

[Chief Executive]: *"How fantastic, What a fantastic story, I'm just, into that. What a brilliant story."*

Chapter 7:

In Conversation with Museum Practice

On the 11[th] January 2017, instead of the usual monthly project team meeting, I ran a workshop with thirteen members of staff from Museums Sheffield. About half worked in collections and curatorial roles and the others had diverse responsibilities for marketing, volunteers, projects, visitor services and senior leadership. Through this workshop I presented my lines of thinking so far, as a provocation for discussion and debate: what could these theoretical ideas mean for museum practice? Ingold argued that "A world that is occupied…is furnished with already-existing things. But one that is inhabited is woven from the strands of their continual coming-into-being" (2008:1797). This ethnographic project, which drew heavily on participant observation, was my attempt to inhabit Weston Park Museum for a period of time. Ingold goes on to describe these strands coming together as an interwoven tissue made up "not of connectable points but of interwoven lines, not a network but a meshwork." (Ingold, 2008:1805). Within the ethnography I embedded my own strand of coming-into-being within the museum and sought to identify and describe some of these strands and their interactions from my perspective. These findings have been translated into the previous three chapters and were communicated to museum staff at the beginning of the workshop through a presentation utilising object-based learning approaches to represent ideas and concepts, and a design-thinking activity drawing upon a series of visitor personas I developed from my research (appendix 4).

The second half of the workshop referred to here, and this chapter which resulted from it, is the unfinished, unravelling or frayed edge: the loose ends of possibility at the point of coming-into-being. As such, this chapter does not seek to present a clear argument or set of recommendations, except perhaps an argument for the potential usefulness of this provocative approach in exploring views that overlap but differ. Rather it documents a range of voices and a variety of perspectives through direct quotations from the workshop transcript (indented and formatted in italics) and a limited amount of commentary on these from myself as the researcher (always subject to my own voice and perspective), including how these intertwine with the academic literature. The provocation given sought to describe a point on the horizon in what I believed to be the direction of travel; had I given a radically conservative provocation, which perhaps described where museums had been some time in the past, the responses of the staff would most likely have been substantially different and that should be noted when considering the text below. Whilst the previous chapters

have looked for the resonance that enables broader generalisations, this part of the text is preoccupied with the specifics and variance of time and place, location and application to practice.

First, I will explain the provocation that I put to museum staff in the form of a 'museum manifesto' before turning to a series of themes that emerged in the reactions.

A Provocation: My 'Museum Manifesto'

> "Dialectic and dialogic conversation procedures offer two ways of practicing a conversation, the one by a play of contraries leading to agreement, the other by bouncing off views and experiences in an open-ended way." (Sennett, 2012: 24)

Within the workshop I sought to utilise the latter of these, dialogic conversations, to uncover the limits of consensus: the points that needed further exploration, that offered jumping off points for a future of possibility, and that were at the edge of ideas coming-into-being. Through the workshop and provocation format a space could be created for dialogue between myself and museum staff, theory and practice, but also between individual members of staff themselves. This chapter reflects that workshop and that dialogue "bouncing off views and experiences in an open-ended way" (Sennett, 2012:24); not necessarily leading to any agreement or resolution. A rich conversation opened-up after I shared my 'Museum Manifesto' as a provocation for discussion. This manifesto is intended to refer to the institution of the museum (as found in the UK context) generally and was not limited to just Weston Park Museum or Museums Sheffield in its scope, though some of the discussions it provoked in this workshop referenced the specific contexts of current or former local authority museums. For me, I believe the manifesto could offer a blueprint for my personal understanding of an 'ideal museum', though I was aware that this vision would not necessarily be shared by the other participants. Therefore, my act of sharing this manifesto was a provocation to uncover the points of departure in our various views.

> **[11/01/2017, Researcher]** *"…I have a vision for museums where:*
>
> *(1) There is no delineation between staff and visitor, the space and collections truly belong to all, used by all, cared for by all, and reshaped by all.*
>
> *(2) Rather than preventing exposure of the collections to ensure their survival, it is accepted that the life of objects continues once they have reached a museum, we trust all who encounter the object to do the utmost to preserve the object for future people's curiosity, whilst using it in a way that satisfies their own.*

(3) That if an object can no longer be used for any purpose in its current form, it is repurposed through a change of form or responsibly, ethically and sustainably dispose of the object or its constitutive materials.

(4) That a museum is embedded in its community: it does not end at the end of a physical space, but rather flows through the community in materiality and ideas passing between individuals so the objects, in a way, are put to use as a library does its books.

(5) That collection takes place in a way to further the relevance and usefulness of a museum to its community, through donation and purchase and manufacture, seek to assemble a collection that feeds the intellectual, practical, spiritual and cultural needs of the community it serves.

(6) And that barriers that prevent access or belonging of any individual are proactively identified and overcome.

To me this is the theoretical, philosophical…end point…but that is not grounded in practice and so my question for a little bit of a discussion is: what are the rules of a museum that have to stay the same for it to continue to exist as a space and for the purpose it is intended, and which of those rules are just our normalised ways of working that don't need to be that way, that could be changed to make a museum more fit for purpose, more relevant?"

In writing the manifesto, I was aware from my experience at Weston Park Museum that certain points would be less compatible the views of staff and current practices. The elements of this manifesto grew directly out of my findings explored in previous chapters. Points 1, 4 and 6 stem, in part, from ideas around sociable forms of curiosity and how these are shaped at an institutional level. Whereas, point 2 draws upon individual curiosity and curiosity-driven practices. Point 1, 3, 5 and 6 all link to the question of who gets to make meaning in a museum and how; in some elements attempting to dismantle the proposed idea of professional meaning-making. All of the manifesto points connect to the idea of incremental change and embedded within a context, thus resonate with vernacular innovation as proposed in the previous chapter. Though beyond these connections, the development of the manifesto was also authored drawing upon my personal experiences of working in the sector for the past six years and my passion for museums as institutions capable of supporting social justice. Rather than offer a lengthy explanation that sought to gradually reach my conclusions, this provocation opened up a space for discussion about how others saw the gap between current practices and this bold future vision.

Delivering this manifesto within a workshop sought to open-up possibilities for others to respond in a non-threatening environment and thus to gain insights into the lines of thinking of Museums Sheffield staff. The use of dialogue and the development of theoretical ideas through exchange is evident in the form of the academic conference: where members of the academic community of practice exchange knowledge and ask questions of each other. This workshop sought to offer a similar forum for the development of the ideas within this thesis, but in dialogue with practitioners instead of other academics and in a way that allowed dialogue between those practitioners and not only with myself as researcher. Isaacs (1999:41) proposes that communication between a group of people begins as a conversation, where people turn their attention to each other, before developing to the point of deliberation, where ideas are weighed out. According to Isaacs (1999:41) this is a fundamental choice point where we may take up a defensive position (which can be both productive or unproductive) or we may choose to suspend and listen without resistance. Taking this latter route can result in reflective dialogue and subsequently generative dialogue that "invents unprecedented possibilities and new insights" (Isaacs, 1999:41). Within the workshop, I used this provocation to enable an element of distancing the content from the participant's immediate context whilst retaining its relevance. The degree of abstraction was critical: talking about museums generally rather than Weston Park Museum or Museums Sheffield initially to discourage defensiveness and build towards reflective dialogue without explicitly asking research participants to do this. This inevitably has an impact on the data created in response and in writing this chapter I have spent significant time exploring how and where the data explores museums generally or the case study museum specifically. The dialogue in the workshop, I believe, reached Isaacs' (1999:41) stage of reflective dialogue with tentative steps toward generating new possibilities. These new possibilities emerged further through the continued communication within my writing, where I used the data and responded to it. Therefore, to ensure it is dialogic until the final form of this chapter, quotations and my elaborations and analysis have been subsequently developed between myself and my research participants: all participants have had a chance to edit and add to their direct quotations used in this chapter and key stakeholders have engaged in the supervision and editing process and contributed to the new insights generated in this text.

Returning to the start of the conversation, though, my vision, in the form of the 'museum manifesto', was written on cards which I handed to the thirteen members of staff sat around the large table. The ensuing dialogue would meander its way through a variety of subjects, yet apparent threads were created exploring the issues of: trust and risk; professionalism; truth and meaning; purpose and relevance; and the institutional form. Sitting around the table, there was

contemplation, disagreement and excitement evident in the participants' expressions, and a bubble of anticipation grew during the deliberations that marked the start of our dialogue.

Reactions: Trust and Risk

The first theme that emerged from the research participants centred around ideas of trust and risk. These responses stemmed from items one, two and three in my provocation, though were particularly triggered by my phrase 'we trust all who encounter the object' in the second point. Some threads that emerged: connected the idea of risk taking as able to fuel innovation within practice; highlighted the difference between taking risks in a museum compared to a for-profit business; and touched upon curiosity about people who had taken risks in the past.

> **[Chief Executive]:** *"I really like that notion of there being no delineation between people who use the collection and use the museum...we've looked a lot at how we appear different voices and how we open the museum and how we work with people. That we're part of a network rather than being at the centre of the universe in our little ivory tower. Not that I'm saying we are, but there is a perception. And I think one of the things that I'm quite interested in is use and what purpose, who we are. I mean you talked about you know being publicly funded and having a social purpose, but actually what does that really mean and what is needed now. But then also the notion of risk, of being prepared to take risks in a slightly different way. I don't know if I circulated it to everyone, what John Orna-Ornstein said about risk, did you see that? I'll forward you the link, it's really interesting because...he's the director of museums for Arts Council and he was sort of talking about a particular display he'd seen it was about people, movement and migration and they've displayed all these objects with no cases and nothing around them and they were all really personal things that people who had travelled to this place had brought with them and so there was a number of things going on that were powerful stories, they were taking a risk and trusting that people visiting that would respect the thing, but would engage with it, and that it was curated together with many voices. And for me it was really, really powerful and it does kind of beg a lot of questions about rules and about risk and about use..."*

> **[Archaeology Curator]:** *"An element of that is...that because the collections don't belong to us, personally, they belong to everybody...you can take risks with things that belong to you and I don't know if in that example whether the things had belonged to individuals who said 'yes I'm quite happy for this to go out, if it gets stolen or damaged I'll take that risk' while with the museum collections if something gets damaged or stolen then it's a whole sort of PR thing of how the museum isn't looking after the people of Sheffield's stuff...I think it's the*

same with money – that's why quite often you can't be as innovative because it's not our own money because a business they can say 'okay we are going to risk a hundred thousand pounds on this project, it doesn't work – fair enough, that was a business risk. If it does work and we make three million pounds – great!' While if we waste a hundred thousand pounds then we've got to write a depressing report about how we've wasted it, and we are never going to make three million pounds so there's not that same sort of risk…So because our resources aren't ours you almost have to be even more careful, and I think that's why…we end up in this narrow…and we shift a little bit with the innovation but we can't just throw everything to the wind because it's not ours…Because when I read your number two…I could feel my muscles tensing and I was just thinking 'oh my god!' and I wish I didn't feel like this because it should be a great thing and you want to be able to trust people, but the problem is it's…can we take that risk, that we trust people, is the problem. I mean I like to think that most people don't come in thinking 'right I'm deliberately going to damage something' but I break things at home all the time…"

Amongst staff there was an association drawn between innovation and risk-taking. This had positive connotations, as in the ability to take calculated and managed risks to enable the public to feel a greater degree of ownership over Weston Park Museum and its collection, as well as associated negative impacts. Individuals articulated their fears of particular risks (mostly damage and theft) and the consequences of those (degradation of the overall collection and blame being ascribed to them as individual professionals). Seven of the participants had a curatorial role where they worked with and took responsibility for Museums Sheffield's collections; these concerns were raised predominantly by those with a curatorial role and speaks to the concept of 'object-love' described by MacDonald (2002) and Geoghegan and Hess (2014). A curator is understood as somebody who is responsible, or cares, for objects in a museum, thus love for the collections becomes a component of successful curation (Geoghegan and Hess, 2014). Throughout my ethnographic project I witnessed, and experienced myself, how this object-love manifested in practices and dispositions influencing the design and installation of the new spaces, and here it appeared in another form articulated in the curators' fear of risk taking when it came to the material welfare of their objects.

> **[Decorative Art Curator]:** *"I think if you asked the average member of the public…should you touch things in a museum, most of them would say 'no'. They'd say 'I don't think you should let people touch things'…"*

> **[Project Manager]:** *"It just takes one, doesn't it."*

[Decorative Art Curator]: *"Yeah, like 'I'd be fine with it but I wouldn't trust someone else with it'. If we put everything on display and see if it breaks or not, people would be horrified and think we weren't doing our job…"*

[Project Manager]: *"But imagine it…saying you could touch everything…one of the reasons that I wouldn't want to touch something is…give me a bloody dodo bone or something and I might break it…and carry that around for the rest of my life? Jesus no…There is something you take on in your professional life where you are incredibly careful but actually as an individual-"*

[Chief Executive]: *"Most people are."*

[Archaeology Curator]: *"Yes, but equally, percentage wise, all you need is one percent of our visitors who don't actually realise how significant a dodo bone is or a child who doesn't really differentiate and they're waving it around or dropping it, or people just accidentally drop things, and it shatters and you cannot replace it. That's fundamental, that you cannot replace it."*

At times, the fear of damage and theft was rationalised against the understanding that the collections don't belong to the curator individually: that they are the caretaker of the objects on behalf of the public of Sheffield. The level of access staff have to the collections, and the resulting responsibilities, forms part of their professional identity. Within this there is a tension between: a responsibility to be innovative and create new ways to enable the public to feel ownership and access the objects now; and a responsibility to mitigate against risks to enable the public of the future to do the same. However, these quotations disguise some of the practices observed during the 'Bright Future' project, which successfully negotiated this tension. For example, the development of handling trollies, allowing visitors to handle both collection objects and replicas, and the co-curation projects in each gallery where curators worked in partnership with community organisations, both demonstrated professional practices that balanced conservation and engagement. These concerns inform the processes of risk assessment in devising and managing such activities, but have not prevented elements of public engagement with objects from taking place at Weston Park Museum.

There may also be a role here for sociable curiosity in both institutional and individual forms. Logic would suggest that if one gets to know other people, it is easier to build relationships of trust. This would be particularly the case if that process of getting to know one another were relational, a process of working together, as in the case of co-curation with community groups. There may be

potential, though this has not been empirically tested during this case study, for staff working together with other stakeholders on these curiosity-driven activities to develop stronger relationships of trust. These could possibly stem from a greater culture of trust amongst institution staff, or equally from a greater sense of responsibility amongst the engaged individuals. A lack of trust presents one of the greatest barriers to breaking down the dichotomy drawn between staff and visitors, and I would suggest that the encouragement of sociable curiosity at both the institutional and individual scale could serve to further bridge this divide.

Reactions: Professionalism

The second emerging theme focused on professional identity and others' perceptions of it. Related to point one in the manifesto, the deconstruction of a divide between staff and visitor was seen as a possible challenge to something central within their own professional identities. Emerging threads touched upon: the ownership of collections; the roles and responsibilities of museums and museum professionals; the contradictory pictures of museums as both high-tech places of preservation and simultaneously dusty storerooms; and the sense of futility around complaining about the lack of resources currently within the sector.

> **[Decorative Art Curator]:** *"…when we say 'yes the objects are owned by the public', if you asked the average member of the public and said 'well you do it, you put on a display, the objects are yours, you deal with them', then they'll say 'well that's not my job'. Maybe it's an older generational thing that when I want to come into a museum I expect – it's somebody's job to tell me what this is."*

> **[Project Manager]:** *"Tell me the story, I'm being entertained!"*

> **[Decorative Art Curator]:** *"Or kind of you know a curator does this, and kind of like it's not my job I'm not trained to do that. It's a professionalism thing isn't it-"*

> **[Natural History Curator]:** *"…There was a recent museums survey that asked the general public what they thought museums were for and as a museums professional I fundamentally disagreed with what the public said…Because they didn't understand actually that museums have a place – picking on this one in particular – have an environmental remit for example. They didn't understand that actually all of this stuff that they were looking at has got all this information that helps protect our environment, they didn't get that…"*

Connected to the theme of trust and responsibility above, the divide between staff and visitors was further reinforced in reference to professional knowledge and skills. In the conversation staff articulated a range of decisions that they could make based on their professional expertise that

members of the public could not, and exposed the tension between older and newer understandings of what it means to be a curator or museum professional. Several authors have described these changes to skills needed by museum professionals, including MacDonald (2002) and Arnold (2015) who suggested that curatorial practice has broadly undergone "a shift from caring to creating". Similarly, Simon's (2010) work on the participatory museum is also emblematic of the rising trend of co-productive practice. Yet these changes put forward by academics and practitioners face barriers to implementation, such as those of national institutions to which individual museums are answerable through funding and accreditation processes. There is a precedent for making museum spaces where a whole variety of different stakeholders can explore their curiosity and pursue innovative projects together, including at Weston Park Museum. Yet in many individual museums and for many museum professionals these approaches centred on engagement and democratisation conflict with pre-existing professional training or capacity issues created by the dramatic reduction of the size of the museum industry workforce over the last five years and a continual need to adhere to the specific requirements of being an accredited museum in the UK.

> **[Decorative Art Curator]:** *"…when we did [2012 Cultural Olympiad Exhibition], there was this whole thing about…user-generated information and content and…one of these museums projects that they did, on launch day they were like 'yeah we're going to collect stories from everybody' and then everyone recently loses their job, and it never happens…The fact that you, and yeah this is 5 or 6 years ago, that you had to let your public write the labels or collect information on your behalf, which is a fantastic idea until you have to employ someone to do it…it's just a practicality thing. It'd be great but-"*

> **[Visual Art Collections Assistant]:** *"Yeah and in terms of the accessibility of the collection I think [Museum A] actually put their entire database and made it available, sort of crap photographs, misinformation, everything warts and all…then again I don't know if you're trying to present this image of quality and attention to detail…"*

> **[Project Manager]:** *"But that's life isn't it? I actually respect [Museum A]…for taking that approach as because it is warts and all not, you know, whether it's been done brilliantly or whatever, but actually that there is something there that we need to demystify is that we're not in raiders of the lost ark and that's not what's at [Store]…you know, what else have they got in there?...You know, actually…that knowledge is really important to start"*

> **[Visual Art Collections Assistant]:** *"…there are just like dichotomies everywhere you look, it's like some ways work really well for some people and not for others. You know people who*

really like attention to detail…it might be preferable to not have access to the collections warts and all whereas other people might be 'yeah'…"

[Decorative Art Curator]: *"It's fear, it is a fear that people will think we don't know what we're doing and think that…there should be this kind of pristine futuristic looking store with this wonderful computer and lots of, it's all terribly well done, it's all terribly well-organised… and then the converse of that, every time you read the newspaper 'a dusty museum store', you don't want to think that they're not looking after things properly, versus you know…time and money and people are constrained and…there is a balance there to be had of ideal standards versus realism."*

[Natural History Curator]: *"Then we get into the whole argument of, yeah we're under-resourced, as an organisation, we're massively under-resourced, we all know it, everybody knows it and yet, who do we tell? Who do we say we're under-resourced to? Or do we just kind of carry on…"*

Staff articulated a number of concerns that impact on their ability to adopt more participatory practices in the museum including: a fear of being perceived as unprofessional, a lack of resources, and a need to manage public expectations. The current structures within the sector have created a museum service in Sheffield, at least partially, dependent on external institutions for its survival. Museums Sheffield's web of relationships draws upon funding from Heritage Lottery Fund, funding and accreditation processes through the Arts Council England, ethics from the Museums Association and, as a former local authority museum, a complex relationship with Sheffield City Council. To this end there is a compulsion to look to and align with the priorities of these other institutions (which have changed over time) whilst being faced with the challenge of not necessarily having adequate resources to sustainably embed supporting practices within the organisation, and facing somewhat conflicting priorities amongst these various other institutions. Ideas and ambitions are constantly being balanced against practicalities. In 2012, faced with a 30% reduction in its overall budget, Museums Sheffield made 45 members of staff redundant in the space of a few months (Museums Sheffield, 2012; Ahad, 2012). Current staffing levels (which have not increased significantly) sit at just over 50 staff working behind the scenes and 32 part-time retail and visitor assistants. In 2012 staff faced the challenge of trying to maintain the same quality of visitor experience with a severe reduction in human resources. A 2016 report commissioned by the Arts Council found that museum staff across the UK were being asked to do more for no extra reward: "Many of the workforce have remained in the same role in the past three years, but over a third report an increased level of

responsibilities with no corresponding increase in pay" (BOP Consulting, 2016: 2). The study also found that:

> "Overall the workforce has a strong emotional commitment to their job and higher levels of self-efficacy than average. Less positively, the workforce is slightly more pessimistic and more risk averse than average. Respondents are quite critical of their organisations, reporting low rates of co-operation across organisations, and poor handling of change management and innovation. They give senior management a lower rating than average and feel that the career development support they receive is low. Freelancers and those in management roles stand out as being more motivated to achieve results, more optimistic and with a higher tendency to take risks than the workforce as a whole." (BOP Consulting, 2016: 3)

The constant demand for innovation, based on a linear and cumulative narrative raises the bar faster and further in a sector where the workforce is more risk averse than average. Within this survey, 42.6% of respondents said that they had attended business or management focused CPD, and for 18% of these it had focused on the subject of innovation. However, understandings of innovation as cutting edge, linear and novel are pervasive and thus difficult to challenge. A continued conscious effort to mainstream the idea of localised (vernacular) application of creative ideas, building upon the current situation rather than requiring constant linear progress, could lend itself to boosting morale within the museum workforce in the UK.

The wider impacts of austerity across the sector have affected the expectations of and narratives around volunteering in museums. In recent years there was felt to have been a changing role for volunteers within the institution and this has drawn attention to several tensions.

> **[Project Manager]:** *"…how do you…get…different people together to kind of decide what's going to be in this gallery. But then…making sure those people are…like are they doing it because they have time and they're happy to give their time free or are they doing it as another part of the job? How's that working because you can't just expect people to do things for nothing...Because I sometimes feel that with volunteering that we have some volunteers who do roles that we potentially would pay for at points…and because the skills are so unique and how do you do that in…a really honest and open way that everybody's on a similar grounding...I mean in terms of like feeling bought in and feeling…able, able to contribute."*

Amongst museum staff across the sector, there is a fear of exploiting volunteers through current models and that by allowing them to work unpaid, it could undermine the value of professional knowledge and skills. As discussed in previous chapters, the practices of staff are institutionalised and professionalised through their training and experience. As Knell (2011) suggests, this is necessary for activities to be done in the accepted way. As funding and paid staff resources have diminished many feel that the use of volunteer labour has become more of a necessity, though Holmes (2006:241) suggests this has been a recurring issue in the museums sector for over 30 years. Whether a new phenomenon or not, through intensive levels of volunteering and, for some, their pre-existing skills, many volunteers also complete activities in the accepted professional approach yet are not remunerated in the same way for their time. This situation raises ethical considerations, but also there are fears it could undermine the value of the professional knowledge and skills of paid staff. Simon (2010) highlights some of the difficulties with embedding more participatory practices within museums as institutions, and this offers another example. The dichotomy of staff/visitor is currently tethered to the value of professionalism. Therefore, any attempts to complicate that dichotomy, as I have argued for within this thesis, must directly and critically engage with value of professional practices so as to not undermine or dismiss them. Within museum research and practice there are many examples where the ethics and power relations of volunteering in museum contexts have been interrogated, including contributions from Graham and Foley (1998), Graham (2004), Holmes (2006), Orr (2006), and Holmes and Edwards (2008). Across the industry, we can recognise that all individuals contribute to the making of museum space in different ways and that ethically some practices should be performed by paid staff. These space-making practices are also often meaning-making practices and, as such, democratising the making of space in museums is intrinsically linked to the creation of knowledge, truth and meaning.

Reactions: Truth and Meaning

A third emerging theme explored this creation of knowledge, truth and meaning. This theme spoke to three strands of the provocation: item 2, the continued life of objects; item 5, collection and interpretation of objects to feed intellectual, practical, spiritual and cultural needs; and item 6, the facilitation of everybody's ability to access and belong within museums. This discussion centred around: story-telling using objects and permission to do this; the role of museums in creating knowledge and opinion; and the multitude of ways in which people make meaning in museums.

> **[Visual Art Collections Assistant]:** *"I found a big basalt ware mug that's kind of this big [indicates with hands] with a silver rim…and the first thing I thought when I looked at it was 'wow I wonder what happened to the giant who used to use this mug', and that's something*

in store that happens to me all the time that you can see something and it says things like that to you, and I think I'm personally interested in that as, yes it was made by Wedgewood in the mid-20[th] century, but to me it is also a mysterious giant's cup. There's nothing to say that it isn't as far as I'm concerned…Things don't just have to be one thing, you know, one thing that's the truth."

Museums often translate knowledge between different forms and contexts, and as such researchers in this discipline regularly engage in debates of authenticity and truth (Fromm et Al, 2014). In recent years there has also been an increasing number of exhibitions that have openly challenged and emphasised the constructed nature of any knowledge displayed within museums. Examples include Grayson Perry's (2011) 'Tomb of the Unknown Craftsman' at the British Museum, comedian Bill Bailey's (2017) contribution to 'Cabinet of Curiosities' at the Maritime Museum in Hull, and the artist-led exhibition 'What Can Be Seen' at Millennium Gallery, Sheffield (Etchells and Horvat, 2017). These exhibitions demonstrate connections between curiosity, meaning-making and innovation, and how institutional forms can be used or subverted to: give precedence to particular meanings; limit or encourage different curiosities; and influence possible subsequent innovation. Similarly, in their making of spaces at Weston Park Museum, staff contemplated the construction of knowledge, truth and meaning with visitors and the wider public.

> **[Project Manager]:** *"There's two bits though, isn't there, there's the actual object and there's the knowledge about the object and really we need both in an ideal world but in some cases we have no object and in some cases we have no knowledge and actually that to me is the empowerment thing…the knowledge is the bit that is about the empowerment really…the object we can get there with our documentation and whatever but, actually if we can share that knowledge then people come with an opinion don't they? And if you don't have any knowledge, how can you form an opinion?"*

> **[Decorative Art Curator]:** *"The thing is people will have an opinion and a lot of people feel like there is a right answer and they're wrong, like we're the guardians of all truth and theirs is an opinion and…ours are the facts"*

In their articulations of the processes of meaning-making in Weston Park Museum, staff recognised the complicated and varying construction of what is opinion and what is fact, reflecting a constructivist paradigm. As Silverstone (1994) argues, meaning is made by the visitors in their museum experience where they complete the messages provided by staff. Similarly, Falk and Dierking (2000:87) argue that visitors "come with a wealth of previously acquired knowledge, interests, skills, beliefs, attitudes and experiences, all of which combine to affect…what meaning, if

any, they make". This broadly matches the Project Manager's comments: that a museum can provide both an object and a certain amount of knowledge about it, from which visitors create their own opinions. However, within the workshop, there still appeared to be tensions for some staff members in their understanding of whether there can be something inherently truthful about certain pieces of knowledge. Staff in the workshop understood meaning-making to be part of the purpose of museums: the provision of information for the public to use to their own ends. Despite the apparent awareness of a constructivist paradigm for meaning-making amongst staff, many institutional norms and parts of professional practice within museums are still based upon a more uni-directional model of instruction: a museum as an authority of truth. For one, the continued dominance of the museum label as a technology of communication that is not editable. As such, discourses of what meanings are appropriate or correct in museums continue to circulate.

Amongst my emotions at this late stage of the project, was a regret that my own emerging curatorial practice was not able to significantly challenge, or produce new, narratives of gender or race in the Romano-British cases in 'Beneath Your Feet'. I remember, when undertaking research for the case, being struck by small fragments that might have allowed the visibility of certain aspects of Romano-British society, which were otherwise lacking from the narrative constructed through material culture. I was aware of and keen to challenge patriarchal and white narratives at that stage but ultimately did not. There was no moment of specific decision to erase these identities from my representation, but as a curator it is easy to adopt existing practices where you do what is expected, follow dominant narratives and let status quo stand. Lynch and Alberti (2010:15) note "Racism can be manifested not only in that which is spoken, but also in that which is left unsaid, including how words are expressed and, ultimately, in how agreements are arrived at and decisions made". This is also true of sexism, and as a result describes how both patriarchy and white supremacy can function. As a curator-in-training I was unwittingly inducted into a community of practice with such norms (i.e. curatorial practice within UK museums) in a way that only came to light through later reflexivity. It was not other museum staff telling me what could or could not go into the case but a number of circumstances that facilitate complicity. With limited time and resources (even with the additional time for research that my position afforded) stories of minorities and those who have been discriminated against throughout history are hard to find, particularly amongst archaeology collections when they might belong to demographics less likely to leave material remains. There were also constraints of space as nuanced stories become condensed simply to fit on the label. Elements of the display do not need to refer to white or male or able bodies for them to be the assumed subject of their description; conversely without explicit reference to how the information in this case pertains to black or brown or disabled or most female bodies they are forgotten in the

worlds the visitor constructs. Whiteness and masculinity are associated with broader themes of assumed objectivity and 'scientific' approaches (Browner, 2004). It is a poor excuse for me to say that I chose not to dwell upon these themes or challenge these norms more thoroughly in the undertaking of this thesis, yet it must be acknowledged that it remains as a lose thread needing further exploration, building upon the feminist and post-colonial work that has taken place to date in museums (Lynch and Alberti, 2010; Dixon, 2012, 2016; Nightingale and Sandell, 2012; Ruffin and Figueroa, 2017).

Whilst the curators at Weston Park Museum did question the assumption that the information they held on objects is always fact, there was a mixed response towards meaning-making practices that were seen as straying too far away from 'factual' interpretations.

> **[Natural History Curator]:** *"I think a lot of the really regular repeat visitors…of the reasons for the amount of young kids that…make a beeline for What on Earth [gallery] is because they've ascribed personalities to the things that are on display in What on Earth…and so they're actually wanting to see the same things that were there last week, the week before…"*

> **[Decorative Art Curator]:** *"Check they're ok, visit their friends."*

> **[Natural History Curator]:** *"Hence why, you take the polar bear off display as they did in 1985, there will be hell to pay as a result of that as everyone wants to know where the polar bear is."*

> **[Communications Officer]:** *"When Spike [Woolly Rhino Exhibit] was behind the barrier…people were like where is he? And I'd say, it's alright…just works being done."*

> **[Project Co-ordinator]:** *"He's still there."*

> **[Natural History Curator]:** *"I'd open the doors for kids because they were crying, I'd say 'no, no he's wandered off, he's grazing in the park'."*

> **[Communications Officer]:** *"…it's much easier to attribute those personalities to something that's recognisable as-"*

> **[Natural History Curator]:** *"As a thing, a living thing, yeah. It's exactly what we're not trying to do."*

Whilst the professional identities of staff members lead to suggestions of which meanings should and should not be made with museum collections, they are evidently aware that visitors are meaning-making in Weston Park Museum in diverse ways. This resonates with Hackett's (2012)

research regarding children's meaning-making in museums and the greater value adults placed on children's sedentary activities versus movement between and within spaces. Whilst museum staff are aware of these different meaning-making strategies (amongst adults as well as amongst children) it is also apparent that differing values are applied to them. Some practices may be more or less accepted within museums for reasons justified by the conservation remit of the institution, whereas others have become normalised over time and thus are critiqued currently by staff as society changes. Furthermore, these divergences in meaning-making practices may also be related to differences in curiosities between those envisaged by staff and those of visitors themselves.

The above extract also testifies to the role of materiality in meaning-making and how it encourages the creation of places within Weston Park Museum. Objects recognisable as animals are visited on a regular basis, creating homes for them within the museum, though a similar process of attaching meaning to location also takes place within a shop role play area (still in Sheffield Life and Times) and the timeline wall with doors to open (in the previous History Lab Gallery). Changing these places creates significant emotional reactions amongst visitors, demonstrating another way that they are able to enact influences over the spatial changes undertaken by museum staff. These emotional connections to museum objects became the subject of discussion later in the workshop, specifically whether it was a museum's role to try to record them.

> **[Visual Art Collections Assistant]:** *"there's an object, I think it's really important that you get the story and the meaning of it from the person. But I think there are other organisations that collect oral history and they use them in different ways and that's not what we're about because we are attached to things."*

> **[Visual Art Curator 1]:** *"Yeah I think the truth of it's in its importance, for example [Social History Curator] will collect something that means something to that family and to Sheffield and that knowledge about that object is very important…it's just as important what somebody's reaction to that object even without that knowledge, what someone else thinks about that is just as important but that's kind of theirs and theirs to share, it's not for us to capture that necessarily, but the actual story about that object originally is kind of what we have and we give, whereas other people's interactions with everything is just as important, but it can't take precedent."*

> **[Decorative Art Curator]:** *"Because opinions have been around…and actually something that was written about an object 150 years' ago in the collections, it might be someone's opinion, but we think: oh it came in with the object, it must be true then."*

[Visual Art Curator 1]: *"No, I mean, it doesn't necessarily have to be true, but that's the information that came in with that object so that's what's connected to that object and it's not any more important than someone's reaction to it now or how someone talks about it now, but that is the thing that was collected."*

[Visual Art Collections Assistant]: *"So what we need to do is enable people, to open people's eyes to be able to look at objects in a different way and to interact with them in a different way and to interact with each other in a different way."*

Throughout the workshop discussions there was an underlying conflict between the ambition for what museums as institutions are capable of doing, and what Weston Park Museum is capable of doing with the resources available. Some members of staff had a bold vision for how a museum could facilitate the understanding of different perspectives and thus elements of social harmony, though this is often constrained before it can be put into practice. The curators made distinctions between the different collections, and in doing so highlighted how the institutional structures might influence how truth and meaning is made through them: in the visual arts, priority is given to the artist or collector and their view of the work; in social history, a greater diversity of individuals can make 'valid' claims of truth; and through the world cultures collection, the idea of changing definitions of truth and opinion over time comes to the fore. As a result, there is potential for curators to research and create displays in other galleries and with other collections in order to unpick their own perceptual lenses and explore the collections from a new perspective. Similar projects are already happening within Museums Sheffield (and elsewhere) as demonstrated by 'What Can Be Seen' at Millennium Gallery, Sheffield (Etchells and Horvat, 2017): an exhibition of collection objects curated by two artists. This interrogation of meaning and truth, and of how it is constructed in museums, directly related to further conversations within the workshop about the purpose of a museum and how it might remain relevant to contemporary society.

Reactions: Purpose and Relevance

The fourth theme included discussion of purpose and relevance. This theme spoke to item 4, the embeddedness of a museum within its community, and also to item 6, the removal of barriers to accessibility and belonging. At one point during the workshop, the Social History Curator queried whether I had considered elements of the museum wider than collections based work:

[Social History Curator]: *"What I'm thinking about is…community projects where you're not working with a collection directly"*

[Project Manager]: *"It's connected to your collection though isn't it?"*

[Natural History Curator]: *"It's a defining characteristic of a museum, you can't have a museum without-"*

[Social History Curator]: *"I'm not saying that you can have a museum without collections but curators can do projects without using collections directly too."*

[Project Manager]: *"…But should it all not be back to the collections? Are they not the core, is that not the core purpose that a museum was for?"*

[Social History Curator]: *"I'm not saying that this is not of relevance…Just some of our activities are not always directly related to the collections."*

[Natural History Curator]: *"Not in our museum"*

[Researcher]: *"They might be related to the collections, but I think it goes back to the object as existing as material objects but also as kind of knowledge, and I would have thought that all activities in the museum in some way would connect to that knowledge that the museum holds and shares…Even if its outcomes that don't exist in material in this museum. I…limited [the manifesto] to talking about people, objects, space relationships because if it was a manifesto for education…that has a lot more different challenges to it."*

[Social History Curator]: *"I suppose I'm talking about the kind of community memory projects or people responding to things, sometimes work that I've done doesn't necessarily use collections, it's all about people's lives now or their personal history. It might be within a theme that we cover a bit in the museum but they're interpreting it in completely their own way and there's no objects or collections in there, it's just that we're providing a space to discuss something"*

…

[Visitor Services Manager]: *"Might some of it be covered under [point] 6 just in terms of…the philosophy and the reason behind doing that…is that it's taking the collection away from the centre and putting people at the centre and…brings people in contact with somebody in the museum to talk about something in relation to something related to museums generally, that's kind of what it is isn't it? And that it's about barriers and that…kind of that barrier, in that sense is like having to relate to collections and having to relate to some kind of collections' knowledge and you're just kind of taking that right down and bringing people together to say: let's talk about this, and let's talk about you."*

Staff were generally agreed that collections were definitive features of museums, though there was a greater degree of debate about whether this was their central purpose and thus whether all of their activities should relate directly to the collections. Individuals with different professional identities or disciplinary foci had different opinions on this matter, indicative of a longer running discussion as to the people-centred or object-centred work of museums. Both of these approaches utilise curiosity as a critical process for a museum's functioning but framed in different ways: epistemic and tactile with the desire to know about ideas and things, or sociable with the desire to know about other people. We can thus utilise Phillips (2016) work on sociable curiosity, and resultant ideas around institutional sociable curiosity explored earlier in this thesis, to consider the intersections and how we might be curious about people through a mutual curiosity about things.

> **[Researcher]:** *"…seeing this as the museum of Sheffield and that the purpose of it is to connect people roughly with the idea of Sheffield, that can connect to anything, that can connect to the objects, that can connect to anything that anybody associates with Sheffield…"*

> **[Project Manager]:** *"I think it's that notion of the buildings that we, as well making space where those conversations can happen so the notion of it being really welcoming to the public, I mean you talked about socialising earlier and visitors…even if you're not interested in the collection, actually as a place for people…it's a nice place and I guess some of the barriers are about entering that place because it has the columns at the entrance and the frieze above the door. The things that make it a museum but trying to think of the work that you're doing to overcome barriers and actually have a conversation. You know, ultimately, this sort of tackles some of that doesn't it. And that sense that the museum is a place for collections, but actually the big bit is that it's about ideas and stories and conversations. And time, time together."*

Members of staff articulated a view of Weston Park Museum as a space for connections and knowledge sharing. However, they also noted that several barriers exist that currently prevent a wider range of people from seeing it as such. In the extract above, the Project Manager refers to aspects of the building's architecture that convey certain meanings about a place, and that may deter some people from feeling in place or like they belong at the museum. These barriers may prevent some individuals from using the spaces of the museum and has repercussions for creativity and innovation.

> **[Visitor Services Manager]:** *"…Like what you said about space, the museums, and the institutions, being the spaces for innovation, the innovation might not be anything to do with*

any of us whatsoever, the innovation is in that community, or in that bunch of people or in that individual's head. The change, the something new, the progression, and that we facilitate that through the stories, through the collections…through the knowledge, through the space…and that it happens out there and that is what then makes you relevant to those people, and they learn something from it and they take something away from it, and that might be really transitory but if you keep that going…like you've said…it doesn't end at the end of the physical space and when people walk out the door. You know a visitor comes and they're just a visitor for the moment that they're in here walking round spending money and visiting the loo and then they go and they're not a visitor anymore, you know then that's not how it is, is it? They're people, and they're engaged in the way that they're engaged, and that can last a lifetime, or it can last a day or whatever."

If we envisage museums as spaces for innovation, it is thus critical to define what we mean by space. Envisaging museums as bounded, physical and geometric spaces for innovation limits us to thinking about what people do within museums that could be considered innovative and this is likely to yield limited results. However, if we envisage museums as a material part of an unbounded space, with flows bringing together different assemblages of people and objects, the question of innovation is rewritten as what do people do with their experience of museums that could be considered innovative or creative. This is likely where museums have a greater degree of impact in contemporary society, though it is also more difficult to measure. How can you evidence the impact that a museum might have had on a person's later thought development? Falk and Dierking (2000) offer anecdotal evidence of such a process: an understanding of bridges that was developed through a visit to a science centre, as well as through subsequent lived experience. However, a museum would rarely be able to collect such information from all their visitors using current methods. Evaluation tools need to be fit for purpose and matched to how we understand the spatiality of museums: rethinking the spatiality means we need the tools we use to understand it as well.

The varying and contrasting definitions and purposes of Weston Park Museum identified by staff members originate from their different backgrounds, experiences and disciplines. Similarly, their visions for its purpose going forward are influenced by multiple factors. At a theoretical level, most workshop participants agreed with the points in my manifesto, though reservations emerged through the conversation relating to different specific areas and there was still clearly a divide amongst these museum professionals as to whether museums should be focused on their collections or the people who visit. The practicalities of being answerable to external institutions (through accreditation as a museum and funding bodies) were some of the most significant concerns, especially within discussions about how museums could adapt and change to remain relevant.

Incremental Change Within the Museum as Institution

Relevance was identified as a central value underpinning the need for Museums Sheffield to embrace some elements of change. These discussions around the theme of change touched upon all the points from my proposal and built upon the conversations conducted within the workshop. From this discussion, a loose thread began to be explored, though not resolved, relating to the next steps towards continued relevance in contemporary society.

> **[Chief Executive]:** *"One of the things I feel really mindful of for now is that there is a risk of paralysis…and we're in a really challenging time where …we must be absolutely relevant and people have to get it and have to feel it and all have to love it and all of those things and so in order to keep that and to make sure people do feel it…we're not just telling ourselves these stories…that mean nothing to people out there…I think we really do need to understand what risks mean to us, and we're not doing it in isolation, we have to do it together and with partners to really understand that risk but I think the risk of paralysis is huge actually…What you'll end up with, and we're beginning to see this across the country, are museums shutting their doors and shutting their doors to the collections, so we have to counter that…for ourselves thinking about what we mean and what were prepared to do…"*

> **[Archaeology Curator]:** *"…I think to achieve this in a practical way you would have to start thinking slightly differently about museum collections. And instead of an accessioned object that means you're going to look after it for ever and ever…kind of changing that subtly to 'as long as is practically possible'. And I'm not saying we should do that because I can see other people frowning at me…I'm just saying…forever is a long time and actually aren't you making a false promise from the beginning, because can we really promise that in two hundred years' time we'll still be looking after certain objects…"*

> **[Visual Art Curator 1]:** *"I think the problem is that you can't really do it as an institution on your own, you'd have to do it across the whole of the museum world, within the country certainly, because there are some standards that you have to meet to get…accreditation, to get funding you have to meet certain levels"*

Museums Sheffield has its own institutional norms and values. However, these do not stand alone and they are derived from and tethered to the institutional form of the museum as it is understood nationally and internationally. This derivation and continued connection stems from the relationship between Museums Sheffield, as one museum service, and national institutions (Museums Association, Heritage Lottery Fund and Arts Council England in particular) that have a certain degree

of power and influence over practices and structures. These norms, in some cases, effect what can be changed or done differently, yet in others they only influence perceptions of such.

> **[Archaeology Curator]:** *"If as a society we moved round to an idea of…the public were happy with the idea of the museum as just an institution that curates things for a while and some things will drop off the end as new things come in then…you could move towards that, but I don't think we could decide as Museums Sheffield or as the museums sector: right, what we're going to do now as a museum is we're going to stop preserving things because we've decided that's what should be done and we're going to operate more on a library model and get rid of stuff and bring things in. I don't think, I don't think it's something we as a museum sector can decide, we might, you know, shift people round a bit, but it's got to come from…"*

> **[Chief Executive]:** *"That's something though?"*

> **[Visitor Services Manager]:** *"It's pushing the boundaries."*

> **[Chief Executive]:** *"We could experiment, there's no reason why we couldn't think: OK, let's have a little explore on this and yes, there's some risk attached to this, but we'll manage the risk quite carefully."*

> **[Archaeology Curator]:** *"I mean, it is happening a little bit because you've moved from that whole thing of we keep everything…and we keep sucking things in. First of all we stopped sucking things in indiscriminately with collecting policies and now it's happening more at the other end with this whole assessing significance thing and looking at collections and saying, 'ok, is this a kind of agile collection that you can do anything with', I think it still gets a bit stuck in that you get to the sense of you've worked out what things you don't know anything about or aren't any good, but kind of get stuck in the: I can't actually throw it away, so I'll just put it in a box marked 'to be thrown away'."*

As Simon (2010) argues, changing practices and values that are embedded within a museum's institutional culture is not an easy feat. Some elements will be easier to change than others and it is important to recognise that changes are likely small and iterative. There was a desire amongst Museums Sheffield staff to be relevant and offer a positive contribution to society, though identifying how to do this could be difficult and challenging at times.

> **[Chief Executive]:** *"And can I, Have you seen this?...In terms of the manifesto vision – do you see that in any other museum? Have you seen that, that sort of idea or visionary sort of place? I'm just quite interested in it because, but you know, you said about the difference*

between like a civic museum like we are bound with this stuff and this heritage and systems,
but for new museums, that's achievable potentially."

To me, this final question was asking: "How can we create a museum that is relevant, adaptable and resilient, whilst retaining the strengths that one has as an institution: professional standards, a familiar role in society, and a position of authority and trust?" My answer, which I gave during the workshop and which I will expand upon here, is by looking to art. By looking at how artists have attempted to subvert the museum's form for their projects, we can become playful with the rules ourselves.

The first example I gave was the Museum of Broken Relationships. This project crowdsources its collections from around the world and presents them in permanent galleries in Zagreb, Croatia, and Los Angeles, USA, as well as through touring temporary exhibitions. The description from their website reads as follows:

> "Museum of Broken Relationships is a physical and virtual public space created with the sole purpose of treasuring and sharing your heartbreak stories and symbolic possessions. It is a museum about you, about us, about the ways we love and lose.
>
> At its core, the Museum is an ever-growing collection of items, each a memento of a relationship past, accompanied by a personal, yet anonymous story of its contributor. Unlike 'destructive' self-help instructions for recovery from grief and loss, the Museum offers the chance to overcome an emotional collapse through creativity - by contributing to its universal collection.
>
> Museum of Broken Relationships is an original creative art project conceived by Olinka Vištica and Dražen Grubišić in 2006. It has since taken thousands of people on an empathetic journey around the world, challenging our ideas about heritage. Its original permanent location was founded in Zagreb. In 2010 it won the EMYA Kenneth Hudson Award as the most innovative and daring museum project in Europe." (brokenships.com, 2017)

I visited this exhibition in 2011 when it was on display across a collection of spaces in Covent Garden, London. Since this time the project has expanded with an ever-growing physical collection across multiple countries and a virtual exhibition of stories and images connected to broken relationships. The project uses museological norms of display by attaching dates, locations, titles and stories to the objects that have been donated (whether tangible or virtual) though, in most instances, presents them without protective cases. The objects are positioned in the conflicting dual role of rubbish to be discarded and emotionally precious objects to be revered: the former removing the museum's

responsibility for conservation and the latter encouraging the visitor to not touch or move the objects. This museum is freed from some of the constraints applied to pre-existing museums as its collection practices have been explicit and targeted since its foundation, though with a theme that transcends local cultures.

My second example was the Museum of Water, which I encountered in Cambridge in 2014. Taken from the project's website it is described as:

> "Museum of Water is a collection of publicly donated water and accompanying stories. Accumulating over two years in different sites worldwide, Museum of Water is an invitation to ponder our precious liquid and how we use it…Everyday we choose water metaphors to define our thinking, yet in reality we have become used to defending against it. We chlorinate it and pipe it, soothed by our certainty that it will pour from our tap when we need it. Perhaps the 2013 floods have changed our attitudes to water? Certainly it is time to re-examine our connection, and develop a new relationship. We are all implicated in this.
>
> We currently have over 700 bottles in the collection, ranging from water from a holy river in India, to a burst London water main, ice from a Sussex field, a melted snowman, 20-year-old evaporated snow from Maine, condensation from a Falmouth window, Hackney rainwater, a new born baby's bath water, Norwegian spit, three types of wee, two different breaths and water from a bedside table said to be infused with dreams.
>
> In celebration of our access to fresh water in this country, running alongside the Museum is Water Bar, a free pop-up outdoor bar serving only tap water." (museumofwater.co.uk, 2017)

This project's subscription to museological conventions is evident in its nomination for the European Museum of the Year Award in 2016. However, its lack of permanent location offers a potential challenge to these norms as it takes on different forms to suit the venue of its display, which is usually an arts festival of some sort. The inclusion of the Water Bar alongside any display of the museum also speaks to themes of transience evident in the collections and highlights the artificial rules around what we can and can't interact with in a museum setting. Like the Museum of Broken Relationships, it has many features that align with my proposed 'museum manifesto': it has a very specific collections policy; the chosen theme resonates across cultures and facilitates the breaking down of barriers; the collections are explicitly crowd-sourced, demonstrating the crucial role any individual can play in the construction of an exhibition; and the touring element takes the exhibition to different spaces and locations. These examples offer evidence that my vision for the museum as a

site for curiosity, meaning-making and innovation are realisable, though do not fully address the specific challenges that Museums Sheffield may face, in particular the presence of collections to be preserved in perpetuity as is the case in many current and former local authority museums.

Working with Museums Sheffield over the past three years has allowed me to encounter the forces that shape their museums. Within the organisation there is an understandable undercurrent of fear and concern for the fragility and sustainability of their own existence, though there are also significant quantities of hope and ambition to be the museum that the city of Sheffield needs. Through my ethnography I have witnessed changes within the institution that have required a great deal of time and effort from all parties to enact, but that offer a signpost of the direction in that it is gradually moving. Within the workshop, curators described how the collections policy (which was last reviewed in 2013 and is due for a full-scale review in 2018/19 in consultation and collaboration with communities and stakeholders) influences what new acquisitions are accepted and ongoing discussions have moved to consider ethical deaccessioning. One instance of this was the repatriation of Moriori remains to representatives of Te Papa Tongarewa, The Museum of New Zealand, which took place in 2016.

This workshop offered a space for a conversation about relevance that has already begun within the institution and that will continue throughout its existence, the question that remains is whether the pace of change in Museums Sheffield will be able to match that of its wider context.

Ways Forward

Museums have an institutional form based on a history that stretches back across centuries and that has informed the specific institution of Museums Sheffield. Both Weston Park Museum and museums generally are additionally anchored to contemporary, external institutions, which dictate aspects of their form and practice, yet they are also made up of individuals with differing views and approaches. As such, change within such institutions is not fast or easy, despite current trends stressing the need for museums to be resilient and relevant. The change needed is also subtley different in different museums. Through the workshop, we continued an ongoing conversation about how Weston Park Museum can develop its spaces through themes of curiosity, meaning-making and innovation and this dialogic exchange is a key method for enacting change. Sennett's (2008, 2012) work, in particular, can offer us insight in to how we might work with the resistance of the institutional form and work together with other people to create new spaces within the museum. Though this also speaks to the need to engage with the specifics of a context, in this case Weston Park Museum, Museums Sheffield and its staff, in such production. From this workshop,

there are numerous threads, future potentialities, that could be picked up and taken on in any number of directions.

Despite this, there are a few elements from this workshop discussion that have the potential to be generalised to a broader context. These developing understandings of the relationship between museums as institutions, their spaces, curiosity, meaning-making and innovations can inform museum practice in several ways. Firstly, these theoretical concepts connect to current discussions and priorities around museums, health and wellbeing. Phillips and Evans (2016) have demonstrated connections between curiosity and wellbeing and Richards (2010) has argued for the health benefits of creativity. Additionally, emotional components of meaning-making could be used to relate this further area to similar activities. Secondly, the need for dialogic activities, supported by the institutional structure, potentially offers a theoretical stance that has applications in practice. Had my dissemination of my findings taken the form of a traditional presentation followed by questions and answers, I do not believe it would have engendered such reflective responses and debate amongst museum staff: it would have set myself in opposition to their similarities. In addition, the overall collaborative nature of this research has created opportunities for us to work together and enriched the process and outcomes for all parties. Thirdly, through this workshop and the longer-term project, I have come to understand the importance of time and space for curiosity, meaning-making and innovation. The RSA Social Brain Centre (2012:35) stress:

> "that attempts to foster and harness curiosity may be dependent on the recognition and acceptance of the need to make space and time for it. This in itself represents a not insignificant challenge for educational, organisational and political structures."

The same I believe holds true for meaning-making and innovation in museums. Museums are able to utilise and promote what they value, and to value something time and space needs to be allocated. Staff at Museums Sheffield have suggested that it is their intention going forward to have more open conversations amongst staff through scheduled workshops that will address pertinent concerns and topics to them. This is a model that I believe could be effectively used in other institutions, and this chapter attests to the rich outputs that can be generated from such events where singular resolution is not a necessity.

17th October 2016 – Reflections on the VIP Opening

On Thursday, I arrived at the museum just before 4pm to help with any last-minute preparation before the VIP opening event that evening. I did some final proofreading and laminating for the Archaeology team, as well as chatting with the Visual Art team as they laminated their prompt cards and legends. At just after 5pm I pushed the object handling trolley down to Beneath Your Feet, accompanied by the Volunteering Manager, and set it up in the middle of the gallery with the help of the Archaeology Curator and Curatorial Assistant. Soon after the Project Manager and the Chief Executive brought around a tour of VIPs from the Arts Council, Heritage Lottery Fund and City Council. The Project Manager introduced the gallery and then prompted the Archaeology Curator to say a few things too. A few guests meandered around some of the cases, taking in the displays like a critic or connoisseur and there were nods of approval. They moved on, and soon those on the longer guest list began to arrive. Over the course of the evening, the sword was definitively the favourite object. It was easier to engage kids rather than adults – probably because they were more willing to approach me and the trolley, and not necessarily because they were more curious. I had a couple of frequent repeat visitors to my station. There was an older man keen to know where certain objects were in the new gallery and regularly lamenting to me that their find locations weren't written more prominently: he was adamant that the canoe was the most notable thing to come out of Tinsley. And also a recently graduated PhD student who was obsessed with swords. She enjoyed a couple of glasses of wine during the evening and chatted to me about LARPing (Live Action Role Play). I pointed out the dressing up clothes were in adult sizes and subsequently witnessed an entire photo shoot of a warrior monk, complete with sword, posing in front of the reconstructed roundhouse.

Chapter 8: Conclusions

As the three-and-a-half-year long collaborative project ends, this thesis has explored the relationships between curiosity, meaning-making, innovation and the making of museum space, as well as how this might impact upon museum practice. It has made several contributions to current knowledge, including significant development of ideas of curiosity in relation to the museum, yet there remains plenty of scope for further development of this work.

Curiosity and Affect in the Museum

This thesis drew upon others' understandings and definitions of curiosity, especially those drawn in relation to the museum, yet sought to extend and go beyond these in relation to the museum as an institution. As a result, my definition and understanding of curiosity developed throughout the research project. Previous definitions of curiosity applied in museum visitor research have considered curiosity as a psychological trait which could be measured through observable behaviours. Bunce (2016) had sought to measure the curiosity of younger museum visitors through her consideration of the type and quantity of questions they asked about an exhibit. Whereas Falk and Dierking (2013) had looked at the amount of time an individual spent looking at or paying close attention to an object as a marker of their curiosity. However, such approaches gave limited account for the social space and influences of other people in the museum environment. Theories of sociable curiosity have been developed by Phillips (2015) and Phillips and Evans (2016), which again understand curiosity as a psychological trait of an individual, though with the potential to be shared or fostered amongst a group. This understanding of curiosity as a trait shaped through the social context offered the potential to understand the curiosity of adults in the museum environment, both museum visitors and museum staff, within this research project.

However, through the data collection and analysis, the importance of the role played by the museum as an institutional structure emerged and with it the possibility to understand curiosity as a trait of an organisation as well as of an individual. I observed such traits through participant observation, echoing recent literature around the institutional nature of museums, professional identity and communities of practice. For example, Hakamies (2017) describes how the conceptualisation of an ideal museum professional is utilised in order to create a community of practice. Similarly, MacDonald (2002) describes how the museum as an institution took on a role in the authorship of an exhibition transcending the individual authorship of individual curators. In my own research, the relationship between the museum as an institution, individuals and their practices came to the fore. Overall, this resulted in an understanding and definition of curiosity as a trait: a

trait of individuals which is observable and self-reported; a trait of a museum as an institution evidenced in it processes and values; and as a trait underpinning the development of practices, particularly those of museum professionals.

Yet there remains scope for further work in and development of this area and these ideas. Anderson and Smith (2001) issued a call for increased attention to be paid to emotional geographies as an opportunity to deepen geographical research. Bondi (2005) suggests that this call is being met with a burgeoning response amongst human geographers, as well as ongoing engagement with emotions from academics working across a variety of fields. Furthermore, Anderson (2013: 454) argues that affects combine with "more or less any aspect of life" reinforcing the assertion that any emotional or affective geography cannot be delineated from other cultural geographies of the same phenomenon, underlining the importance of the analysis of affect. However, within this thesis, there has been a limited consideration of affect or emotional geographies, including those of museum spaces. Dixon and Straughan (2013) suggest that "affect draws attention to the as yet undisclosed heterogeneity and multiplicity of space", implying that work on affective geographies would strongly align with the spatial theories of Massey (2005) and Ingold (2008) which have been drawn upon throughout this thesis. As such, literature and theorisation from this area may lend themselves to further extension of the understanding and definition of curiosity developed here, as well as to the further development of a body of work considering the geography of museums.

One affective concept that has been touched upon in relation to both the curiosity and meaning-making of museum staff is that of 'Object-Love'. This affective condition of 'Object-Love' is defined by MacDonald (2002) as underlying observations of how a curator's personal interests and preferences might influence the process and practices of gallery design, drawing upon her ethnographic study of the design of the Food Gallery at the Science Museum, London. This has subsequently been further developed through Geoghegan and Hess's (2014) study into how the same affective concept manifest during their experiences of research in museum store rooms. The affective qualities of 'Object-Love' have some similarities with the trait of curiosity in that both may offer an epistemic motivation for undertaking research around, or for displaying, a certain object. They both may also encourage the pursuit of sensory experiences through personal contact and interaction with objects from museum collections. Whilst 'Object-Love' is described as an affective condition of an individual, a connected body of literature exploring the ability of objects to engender emotions may also be pertinent here. One such author, Hill (2007: 81), describes the "enchanting potential" and "embodied materialities" of objects exerting an influence over individuals' relationships with museum spaces. This thesis has given limited consideration to the affective qualities of objects or the affective dispositions of individual adults when engaging with museum

spaces, and as such further investigation of curiosity alongside affective relationships with museum objects could deepen our understanding.

A thorough consideration of the affective geographies of museum spaces could also serve to contribute to a growing body of work examining how the affective and the spatial are both deployed in contemporary museological practice. Gregory and Witcomb (2007) and Witcomb (2013) argue that affective experiences have been designed in history museums with the aim of heightening the engagement of museum visitors and achieving "audience participation in the process of making meaning" (Gregory and Witcomb, 2007: 263). Witcomb (2013) suggests that such approaches can be seen as an emerging form of pedagogical practice in museums where emotions are used as a tool to aid the learning of museum visitors. Affective geographies also have a role to play in examining issues of social justice within museum spaces for both museum visitors and museum staff. For example, Tolia-Kelly (2016: 896) has employed a postcolonial lens to examine the "affective politics in the everyday space of the British Museum" through considering the embodied experiences of Maori visitors to the museum. An analysis of the affective geography which emerges during the spatial redevelopment of a museum could offer a means to further interrogate pedagogical and/or post-colonial perspectives on the manifestations of curiosity, meaning-making and innovation explored in this thesis.

Overall, through the ideas discussed here and in Chapter 4, I sought to address the relationship between adults' curiosity and the making of museum space. I found that curiosity as a trait of museum staff and as a trait of the museum as an institution had the most significant role at Weston Park Museum. As a result, I outlined and developed the idea of institutional curiosity, that is the desire of an institution to fill gaps in its knowledge evidenced in the existence of processes, systems and values to facilitate it. This institutional curiosity interacts and combines with individual curiosity and curiosity-driven practices in the process of making museum spaces. Additionally, sociable forms of curiosity have a relevance to the museum and existing thought in this area can be adapted to the institutional scale. Institutional empathetic curiosity - an interest in knowing about the audience - has developed across the museums sector through the adoption of 'New Museology' over the last three decades. An institutional relational curiosity, defined as a desire to engage members of the audience in order to come to know them, has emerged more recently amidst a turn towards more participatory and co-productive practice in the museum. The adoption or facilitation of these various forms of curiosity influenced how adults, including museum staff, visitors, volunteers and researchers, could each contribute to the making of space during the 'A Bright Future' project at Weston Park Museum.

Other Contributions to Knowledge

Whilst a researcher may desire to make a ground-breaking discovery, the reality is that most developments are incremental, building upon what has come before, reframing ideas in a new context and pushing the boundaries wherever they may give a little. To this end, this thesis began to build three distinct academic contributions: institutional curiosity (discussed above); professional meaning-making; and vernacular innovation; as well as a contribution to museum practice.

Chapter 5 considered the relationship between meaning-making and space-making in the museum and the third sub-question for this research project: How does adults' meaning-making connect to their curiosity, processes of innovation and the making of museum space. Drawing upon a significant body of existing work that examines visitor meaning-making in the museum and the influences of the institution upon this, I proposed that by looking at adults' meaning-making practices, we could attempt to deconstruct the dichotomy drawn between staff and visitors. Meaning-making offers a framework for considering the experience and actions of a spectrum of adult stakeholders and opens up the opportunity to analyse their contributions to the making of museum space on a more equal footing. This chapter also dwells upon the role of the institution in professionalising the meaning-making practices of museum staff, and the effects of these practices on space-making during a redevelopment project. The museum is a highly spatialised institution, from the presence of material objects to their organisation within galleries to the use of digital spaces to extend the museum's reach beyond its building, and as such adults' meaning-making practices interact and remake this spatiality on an ongoing basis.

Chapter 6 addressed the relationship between innovation and the making of museum space, and highlighted the relevance of innovation as process in the museum context. Looking to existing work on vernacular creativity, a similar idea of vernacular innovation begins to emerge. Whilst several possibly innovative products were identified in the course of the redevelopment, each of these spoke to the specific context in which they were developed at Weston Park Museum, Sheffield. The vernacular concept emphasises the applied outcomes from everyday creative practices that are considered innovative in the geographical, material and cultural contexts in which they occur and that often fall outside of the value system of capitalism and commerce. Understanding innovation in the vernacular context of the museum's institutional form also draws upon understandings of open social innovation and reflective practice. These ideas are tentative suggestions that could be more fully developed through further empirical studies.

This project also sought to make a contribution separate from the academic knowledge transmitted through this thesis and other publications: it sought to make a contribution to the knowledge held

and practiced within the museum and within Museums Sheffield in particular. In Chapter 7, I turned to the fourth sub-question: What do our understandings of these relationships mean for the development of museum practice? I described the dialogic exchange that took place through this project and the intended exercise of translation between theoretical concept and practiced activity. Rather than a neatly packaged and identifiable new way of working, the legacy of this project will be in the micro-scale changes effected through ongoing collaborative practice over the space of three years. These were generated through the substantive activities of curating displays on the Iron Age and Romano-British periods of Sheffield's archaeology for 'Beneath Your Feet', undertaking graphic design work to support the creation of interpretation materials across all of the redeveloped gallery spaces, and developing practices of prototyping with visitors at Weston Park Museum. The methodology of the project, enacted through my presence and actions as a participatory ethnographer, raised questions and articulations: about prototyping and consulting audiences; about the importance of materiality and place; about the role of graphic design in interpretation; about trust and intentions; about the professional practice of curation; and about the fundamental purpose of the museum. I also contributed a 'case for support' for the museum's fundraising team and a set of visitor personas specific to the context of Weston Park Museum and introduced through a design-thinking exercise. As demonstrated in the previous chapter, the museum is an institutional structure that is negotiating the difference between preservation and conservation, and is simultaneously trying to find its relevance through the past, the present and the future. By working together collaboratively we created opportunities to continue and further this ongoing negotiation.

Overall, this project has sought to answer the research question: What is the relationship between adults' curiosity, meaning-making and innovation, and museum space? This complex relationship has been explored through the example of a redevelopment project at Weston Park Museum, Sheffield. Space is made by all museum users, therefore the curiosity, meaning-making and innovation activities of staff, visitors and all those in between each impact upon how the space is made. In turn, the type, intensity, duration and location of these various activities is influenced by the institutional form of the museum generally, and specifically that of Museums Sheffield. Institutional curiosity shapes how a museum acquires new information, how it empowers or influences its staff and how it engages with its audiences. Institutional form also influences how both visitors, staff and those in-between make meaning in the museum. Finally, the context of a particular museum or other institution, in this case Museums Sheffield, is part of the specificity inherent in vernacular innovation. Whilst this study has begun to illustrate some of the complexity of this relationship, there is plenty that remains unexamined.

Scope for Further Research

This thesis has drawn attention to fertile areas for future research. Some of these relate to the potential for the further development of methods and their analytical frameworks, whilst others identify more questions or empirical contexts that could be used to deepen and broaden the theories outlined above.

Whilst ethnography is a widely explored methodology that requires continuous revaluation, it is the visual methods used in this project that I believe need more theoretical discussion and empirical application. Both the write-draw and photo-documentation methods used in this research were limited by the lack of potential frameworks to be used in their analysis; both drew mostly upon Rose's (2012) '*Visual Methodologies*'. There is scope to develop rigorous analytical techniques. Falk and Dierking (2000) propose methods for measuring developments to understanding through a museum visit using text based approaches. Such analytical frameworks show potential for being able to further elaborate on the research questions underpinning this study by more clearly identifying manifestations of curiosity, meaning-making, creativity and innovation. There is also scope to deepen our understanding of write-draw and photo-documentation techniques in order to address methodological questions: how can art-making be used with rigor and trustworthiness in the research and evaluation of people's experiences within museums and galleries? What about in other settings? Evaluation and reporting has become a routine part of museum practice in recent years driven by funder requirements; the introduction of arts-based methods could provide us with new insights.

In addition to methodological developments, there is scope to address further questions around the thematic areas of curiosity, meaning-making and innovation. The concept of institutional curiosity needs to be tested within other empirical contexts: other museums of varying size and subject, other arts organisations that produce work for audiences, and other publicly-funded institutions that could benefit from understanding their users. Phillips and Evans (2016) have already begun to explore themes of curiosity within social and health-related services, though at the level of the individual user. As such there may be opportunity to apply the idea of institutional curiosity to a social or health-related organisation as a whole. The concept of professional meaning-making could similarly continue to be developed through application in other empirical contexts. This thesis built upon existing work considering professional meaning-making in formal education settings (for example: Gould, 2010; Coffin and Donohue, 2011; Forsman, 2014) and extended this to the non-formal education setting of the museum. Our understanding could also be enriched by a more detailed analysis of different professional identities within the museum: for example, how do the curator and

the marketing manager make meaning differently? Lastly, I have only tentatively introduced the idea of vernacular innovation within this thesis and thus much work remains to create a robust theory. Perhaps in light of current national and international political events, I would particularly advocate to explore how we might use these concepts and other questions of curiosity, meaning-making and innovation in museum settings (as well as other environs) to address larger themes of social justice. This would continue the growing body of work on museums and social inclusion (for example: Sandell and Nightingale, 2012). The three themes explored in this thesis are each substantial areas of enquiry with significant potential to develop our understanding of the museum, as well as other spaces and institutions.

As part of a fledgling field of museum geographies, there remains much scope for further consideration of the spatiality of museums. Geoghegan (2010) sets out a more extensive list for future research, so here I will merely focus upon those resulting directly from the work in this thesis or the most significant areas not addressed by this project's research questions. Firstly, as it was not central to the 'Bright Future' project, I have largely ignored questions of the relationship between digital and physical spaces in Weston Park Museum. Work in this area is currently being undertaken by Ciolfi and Bannon (2007), looking at human-computer interaction, Parry (2010), on museums in a digital age, and Eid (2016), creating museum digital innovation models. Digital spaces have become ubiquitous in museums and changing technologies will reveal additional questions to be addressed on a regular basis. Secondly, I believe there is potential to further explore how my tripartite scheme for museum spatiality (of place, materiality and flows) may relate to MacLeod's (2015) work on design thinking, or how it might be further developed as a tool to aid in museum planning and design processes. There is also scope to extend this beyond museums to consider the spatiality of other arts, heritage and non-formal education contexts. Could the three foci of materiality, place and flows yield new understandings of other overlapping and related settings such as performances, festivals, e-learning, and archaeological sites?

The final area in which there is scope for further research is within Museums Sheffield and other similarly sized organisations. Museological research in the UK, for a variety of reasons, has often been overly concentrated within national institutions. Whilst some of these have branches in regional locations, such as National Museums Liverpool and the National Railway Museum (York), more research within smaller institutions, and city or county museums in particular, is needed within the UK. This research enables us to understand the role and impacts of museums and their spaces across a range of geographical contexts. The majority of these city or county museums are wholly or partially dependent upon local authorities for funding and have faced a mounting crisis over the last decade (Heal, 2015). Heal (2015) suggests that higher education institutions can seek to improve the

effectiveness of museums and provide additional resources, and I believe collaborative research is one way to achieve this. With limited funds, evaluation in many museums has become designed specifically to meet the checklist of a funding body. However, if research organisations utilise their expertise to go beyond this and to look at areas of the museum in different ways, we can have a direct impact on museum practice and subsequently for the public who use these institutions.

Final Thoughts

In her last week at the Museum before leaving for another job, the Archaeology Curatorial Assistant posted to Twitter about the objects she was cataloguing in the run up to her departure. These included one she herself had donated – a cup from a recently attended music festival, made from steel in Sheffield. The collection was altered by this object, a material trace of this member of staff, and there is no doubt that her time working with the collection altered the staff member too. We are all constantly 'in becoming'. The museum, the visitor, the object, the staff member, the collection, the researcher, the thesis. That is, we have no beginnings and endings, or our endings are in fact new beginnings. Each shifts in or out of focus, depending on our perspective, to form new associations and combinations. There has come a point where I have said goodbye to Weston Park Museum, the end of my role as researcher there and the ending of my presence as a constitutive part of the materiality and the place. But we have left an impression on each other, as has each staff member who stayed or moved on, each visitor who exited through its doors and may or may not return, and each object that found itself preserved or discarded.

Epilogue:

[November 2016, Interview]

Researcher: *…my last question: what do you think are going to be the biggest challenges and opportunities…moving forward?*

Project Manager: *People and money…The people thing is, how do you continue to get that passion out there. If you don't get that passion out there, you don't get the money…I think that we are quite an enthused passionate team and you know we all have different ways of showing that but actually…we are a small team and it's not just about how to get the best from people, but to let them know that they are appreciated… we need to continue making sure that all of our sites are owned by Sheffield…if our sites aren't owned by Sheffield and its people then we are redundant…so actually they are constant challenges, aren't they? Your internal staff ability can be adapted through projects etcetera but it always needs to come back to somebody having the idea to put that out there to get that support and if you can't show that enthusiasm and that drive then how do you enthuse others. If you can't think about things in a different way…we have to constantly be thinking differently…and that's just tiring. So we need to be aware of that. Money is always the issue but I don't think, I don't think it will be the end of everything…I truly believe that we are an important part of society and how society reflects itself and how society moves forwards and I think…that you need to bring in other people into that cos it's not, my view doesn't matter, you know, I'm, I'm the converted, I'm here, I'm doing what I do because I think it's important…, other people's views are the ones that matter, so how do we engage with them.*

Researcher: *Ensure the museum is relevant to them and remains relevant to the city.*

Project Manager: *Yeah, but you need to have a lot of energy to keep doing that.*

Researcher: *Yeah. [Laughs]*

Project Manager: *Lots of energy… it is constant change and I think it's…just looking at Trump in America…we are living in interesting times, we really are…I think…the last 10 years of change in politics has been immense really, hasn't it, and it's not actually got where it needs to go yet and that's what I'm very cognisant of …those who are disaffected continue to be disaffected because we aren't making those changes that are actually…about, they're about learning, they're about education, they're about life chances you know, Theresa May, hopefully will…focus on social mobility, she talks about it, let's hope she does cos I think it's probably one of the most difficult bits and I think we can have a role in that, but what we can't have a role in is just doing it for the middle classes. But*

then if you haven't got enough staff to be out there, how do you get the people in? So there's lots of challenges facing us.

Researcher*: Yeah.*

Project Manager: *I dunno if I could sort, I think yeah keeping energy up, to keeping yourself relevant, and what we do relevant. Our staff team needs to be reflective of what we're doing and where we're coming from…and just that ability to question, and then there's always a worry on resources but I think if you've got the passion, if you've got the idea, you've got the drive you'll get there.*

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Appendix 1 - Glossary

Contact Zone:

"Clifford (1997:192) borrows Mary Louise Platt's term 'contact zone' which describes "the space of colonial encounters" where previously separated groups establish "ongoing relations" usually including conflict and inequality. Clifford (1997: 192-5) argues that applying this perspective to the museum transforms the collection into the frontier, made up of "an ongoing historical, political, moral relationship" involving the movement of objects, messages, money and people. Whilst Clifford's (1997) work focuses on anthropological museums, he suggests the 'contact perspective' can be used to understand the meeting of different socially distanced audiences within the museum." *(Chapter 2.1)*

Curiosity-Driven Practice:

"museum visitors use practices to explore and staff use practices to complete the daily requirements of their employment. For both, some observable practices have a reported connection to curiosity using visible and measurable indicators such as question-asking and attention-spans (Bunce, 2016; Falk and Dierking, 2013). Therefore, we might record close looking and question-asking as curiosity-driven social processes evident in the museum, but the observation of these practices does not fully illuminate how social agency is constructed within them… It is probably that not all practices that are deemed to be 'curiosity-driven' occur out of an individual's psychological state of curiosity, but are informed by curiosity none-the-less. That is, a practice of finding out new information may variously be motivated by the institution's desire to know or the individual's desire to know. For museum staff, the form that a practice takes is influenced by established norms, in particular the professionalisation of the practices of museum staff." *(Chapter 4)*

Dialogic Conversation:

"Dialectic and dialogic conversation procedures offer two ways of practicing a conversation, the one by a play of contraries leading to agreement, the other by bouncing off views and experiences in an open-ended way." (Sennett, 2012: 24)

Dialectic Conversation:

"Dialectic and dialogic conversation procedures offer two ways of practicing a conversation, the one by a play of contraries leading to agreement, the other by bouncing off views and experiences in an open-ended way." (Sennett, 2012: 24)

Empathetic Curiosity:

"Phillips (2015:3) outlines two forms of sociable curiosity and defines these as "wondering and finding out about others, which I shall call empathetic curiosity, and being curious (about ideas, things, or others) with them, which I shall call relational curiosity"." *(Chapter 4)*

Flows/Unbounded Space:

"The bringing together of different 'flows' from people, objects and ideas, though unequally balanced, speaks to Ingold's (2008) work on zones of entanglement. Ingold described the world as inhabited and "woven from the strands of [things'] continual coming-into-being" (Ingold, 2008:1797). The unbounded world is lived in rather than on (Ingold, 2008), stressing the interaction between this space of flows and the materiality…Ingold (2008) considered the human being, in fact any living organism, to be more than a single line. Their surface is a permeable surface like the world itself making the person a bundle of strands (Ingold, 2008) potentially shaped through the ideas and experiences accompanying identity and the practices and tools that control, clothe and decorate bodies. Objects and people in the museum then are already entanglements that further interweave through their interaction in this context. These flows are the stories-in-progress of different actors (Massey, 2005), lines of becoming without a beginning or end (Ingold, 2008)." *(Chapter 2.1)*

Institution:

"An institution can be understood as a type of organisation, within which there are structures and discourses which dictate what that organisation might do and how it should be done. In this thesis, a museum will be understood primarily as an institution possessing a collection of objects and who displays them in order to provide a space for non-formal education." *(Chapter 1)*

Institutional Curiosity:

"I define institutional curiosity as: the desire to know within an organisation and is found in the existence of values, systems and events which enable the filling of gaps in institutional knowledge. These values and systems are established through the intertwined processes of professionalisation of staff and the institutionalisation of the museum." *(Chapter 4)*

Materiality:

"In museum practice, materiality could be considered the principle focus. Materiality, the objects in a collection, is what sets the museum apart from other communicative media (see Hooper-Greenhill, 1995). It has therefore also been a key consideration in museum studies literature and within museum design practice. Colours, sizes, weights, floorplans with transparent glass cases and solid

walls, the ordering of objects: these are aspects of materiality of the museum and they are often located within empirical or geometric space – a space which is assumed to be objectively observable. However, wider discussions of the significance of materiality, its interaction with people and its political life, are taking place across many disciplines and these may be usefully applied to the museum context." *(Chapter 2.1)*

Meaning-Making:

"More than just formalised and measured 'learning', meaning-making is intertwined with curiosity, creativity and innovation. If curiosity is connected to motivations and the pursuit of new information, the process of meaning-making is how the acquired information and experiences are translated into new knowledge and understandings (Falk and Dierking, 2000; Mason, 2005; Silverman, 1995). This concept also connects with innovation, as the application of new knowledge and understandings in meaning-making resonates with phases of incubation, insight or illumination in a creative or innovative process (Haner, 2005; Wallas, 1926). As a result, it is important to consider meaning-making within this research as it pertains to a process connecting the terms of curiosity and innovation embedded within the research question. This rich and messy process of meaning-making has been widely discussed: understandings of visitors' meaning-making have drawn heavily on semiotic theory since the rise of New Museology in the 1990s, but the meaning-making of staff may be better understood in the context of emerging discussions of professional meaning-making." *(Chapter 2.2)*

Place:

"Tuan (1977) described space as movement and place as pause, creating a division between the former as a framework and the latter as being invested with meaning. Such works implied that place was a subjectively experienced thing, yet have been widely critiqued as not allowing for or representing diverse experiences…In addition, Cresswell (1999:23) noted that places are "simultaneously geographical and social", implying they are affected by the interactions of human actors, and Rose (1993:41) suggested a definition of place as "a specific set of interrelationships between environmental, social, political and cultural processes". Massey (1994: 153-155) argued that there would never be a single sense of place, even socially held, as places are defined through their associations and connections and, in later work, (Massey, 2005: 130) refined this sentiment to propose places as events located at a point in time and space where different agents in becoming, "stories-so-far", intersected. Those that didn't connect or intersect at this point would be disconnected, possibly excluded, from the resulting 'place' (Massey, 2005). Through this Massey

(2005:9) sought to illustrate an understanding of space as a sphere of "contemporaneous plurality" and "coexisting heterogeneity"." *(Chapter 2.1)*

Practices:

"Practices can be understood as what is done and how. Geographers have used theories of practice to move past the dichotomy of structure and agency by emphasising "the ways in which social agency is constructed in various sets of social processes" (Goodwin, 1999:41). Whilst not directly drawing upon these theories, this thesis suggests museum visitors use practices to explore and staff use practices to complete the daily requirements of their employment." *(Chapter 4)*

Professional Meaning-Making:

"I define it as professional meaning-making when individuals draw meaning from an experience in a way that is structured by institutional expectations, professional identities and the collectively understood and practiced strategies within a community of practice. In the museum, this community of practice draws heavily upon the visual and the material." *(Chapter 5)*

Relational Curiosity:

"Phillips (2015:3) outlines two forms of sociable curiosity and defines these as "wondering and finding out about others, which I shall call empathetic curiosity, and being curious (about ideas, things, or others) with them, which I shall call relational curiosity"." *(Chapter 4)*

Vernacular Creativity:

"Burgess (2006) defines vernacular creativity as everyday creative practices which fall outside of the cultural value systems of high culture and commercial practice, and which are locally specific placing importance on the geographical, material and cultural contexts in which they take place." *(Chapter 6)*

Vernacular Innovation:

"I propose that vernacular innovation, in the non-profit sector, can focus on contextualised creative processes where the outputs are applied in a specific locale to enable an organisation or institution to more effectively, sustainably, efficiently and justly meet its social aims. In this case, it is important to consider how innovation took place within Weston Park Museum, Sheffield, and not just museums generally. The vernacular can resist institutionalised discourses of innovation: it can reject the idea of linear progression and adapt to a world of ebbs and flows, and it can prioritise social aims over capital accumulation. It can also begin to break down the binary divide between staff and visitor as it can be practiced by any individual using the museum relative to their own role. Applying

the idea of a vernacular form of innovation to museums can overcome the limitations that an understanding of innovation based of technological advances brings; the quality, materiality and social impacts are relative to the community that will feel the benefit." *(Chapter 6)*

Appendix 2 – List of Research Activities

Research Method	Activity	Date	No of observations / responses
Participant Observation	Design Day Meeting	14/05/2015	
Visitor Tracking	Archaeology Gallery - Gallery Observation	20/05/2015	
Visitor Tracking	About Art Gallery Space Observation	27/05/2015	1
Participant Observation	Archaeology Gallery - Gallery Design Meeting	08/06/2015	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	09/06/2015	
Participant Observation	Project Team Meeting	11/06/2015	
Participant Observation	Design Day Meeting	16/06/2015	
Participant Observation	Archaeology Gallery - Gallery Design Meeting	01/07/2015	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	01/07/2015	
Participant Observation	Archaeology Gallery - Participation in Curation	02/07/2015	
Participant Observation	Project Team Meeting	03/07/2015	
Visitor Tracking	History Lab Gallery Space Observation	03/07/2015	1
Visitor Tracking	Sheffield Life and Times Visitor Tracking	03/07/2015	1
Participant Observation	Design Day Meeting	14/07/2015	
Visitor Tracking	About Art Visitor Tracking	21/07/2015	5
Visitor Tracking	History Lab Visitor Tracking	21/07/2015	5
Visitor Tracking	Hub Space Observation	21/07/2015	1
Visitor Tracking	Mappin Lobby Space Observation	21/07/2015	1
Visitor Tracking	What on Earth Visitor Tracking	21/07/2015	5
Participant Observation	Archaeology Gallery - Community Co-Curation	22/07/2015	
Visitor Tracking	Arctic Worlds Visitor Tracking	27/07/2015	5
Visitor Tracking	Sheffield Life and Times Gallery Space Observation	27/07/2015	1
Visitor Tracking	Sheffield Life and Times Visitor Tracking	27/07/2015	5
Visitor Tracking	Treasures Gallery Space Observation	27/07/2015	1
Visitor Tracking	Treasures Visitor Tracking	27/07/2015	5
Participant Observation	Archaeology Gallery - Gallery Design Meeting	28/07/2015	
Participant Observation	Archaeology Gallery - Object Research Started	28/07/2015	
Participant Observation	Archaeology Gallery - Initial Label Draft	01/08/2015	
Visitor Tracking	History Lab Visitor Tracking	01/08/2015	1
Visitor Tracking	About Art Visitor Tracking	06/08/2015	2
Visitor Tracking	History Lab Visitor Tracking	06/08/2015	7

Research Method	Activity	Date	No of observations / responses
Participant Observation	Archaeology Gallery - Labels draft	10/08/2015	
Visitor Tracking	About Art Visitor Tracking	13/08/2015	6
Visitor Tracking	History Lab Visitor Tracking	13/08/2015	4
Participant Observation	Project Team Meeting	14/08/2015	
Participant Observation	Design Day Meeting	18/08/2015	
Write-Draw	Write-Draw Pilot	20/08/2015	21
Documentation	Pre-development photo documentation	25/08/2015	
Visitor Tracking	About Art Visitor Tracking	27/08/2015	3
Visitor Tracking	Atrium Visitor Tracking	27/08/2015	8
Visitor Tracking	History Lab Visitor Tracking	27/08/2015	3
Visitor Tracking	Museum Atrium Space Observation	27/08/2015	1
Visitor Tracking	Sheffield Life and Times, Our Green City Space Observation	27/08/2015	1
Visitor Tracking	What of Earth Gallery Space Observation	27/08/2015	1
Participant Observation	Design Day Meeting	22/09/2015	
Participant Observation	Archaeology Gallery - Case Layouts	30/09/2015	
Participant Observation	Archaeology Gallery - Gallery Design Meeting	08/10/2015	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	08/10/2015	
Visitor Tracking	About Art Visitor Tracking	26/10/2015	5
Visitor Tracking	History Lab Visitor Tracking	26/10/2015	1
Visitor Tracking	History Lab Visitor Tracking	26/10/2015	4
Write-Draw	Write-Draw Pre-Development	29/10/2015	25
Participant Observation	Archaeology Gallery - Gallery Design Meeting	03/11/2015	
Participant Observation	Archaeology Gallery - Object Research Finalised	07/11/2015	
Participant Observation	Arcaheology Gallery - Coins Training	09/11/2015	
Visitor Tracking	About Art Visitor Tracking	11/11/2015	5
Visitor Tracking	History Lab Visitor Tracking	11/11/2015	5
Participant Observation	Project Team Meeting	12/11/2015	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	12/11/2015	
Participant Observation	Archaeology Gallery - Labels draft	30/11/2015	
Interviews	Interview with Visual Art Team	03/12/2015	3
Participant Observation	Archaeology Gallery - Case Layouts	08/12/2015	
Interviews	Interview with Archaeology Team	10/12/2015	2
Interviews	Interview with Project Administrator	10/12/2015	1

Research Method	Activity	Date	No of observations / responses
Interviews	Interview with Project Manager	10/12/2015	1
Participant Observation	Archaeology Gallery - Gallery Design Meeting	10/12/2015	
Participant Observation	Project Team Meeting	10/12/2015	
Interviews	Interview with Social History Curator	11/12/2015	1
Participant Observation	Archaeology Gallery - Gallery Design Meeting	07/01/2016	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	12/01/2016	
Participant Observation	Archaeology Gallery - Gallery Design Meeting	14/01/2016	
Participant Observation	Project Team Meeting	14/01/2016	
Participant Observation	Archaeology Gallery - Gallery Design Meeting	21/01/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	25/01/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	26/01/2016	
Participant Observation	Project Team Meeting	02/02/2016	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	02/02/2016	
Participant Observation	Archaeology Gallery - Gallery Design Meeting	03/02/2016	
Documentation	Mid-development photo documentation	15/02/2016	
Participant Observation	Archaeology Gallery - Gallery Design Meeting	10/03/2016	
Participant Observation	Archaeology Gallery - Labels draft	10/03/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	10/03/2016	
Participant Observation	Archaeology Gallery - Case Layouts	14/03/2016	
Participant Observation	Archaeology Gallery - Labels draft	14/03/2016	
Participant Observation	Meeting with Project Administrator	15/03/2016	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	22/03/2016	
Participant Observation	Archaeology Gallery - Gallery Design Meeting	24/03/2016	
Participant Observation	Archaeology Gallery - Prototyping	24/03/2016	
Participant Observation	Archaeology Gallery - Gallery Design Meeting	12/04/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	12/04/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	14/04/2016	
Participant Observation	Project Team Meeting	14/04/2016	
Participant Observation	Archaeology Gallery - Gallery Design Meeting	03/05/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	05/05/2016	
Participant Observation	Visual Art Gallery - Participation in Curation	05/05/2016	
Participant Observation	Archaeology Gallery - Gallery Design Meeting	12/05/2016	
Participant Observation	Project Team Meeting	12/05/2016	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	12/05/2016	

Research Method	Activity	Date	No of observations / responses
Participant Observation	Archaeology Gallery - Participation in Curation	15/05/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	16/05/2016	
Participant Observation	Visual Art Gallery - Prototyping	16/05/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	17/05/2016	
Participant Observation	Archaeology Gallery - Gallery Design Meeting	18/05/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	18/05/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	01/06/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	02/06/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	07/06/2016	
Interviews	Interview with Archaeology Curatorial Assistant	09/06/2016	1
Participant Observation	Project Team Meeting	09/06/2016	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	09/06/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	22/06/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	04/07/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	06/07/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	12/07/2016	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	12/07/2016	
Participant Observation	Archaeology Gallery - Participation in Curation	13/07/2016	
Visitor Tracking	Sheffield Life and Times Visitor Tracking	05/08/2016	10
Participant Observation	Visual Art Gallery - Gallery Design Meeting	23/08/2016	
Participant Observation	Project Team Meeting	25/08/2016	
Participant Observation	Project Team Meeting	08/09/2016	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	08/09/2016	
Participant Observation	Visual Art Gallery - Gallery Design Meeting	22/09/2016	
Participant Observation	Project Team Meeting	13/10/2016	
Visitor Tracking	Beneath Your Feet Visitor Tracking	17/10/2016	4
Visitor Tracking	Sheffield Life and Times Visitor Tracking	17/10/2016	5
Participant Observation	Archaeology Gallery - Participation in VIP Opening	20/10/2016	
Participant Observation	Archaeology Gallery - Participation in Public Opening	22/10/2016	
Write-Draw	Write-Draw Post-Development	24/10/2016	24
Visitor Tracking	Beneath Your Feet Visitor Tracking	07/11/2016	4
Visitor Tracking	Picturing Sheffield Visitor Tracking	07/11/2016	5
Visitor Tracking	What on Earth Visitor Tracking	07/11/2016	5

Research Method	Activity	Date	No of observations / responses
Interviews	Interview with Learning Officer	10/11/2016	1
Interviews	Interview with Project Manager	10/11/2016	1
Interviews	Interview with Social History Curator	10/11/2016	1
Participant Observation	Project Team Meeting	10/11/2016	
Visitor Tracking	Picturing Sheffield Visitor Tracking	14/11/2016	2
Visitor Tracking	Sheffield Life and Times Visitor Tracking	14/11/2016	3
Visitor Tracking	Picturing Sheffield Visitor Tracking	21/11/2016	3
Visitor Tracking	What on Earth Visitor Tracking	21/11/2016	2
Visitor Tracking	Sheffield Life and Times Visitor Tracking	28/11/2016	1
Visitor Tracking	Beneath Your Feet Visitor Tracking	30/11/2016	1
Visitor Tracking	Sheffield Life and Times Visitor Tracking	30/11/2016	2
Visitor Tracking	What on Earth Visitor Tracking	30/11/2016	1
Interviews	Workshop with 13 Museum Staff	13/01/2017	13
Documentation	Ongoing Collection of Documents and Photography	Duration of Project	

Appendix 3 - Interviews Discussion Guide
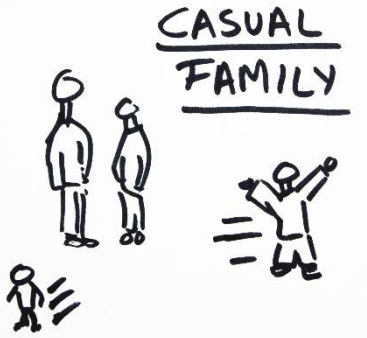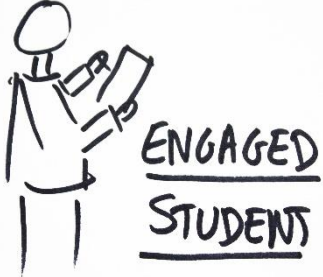
December 2015

If you can answer the questions specific to the galleries you're working on, but feel free to comment on the whole overall museum if you'd like too.
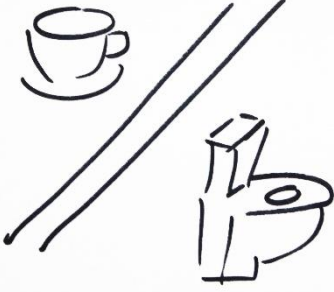
- Who are the different 'actors' (people or organisations) who have been involved with shaping the space so far?
    - Which have been major influences and which only minor roles?
- Do you have a clear idea about what the space will be like at the end of the project?
    - Why yes or why no?
    - What is that idea, can you describe how you think it will be?
- What do you think visitors will take away from the new space? How is that different to the current space?
- What role do you think your curiosity has played in the process so far?
- What opportunities have there been to be creative in the process so far?
- If we think about 'innovation' as making changes based on learning from the current space or other prior experience, What innovations will inform or be in the finished space?
- Have you got any particular thoughts about the process so far that would be useful for me to take into consideration in my research that I'm doing?

Appendix 4 – Weston Park Museum Visitor Personas

Drawing upon segmentation museum visitors developed by other researchers and consultants, I adopted an approach of 'personas' as used for the development of user experiences in digital fields. These are not exhaustive or exclusive categories, but rather seek to create imaginary characters which represent some of the most common visitors to Weston Park Museum in order to think about their motivations and needs. These were presented to Museums Sheffield staff in a workshop in January 2017.

	Casual Family *Up to a few children and couple of adults.* Priorities: - Occupying the children for little cost. - Socialising as a family group. Key Considerations: - Space for adults to dwell with each other (standing or sitting) that isn't necessarily child focused, but perhaps gives a reasonable vantage point for keeping a relaxed eye on children. - Robust construction of gallery furniture.
	Tour Guide *An adult with their parents, or a friend or two from out of town.* Priorities: - Conveying a sense of the city and catching up with each other. - Finding aspects their guest might be most interested in. - Use objects as jumping off points for conversations about their own experience of living in the city. Key Considerations:

	- Often likely to be around university graduations. - Ensuring texts have enough simple language for those with limited English reading skills to get the gist, or written in a way that is easily summarised by someone reading them out to others. - Sign-posting and orientation in the museum.
	Time Watcher *Alone* Priorities: - Being occupied for 10-30 mins. - Constantly checking a watch as don't want to be late for their appointment. Probably go in to a couple of galleries and pay attention to a few keys things. Key Considerations: - Changes in display so there is often new things to see, but some continuity of location for the public's favourite objects. - Temporary exhibitions that can be taken in at a superficial level in a few minutes. - If the staff seem approachable they might strike up a conversation – especially if recognise each other from coming in regularly.
	Engaged Student *Either alone, with couple of others or in a large group facilitated by a leader.* Priorities: - Completing an assignment or class - Either guided by a tutor or by the instructions of an assignment set for them, they will explore the museum in a structured way, writing, pausing, thinking and possibly discussing as they go along.

	Key Considerations: • Spaces in galleries where up to a dozen adults can gather for a few moments at a time without feeling too much in the way of other visitors. • Friendly and welcoming staff who individual students can approach with questions (probably about where something is).
	Facilities User *Alone or with one other.* Priorities: • A cup of tea and/or a trip to the loo. Key Considerations: • Signage. • Being made to feel welcome (else they won't feel comfortable in the space and won't come back in the future to explore). • Making the loos and café feel part of the museum e.g. tiles and marketing in the toilets making connections to the rest of the museum.
	Socialite *Meeting several other adults, often many with a young child.* Priorities: • Gossip. • Likely to spend a lot of time in the café. • Visit the galleries to let the children have a run around and see their favourite bits. Key Considerations: • Tables you can get a lot of chairs (and high-chairs) around.

	• Hard-wearing and replaceable components to young children's favourite interactives.
	Parental Educator *Visiting with 1 or 2 children and possibly another adult.* Priorities: • Ensuring their child learns something, possibly connected to a school project. • Visit most of the galleries but spend most time in the one connected to the intended learning outcome. • Visited before and have a reasonable sense of where to go. Key Considerations: • Having things on display that can connect to curricula. • Adults and children taking part in interactives together. • Things in the shop that connect to collections and subject areas. • Will expect extensive answers to their questions from staff.
	Cultural Dater *Two adults* Priorities: • Getting to know each other better, using the museum for conversation starters. • Meander between the galleries, trying to work out what each other is interested in. • Using different objects and information they are drawn to as prompts for questions or anecdotes. Key Considerations: • Sign-posting and orientation as unfamiliar with the museum.

	- Interest in resources to offer structure to their visit and conversation starters. - Potentially interested in casual/fun programmes aimed at adults outside of times when the museum is full of children.
(Developed after illustrations created)	Reminiscer *Possibly alone, but probably with another adult.* Priorities: - Finding objects that remind them of something they're familiar with. - Engaging in a conversation about those objects - with each other or staff. Key Considerations: - Keeping objects that might be key for reminiscence for local people with memory problems in similar locations e.g. miners lamp. - Providing opportunities for people to share their memories.

Participant Number: /

☐ I have read the participant information.

☐ I give permission for my response to be put on display.

Please draw what you did at the museum today:

Participant Number: /

☐ I have read the participant information.

☐ I give permission for my response to be put on display.

Please draw what you did at the museum today:

Did you visit with a child today? YES/NO

Gender: _____   Age: 18-25 / 26-39 / 40-55 / 56+

Ethnicity: _____

Please write about what you did at the museum today:

Did you visit with a child today? YES/NO

Gender: _____   Age: 18-25 / 26-39 / 40-55 / 56+

Ethnicity: _____

Please write about what you did at the museum today:

Observation Record Sheet

Date: **Space:**   **Start:**   **Stop:**

Actions Observed

1)

2)

3)

4)

5)

6)

7)

8)

9)

10)

Appendix 6 – Before and After Photographs

History Lab/Beneath Your Feet

Late 2015/ Early 2016	October 2016
	© Andy Brown
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Sheffield Life and Times

Late 2015/ Early 2016	October 2016

About Art/Picturing Sheffield

Late 2015/ Early 2016	October 2016	