UNIVERSITY OF WINCHESTER

CURATOR, DESIGNER AND VISITOR INTERACTION IN
CULTURAL HERITAGE INTERPRETATION DESIGN PRACTICE

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DOCTOR OF PHILOSOPHY

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Curator, Designer and Visitor Interaction

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ABSTRACT

This thesis forms 60% of my practice-led doctoral submission and provides an in-depth account of a collaborative and inclusive approach in the professional design of heritage site interpretation. Reflecting on my practice as a professional heritage site interpretation designer, I wanted to understand whether the gaps in curator/designer/visitor communication I experienced was the same for other heritage site interpretation design practices. This initial reflection led to my thesis focus and research question. My design practice in crafting the 3D interactive, kiosk-based, heritage site interpretation for the Cistercian Abbey at Beaulieu in Hampshire is presented as 40% of my doctoral submission. This is portrayed through my 'Talking Walls- Reflection on Practice' website. A series of galleries, posts, including the kiosk interpretation, forms the online exhibition submission which can be explored through this link.

The new model for 'Collaborative Heritage Site Interpretation Design' developed through Action Research, Practice-led design and Design Thinking approaches, contributes to the field of heritage interpretation design for historic houses, as a business model as well as academic contribution. The model extends a user-centred design and participatory design process to include a consistent curatorial, design and visitors team for the design and development of heritage site interpretation, with the intention of enhancing visitors' engagement and experiences at heritage sites. The literature review focused on analysing existing heritage site interpretation design practice definitions and theories across three themes: curation, designing for interpretation, and the

importance of visitors' experiences in shaping heritage interpretation. A lack of heritage site interpretation design literature meant this needed to include literature for interpretation design at museums. Museums are generally more advanced than heritage sites in their participatory/co-design interpretation approaches, yet can be considerably different in the context of space, story-telling and interpretative portrayal of historic sites. This includes the use of digital technology, for which the kiosk interpretation was an early advocate in the use of 3D reconstructions and choice of content on mobile platforms at heritage sites.

Recommendations for future research include potential impact in the use of the Collaborative Heritage Site Interpretation Design model and design process for heritage site interpretation design. New technological developments for heritage sites and museums can build upon the collaborative and multi-disciplinary nature of the model. The thesis and model adds value to the field of heritage site interpretation design, providing a method and process for smaller heritage sites and academic research to follow. The growth in practice-led and practice-based design research PhDs is notable, for which this thesis may also be of value to future design students.

CONTENTS

2D – Two Dimensional

3D – Three Dimensional

AR – Action Research

BAKA – Beaulieu Abbey Kiosk interpretation

CHSID – Collaborative Heritage Site Interpretation Design

DCMS – Department of Culture, Media & Sport

EF – External Influences

EH – English Heritage

FoH – Front of House

FSE – Finance South East

HCD – Human Computer Design

HRP – Historic Royal Palaces

HSI – Heritage Site Interpretation

IF – Internal Influences

IPA – Interpretative Phenomenology Analysis

NT – National Trust

PDA – Personal Digital Assistant

SEEDA – South East Enterprise Development Agency

SVS – Special Visit Sheet (Beaulieu)

UCD – User Centred Design

UGC – User Generated Content

UI – User Interface

UX – User Experience

UXD – User Experience Design

VT – Visitor Team

XD – Experience Design

*All our knowledge falls with
the bounds of experience.*
(Kant, 1787)

INTRODUCTION

The purpose of this chapter is to present the thesis research question, how I plan to address the research question through my aim and objectives, research approach, design and methods. The structure of the practice-led thesis is also presented and explained.

When I joined the University of Winchester in 2010 as a Senior Lecturer to head the new MA Digital Media Practice programme, I was a business owner in the process of launching a multimedia kiosk interpretation application[1] 'The Talking Walls-Beaulieu Abbey' for Beaulieu Abbey[2], which I had researched, designed and created with the support of funding from a Micro Project SMART award. The research and development of the interpretation design of the application was also the subject of my MPhil/PhD, initially started at Winchester School of Art, University of Southampton.

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[1] The Talking Walls Beaulieu Abbey website version: *www.thetalkingwalls.co.uk/Beaulieu* requires Adobe Flash Player to view, which can be accessed here: *https://get.adobe.com/flashplayer/*

[2] Beaulieu is in the heart of the New Forest, Hampshire and is 'one of [the] South of England's top family days out'. The village is well known for Palace House and gardens, the National Motor Museum and Beaulieu Abbey. The World of Top Gear forms part of the National Motor Museum. Beaulieu Abbey's church no longer exists, although there are remains of the cloisters and cloister buildings. King John founded the royal abbey in 1203 in a 'beautiful place' (Beaulieu) for monks of the Cistercian Order, sent from Cîteaux Abbey, France. It was once one of the largest Abbeys in England and was the reason why there is now a village at Beaulieu (*www.beaulieu.co.uk).*

The Beaulieu Abbey interpretation developed from a speculative approach I made to Beaulieu regarding a 3D 'The Talking Walls' style reconstruction of the abbey. During the presentation, the Beaulieu team, comprised of the Commercial Director, Archivist and Owner/Stakeholder, liked the idea presented of a 3D model with a flythrough/walkthrough of the Abbey as it once was. At the time of the approach, Beaulieu were developing an audio tour of the Abbey to help to increase footfall to the Abbey site. The team could see that a virtual model of the abbey at its full size, with additional narratives of people that lived in or visited the abbey in its heyday, would help visitors to understand the abbey's history and significance as a Royal Abbey, and could work well in parallel with their planned audio tour. An outline of what could be produced was developed, forming the initiation of a project brief which I would continue to shape, and for which I would eventually be awarded SMART Micro Project funding.

This thesis presents my research and reflection on practice, the development of my practice both as a professional designer and academic, and my contribution to knowledge in the field of heritage site interpretation design practice. This led to my thesis research question 'What is the nature and scope of communication gaps in the interrelationships between designer, curator and visitors in the ideation, designing and crafting of interpretation at heritage sites? As a design practitioner and academic, the approach used to answer this question was through Action Research and Interpretative Phenomenological Analysis as a Practice-led Design PhD.

The first chapter has been designed to present the research question, aim and objectives of the practice-led thesis. My proposed contributions to knowledge are presented in section 1.2.1, throughout the thesis and through my heritage site interpretation practice, the Beaulieu Abbey kiosk interpretation. The chapter also provides detail of the nature and value of the thesis, the methodology used and an explanation of my design practice and research background in heritage site interpretation design leading to the initiation of the thesis.

The structure of the thesis is presented with an explanation of why and how the structure has been designed to follow the cycles of Action Research, Practice-led Design Research and a typical design process. The chapter also details the journey in building expertise and experience in my role as a designer of heritage site interpretation, a reflective practitioner, design researcher and Senior Lecturer in digital media design.

'Heritage site Interpretation' (HSI) within this thesis, focuses on 'built heritage' (Kelly, 2009a; Uzzell, 1996), buildings that have undergone significant architectural changes no longer visible

(architectural time slices), and, therefore, difficult to imagine without forms of visual representation. The stories of inhabitants existing within the different time slices provide a method of relating cultural values and lifestyles to visitors. Specific inhabitants are recreated as characters which visitors may choose to learn about the heritage site, and its significance over time. Built heritage interpretation is, therefore, often different in the way information is portrayed compared to heritage interpretation at museums. Museums focus more on collections of artefacts and individuals/individual objects within a setting that is usually out of context to use and origin. Another reason for my focus on built heritage interpretation design rather than museum interpretation design is from seeing the more advanced creative use of technology within museums not echoed at built heritage sites, and exploring how this may be changed. The subsequent design of 3D reconstructed time slices with stories via a choice of characters as interpretation at a heritage site has proven to be a successful method of engaging visitors with the history of the site.

How my design practice and experiences in designing cultural heritage site interpretation (HSI) applications compared to other practices and processes, has been through the use of three comparative case studies of interpretations[3] chosen for aspects of similarity and contrast to the Beaulieu Abbey kiosk interpretation:

- Case Study 1 – _National Trust's Lacock Abbey (2013 interpretation)_
- Case Study 2 – _English Heritage's Bolsover Castle (2011-12 interpretation)_
- Case Study 3 – _Historic Royal Palace's Kensington Palace (2012-13 interpretation)_

Comparisons of the different processes used at the three sites with the personal experience of designing, developing and curating interpretation for Beaulieu Abbey, provided useful insights to how complex the design processes can be. Three distinct areas in crafting and launching the Beaulieu Abbey kiosk interpretation, represented as Cycles throughout the thesis, are compared against the case studies with regards to curatorial practice, design practice and effectively, visitor practice. The comparisons of practice were a significant contribution to the literature review. For example, assumptions made in the design and development of the Beaulieu application prompted inquiry as to whether this was a common practice in design processes, specifically in the design of

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[3] More information regarding the three heritage sites' interpretations can be found in Appendix M Heritage Site Interpretation in Practice: The Case Study sites overview and subsequent infographics for each site can be found on this link: _http://thetalkingwalls.co.uk/wordpress/?p=2764_

HSI. Assumptions regarding the experience and conveyance of information between teams involved in the design process also provoked investigation in relation to the impact this may make on the interpretation design outcome. The relationship between curators and designers in forming HSI design, their cultural backgrounds, expertise and experiences in crafting HSI was a key aspect in understanding and comparing their heritage site interpretation design processes.

The knowledge gained has demonstrated that interpretation at the heritage sites differs from that of similar processes within heritage interpretation design at museums (Uzzell, 1996; Bonn *et al.*, 2007; Kelly, 2009b). The larger museums are more participatory in their interpretation design, involving visitors at different stages of the design process, are more collaborative across different areas/disciplines within the museum organisation, and are more creative in their use of technology (Simon, 2010; Petrelli *et al.*, 2016; Hornecker & Ciolfi, 2019). Understanding this has helped to form a more participatory and collaborative method or process for smaller heritage sites and museums to use in their interpretation design (Claisse, 2018).

In explaining the stages and structure of the thesis, this chapter clarifies the contribution and value of HSI design practice. An explanation is provided for how and why the structure has been presented to reflect the cycles of both Action Research (Gray & Malins, 2004) and a typical design process (Brown & Katz, 2009) and why this has been an essential process as a designer in forming the development of the thesis.

In developing the structure and format of my PhD, I needed to find a methodology and approach that included practice as a significant element of the overall research. Further research and advice made it clear that the format, structure and examination of a practice based or practice led design PhD could include a reflective written element and a practical element, usually in the form of an exhibition as part of the Viva (Candy, 2006; Smith & Dean, 2014; Hawkins & Wilson, 2017). Due to the Covid-19 lockdown leading up to and including the Viva event, there would not be an opportunity to present an exhibition (see section 1.3.2 for further information regarding the intended exhibition). Instead, the practical element and development work has been included in my 'Reflection on Practice' website, with a link to the website submitted with the thesis. (More information regarding Practice-based and practice-led PhDs can be found in section 1.2.1.)

Reflection on design practice also led to an exploration of specific design models in use for heritage site interpretation design. As part of this process it was valuable to understand how cultural backgrounds and stakeholders/relationships and constraints impact upon the designed

interpretation outcome for the visitor experience (Black, 2005; Kocsis & Barnes, 2009; Falk & Dierking, 2013; Falk, 2010).

In developing the proposed new model, it was necessary to understand how HSI design and curatorial professionals worked towards producing an exhibit or interpretation. In-depth interviews were held with a selection of four professionals from the Beaulieu curatorial team, four designers involved in exhibition and interpretation design, and four professionals from the guest list for the Beaulieu Abbey kiosk interpretation launch. The interviews were designed to discover their experience in setting an interpretation brief and how it translated through their organisation's processes (Kitimbo & Dalkir, 2013; Fong & Wong, 2009; Roberts, 2014; Maye *et al.*, 2014).

1.1.1.   RESEARCH QUESTION, RESEARCH AIM & OBJECTIVES:

From my experience and research in designing interpretation at heritage sites, there appeared to be a gap in communication between interpretation designers and visitors. From researching key literature (Taylor, 2006a; Hems, 2006; Roberts, 2014) regarding interpretation design at heritage sites this would appear to be overlooked, yet in evidence for interpretation design for museums (Kocsis & Barnes, 2009; Maye *et al.*, 2014; Claisse, 2018). Curators and Designers communicate ideas to fulfil interpretation for visitors, with the curators' knowledge of the site and visitors' feedback helping to inform designers of what may be expected, required or surprised with during the visit (Black, 2005; Ham, 2013; Petrelli *et al.*, 2016). Reflecting on my lack of contact with visitors in designing the Beaulieu Abbey Kiosk interpretation caused me to consider whether lack of contact was the case for other heritage interpretation design practices and whether this is important.

My relationship with the Beaulieu team was collaborative and supportive throughout the process, therefore, I also wanted to research whether this was the case for other designers working with curators and heritage site organisations.

The research question asks, therefore: 'What is the nature and scope of communication gaps in the interrelationships between designer, curator and visitors in the ideation, designing and crafting of interpretation at heritage sites?'

The aim of this thesis is:

- to evaluate the current models that exist in heritage interpretation design, and discover whether there is a model which explains the distinctive roles and interactions between curators, designers and visitors in crafting engaging heritage site visitor experiences.

In order to fulfil this aim, the thesis tackles specific objectives, to:

- explore, understand and portray the relationships between curator ~ designer, curator ~ visitor and designer ~ visitor within the design process of a heritage interpretation project.
- evaluate 'user centred design' models in use by heritage site interpretation designers that examine how internal and external influences affect heritage site interpretation design outcomes.

- explore the characteristics that enable curators and designers to envision 'the visitor' targeted by cultural heritage sites.
- portray the role of envisioning 'the visitor' to a heritage interpretation such as Beaulieu Abbey and how this translates through the design process and interpretation.
- evaluate methods used to measure and understand visitors' experiences of interpretation design

The model in Figure 1 on page 20 presents the perceived gap in the relationships between Curator, Designer and Visitors, and the possible factors influencing those involved in designing heritage site interpretations. It has been argued that if you want people to use your design, you need to understand how they will use it and design it from their perspective (Chang, 2003; Dix *et al.*, 2003; Nielsen, 2000; Moggridge, 2006; Rogers, 1995; Rogers, Sharp & Preece, 2011; Braterman & Becker, 2008). As the Beaulieu Abbey kiosk interpretation designer, I considered that placing myself as the visitor would be sufficient to answer design issues and curatorial aspects involved in the Beaulieu Abbey interpretation.

It was as the interpretation progressed that I realised this was inadequate. I recognised a lack on my part as designer, of direct communication with visitors to the Abbey, which would have helped to understand more clearly, the type of content to include. For information regarding Beaulieu site's visitors, I had researched data from the Association of Leading Visitor Attractions (ALVA)[4] and spoken with the Beaulieu Team about the type of visitors, how Beaulieu wanted to increase the footfall to the abbey and different projects they had previously considered. Being local to the Abbey, I had been a frequent visitor over a number of years, and had noted the age range of people visiting were approximately 40+ year age range. Local school groups also visited and young families who made use of the museum as a learning facility and quiet space.

By not involving visitors in my design and planning process, I did not know if my plans to create characters with their stories, 3D models of the abbey in different ages, puzzles, lifestyles and visuals of a time past, would be what visitors would like to see at the abbey. Feedback and suggestions from the Beaulieu team, combined with reactions and feedback provided from presenting similar work to other sites, highlighted the ideas as exciting and innovative, and as such, would perhaps attract additional visitors from across the site. It was hoped the visitors may

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[4] Beaulieu's Palace House has been involved with ALVA since 2004, and is currently listed under Heritage & Gardens/Treasure Houses of England.

also engage with the characters and 3D models for a more extended period of time, and therefore learn more about the abbey, the size of the building, its inhabitants and growing community. Speaking with the Beaulieu Archivist, who led the Living History project at Beaulieu, I was re-assured that the plans would be an excellent addition for abbey visitors. We then worked together to provide characters she thought the abbey visitors would like to engage with, and were a real part of the abbey's past. Nonetheless, on reflection, I felt I should have involved visitors in my planning and design of the interpretation application for the intended kiosk in the abbey museum. I would have been able to find out more about what elements would engage different age ranges rather than relying on information provided and my own assumptions. Due to financial and time constraints, it was not possible to change the process already started to include measuring and understanding visitors' behaviour, values and expectations and therefore I had to continue with a personal form of empathic design (Postma *et al.*, 2012b). The recognition of a lack of outside opinion and input became the basis of researching interpretation design and how designers and curators incorporated visitors at each development stage (Gaffikin, 2012; Bella, 2014; Claisse, 2018). A realisation of the limitations of empathic design reinforced the notion that measuring and understanding visitors at a design level should be thoroughly evaluated (Tallon & Walker, 2008a; Kocsis & Barnes, 2009; Boiano, Bowen & Gaia, n.d.; Sparacino, 2008; Nack, 2003).

In May 2010, the kiosk interpretation launch for Beaulieu Abbey museum took place for local dignitaries, and the Beaulieu team. The project had taken four years from initial concept presentation to the launch. This journey involved many iterations of curation and design negotiations, funding application processes and in-depth research to reach the final interpretation design. The project enabled a case study that encapsulated the design process. It has also facilitated a means to articulate the nature and value of relationships between the designer, the curatorial team and visitors, and query existing models for HSI design.

The triangle represents my perception of the three main components that should be involved within the design of HSI: curatorial team, design team and visitors. A heritage site design and curatorial team may be comprised of multi-disciplined, multi-skilled professionals from various backgrounds, with varying interests. Internal influences i.e. resulting from an individual's cultural background, education and life experience, may shape how they perceive concepts, projects, and team members. External influences i.e. limitation of budget, stakeholder requests, time and available technology may also be significant in their impact on the interpretation design project. External and internal influences may also affect assumptions which may have been formed from

previous experiences in interpretation design, or previous working relationships. Visitors may also be multi-skilled professionals from various backgrounds, with varying interests, and include non-professionals, families, school groups, couples, and other demographics forming heritage site audiences.

Cultural Heritage Interpretation Design

'Visitors' who are they?

I.F.

E.F.

3. How can we measure and understand this gap?
4. Is it important?

Curator assumptions & experience

'GAP'

Designer assumptions & experience

I.F.

I.F.

E.F.

1. Explanation of Curator & Designer roles, interactions and conflicts.
2. Is this relationship important in crafting an interpretation?

E.F. = External Influences
I.F. = Internal Influences

Figure 1: Research Aim Model (Wilson, 2013 ©)

Literature on the design of heritage site interpretation is limited; the focus is mostly on larger museums, in areas of collaborative design, participatory design (co-design) and interaction design with multi-skilled teams (Simon, 2010; Fuks, Moura & Cardador, 2012; Avram & Maye, 2016). Larger museums have also been able to make use of interactive technology for providing multimedia rich, and more engaging experiences, similar to the Beaulieu Abbey interpretation, for visitors more used to technology and multiple platform delivery (Heath & vom Lehn, 2009; Proctor, 2010; Roberts, 2014; Damala *et al.*, 2014; Ciolfi *et al.*, 2016). Having worked with small local heritage sites over a number of years, it is evident there is a lack of budget for technology in smaller local heritage sites which has created issues in being able to providing engaging interactive

visitor experiences (an area our Digital Media students have been able to assist with via their 'live' client projects). There has also been a frequent change of management, staff and volunteers; consequently, networks, collaboration and multi-discipline expertise would also be aspects to consider during design process research.

The Research Aim model (Fig.1) was initially perceived primarily from a designer and business owner perspective. The need to understand the questions raised would help in working with curators/curatorial teams and visitors to provide a consistent approach for each heritage site interpretation. This could be developed by devising a method which would become routine, include a known and trusted team of professionals, subject experts and visitors, and provide reflective/evaluative stages to ensure a measurable and successful interpretation outcome (Black, 2005; Veverka, 2011; Tilkin, 2016). A design model should, therefore, also fit with the smaller/private heritage site organisation where there is often a limited amount of staff working with a limited amount of volunteers.

To understand who the heritage site interpretation team might be, an explanation of the designer and curator roles, their interactions and possible conflicts that may arise in the interpretation design process was sought within the thesis. Also sought was an understanding in how curators and designers form and work as a team, working with each other's skills sets, experiences and possible bias in developing a concept through to completion. Understanding the collaborative and communicative nature of the 'team', and whether this was critical to the success of crafting the heritage site interpretation, may be influential in the development of a new heritage site interpretation design model, should a suitable heritage site interpretation model not exist.

The three main components in Figure 1 were expanded in Figure 2 on page 22 to illustrate many of the influences and questions curators and designers may face in the development of an exhibit. From the Beaulieu Abbey case, it became evident there were many gaps in encapsulating the Curator~Designer to Visitor relationship. The relationships between designers, curators and visitors have been highlighted as an unknown, a gap in understanding what these relationships may be, if they existed. The illustrative mind map details areas and aspects Curators and Designers may need to consider in their roles. For the Visitors, the areas listed are not what the Visitor is
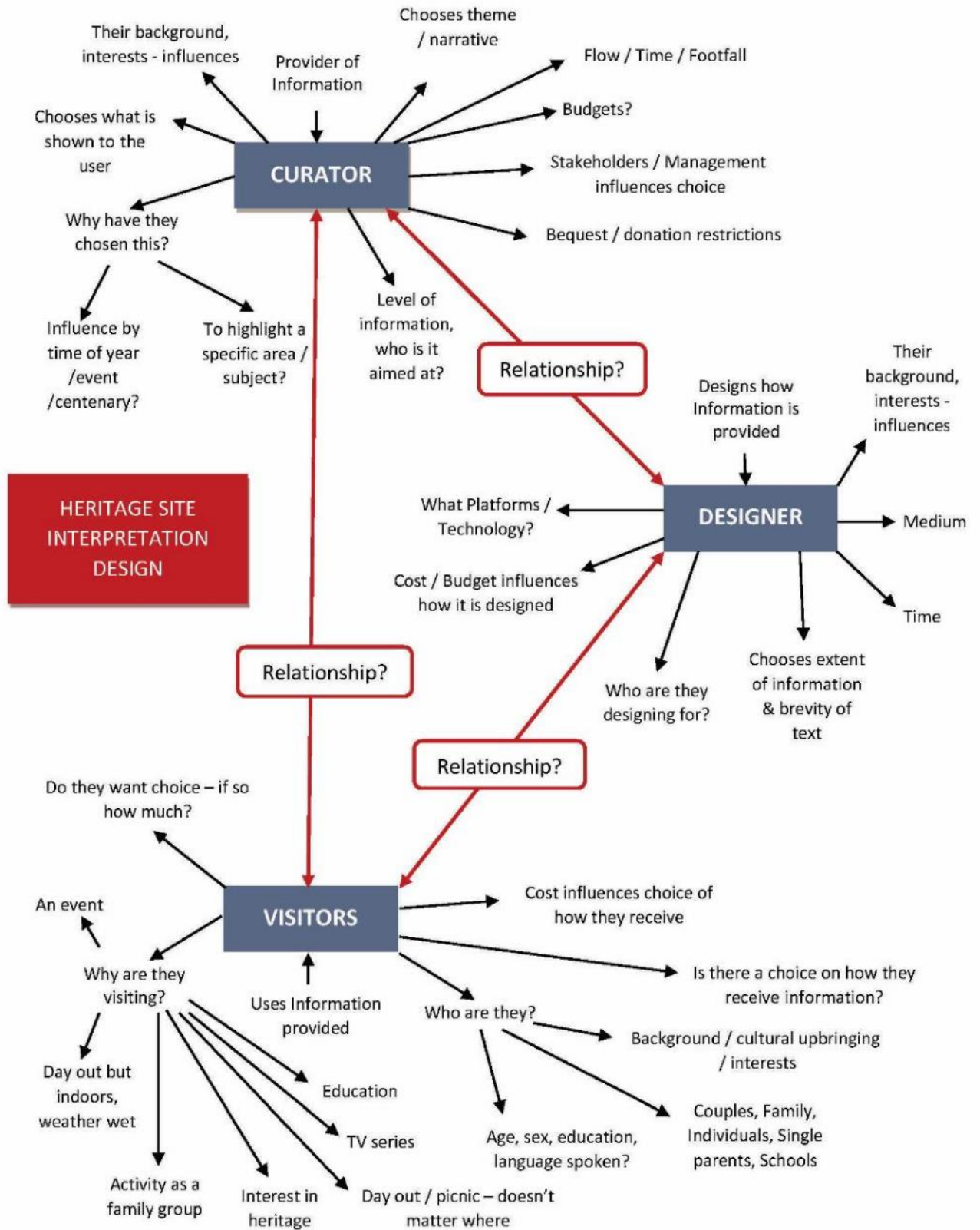
Figure 2-: Illustrative mind map of the roles of a curator and a designer, and the visitor forming the basis of this thesis.

(Wilson, 2012)

in their visit. My perception is, that unless Visitors are part of the process, these can only be considerations and assumptions, rather than known entities. Hence the research via the case studies and literature review to discover if visitors are generally included in the HSI design process, and if so, whether the design process is affected or shaped by their inclusion.

The investigation and subsequent comparison of the interviews, heritage site case studies, literature review and analysis (Smith, Flowers & Larkin, 2012) were vital in understanding how curators and designers work together, what processes are used in providing positive experiences for their visitors and how visitor experiences are measured for understanding how to improve and enhance future interpretation. The new knowledge confirming a gap in communication and involvement of visitors in the design of heritage site interpretation, and the lack in evaluation of the interpretation by designers, helped to outline a new process for heritage site interpretation design that was more inclusive and collaborative. Recognising and understanding the difference in designing interpretation at museums and built heritage sites, the proposed new model and process would be a valuable resource for smaller heritage sites, small museums and designers/design agencies working with heritage interpretation.
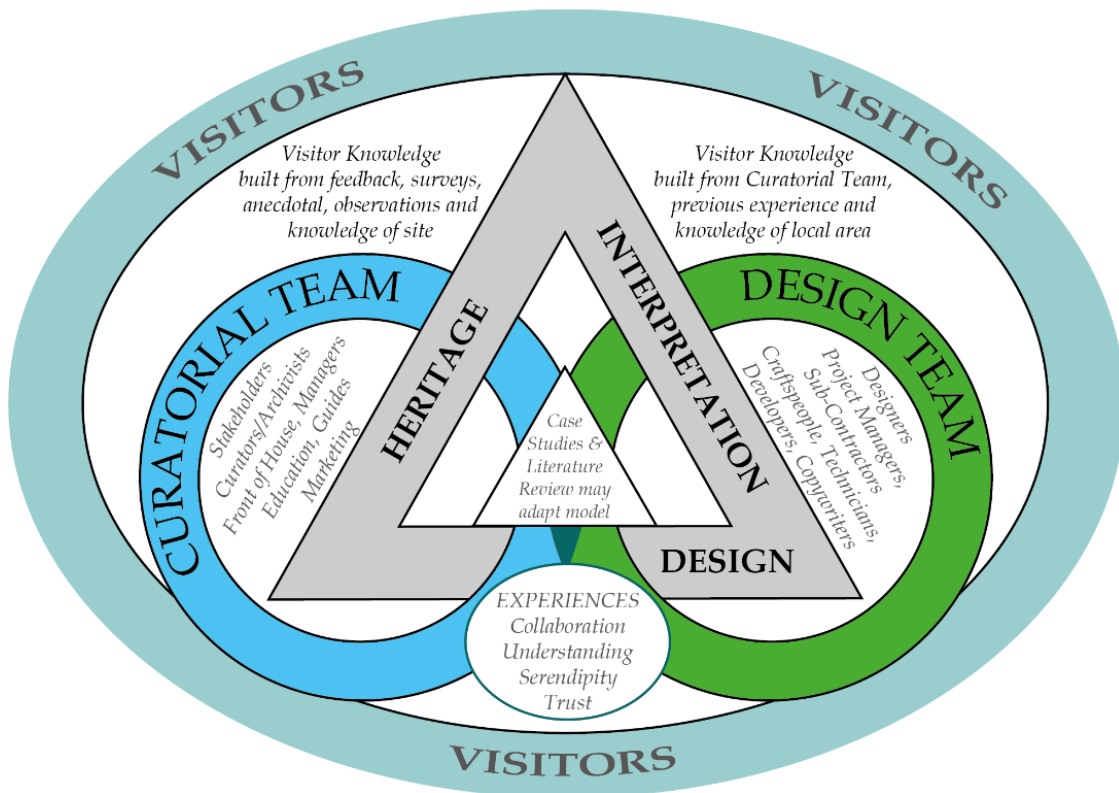
**Figure 3: Beaulieu Abbey kiosk's HSI design existing model resulting from primary data
(Wilson, 2018 ©)**

The model in Fig.3, was designed as a result of my further reflection on practice and the processes involved during the design of the Beaulieu Abbey kiosk interpretation, working closely with the Beaulieu team. The model takes the Research Aim model (Fig.1) further by visualising the lack of visitor representation experienced in the design and development process, and forms the foundation in the development a new model to include a 'visitors' team'.

In the existing model, the outside ring 'Visitors' Sphere' indicates the constant consideration of visitors and what they may wish to engage with, although not involved. This was further supported by comparing the results of the planning process and the feedback provided by the fieldwork with recommendations from Taylor (2013), Veverka (2010) and Black (2005) regarding who is typically involved. The perceived communication gap by the curatorial and design team in speaking to/involving visitors in the planning, design and development process, therefore, does exist. The model (Figure 3) also portrays the results of analysis concerning the collaboration activity between the different teams. For example, it was clear from my experience at Dunster Castle and Beaulieu Abbey that communication between the curatorial team and HSI design team is generally good. Communication between the curatorial team and visitors existed mostly via feedback from surveys/social media and/or front of house/volunteer guides. However, communication between the HSI design team and visitors was non-existent.

Visitors are varied in who they are, why and how they may visit, i.e. the same visitor may visit as part of a group, as part of a couple or alone. Each occasion would form a different type of visit, and experience (Falk & Dierking, 2000; Poria, Butler & Airey, 2004; Black, 2005; Falk, 2009a; Falk & Dierking, 2013; ATS Heritage, 2014b; Tilkin, 2016) (see Chapter 2, sections 2.2.3 and 2.3.3 for further detail regarding visitor types and motivations for visiting heritage sites). The heritage site interpretation team should be able to make use of these experiences, building a 'visitor story journey', highlighting the different touch points where experience(s) may be formed. Personas, user journeys/stories and empathic design form part of the user centred design (UCD) process, which is core to the Design Thinking methodology (Beckman & Barry, 2007; Lockwood, 2009; Dam & Siang, 2018) (see Chapter 2, sections 2.2.2 and 2.3.2 for further detail regarding UCD and Design Thinking processes). The two main differences that have emerged in the use of a UCD process are:

- the lack of consistent involvement of users/visitors (i.e. an active team) throughout the design process

- a lack of the HSI designers' evaluation and understanding of their users'/visitors' engagement and experience with the outcome (Mcintosh, 1999; Roppola, 2012; Roberts, 2014; Avram & Maye, 2016; Claisse, 2018)

Development of a new Heritage Site Interpretation Design model by incorporating a representative team of visitors through the design process, would negate the differences highlighted above. How and when such a team could be formed is discussed in more detail in Chapter 3, Section 3.1.3.

In developing an understanding of the different design processes used within HSI design, I realised there was a definite lack of a detailed step-by-step process for the various stages involved. There were a few examples for museum interpretation planning (Veverka, 1994; Boylan, 2004; Black, 2005; Maye *et al.*, 2014; George, 2016; Tilkin, 2016) which provide generic outlines, but I could not find a comprehensive detailed design process, which could be used as a flexible template for the majority of HSI design.

I would not have been awarded the funding for the Beaulieu Abbey kiosk interpretation had I not provided a detailed plan, schedule, timeline and costs within the funding plan. To map and provide this information, I needed to work out and clarify what was involved at each stage of the project i.e. a detailed step by step process. Having had to do similar as a business owner, I was able to achieve this reasonably well albeit with additional research and expert advice. The successful business plan became the project brief, which included the step-by-step process, making it clear for those involved what the tasks were and the deadlines involved.

I therefore considered that in providing a new model for designing HSI, an accompanying flexible stepped design process would be beneficial in taking the model forward in future HSI design (Roberts, 2014:p.194). Consequently, it would be necessary to re-visit my original Beaulieu design process (Fig.34, p.82) (see Chapter 2, section 2.1.1 for more detail regarding the process) to create a more detailed design process that would be suitable for future HSI design teams.

It was also evident that the creation of multimedia-rich 3D reconstruction mobile applications, with a choice of time slices and characters relating stories of the heritage site, was an engaging and immersive learning asset for interpretation at heritage sites. Where the technology, hardware platforms and software were once slow and unreliable, the advanced systems now available make the development of further multimedia-rich 3D applications easier to replicate.
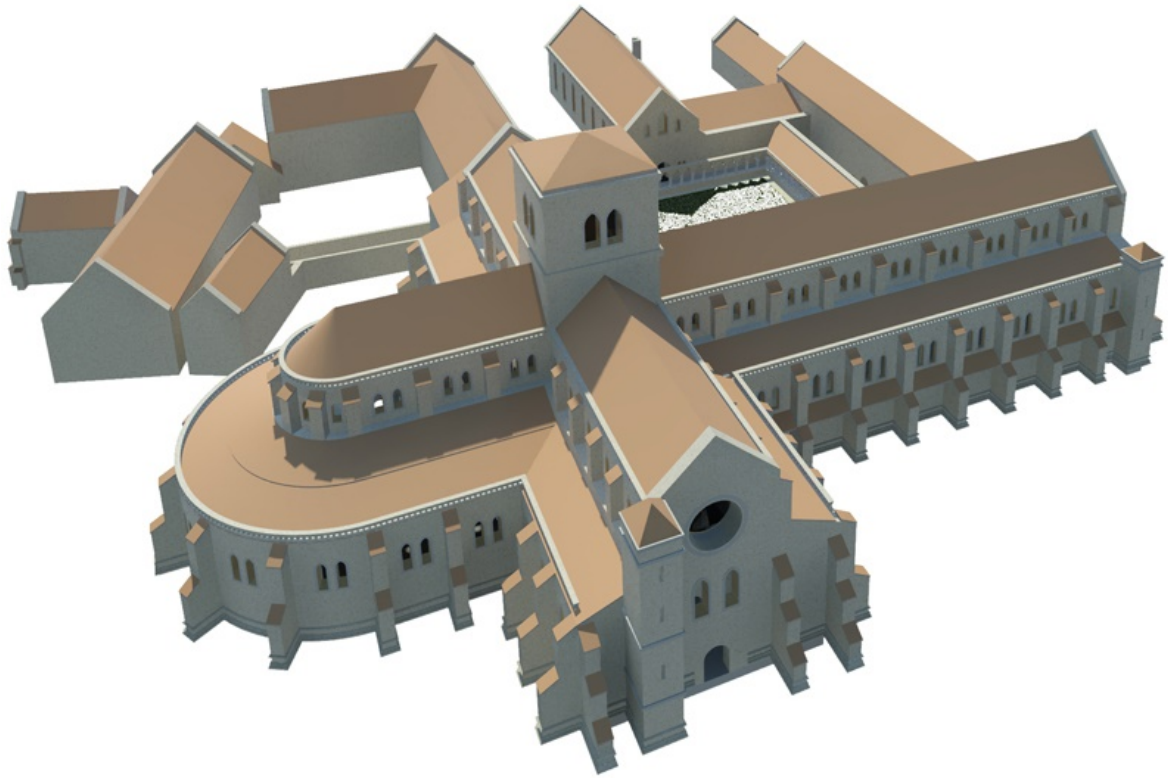
Figure 4: A 3D render from Autodesk Revit of Beaulieu Abbey. (Wilson, 2009 ©)

Together with my practice case, this is the second component of my contribution. It is novel because it enables visitors to have choice in architectural time slices or eras of the space they are in. They also have choice in which character will provide them with information of that space, and choice in whether that information is at child, adult or professional level via my 'KubeMatrix' template (see section 1.3.1 for more detailed information). According to the feedback provided verbally and via a questionnaire, the launch guests stated the Beaulieu Abbey application was unique in this respect; only one guest had seen something similar at another heritage site, but not with the depth and variety of choice. The need for the application to be available via mobile was clear, saving queueing/delays at kiosk points, and providing a more personal experience. With the current advanced mobile platforms and widespread use of personal devices, the application as a mobile application would enable visitors to roam a heritage site, guided by a chosen character, and visually explore the existing space through different centuries.

Action, Evaluation, Reflection

As a designer and design researcher, the structure of this thesis has been structured to follow the three cycles of Action Research (Reason & Bradbury, 2001; Gray & Malins, 2004; Horváth, 2007), which also loosely replicates a typical user centred design process (Abras, Maloney-Krichmar & Preece, 2004; Brown & Katz, 2009; Hashim, 2013; Hornecker & Ciolfi, 2019).

The diagram below (Fig.5) has been designed to explain the use of Action Research (AR) in the construction of this thesis. The structure closely follows the practice, reflection and evaluation of the practical element, enabling evaluation and reflection for each of the 3 Stages.

Stage 1 – Context

- Research Question, Research Aim, Objectives & Contribution to Knowledge
- Research Approach, Research Design & Methods
- Background (Professional & Academic) & Context

Stage 2 – Practice

- Design Challenges & Outcomes
- HSI in Practice: Case Study Comparisons
- Curator~Designer~Visitor – Shaping Heritage Site Interpretation Design

Stage 3 – Evaluation & Reflection

- Evaluation & Discussion
- Reflections as a Design Practitioner, Design Researcher & Academic

Figure 5: Thesis Structure showing the 3 Main Stages and Cycles

The animated visual summary[5] of the thesis structure was extremely helpful in mapping the flow of content and the significance of each stage. In conjunction with the visuals, a written summary (see below) for each chapter helped to consolidate the use of AR and curation of content. The initial objective in understanding how the practical and written elements knitted together as a unified structure using AR has subsequently helped in presenting the overall structure clearly, to the reader.

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[5] The link for the animation: *https://youtu.be/TM-iv1i-p80*

STAGE 1

Chapter 1. INTRODUCTION, METHOD & CONTEXT

Chapter 1 includes three sections, the first of which provides reasons for my practice based design research, written thesis and contribution to knowledge. The structure of the thesis is presented with an explanation of why and how the structure has been designed to follow the cycles of Action Research, Practice-led Design Research and a typical design process. The Methods section explains the chosen methodology and factors shaping why this methodology was chosen and how the methods have been used over the three distinct stages. The difference between Practice-based (PB) and Practice-led (PL) design research is explained, how these compare with more traditional PhD formats and the subsequent use of PL design based format for my PhD thesis and practice element. Furthermore, an account of my professional and academic background is included, with an explanation of the Beaulieu Abbey kiosk interpretation practice element, reasons for the kiosk interpretation and the challenges involved. A definition of heritage interpretation as information to 'provoke, reveal, relate' sets the context for presenting information as heritage site interpretation at Beaulieu Abbey. This is followed by the intended plans for the Viva exhibition.

STAGE 2

Chapter 2. HERITAGE SITE INTERPRETATION DESIGN IN PRACTICE

The first section 'Design Challenges and Outcomes' details the practice element through the use of three stages and action cycles: Practice, Launch and Post Launch. The first cycle (practice) provides detail of the planning and build of the practical element, the developing relationship with the Beaulieu team and experience of 'getting to know' the abbey. This is followed by details of the launch event and the material collated (cycle 2). The third cycle (post launch) provides the interview plans with curators, designers and launch guests involved in the interpretation project at Beaulieu and professionals from other heritage organisations.

Section 2.2 consists of three sub-sections: the curation process (2.2.1 Curating Interpretation at Heritage Sites), the design processes used (2.2.2 Designing for Interpretation), followed by who is using and engaging with the interpretation and how this is measured (2.2.3 Using and Engaging with Interpretation). The sections are analysed through the use of three HSI case studies: English Heritage's Bolsover Castle, Historic Royal Palaces' Kensington Palace and the National Trust's Lacock Abbey, chosen for similarities to the Beaulieu Abbey kiosk interpretation.

Section 2.3's purpose is to establish a theoretical lens to critically review and analyse existing theories and definitions pertaining to design practices in the formation and creation of interpretation at heritage sites. A cross-disciplinary systematic literature review was undertaken to ascertain key texts in three main themes to explain the process, nature and challenges associated with effective communication between curators, designers and visitors. A section of the literature review explores the importance of reflective practice within different design processes and how this may aid the development of initial interpretation concepts for forming a new model for designing interpretation.

STAGE 3

Chapter 3. EVALUATION & REFLECTION

The purpose of the first section is to evaluate and discuss the interview findings and survey results from which the model for future collaborative HSI design applications has emerged. The chapter also provides a summary of the research question and aim through evaluation, discussion and reflection on the research results and findings for each of the three main stages: 1 – Practice Element and Thesis; 2 - Design Processes in Heritage Interpretation; 3 - Visitor Involvement in the Heritage Interpretation Design Process and How Successful Visitor Experiences are Determined.

The second section provides reflections on how the iterative AR reflective cycles and IPA have been used for developing the thesis structure, design practice and the new CHSID model and process. These are then summarized with conclusions concerning the impact a reflective design process has on design and research for HSI design. Reflection on the Beaulieu Abbey kiosk interpretation through the different Cycles and the practice of reflection as part of a design process is also included. In addition, this section provides reflection and insight regarding PB and PL design research, and how this will support future PB or PL design research PhDs within the University.

CONCLUSIONS

Chapter 4. CONCLUSIONS

This chapter explains how I have answered the research question, aim and objectives, and in doing so, what I have contributed to knowledge in the field of heritage site interpretation design. The new Collaborative Heritage Site Interpretation Design (CHSID) model is presented with an explanation of the differences between the existing Beaulieu and UCD models that make the CHSID model unique. Also presented is a detailed design process structured to provide a step-by

step reference to accompany the new CHSID model and future considerations for encapsulating visitor experience via the CHSID model is discussed. The chapter includes an overview of how the CHSID model and process has been used on current heritage site projects, and how it can be used by heritage site organisations and heritage site interpretation designers for their own interpretation projects.

Recommendations for future research regarding a wider practice in HSI design such as comparisons with smaller heritage site organisations are also outlined. Design methodology recommendations are presented and demonstrate the value of the thesis in current thinking and practice in HSI design. Unexpected research areas emerging from the research and evaluation of data are also highlighted.

The aim of the thesis is to evaluate the current models that exist in heritage interpretation design, and discover whether there is a model which explains the distinctive roles and interactions between curators, designers and visitors in crafting engaging heritage site visitor experiences. Research was approached via three stages:

Stage 1 – Visual and Historical Research Practice

Through the practice of HSI design in crafting a visitor experience, considerable fact-finding regarding the history of Beaulieu Abbey, current examples and methods of designing information for heritage interpretation was undertaken. The outcome consisted of an array of visual material including development sketchbooks, diagrams and matrix information, photography, illustrations, 3D models and sound files. Personal reflections include design challenges, changes and influences affecting the interpretation, the groundwork and investigation required to create the multimedia elements and relationships built through the process.

Stage 2 – Guest Launch Research

At the Beaulieu Abbey launch, research material was collected before, during and after the launch. For example, questionnaires completed at the launch, video clips, photographs, Google analytics data, feedback communicated via email and reflections on the event overall. The feedback and questionnaires from the launch provided valuable information regarding usability, navigation and content. Working with Beaulieu in organising the event and observing communication between the different relationships involved, provided a unique insight to how important this process was for a successful launch event.

Stage 3 – Interview Study

Interviews (Smith & Osborn, 2007; Corbin & Strauss, 2008b; King & Horrocks, 2010) with key people involved in the production and engagement of the Beaulieu Abbey interpretation were conducted in person, to discover how working relationships between groups of individuals develop, and whether those relationships influence the interpretation. The participants selected were from three groups: Curators, Designers and Visitors (see Fig. 6 overleaf). The interviews were conducted in person at their chosen location, and were each between one to one and a half hours long. Analysis of the transcripts was via IPA and thematic analysis, using NVivo as a tool to aid in determining categories and subsequent themes (see section 1.2.3 for more detail). The interviews with the Curators provided valuable information regarding the individual relationships

with their visitors and processes used in planning and curating information for interpretation. They also highlighted the team's working relationship and how restrictions were reduced by being a small yet broad-skilled team.

The 'Designers' interviews explored their preferred processes in working with interpretation briefs and whether their cultural upbringing influenced their interpretation. These interviews were significant in understanding the design methods used, whether user experience design is considered when designing for visitors and the Designer's experience of the design process.
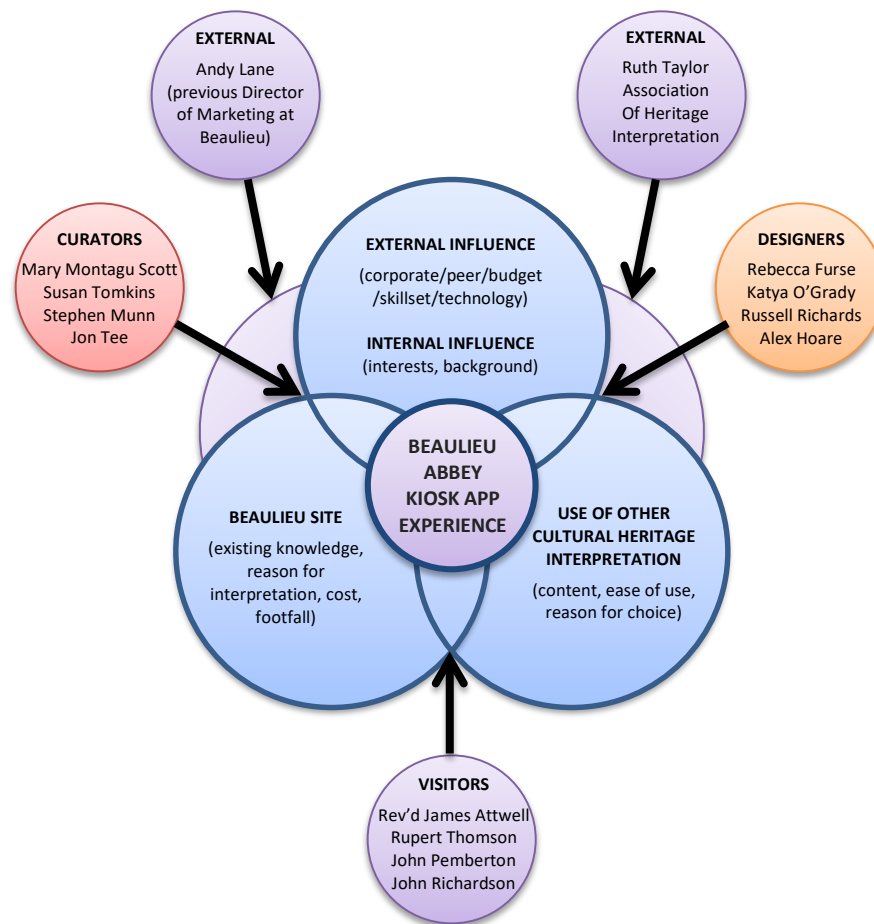
Figure 6: Participants and indication of subject area for in-depth interviews in relation to their experience of the Beaulieu Abbey Kiosk interpretation (Wilson, 2013)

The 'Visitors' group of interviews consisted of launch guests selected for their interest in the use of digital media to provide visuals of how the abbey was built, the Abbey and the life of its inhabitants (see section 1.2.3 for detail about the selection of the interview participants). The kiosk interpretation was demonstrated at the launch, and guests were encouraged to interact with characters that could be chosen to guide them through the abbey in the different eras. Their first

experience of the application, possible subsequent use and how this compared to other interpretation experiences were essential to capture via the interviews, bearing in mind their backgrounds, interests and professions.

Two further interviews were undertaken with cultural heritage professionals to gain an insight about methods and processes used in other cultural heritage sites to compare with those used by the Beaulieu team and individual designers. These interviews were critical in providing an external view of the design of HSI, particularly in larger organisations.

In summary, the interview process sought to discover how groups of individuals work with each other, how they came to be where they are and how this influences their working relationships. Reflection on their processes and comparing these with known models also follows a mode of discovery, based on interpretation and experience. The approach, therefore, encompasses the following three philosophical theories: Aristotle's endoxa, the term for 'what is believed to be true' (Shields, 2008; Haskins, 2004) which supports the research regarding opinions and reflection concerning visitors and assumptions about individuals. The second is epistemology, the term for 'what is known to be true' (Davison, 1998; King & Horrocks, 2010) and supports research in the knowledge being shared by 'experts' in the crafting and process of an interpretation. The third is ontology, the term for 'what is known to exist' (King & Horrocks, 2010; Lawson, 2004; Corbin & Strauss, 2008a) which supports research in the organisation structures and existing processes.

As a logical, creative thinker, I like to know how things work and how they are made. As a designer, my interests lie in understanding what makes people 'tick', how they will interact and engage with an interpretation or react to the way information is conveyed. As a design researcher, these interests extend to how relationships work in sharing and developing an idea, how individuals share their knowledge and how this is received and interpreted. Reflection and interpretation are organic and a constant background activity.

Therefore, the research philosophy 'Interpretivism' was already determined by the nature of the study described above, and my personal nature and interests. Interpretivists share the following qualitative beliefs: relativist ontology[6] and subjectivist epistemology[7]. Interpretivism's qualitative methodologies (phenomenology, ethnography, and hermeneutics) (Mills, Bonner & Francis, 2006;

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[6] Relativist ontology - assumes that social reality only comes to light through individual interpretation and meanings and understandings developed socially and experientially

[7] Subjectivist epistemology - seeing knowledge as something interpreted by individuals

Corbin & Strauss, 2008b; Pallud, 2008; Regan, 2012; Piggot-Irvine & Zornes, 2016) incorporate methods such as action research, case studies, descriptive, interpretive and subjective, some of which have been used in this thesis to capture and understand individual descriptions and meanings of events, and generate new theoretical inferences (Burns, 2000). Through the qualitative interpretive approach, the use of a variety of data sources was supported, providing the opportunity to curate a rich collection of multi-media material alongside personal reflections on involvement with, and use of, the practical element – the Beaulieu Abbey kiosk interpretation.

At the start of my PhD, I was a practicing designer with two companies, one was a design and training company (Clear Thinking UK Ltd), the other consisted of simply myself as a heritage site interpretation designer and researcher (The Talking Walls UK Ltd). The latter developed from completing my Masters in Interaction Design and the resulting major project winning a commercial viability award (2004). Through The Talking Walls, I presented the designed KubeMatrix-based heritage application for Dunster Castle at various innovation events and conferences as a heritage site interpretation designer. I also presented the application to the National Trust, the British Museum and Beaulieu amongst others.

My experience as a multi-disciplined contractor/freelancer, business owner/manager, illustrator/craftworker and manager of a craft centre, built a set of skills that were valuable in being able to teach across different subjects, and in relating/communicating with others of varying ages and professions.

My research in further designing/developing the heritage site application and the KubeMatrix model for Beaulieu, took the form of a MPhil/PhD proposal. This was the first step of my extended 10 year PhD journey. At Winchester, due to organisation and academic constraints, the decision was to work with the business area of design, i.e. innovation, organisational frameworks, processes and user-centred design, tying in with marketing. This decision complemented my background and experience in business innovation, marketing and branding.

I had previously researched performance/creative practice based theses when initially starting at Winchester, and from the completed examples had understood the structure could be different – and therefore had designed my PhD thesis structure to suit Action Research cycles and design processes used as a designer (discussed in Chapter 2). Reflection is a core factor of my design work and, therefore, seemed completely logical to use throughout the thesis and practice element.

It was evident from further research (Vaughan, 2019; Candy & Edmonds, 2018; Claisse, 2018; Smith & Dean, 2014; Clarke, 2011; Borg, 2009; Rust, Mottram & Till, 2007) that there was, and still is, considerable discussion regarding design based PhDs and design research. A conclusion derived from the research was that my PhD was more in line with practice-led design PhDs, i.e. a reflection on practice rather than reflection through practice. The table in Fig.7 highlights examples of successful theses in Practice-based and Practice-led design PhDs, and their similarity to traditional

PhD formats and approximate weightings of practice and thesis. My PhD consists of a written thesis (60%) and a practice element (40%).

Thesis	Practice Based (PB) or Practice Led (PL)	Weighting re Practice/Thesis	Word Count (w/o refs & appendices)	Typical PhD Structure?
The experience of writing a practice-based thesis in Fine Art and Design – Borg, 2009	PB	2 Case studies of art practice students over 3 years. All Thesis, no physical practical element	96,824	No – Has Introduction, Methodology, 2 Case Studies, Conclusion. Has 2 large sections each with overview and conclusion – the first regards Introduction, background, methodology through 4 chapters, the second are the 2 case studies ie encounters with artists and designers.
Uncertain surrenders: The coexistence of beauty and menace in the maternal bond and photography – Wilkinson, 2012	PL	Book of Photographs and written element	50,682	No – Has 5 chapters understanding maternal passion plus an Introduction
What Feels True?: Sifting Through Belongings – Clarke, 2011	PL	Poetry (Practice elements) and written element	20,000 approx not inc. poetry	Mostly No – Has a Prologue, Introduction, Background, Methodology, Chapter about work, Reflections on Practice, Conclusion and Poetry at the back.
RePhrasing Voice: Art, Practice-led Research and the Limits and Sites of Articulacy – Mafe, 2009	PL	60% practice component and 40% exegetical. Practice was an exhibition across 2 QUT venues, providing an overview of creative work	45,000 approx.	No – Has Introduction, Methodology, Contextual Review, Studio Practice, The Artist's Voice and Conclusion
Design Research & Reflective Practice: the facility of design-oriented research to translate Practitioner insights into new understandings of design – Grocott, 2010	PL/Design Orientated Research	Visualisation Case study, blogs and research website (on DVD) with written element (60 practice/40 written?)	75,600 approx	No – Has Summary (Intro?) and 4 Chapters: 1 The Context, 2 Case Study, 3 Discussion, 4 The Knowing followed by an Epilogue
The Augmented House: Crafting tangible interaction in House Museums – Claisse, 2018	PB	Written thesis, practice (interactive installations) and exhibition of practice (60 written/40 practice?)	60,000 approx	Partly – Has introduction, Research Context, Lit Review, Methodology, 4 Phases and Conclusions

Figure 7: Comparative formats of PB/PL completed theses (Wilson, 2020)

Research highlights that the field of design is becoming more acknowledged as a core discipline in practically every industry. Designers and graduate designers are able to apply for a growing range of design related roles. What has changed in my 35+ years as a designer, is the varied roles from what would have been simply been called a Graphic Designer. The table below (Fig.8) demonstrates a small portion of the range and variety already available under three broader disciplines of Graphic, Information and Spatial Design.

Graphic Design	Information Design	Spatial Design
User Experience (UX) Designer	Web Designer	Space Planner
User Centred (UC) Designer	Application Designer	Exhibition Designer
User Interface (UI) Designer	Game Designer	Computer Aided Designer
Human Computer Interaction (HCI/IxD) Designer	Interpretation Designer	3D Designer
Brand Designer	Infographic Designer	Set Designer
Advertising Designer	Experience Designer	Fashion Designer
Social Media Designer	Information Architect	Interior Designer
Motion Graphics Designer	User Experience (UX) Architect	Museum Designer
Packaging Designer	Virtual Reality (VR) Designer	Sustainability Designer
Visual Designer	Augmented Reality (AR) Designer	3D Environment Designer
Digital Media Designer	Artificial Intelligence (AI) Designer	Biophillic Designer
Typographic Designer	Front End Developer	Landscape designer

Figure 8: A Sample Range of Current Design Roles (Wilson, 2020)

There are future roles already being considered such as Invisible Designer, Biometrics Designer, Predictive Designer (Rühl, 2019) demonstrating how the growth and development of technology coming from design, further impacts the design disciplines and industry in providing additional design roles.

A major part of design growth is the area of design research, in Universities and in professional practice. Although there has been design research as a field of research since the 1960's (Bayazit, 2004:p.17), designers who are not engineers or architects, studying for a design based PhD is a relatively new phenomenon (Vaughan, 2019:p.9). The first doctoral conference which included industrial and graphic design was the 'Education in Design Conference', Ohio, in 1998 (Bayazit, 2004:p.27). Now, there are various conferences with design built into the core of the multiple industry specific papers and journals.

According to Ehl and Ullmark (2017) the process of building design skills could be 'understood as pragmatic knowledge production in the tradition of philosopher John Dewey…where experience, as growing out of encounters with real-life situations, is fundamental to understanding' (Ehl and Ullmark cited in Vaughan, 2019:p.78). They also remark on Schön's reflection in action in that 'knowing and doing are inseparable, and of how this is carried out as on the spot experiments, where the materials available to the situation (models, sketches, drawings etc.) talk back, often in a surprising way.' (Ehl and Ullmark cited in Vaughan, 2019:p.78)

Having read the completed Practice-led (PL) and Practice-based (PB) theses in Fig.7, and from my understanding of the differences put forward by Candy (2018), Grocott (2010), Gray (2004) and Smith (2014), some of the PL theses could be classified as PB. PB includes iterative cycles of 'doing and reflecting' through practice, forming the main function of the study and contribution to knowledge. PL is about reflecting on practice work/projects already undertaken, leading to new insights of practice or process, possibly forming new frameworks/processes or models of practice.

Therefore, the researched outcomes for the differences between PB and PL design PhDs, have resulted in the following statements with additional clarification in squared brackets:

Candy states:

- 'If a creative artefact is the basis of the contribution to knowledge, the research is practice-based. [PB]

- If the research leads primarily to new understandings about practice, it is practice-led.' [PL] (Candy & Edmonds, 2018:p.64)

Mottram states:

- 'Research into practice [PL] and research through practice' [PB] (Mottram cited in Smith & Dean, 2014:p.238)

and quotes Frayling's (1994) art and design model of:

- 'research for [PL], through [PB] or into [PL] practice', (Mottram cited in Smith & Dean, 2014:p.239), also quoted by Vaughan (2019:p.74) and Grocott ((2010:p.14)

In Grocott's (2010) explanation of the struggles design practitioners face when taking their practice through to PhD level is supported and discussed by many academics and design researchers. Her experience echoes my experience as a design practitioner in an academic environment, and that of other theses researched. What I find difficult to understand is, that as

designers, our work/practice consistently involves critical analysis, research and problem solving, new insights and new knowledge often formed with each project undertaken (Horváth, 2007; Friedman, 2003). This process is comprehensively explained below by Grocott:

> 'Designers tend to consider a 'problem' from the perspective that there is no single answer – only possible solutions. To this end, designers use their evaluations of a design proposition as a strategy for opening up the design situation… The designer's capacity to iteratively search for the right way to frame a project is a valuable skill to bring to researching when the subject is as unquantifiable as design praxis. Design-based methods provide a critical plat-form by which to reflect upon the subject at hand, but it is the designer's ability to exhaustively frame and reframe the design problem that allows for a comprehensive understanding of the design situation to emerge.' (Grocott, 2010:p.178)

In the research regarding design PhDs, as one of the multi-skilled, multi-disciplined design practitioner/researchers, I empathise with Grocott and appreciate the difficulty faced in finding a 'formula' or PhD structure that would suit the many variants required to accommodate a design practitioner, design researcher or research designer.

Within the practice of design, there are many varying design process frameworks, mostly from a human centred design/design thinking perspective such as user-centred design (Hornecker & Ciolfi, 2019). Designers are now leading 'Design Thinking' workshops in their companies 'because of its ability to generate ground-breaking solutions in a disruptive and innovative way' (Friis Dam & Teo, 2020). Design is becoming more integrated as a valuable resource in critical thinking, critical inquiry, analysis and innovation, therefore demonstrating that designers/design practitioners are developing and 'repurposing methods and languages of practice into the methods and language of research' (Haseman & Mafe cited in Smith & Dean, 2014:p.32). This is occurring in most areas of industry, governmental and health organisations, and Universities.

There will be more designers wanting to take this level of critical inquiry, critical thinking, analysis and reflection on practice to a greater level of research, informing their practice to take onto an academic role, or to progress within their company. It is, therefore, going to be critical to ensure that the options to do so within academia, are clear and informed, with a flexible framework (and language) that bridges design practice with academic research.

Design PhDs	
Practice-led	**Practice-based**
Reflection on design practice/projects, building new or extending existing frameworks, processes or systems	Reflection through design practice/projects, the 'doing' of the practice forms the study
Able to submit documents and artefacts as evidence	Able to submit documents and artefacts as evidence
Viva exhibition & (closed) examination of thesis (or exegesis)	Viva exhibition & (closed) examination of thesis (or exegesis)
Word count: 40 to 100%	Word count: 40 to 60%
Practice element: 0 to 60%	Practice element: 40 to 60%
Reflective account therefore able to use personal pronouns	Reflective account therefore able to use personal pronouns
Not specifically site based, although it can be	Usually site based ie research and practice takes place in the same site
Qualitative, although can also include quantitative	Qualitative
Design Research Approaches	
Practice-led Research, Practice-based Research, Design Orientated Research, Methodological, Transformative, Interdisciplinary, Reflective Practice, [Design Thinking],	
Appropriate Methods	
Constructivist, Phenomenology, Action Research, Grounded Theory, Reflection on/in Practice Research through Design, Case Study, Interpretative Phenomenological Analysis, Participatory Observation, Expert Interviews, Focus Groups, Co-Design, Design Processes, Speculative, Sketching,	

Figure 9: Design PhDs - 'Formula' based on Vaughan (2019), Smith & Dean (2014), Grocott (2010) and Candy (2018)

The thesis is situated using two research approaches: Action Research (AR) and Interpretative Phenomenological Analysis (IPA). The AR and IPA positions support reflection on process and iteration which should be crucial to all areas of academic study and design practice.

However, in researching the two different approaches, AR would appear more suitable to the practice-based element of the thesis (Stages 1 & 2), and IPA for the fieldwork element (Stage 3) as shown in the following:

Stage 1 & 2 – Action Research Overview

Marshall (2011) characterises AR as a series of cyclic steps: action/exploration, immersion in the chosen area, stepping back and reflecting, new or another cycle of engagement. These steps are typical in design production, and therefore eminently suitable for the creation and development of the Beaulieu Abbey Stage 1 and 2.

The AR position encompasses engagement with participants via co-operative enquiry (Heron, in Reason & Bradbury, 2001), thereby covering the working relationship with the Beaulieu team and design assistants in Stages 1 and 2, and seeks to explore and explain the process. Lewin (1951) considered AR to be a democratic-based approach and that 'behaviour of participants vary across time and under [the] influence of different environmental forces' (Passmore, in Reason & Bradbury, 2001 p.38). The relationship and engagement with the different members of the Beaulieu team changed over the length of the project, from that of uncertainty to a degree of trust and friendship. The AR reflection here concerns the processes involved in the development and discussion from concept to finished outcome and that of the curator/stakeholder and designer relationship forming.

Typical Action Research cycles (Gray & Malins, 2004) have been created as a 3D animation[8] to highlight the micro (overview) and macro (detail) stages and cycles as chapters for this thesis. The still images overleaf show the micro overview (Fig.10) and macro overview (Fig.11). In the macro view, each stage has been curated to highlight the main events, reflections and evaluation of the processes that are discussed in the chapters to follow.

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[8] The link for the animation: *https://youtu.be/TM-iv1i-p80*

Stage 3 –
Evaluation &,
Reflection
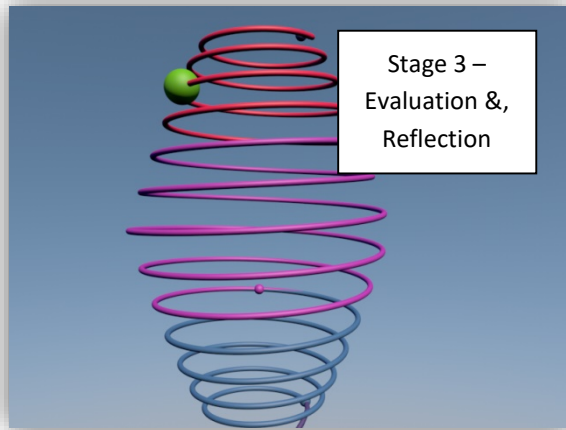
Overview of Thesis.
Structure shown as
AR Cycles:
Stage 1 (Blue)
Stage 2 (Purple)
Stage 3 (Red)

Figure 10: Micro View showing the 3 cycles of Stage 3.
(Wilson, 2013 ©)

Macro view showing the
chapters within each AR
Stage

Stage 3 – Cycles A & B
A – Evaluation & Reflection
B – Reflection on Practice &
Practice-led Research

Conclusions– Cycle C

Stage 2 – Cycles A, B & C
A – Design Challenges & Outcomes
B – Heritage Site Interpretation In
Practice
C – Curator~Designer~Visitor –
Shaping HSI Design

Stage 1-B
Research Approach,
Research Design & Methods

Stage 1 – Cycles A, B & C
A –Research Question, Aims,
Objectives & Contribution to
Knowledge
B – Research Approach, Design &
Methods
C – Practice-led Design Research
PhD

Figure 11: Diagram showing a 'Macro View' of the 3 cycles and chapters of each Stage. (Wilson, 2013 ©)

Stage 3 - Interpretative Phenomenological Analysis Overview

Smith, Flower and Larkin (2012) characterise IPA as aiming to understand participants'
perspectives, perceptions and views. It is concerned with a detailed examination of lived
experience. The focus is on open questions, exploratory not explanatory, and on meaning, causes

or consequences. An important part of building knowledge and skills is learning from experiences; an important aspect of design and problem solving includes observations and research of daily processes, actions and behaviours. IPA, therefore, fits well with my stance as a designer/design researcher for analysing the interviews.

The IPA position for Stage 3 supports the in-depth interviews in understanding the participants' experience and 'connection' with the project and parties involved. The participants' cultural influences and external pressures were also explored through gaining an understanding of their perceptions of their role and project relationships. Through the use of NVivo, the interview data was analysed by reading and segmenting the data into an initial set of themes which were further analysed, and re-categorised (see Fig.12 below). The results of the IPA process can be seen in section 1.2.3.
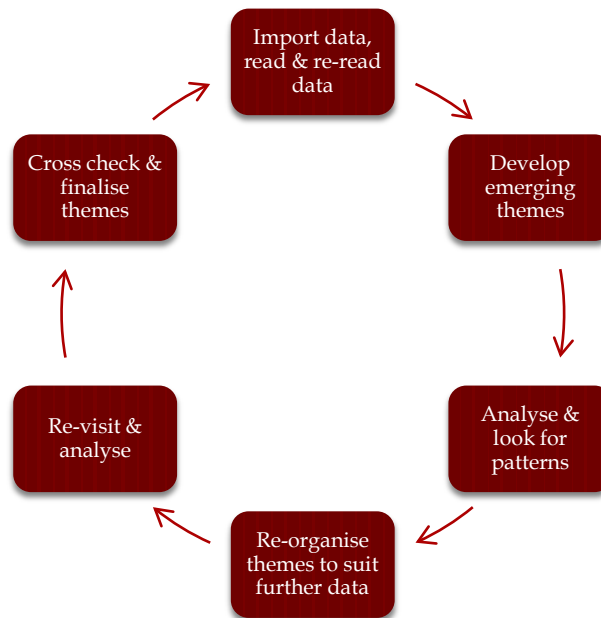
Figure 12: IPA & NVivo Cycle (Wilson, 2018)

Kuhn (1970) stated: '*what a man sees depends both upon what he looks at and also upon what his previous visual-conceptual experience has taught him to see*' (Kuhn, 1970 p.113). He highlighted the need to build a relationship and an in-depth understanding of each participant. Using the IPA research paradigm enables the interviewer to be responsive to each participant's voice self-consciously and systematically (Smith & Osborn, 2007).

The use of a variety of data sources is supported in both AR and IPA, which compensates for possible distorted interpretations inherent in each. A balance was sought between rigour and relevance; richness and applicability; discovery and verification (Guba, 1990:pp.21–23). Section 2.2 and 2.3 discuss in more detail how the three stages were viewed through the use of AR and IPA's reflective cycles and how the two research paradigms reflect the iterative cycles of a design process.

Action Research: 3 stages - Practice, Launch, Post Launch

Elliott (1991) believes Action Research is fundamentally about the transformation of practice; he does not see it as a reflection in action and on action put forward by Schön (Schon, 1984; McIntosh, 2010). Schön's (1984) epistemology was formed from observing the way in which practitioners reflect on their actions during and following their work.

Elliot and Schön's theories work well for designers as researchers, based on the belief that to transform practice you need to reflect and critique the methods you use, as a continuous cycle. This fits with my practice and experience as a designer. I view 'first-person action research' (Reason & McArdle, 2001) similarly to the 'action' areas of a typical design process, i.e. analysis, practice, reflection and evaluation. A designer's role is varied although generally remarked on as instrumental in solving problems and providing information in a method/format that others can understand; they analyse what the problem is and how they will provide an outcome (Lupton, 2017; Cross, 2011; Aspelund, 2015; Lawson, 2006). Through this, a variety of possible solutions are created, at the same time reflecting on how well each provides a solution (reflecting and evaluating). Each cycle of reflection and evaluation transforms the possible solution until one is found to be the best fit. The outcome may start another cycle once presented to the proposer of the problem.

Lawson (2006) suggests that the design process (Figure 13) is '*a negotiation between problem and solution through the three activities of analysis, synthesis and evaluation, with each seen as a reflection of the other*' (Lawson 2006, p48). Figures 14–16 (see page 48) have been designed to depict the importance of reflection in each of the main stages of the creation and launch of a cultural heritage interpretation, in this instance Beaulieu Abbey. Also shown is the consideration of including the three groups of participants at each main stage. For each cycle, there is considerable importance on data collection and its subsequent analysis and evaluation. Reflection

is shown as a separate stage at the end of each cycle; as the designer, this process has been a constant, at an unconscious and conscious level and here, has been designed as the sphere surrounding each stage. The separate reflection stage is to highlight considered reflection on the '*process of making sense of an action after it has occurred and possibly learning something from the experience which extends one's knowledge base*' (1994:146, cited in Ellmers 2006). Therefore enhancing the participants' knowledge which they would be able to take forward to new interpretations.
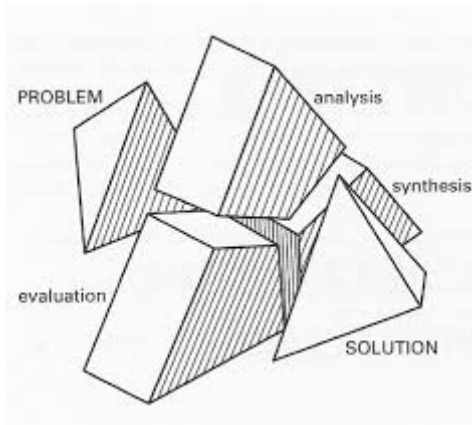
Figure 13: Lawson's suggested design process (Lawson 2006)

Figure 17 (see page 49) depicts the similarity of the reflective practice in a design process. The main difference is the middle cycle, Stage B, where the design is considered, reflected and considered in an ongoing cycle until all participants are in agreement. The designed artefact moves to the next stage, perhaps 'launched' and its impact studied, analysed and reflected upon as one process. Although not shown, the next stage might be a new brief to reflect the results of the previous stage – and the whole cycle is repeated changing the successive interpretation's outcome, or perhaps used for a completely different interpretation. Therefore, the reflection element in Stage C is included rather than a separate stage as in the AR and IPA approach shown in Figure 16.

By placing the practice of designing and creating the Beaulieu Abbey kiosk interpretation as Cycle 1, the Launch as Cycle 2 and Post Launch as Cycle 3, it has been easier to record, reflect and evaluate the experiential impact the project has had on my practice. The three cycles are very different to each other but cannot exist without the other, in themselves reflecting the process of Action Research and Design Processes. My role as a practitioner and educator would also not exist

without the experiences gained through this process, reflecting back to Kant's (1781) quote 'All our knowledge falls with the bounds of experience.'

An area of concern regarding the three cycles (Figures 14-16), is the ongoing cycle of consideration and reflection depicted in Figure 17 Stage B. Will using AR and IPA as the primary approaches in analysing and reflecting on the participants' experience be as thorough as a reflective design process, or should they be used in 'conjunction' with a reflective design process?

The following section will examine this question in more detail, and be explored via comparison with different design processes in Chapter 2, Section 2.2.

Figure 14: Beaulieu Abbey Practice – Cycle 1
(Wilson, 2013)
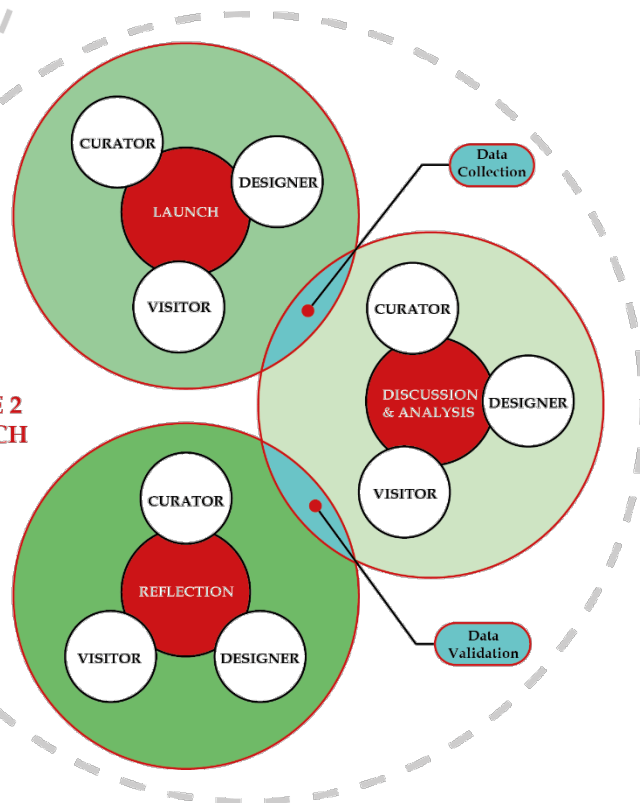
Figure 15: Beaulieu Abbey Launch – Cycle 2
(Wilson, 2013)
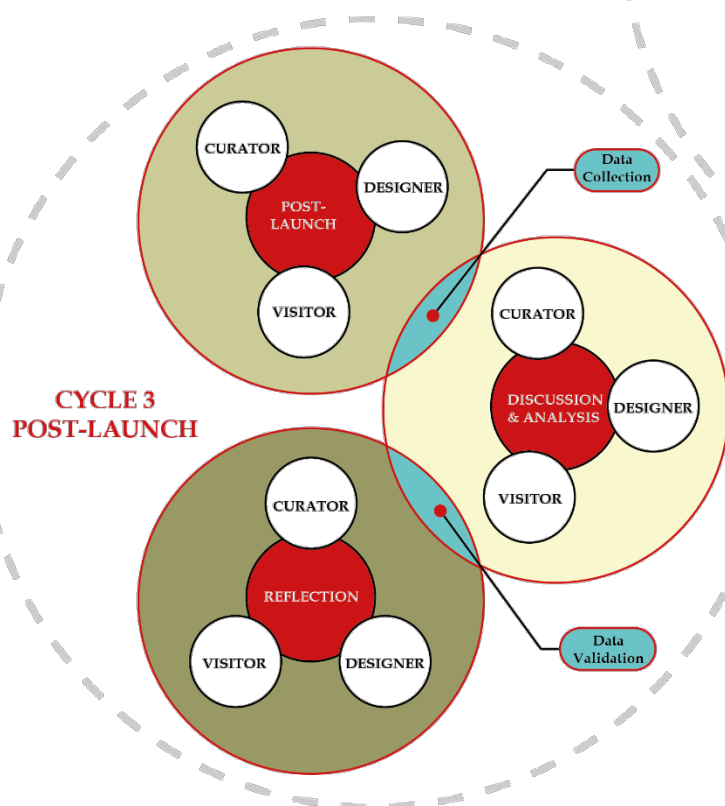
Figure 16: Beaulieu Abbey Post Launch – Cycle 3
(Wilson, 2013)
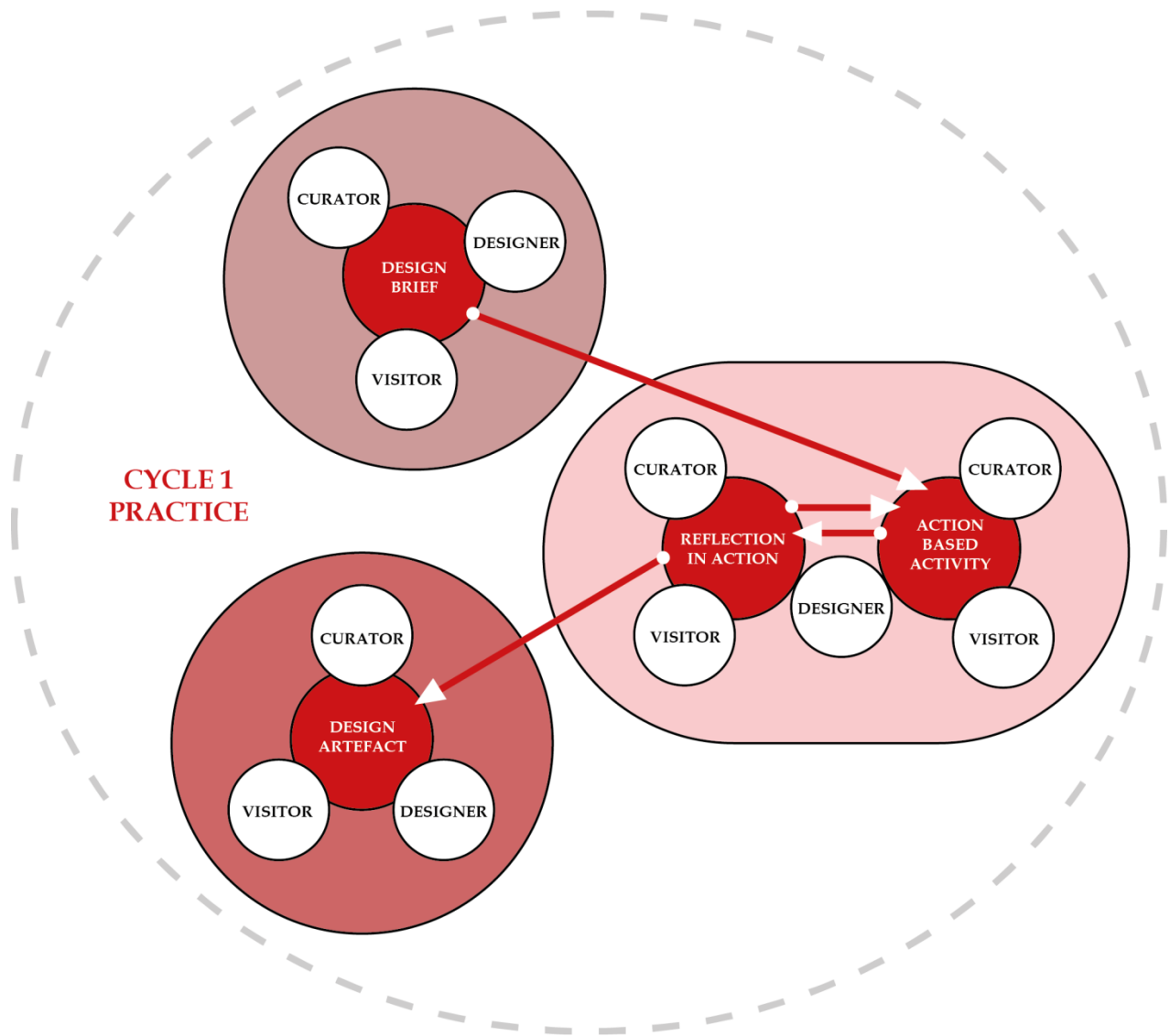
CYCLE 1 PRACTICE

Figure 17: Beaulieu Abbey Practice – Cycle 1 using a Reflective Design Process (based on Ellmers' Reflective Framework (2006))

IPA has been used with AR as the two main qualitative research methods. It is at this stage, Stage 3 - Post Launch that IPA is used as the dominant paradigm hence this separate section. Stage 3 explores the experiences of those involved in the journey, and those taking part in the launch via semi-structured interviews. IPA is the most suitable for understanding, interpreting and analysing participants' experiences in their involvement of the Beaulieu Abbey kiosk interpretation and heritage interpretation design.

Therefore Ellmers' Reflective Design Process model (Fig.17) mentioned in the previous section, is only suitable in conjunction with AR and IPA, for the Stage 1 Practice, although the iterative cycles of reflection and action of this model may be relevant in verification of the interpretation and analysis of the interview data. However, IPA also allows the participants to reflect and make sense of their experiences (Smith & Osborn, 2007), which is questionable in the design process model. Sense-making and interpreting their sense-making is a core value of IPA and this thesis.

Reid (1764) stated:

> 'If the original perceptions and notions of the mind made their appearance single and unmixed, as we first received them from the hand of nature, someone who was accustomed to reflection would have less difficulty in tracking them; but before we are capable of reflection our perceptions and notions are so mixed, combined and recombined by habits, associations and abstractions, that it is hard to know what they were originally' (Reid, 1764:p.3).

Using IPA, the researcher can help the participant make sense of their experience by the simple act of allowing them to voice their thoughts on the specific experience; the sense-making for the researcher is interpreting what they have heard and recorded, i.e. double hermeneutic (Smith & Osborn, 2007). It is vital, therefore, and key to an IPA approach, to ensure the interpreted data has undergone an iterative cycle of analysis to reconcile possible perceived or biased differences in the interpretation (Smith & Osborn, 2007).

The primary method was in the form of semi-structured interviews. Another method involved post launch kiosk observations and feedback, from the front of house (FoH) staff and volunteer guides, of their observations of visitors engaging with the kiosk, and from my observations during the year following the launch.

The reason for using IPA for analysing the post-launch data was to explore and understand experiences the participants have within their professions and background, and how their experiences affect new experiences, specifically their experience with the Beaulieu Abbey kiosk interpretation and launch event (Storey, 2007; Smith, Flowers & Larkin, 2012).

To understand other professionals' perspectives and opinions concerning the processes used in the development of the Beaulieu Abbey kiosk interpretation, it was necessary to speak with those involved in the development of the application. Selection of the participants was determined by who was primarily involved. Maintaining the three aspects of the thesis title and the three stages of the action research/design process structure, I made the decision to have three teams: the Beaulieu Team, Designers and 'Visitors,' i.e. launch guests (see list below). Based on the four members of the Beaulieu team I primarily worked with, the decision was to then use four designers and four launch guests as the fieldwork sample. The design team working with me on the Beaulieu kiosk project consisted of one design assistant and a freelance designer. Unfortunately, the freelance designer was not available for an interview. Therefore three designers working with, or who had experience of, HSI design were chosen from my professional network connections. The launch guests were chosen from their interest shown in the design of the application at the launch event.

The interview questions needed to reflect the areas raised from the literature review (DiCicco-Bloom & Crabtree, 2006), for example: background and experience, processes used in curation, interpretation planning and design, involvement of visitors and how visitor experiences and feedback were measured and understood. This data was augmented with FoH staff feedback, personal observation of visitors using the kiosk interpretation, MA Marketing students' survey data and feedback correspondence.

There are, therefore, two areas of archival information for this section:

1. Interview recordings and transcripts – which includes:
    a. Interviews with the Beaulieu team:
        - Mary Montagu-Scott (*Owner, designer/curator*),
        - Stephen Munn (*Commercial Director*),
        - Susan Tomkins (*Archivist*)
        - Jon Tee (*Visitor Services Manager*)
    b. Interviews with Designers:

- Rebecca Furse (*Design Assistant, Beaulieu Kiosk interpretation & Architectural Technician/Interior Designer*),

- Russell Richards (*Designer & Senior Lecturer, MAiP, Southampton Solent University*),

- Katya O'Grady (*Fine Artist / Designer, Cathedral Chronicles of Light project*)

- Alex Hoare (*Glass Designer for Museum Installations*)

c. Interviews with invited Launch guests:

- The Very Revd James Attwell (*Winchester Cathedral & Launch Guest*)

- Rupert Thomson (*Publisher, Set Squared Mentor & Launch Guest*)

- John Pemberton (*Software Consultant & Launch Guest*)

- John Richardson (*Business Enterprise & Launch Guest*)

d. Interviews with external heritage professionals:

- Ruth Taylor (*Freelance learning, interpretation and community engagement consultant (National Trust in 2006)*)

- Andy Lane (*INTECH, Marketing Manager (previously at Beaulieu)*)

2. Kiosk Observations– which includes:

a. Front of House staff and volunteer student guide feedback

b. Personal observations of visitors using the kiosk

Semi-structured interviews are one of the most typical forms of qualitative research data collection; a form of which is the 'life-history' interview and focuses on '*understanding another's life story'* (DiCicco-Bloom & Crabtree, 2006). Understanding the participant's background and how they arrived at their current position was necessary for knowing more about the participant, and their experience in HSI. Therefore, the interviews were planned to be semi-structured with a mixture of closed and open questions. The interview questions were anticipated from experience of relationships built within the interpretation project process, the launch event and use of content, application and technology in the interpretation project for Beaulieu Abbey (the 14 individual participants' question/interview sheets can be found in Appendix G and on this link[9]).

The question prompts for each of the participants related to their role and involvement with the design or use of the kiosk interpretation and the launch event. Although the question prompts

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[9] *http://thetalkingwalls.co.uk/wordpress/?p=1596*

were different according to their specialism/profession, there were areas of commonality such as finding out about their backgrounds and how they came to be in their current role. The participants were also encouraged to expand on their responses and share their thoughts regarding their background experiences, processes used and their experience of the Beaulieu Abbey application. The majority of the participants expanded on their individual backgrounds forming their career and career decisions, and positive feedback in their use of the kiosk interpretation. Nonetheless, the specialism/profession based questions meant that the interviews were more difficult to analyse, and possibly provided limited outcomes.

The interviews were recorded (with permission gained in accordance with ethical procedures) and transcribed through the use of an external transcript company. Contact was made with each of the participants to arrange to meet and discuss participation in the research. For those that were unavailable to meet, the information sheet, request and consent forms were posted and signed before the start of the interview. Interview dates and times were arranged with each of the participants to suit their availability and choice of location and spanned between March 2013 and May 2014. (see Fig. 18) below for the schedule for dates, times and locations for each participant[10]). The length of time for each interview was approximately between one to one and a half hours and held primarily at their place of work.

The reason for the delay in being able to interview the participants three years after the launch was primarily due to the transferal of my MPhil/PhD from Winchester School of Art, University of Southampton to the University of Winchester in 2012. An earlier delay (2011) was a six-month sabbatical to focus on developing new programmes in my new lecturing role at Winchester. The interviews were designed to open discussion on issues relating to their practice, in relation to heritage site interpretation design, and not primarily about the launch. Additional participants helped to provide a rounded perspective.

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[10] Also available on this link: *http://thetalkingwalls.co.uk/wordpress/?p=845*

Schedule of Interviews

ID	Date/Place	Name & Profession	Interview Purpose	Category
BT1	11am Fri 1st March 2013 @ John Montagu Building, Beaulieu	Mary Montagu-Scott (*Site Owner/Director/Designer/Curator*)	The interview with Mary aimed to understand Beaulieu's vision for the Abbey and how they see cultural heritage interpretation as part of this vision. Questions concerned Beaulieu's perception and knowledge of visitor interaction with cultural heritage and their engagement with heritage artefacts. A discussion of the relationship between the stakeholders and the curator was planned to ascertain the extent of external influences that may exist in the origination of an interpretation project.	Beaulieu team
BT2	11.30am Thur 18th July 2013 @ John Montagu Building, Beaulieu	Stephen Munn (*Commercial Director, Beaulieu Enterprises Limited*)	The interview with Stephen Munn aimed to understand the decision making process in the commercial / marketing aspect of the Abbey. Questions concerned the processes involved in how a project is decided upon as a commercial attraction / visitor attractor. Discussion regarding what is seen as a successful visitor interpretation at Beaulieu was planned, including discussion on how they capture this information.	Beaulieu team
BT3	10am Wed 10th July 2013 @ John Montagu Building, Beaulieu	Susan Tomkins (*Archivist & Learning Interpretation Advisor/Curator*)	The interview with Susan aimed to understand Beaulieu's choice of content and how this was relevant to the initial conceptualisation of an interpretation project. Questions concerned the interaction of the relationship with the designer(s) and how this affected the interpretation project. Discussion regarding the curator's interaction with visitors, the methods used to measure the success of interpretation at the Abbey and how important this is for future interpretation projects was planned.	Beaulieu team
BT4	2pm Wed 3rd July 2013 @ John Montagu Building, Beaulieu	Jon Tee (*Visitor Services Manager, Beaulieu Enterprises Limited*)	The interview with Jon aimed to understand how Beaulieu manages to capture data on their visitors' experiences. Questions concerned the methods and processes used in capturing their visitor data and feedback, how they analyse and feed this back into the Beaulieu interpretations, and how they communicate with their visitors. Discussion regarding feedback and communication with Beaulieu Abbey's interpretations including the kiosk was planned.	Beaulieu team
BD5	11am Fri 6th Sept 2013 @ Lowden Avenue, Chippenham	Rebecca Furse (*Design Assistant, Beaulieu Application & Architectural Technician /Interior Designer*)	The interview with Rebecca aimed to understand her experience in the development /build of the Beaulieu Abbey application and the depth of content available through the application. Questions related to the design of the interpretation and how it answered the Beaulieu Abbey brief, how it might have been designed differently if designed by Rebecca, what changes would have been made and why. Discussion regarding the effects of cultural influences and external interests affecting interpretation and design of cultural heritage applications was planned.	Designer

BD6	10.30am Wed 3rd July 2013 @ James Matthew Building, Southampton Solent University	Russell Richards *(Senior Lecturer and Designer, Southampton Solent University)*	The interview with Russell aimed to understand his experience of the Beaulieu Abbey application, the choice of content available through the application and if having choice enhanced his experience. Questions related to the design and clarity of the application – i.e. was the navigation intuitive although unique, was the content too rich, not rich enough, and was there too much choice. Discussion regarding the educational aspect of cultural heritage applications such as the Beaulieu Abbey kiosk app, how much is too much information, and how educators as well as cultural heritage site visitors may use interpretation to enhance experience to cultural heritage sites was planned.	Designer
BD7	11am Tue 8th Oct 2013 @ the University of Winchester	Katya O'Grady *(Fine artist/designer)*	The interview with Katya aimed to understand her experience in the development/build of the Riddle Route QR application for Winchester Cathedral and her involvement with the Chronicles of Light. Questions related to the design of her interpretation of the original brief and how it then answered the brief, how it might have been designed differently if more time and budget had been available, what changes would have been made and why. Discussion regarding the effects of cultural influences and external interests affecting Katya's work was planned including how the visitor/audience is placed with regards to her art work.	Designer
BD8	8.30am Thurs 18th July @ The Light Factory, Worthy Lane, Winchester	Alex Hoare *(Glass Designer for Museum Installations)*	The interview with Alex related to her experience of designing for museum installations, her involvement with curators and stakeholders / funding organisations. Questions relating to the influence in her designs by external and internal sources were asked. Discussion regarding where the visitor sits in the process of designing museum installations was planned.	Designer
BL9	2.30pm Wed 13th Nov 2013 @ Winchester Cathedral Close	Very Revd James Atwell *(Dean of Winchester Cathedral)*	The interview with the Dean aimed to understand his experience of the Beaulieu Abbey application, the choice of content available through the application and if having choice enhanced his experience. Questions concerned the mix of visitors to religious heritage sites such as Beaulieu Abbey and whether an interpretation should provide different types of experiences for the different groups that visit. Discussion regarding cultural heritage software's ability to engage and enhance a visitor's experience at a religious cultural heritage site was planned.	Launch Guest
BL10	11.30am Fri 25th Oct 2013 @ Hogs Back Brewery Ltd, Guildford	Rupert Thomson *(Publisher & Set Squared Mentor)*	The interview with Rupert aimed to understand his experience of the Beaulieu Abbey application, the choice of content available through the application and if having choice enhanced his experience. Questions related to the clarity of the application – i.e. was it made clearer via demonstration at the museum, and was the event useful in understanding the way it could develop were asked. Discussion regarding the transposition of guide books to digital media, i.e. will digital replace or enhance traditional media was planned.	Launch Guest

BL11	10am Tues 1st Oct 2013 @ Ipley Manor, New Forest	John Pemberton (*Software Consultant & SEEDA Mentor*)	The interview with John aimed to understand his experience of the Beaulieu Abbey application, the choice of content available through the application and if having choice enhanced his experience. Questions related to the clarity of the application – i.e. was it made clearer via demonstration at the museum, and was the event useful in understanding the way it could develop were asked. Discussion regarding the commercialisation of cultural heritage software to enhance a visitor's experience at a cultural heritage site was planned.	Launch Guest
BL12	Wed 14th May 2014 @ Holiday Inn, INTECH, Winchester	Dr John Richardson Blue Planet Innovation, Senior Lecturer Innovation Management, University of Winchester and iNet Project Manager (previously Business Link)	The interview with John aimed to understand his experience of the Beaulieu Abbey application, the choice of content available through the application and if having choice enhanced his experience. Questions related to the clarity of the application – i.e. was it made clearer via demonstration at the museum, and was the event useful in understanding way it could develop. Discussion related to John's experience working with innovation and small business and how this has helped him to create his own business ideas (i.e. business KIT). It was also valuable to discuss similar applications John may have experienced and how the Beaulieu application compared.	Launch Guest
BH13	2pm Mon 22nd July 2013 @ Costa Coffee, 3 Station Road, West Byfleet	Ruth Taylor (*Freelance learning, interpretation and community engagement consultant (previously at National Trust HQ, as Learning & Engagement Manager, 2006)*)	The interview with Ruth aimed to understand her experience of working within an organisation such as the National Trust. Questions related to how the process for curating/designing and installing interpretations within a large organisation may be different to smaller private cultural heritage sites. Discussion regarding the importance of visitor learning via interpretation was planned.	External Heritage Professional
BH14	2pm Mon 8th July 2013 @ INTECH Science Centre and Planetarium	Andy Lane (*Marketing Manager, INTECH, (previously Marketing Manager at Beaulieu Enterprises Ltd)*)	The interview with Andy aimed to understand his experience of working at Beaulieu Abbey and how the interpretations were planned and the processes they went through before installation. Questions related to the involvement of the visitor in the interpretation process. Discussion regarding the marketing methods used to attract visitors was planned.	External Heritage Professional

Figure 18: Purpose and Schedule of Fieldwork Interviews (Wilson, 2014)

Kiosk Observations

Kiosk observations included email and verbal feedback from the Front of House staff and Beaulieu's student volunteer guides as they checked the museum and the kiosk throughout the day. Personal visits to the museum between June 2010 and May 2011 meant that I was also able to observe visitors of differing ages using the kiosk interpretation, and ask about their experience in using the content available. The verbal feedback has been recorded through the use of anonymised notes in the form of bullet points (please use this link[11] to access the feedback

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[11] *http://thetalkingwalls.co.uk/wordpress/?p=1620*

documents). The few photographs taken were, unfortunately, not granted permission for use within the thesis.

Data analysis for the fourteen in-depth interviews and kiosk observations and feedback is via a cyclical approach to determine emerging themes (Smith, Flowers & Larkin, 2012).

The interview responses were analysed using IPA analysis, drawing out key themes and identifying commonalities from the data. The IPA theme analysis provided an opportunity to draw on the experiences provided by the participants' interviews (Wilks & Kelly, 2008). The initial themes were initially categorised using the key word boolean search terms used for the systematic literature review process (please see Fig.19 below) after importing the interview scripts to NVivo[12]. The resulting themes were grouped related to the different subsets in Fig.19 and then cross-referenced with the three 'team' areas of Curators, Designers and Visitors.

Sub Section Content Overview for each Main Section in the Literature Review			
Experience	Assumption	Measurement	Reflection
Experiences of other curatorial / design teams - with visitors at centre of decision making for interpretation design at heritage sites (as opposed to museums) What were the successes / pitfalls i.e. in relationships? comparison with larger heritage organisations	Assumptions of each other (curators, designers, visitors) Look at possible assumptions, how they have formed and whether they are founded - are they changing with the use of more user centred design? (cultural backgrounds / experience)	Measurement of visitor engagement define 'engagement' Define measurement - who, how and why? Has engagement been more successful for interpretation using visitors centred in the design process?	Reflective Practice in design - design models (and action research) exploring the importance of reflective practice.

Figure 19: Sub section content overview for each main section (Dissemination of Knowledge and Experience, Assumptions in the Design of Heritage Interpretation, The Importance of Visitors' Experiences in Shaping Heritage Interpretation) of the literature

After importing the data sources to NVivo, I was curious to see the frequency of the words initially set out as key areas (see Fig.19) therefore ran a query on all data sources and all words above three letters.[13] The list of individual words was then grouped to form hierarchical themed sections, as Nodes, under the keywords: Design, Experience, Heritage, Visitor and Knowledge. The results of this hierarchical grouping with their reference frequency are depicted in Appendix O. The hierarchy of words within each 'theme' was decided based on my experience and practice with

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[12] NVivo (qualitative research software by QSR) has been used for its ability to explore and find themes and patterns across a range of material.

[13] Certain additional words were added to NVivo's 'Stop' word list, mostly names of people and places other than Beaulieu

heritage interpretation design. Therefore, there is perhaps an element of bias in the placement of words.

Having created the five main themes and their subsets, I analysed the different sources and separated the data into relevant paragraphs/segments, saving each as a node, and placing into a relevant subsection of one of the five main themes. It became apparent in the analysing process that the five main themes and subsections required re-thinking and expansion to fit the content, resulting in a constant iterative process to match content with subsections and create new subsections once more than one node of similar content had been created. The second iteration's set of themes, and the total of nodes per theme can be seen in Appendix P, although this does not show the header themes and subsections.

Returning to the thesis chapter structure, and reviewing the case studies' and literature, I decided the most logical categorisation was to relate each of the current themed nodes to a set of new hierarchical groupings with the same titles as the chapter titles. The reasoning behind this decision and further categorisation was that the new 'chapter/section-titled' grouped themes would enable direct comparison and analysis of the data with each of the chapter outcomes. Accordingly, the new themed groups were created and can be seen in Appendix Q. The process required an element of 'finessing', and in doing so, it became apparent there were subgroups which were part of a particular practice, discipline, consideration or process. The outer ring has subsequently been created to name and highlight the different subgroups.

By separating the data nodes to different instances made the data easier to analyse. Through the previous process of theming, it was difficult to rationalise some of the data to just one node as there were different meanings conveyed. The final diagram has enabled such instances to be much clearer in purpose. The process of naming, re-shaping, re-theming and re-grouping helped to reflect on the interconnections between the themes and the primary messages of the thesis chapters highlighted (Waring & Wainwright, 2008; Brooks et al., 2015). The concluding template was valuable in determining pivotal design processes and interaction between the curators, designers and visitors, experience required for HSI design and planning, and how success is evaluated and understood.

<u>Qualitative versus Quantitative</u>

Qualitative research typically starts from specific observations and fieldwork. Questions arise from the data resulting in more fieldwork with the possibility of the research questions changing. Patterns may emerge from the fieldwork forming possible hypotheses that can be explored further. Conclusions could be new theories or models. This process is inductive, working to provide theory and is a spiral (or cyclic) and subjective process (Lab4, 2003; Gray & Malins, 2004; Malhotra & Birks, 2006; Corbin & Strauss, 2008a; King & Horrocks, 2010).

The research method initially considered was a mixed approach of quantitative and qualitative methods. The quantitative method enabling statistical analysis would be an excellent basis if the research planned was going to concentrate on measured 'facts'. It would provide clear and objective data of, for example, visitor attendance and engagement with heritage interpretation or the number of designers and curators working together, and the regularity of communication between them. The chosen qualitative approach enabled a rich, varied, more in-depth look at the relationships between the participants involved in developing visitor experiences (Corbin and Strauss 2008).

Reflecting on how to gain an understanding of the participants' experiences, the use of a quantitative survey with yes and no answers would be quicker and easier to analyse but not provide the richness or depth required to form a holistic understanding. Guiding the participant with qualitative semi-structured questions would provide a valuable consensus of the participant's experience and perception of the interpretation, allowing them to reflect and express their views (Malhotra & Birks, 2006). The results would help form a deeper understanding of the phenomenon, albeit more time consuming and difficult to analyse.

Quantitative research methods would not be sufficiently flexible to provide the depth of meaning necessary for understanding the participants' experience in crafting visitor experiences. Explaining the distinctive roles and interactions between curators, designers and visitors requires the use of methods that allow participants to speak freely, voicing their opinions and reflections (in-depth interviews). Reflection and observation of the practical element are only possible via qualitative methods, for example, AR and IPA discussed in previous sections of this chapter. Qualitative research is, therefore, the most appropriate to answer the research question for this thesis.

Research Objectives

| explore, understand & portray the relationships between curator ~ designer ~ visitor within the design process | evaluate 'interactive design' models that examine how internal and external influences affect design outcomes | explore the characteristics that enable curators and designers to envision 'the visitor' targeted by cultural heritage sites | portray the role of envisioning 'the visitor' and how this translates through the design process and interpretation | evaluate methods used to measure and understand visitors' experiences of interpretation design |

Research Methods

Cycle 1 Practice Data | Cycle 2 Launch Data | Cycle 3 Post Launch Data

| Unique Application Data | Historical Reference Data | Launch Preparation | The Event | Launch Event Survey | Fieldwork Interviews | Kiosk Observations |

| Funding Docs Artwork & Photos 3D Models & Renders Characters & Stories Characters' Medieval Music Tours (Animations) | History of Beaulieu Abbey Cistercian Abbies & Culture Medieval Royals & Abbots Medieval Architecture & Materials | MA Marketing Student Project Speech Preparation PR & Marketing Invitations/Flyers Guest List | Speeches Kiosk Demo Observation Networking with Guests | MA Marketing students' Feedback Questionnaire Results & Analysis Emails Beaulieu Team Feedback | Semi-Structured, In-depth: Beaulieu Team (4) Designers (4) Launch Guests (4) Heritage Professionals (2) | Beaulieu Staff Observations & Personal Observations |

Case Studies - three heritage site interpretations for comparisons regarding: Curation at Heritage Sites, Designing for Interpretation & Using and Engaging with Interpretation

| Lacock Abbey, National Trust (2013 Interpretation) | Bolsover Castle, English Heritage (2011-12 Interpretation) | Kensington Palace, Historic Royal Palaces (2012-13 Interpretation) |

Systematic Literature Review: Dissemination of Knowledge & Experience; Assumptions in the Design of Heritage Interpretation; The Importance of Visitors' Experiences in Shaping Heritage Interpretation

| Experiences of other curatorial and design teams with visitors at the centre of decision making for heritage interpretation design. (comparison with larger organisations) | Assumptions between and of curators, designers and visitors. Are they changing with increasing use of 'user-centred' design. (review cultural backgrounds and prior experience) | Measurement and understanding of visitor engagement. Has engagement been more successful for interpretation using visitors centred in the design process? (define measurement and engagement - who, how and why) |

Research Analysis

Cycle 1 & 2: Action Research - review and reflection of practice in the design and build of the kiosk application, and launch event
Cycle 3: IPA Analysis (NVivo) - through deductive and inductive theme analysis, to compare and reduce the varied data collations

LEGEND: • = Links,   ▶ = Flow,   ⌒ = Bridge   (Wilson, 2018)

Figure 20: Research Methods Summary (Wilson, 2018)

SUMMARY

This section has explained the choice of methodology for this thesis and why it was based on personal interest in understanding more about working relationships for crafting cultural heritage interpretations and the role of visitor measurements. Understanding these processes helped in the development of a model to encompass continuous evaluation and reflection for future use within heritage site interpretation. The decision to use interviews and a case study of the practice element has been outlined, both supported and informed by a review of research methods' literature. Cyclical AR and IPA iterative approaches helped to validate against possible bias in the interpretation of the qualitative data described. The diagram below provides a summary overview of the research focus, objectives and how the research methodology, research design and analysis are linked to each other:
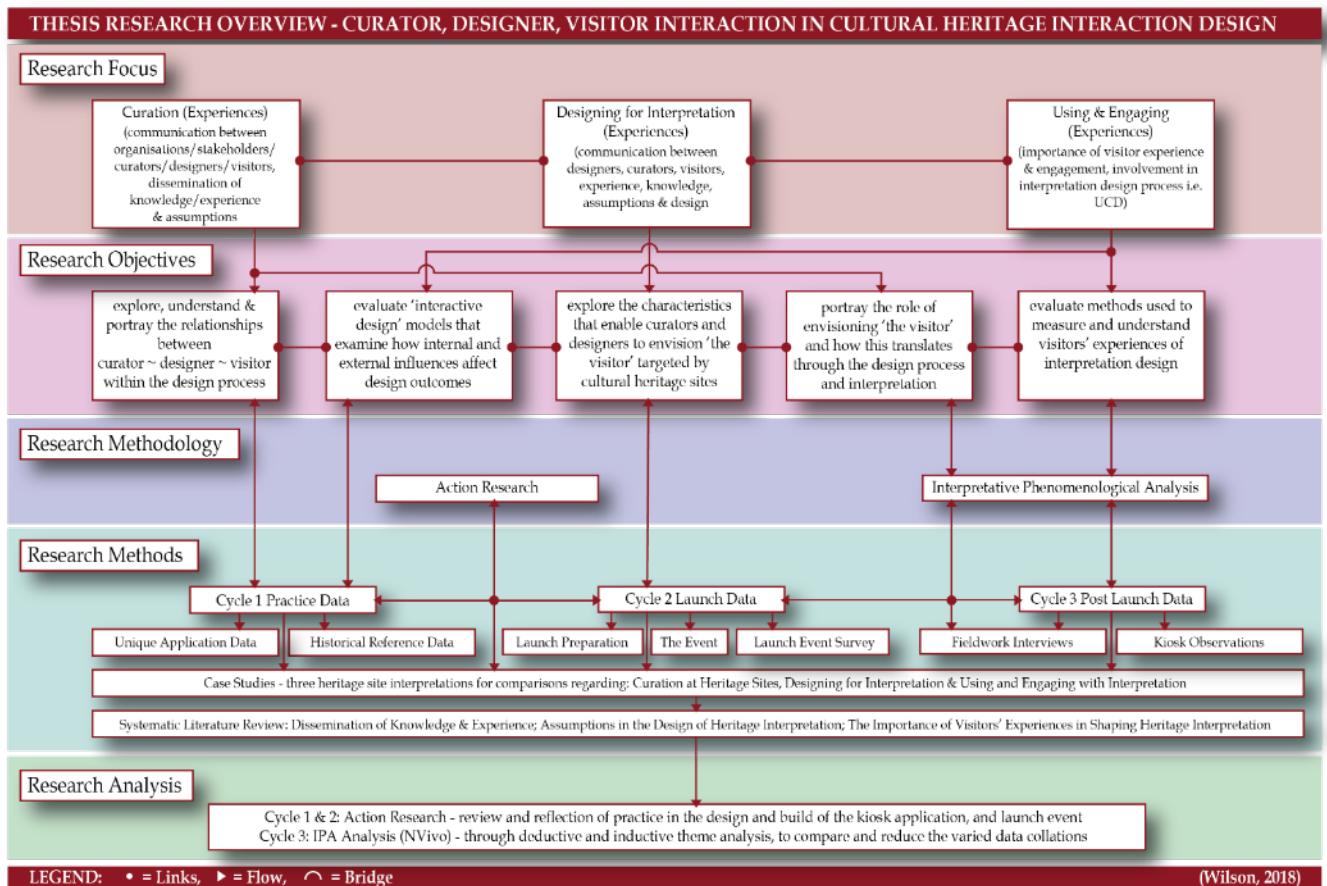
Figure 21: Research Overview providing the links and connections between the research focus and objectives with the research methodology, methods and analysis. (Wilson, 2018)

The use of AR and IPA was seen as essential research approaches for the thesis, and in the construction of the three stages: practice element (Stage 1), the launch event (Stage 2) and post-launch (Stage 3). The chapter has compared the process of AR to that of a typical design process, and highlighted the difference in the way experiences are reflected upon. In the design process model, reflection occurs mostly in the middle of the process and rarely after the outcome. Practitioners usually move on to the next problem taking with them feedback on what may have worked (or not) through the process. There does not appear to be the same time for personal reflection on individual processes and experiences gained through the project as in the AR model. Therefore, the interviews with the design team were valuable in understanding this further.

In the penultimate section, the core objectives of using IPA were discussed based on 'describing and portraying' relationships, with each other (curator, designer, visitors) and heritage interpretation. Primary research was through the use of semi-structured, interviews, kiosk observations and feedback. Exploring these personal perspectives from their particular contexts (Smith, Flowers & Larkin, 2012) provided a unique set of experiences and insights forming a knowledge base for future reference, and for understanding how to design future interpretations.

1.3.1. RESEARCH CONTEXT

<u>Personal Background leading to the Beaulieu Kiosk interpretation</u>

My practice and experience in interpretation design evolved from a project initiated in 1995 for Dunster Castle. The Dunster Castle project was informed through contact with a National Trust volunteer guide at Dunster, and a prototype was developed by studying a Masters in Interactive Production (2001-2003). The prototype developed won the Innoventions 2004 award 'Highly Commended for Commercial Viability' which encouraged the formation of The Talking Walls (UK) Ltd, a research and development micro company primarily for HSI design. The company was eligible for mentoring support by the South East Development Agency (SEEDA), and through their mentor network, it was possible to approach Beaulieu. The diagram (see Fig.22) below highlights
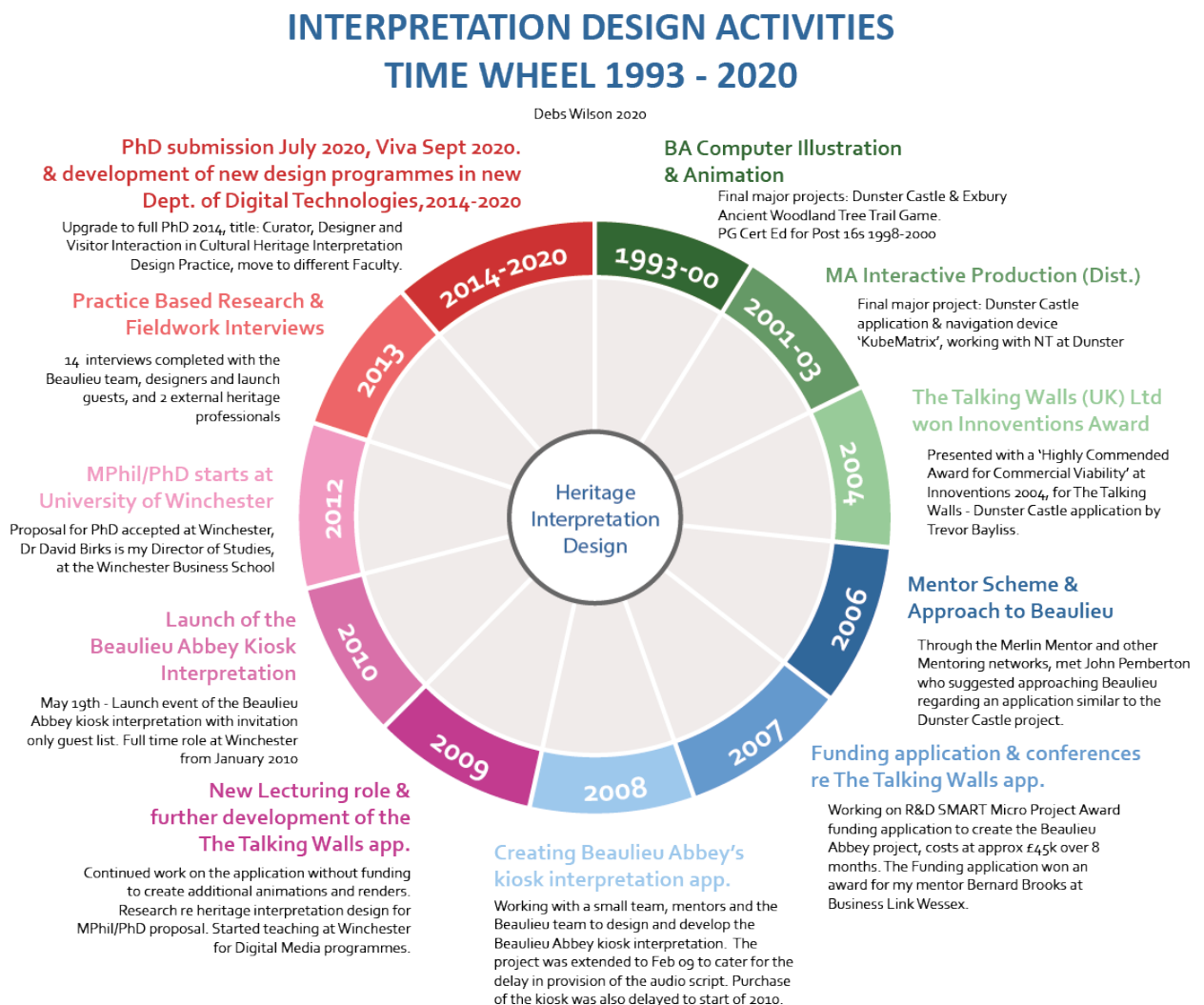
Figure 22: Time line of personal development and practice in interpretation design. (Wilson, 2020)

the time line involved, and the development of my practice which also made the approach possible, and led to the study of this thesis.

The Innoventions 2004 award led to many other opportunities including discussion with interpretation departments at the British Museum, the National Trust, Pitkin Guides, and conferences such as Power to the Pixel, Electronic Visual Arts (EVA) and Digital Horizons.

The principal aspect of the Dunster Castle application considered unique was the KubeMatrix, the interpretation's interface and navigation device, which enabled navigating physical space, time and content. The KubeMatrix's 'cubes' (see Fig.24) represented rooms and the 'links' represented 'doorways' leading from/to another room when navigating the heritage site. On choosing a room, the visitor was presented with a choice of seeing the same room in a previous or later era by clicking on the up or down arrows visible (see Fig.23). The cubes and links were also able to represent content. The 'layers' represented time-slices of architectural change at Dunster Castle, and 'levels' of information: bottom level - content suitable for children, middle level – content for general public at adult level, and top level – a deeper level of content for enthusiasts, academics and professionals. The initial concept was that the KubeMatrix would allow visitors to choose child, adult or professional at the start of the application, then choose one of the nine characters (cube content), then choose what period of the abbey they wanted to explore by choosing a time period 'layer'.

Figure 23: The KubeMatrix navigation device, one 'level' showing up and down 'jumps' to a previous or later time-slice of architectural change (Wilson, 2004 ©)

Figure 24: The KubeMatrix navigation device, Dunster Castle project (Wilson, 2004 ©)

For the Beaulieu Abbey kiosk, I re-designed the KubeMatrix device to just three architectural changes from the six that had been available for Dunster Castle, and simplified the design to make the most of a small mobile touch screen (see Fig.25 & Fig.26). Considerable time was spent on exploring different technologies available such as Swift 3D[14] and Papervision3D[15] to enable visitors to rotate the KubeMatrix on a mobile device. The outcome was that the ability to achieve this was not feasible with the coding skills available in the team. There was also an issue with running the application on 2008 mobile technology, primarily due to insufficient onboard storage and RAM to store and play the content.
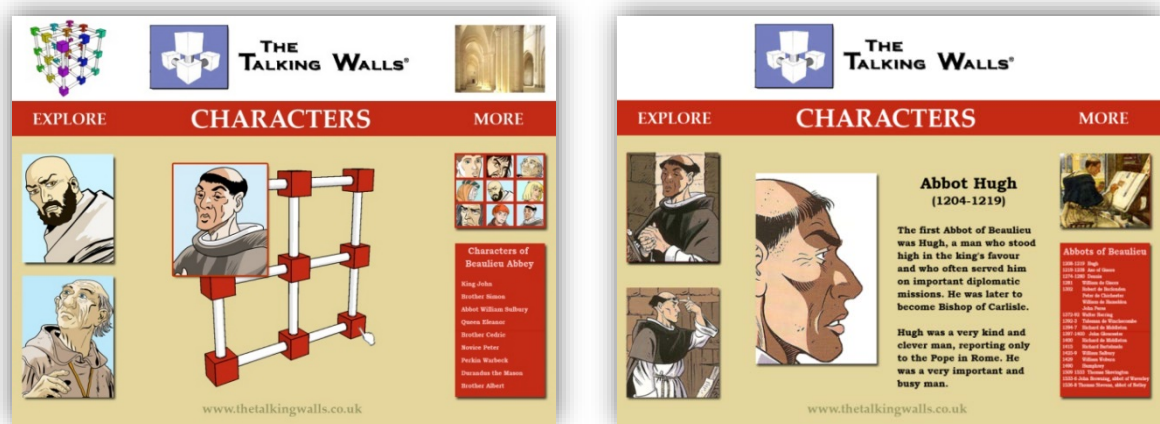
Figure 25: Kiosk Page for Beaulieu Abbey's Abbot Sulbury. (Wilson, 2010 ©)

Figure 26: Kiosk page for Tours of Beaulieu Abbey. (Wilson, 2010 ©)

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[14] Electric Rain's Swift 3D was software available in 2006 that enabled the creation and conversion of 3D models to vector files and therefore able to be used within Adobe Flash based applications. The software was last updated in 2012 and is no longer available on www.erain.com.

[15] Papervision3D was an open source real-time 3D engine for use with Adobe Flash. Adobe Flash was a 2D software enabling animations for the web, therefore by using Papervision3D, it was possible to create the rotating KubeMatrix, and use within Adobe Flash based content. The software was popular in the creation of animated 3D content for Adobe Flash based web applications in mid 2000s to 2012.

The impact on the Beaulieu Abbey kiosk interpretation meant re-thinking the KubeMatrix design to enable visitors to access all parts of the KubeMatrix without rotation. A more critical impact was the inability to provide a working mobile version of the kiosk interpretation for the launch guests to use and explore content. A further impact, due to the reduced time, meant only one 'level' of information was made available. The level was mostly adult, with a few games and puzzles for children and content such as 'Send a Postcard' shown below in Fig. 27.

Figure 27: Simplified KubeMatrix design for use on the PDAs available for the Launch in 2010 (Wilson, 2010 ©)

The simplified design of the KubeMatrix device, therefore, consisted of three layers of a set of nine cubes which was considerably different to the Dunster Castle KubeMatrix concept of rooms and doorways. Instead, the cubes became buildings and annexes for the Beaulieu Abbey site and the three layers represented the build, heyday and dissolution of the abbey when viewing 'Ages of the Abbey' and 'Abbey Tours'. For the remaining content, the layers represented the three levels of information: child, adult and professional, with the cubes as categories of content. The process involved significant research in user interface design (UI) and user experience design (UX) to ensure the KubeMatrix device would be intuitive to use on small screen devices, with additional forms of navigation for larger screens, providing multiple opportunities for how users interacted with the content.

The design of the KubeMatrix as a navigational and content interface template for the Beaulieu Abbey interpretation forced me to re-appraise the original template design and how it would work on mobile platforms/smaller screens. Through an iterative design process, testing with members of the teaching team who had expertise in user interface design, and using the design of the KubeMatrix for accessing content as a live usability project[16] with student volunteers, resulted in an improved prototype 'template'.

My doctoral study also underpins my consultancy work and teaching in using augmented reality/3D and other emerging digital media technologies with traditional methods for heritage interpretation. The research has provided a deeper understanding of emerging market areas for new courses/programmes and pathways for Digital Design and Technology based programmes.

Beaulieu – Practice element

The Beaulieu Abbey interpretation was the result of specific goals pre-determined by the stakeholders and curator that involved increasing visitor footfall to the Beaulieu Abbey site from the main site attraction – the National Motor Museum.

The ruins of Beaulieu Abbey suffer a lack of footfall in comparison to the main attractions of the Motor Museum and Palace house. After an initial meeting with owner/director Hon. Mary Montague Scott and the commercial director, Stephen Munn, it was agreed that a rich multimedia application would be a 'good attractor' to encourage increased footfall. The application needed to be designed to engage and encourage learning using rich media and storytelling. The 3D virtual abbey would be an engaging way of imparting visual knowledge, comparative size of the building and history of the site. At this point, a suggested mobile application was not acceptable due to Beaulieu's perceived security complications, therefore the application needed to be built for a kiosk that Beaulieu would install in the abbey's museum - the Domus, specifically for the application.

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[16] My doctoral study also underpins my consultancy work and teaching in using augmented reality/3D and other emerging digital media technologies with traditional methods for heritage interpretation. The research has provided a deeper understanding of emerging market areas for new courses/programmes and pathways for Digital Design and Technology based programmes.

A design challenge was to ensure the content covered a range of visitor types, was mostly visual and captured visitor attention. Navigation through the content needed to be simple and consistent. Information needed to be easy to read and provided in a way that was impressionable and memorable. The design ultimately would need to work across multiple platforms. A mobile application would have been more engaging to use than a kiosk, as the user would be able to roam the site and view, in situ, how the building used to look and gauge size more easily. I considered this to be an important aspect of the application, therefore, although it was not required for Beaulieu, I decided that it would be short sighted not to plan for the smaller screen of a mobile / handheld device in the design.

Consideration of new devices and their screen sizes, how visitors would interact with different devices, the navigational difference in those devices (touch screens/mouse clicks/ thumbs) and the level/type of content the visitor may choose to view on these devices were equally important. As were the implications of designing a 'template', i.e. what would be 'generic' and what would be unique to each application, creating a design that could be used for different heritage sites so that visitors would be comfortable and familiar with using the heritage site interpretation application where it was available.

The Beaulieu Abbey project had to be designed, created and built in seven months as part of the funding agreement with Finance South East[17], it was therefore agreed that the content for the two remaining categories would be a Phase 2 build dependent on the success of the pilot.

The decision on the amount of different types of content within the application was based on the design of the KubeMatrix navigation. The three levels of the main structure became three categories of content – children, adults, professionals. The KubeMatrix design provided nine cubes per category (level), so the application would need nine areas of content. These were:

1. Characters
2. Tours (virtual)
3. Ages of Abbey
4. Quiz'd
5. Send a Postcard
6. Write a Story
7. Fact Sheets
8. Lifestyles
9. Beaulieu Links

To enable this to work as a template for other properties, there needed to be a library of elements that could be re-used. The characters for 'daily life' would form part of this library for other abbeys. The digital video clips of mock battles and life scenes were also edited to create a generic set of clips. Sound clips, 3D modelled items such as plants, trees and everyday objects also became library items.

Within this template, there are areas designed to both entertain children while visiting the place of interest and to inform adults and children alike either while visiting the heritage site or at home. These were designed with a level of empathy and experience from observing what excites, primarily children, in the use of kiosks and computer games. They appear to be fascinated and intrigued by gruesome and gossipy facts, such as those found in the Horrible Histories series (Deary & Brown, 2017). In observing children, it is noticeable how they explore the screen. They appear to mine sweep (Neilsen & Loranger, 2006:p.184) moving around the screen to see if there are any hidden snippets of information or links, as they would in a game. They do not seem to

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[17] Finance South East - *http://www.financesoutheast.com/*

have the reluctance that adults may have in this type of exploration (Sutcliffe & Kim, 2014; Ham, 2013).

Creating the characters was a major element of the formation of the content. Knowing who the characters were going to be and ensuring that they covered a range of lifestyles in and around the abbey complex became a key part of the design for the other areas of content. Nine characters were designed with advice and validation from Beaulieu's archivist Susan Tomkins. The nine characters (see Fig.29) consisted of people who lived at or stayed in the Abbey, five of them are actual people (Abbot Sulbury, King John, Queen Eleanor, Durandus and Perkins Warbeck). The remaining characters are fictional but represent typical inhabitants with a story relevant to their role. Each character has their own voiceover, music and illustrated story of their involvement with the abbey. It is their stories and the 3D abbey that are the main 'learning' and engaging elements of Beaulieu Abbey kiosk interpretation application.
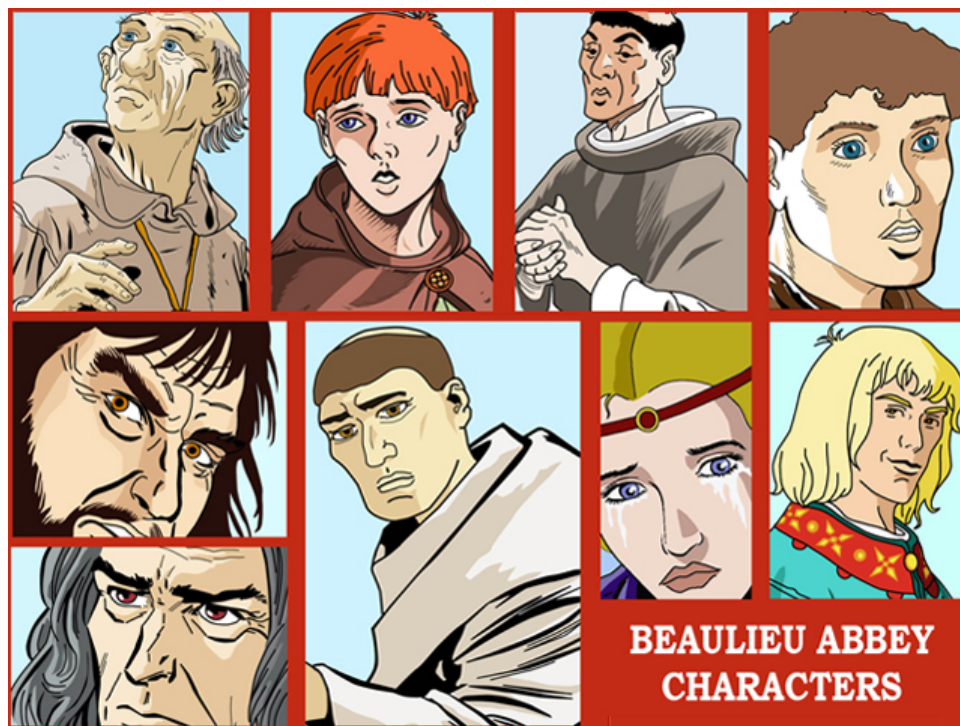
Figure 29: Pilot kiosk/Web/DVD Characters Postcard (Wilson, 2008 ©)

The original concept of 3D replication of important time slices of the heritage site translated to two different areas, one of which was the tours (animated walk-throughs of the building), the other was 'Ages of the Abbey'. In Ages of the Abbey, visitors are able to choose areas of the abbey and virtually 'walk' through the 3D space, using software such as Papervision 3D or Turntool.

Unfortunately, the complex model of the abbey meant the polygon count was too high for either of these tools; only parts of the abbey would render, providing a fragmented unusable image. To be effective, the 3D model would need to be rebuilt in a much simpler box method with images mapped onto the sides.

This would have taken too long for the seven-month deadline and although it would provide visitors with the ability to interactively navigate around the box model, it would not make use of the full structure that was architecturally built based on extensive research. The Ages of Abbey was, therefore, adapted to show the three main ages of the abbey, the build, its 'heyday' and the dissolution via rendered stills and animated walk-throughs (Fig. 30).

Figure 30: Rendered still of Beaulieu Abbey Apse with scaffolding in the Nave (Wilson, 2008 ©)

With the two abbey options, there were also categories provided as 'sticky' factors, to encourage the children to stay longer, return and possibly use at home for homework/fun such as: Quiz'd, Write a Story, Postcards, Fact Sheets and Lifestyles. The remaining ninth cube provided links to the main Beaulieu site. Each category had another nine cubed matrix for further areas to explore.

The design through to build process brought challenges, pushing concepts for certain areas, such as Ages of the Abbey, to reconsider for future updates or redesigns. The realisation of designs into practice highlighted a lack of skills in certain new technology areas such as Papervision3D, for myself and my design/developer contacts. The technology that would excite and engage visitors to interact with the history of the abbey was too new in 2009. A few specialists were able to programme the interactivity on a simpler scale for websites, but with the time and finance available, it was out of reach for the Beaulieu Abbey kiosk interpretation. Nonetheless, the kiosk interpretation provided visually rich 3D interpretation enabling visitors to experience the real scale of the Abbey, and convey stories of the lives of the monks, their craft and culture.

Working with the Beaulieu team involved privileged access to the curatorial team, the front of house staff and stakeholders. This access was mostly due to Beaulieu being a privately owned heritage site and a small team. Understanding the personal interests, abilities and skills of the small team helped to understand expectations, and who would be able to help at what point within the design and development process. Having completed the kiosk interpretation, reflection on design practice and processes in working with Beaulieu, raised several questions, one of which was whether the majority of curator/designer relationships have similar access to curators and decision makers for forming and understanding the interpretation's requirements.

Interpreting Heritage information

Freeman Tilden, an interpretation writer and consultant for the American National Parks, considered the 'Father of Heritage Interpretation' (Veverka, n.d.) defined interpretation as:

> 'an educational activity which aims to reveal meanings and relationships through the use of original objects, by first-hand experience, and by illustrative media, rather than simply to communicate factual information'(Tilden, 1977).

Tilden started his career as a journalist (Tilden, 2007:p.xii), and, in his spare time, writing fiction novels and plays. He did not start writing non-fiction until his late 50's which was mostly regarding interpretation as a consultant for the National Park Service (Tilden, 2007:p.xv); his experience in writing about interpretation for parks initially only as a visitor. His perception and interpretation of heritage interpretation must, therefore, be based on his experiences visiting the parks, thus building his knowledge base.

One of the six basic principles of heritage interpretation listed by Tilden (1970) suggests information provided, such as the plaque mentioned earlier, is not interpretation, it is merely 'information'. Interpretation is the meaning the recipient invokes from blending the information being received with their own experiences. Veverka (2005) and Uzzell & Ballantyne (1998) describe heritage interpretation similarly. Veverka talks about interpretation as a method of 'Provoke, Relate, and Reveal' by using various types of media to convey a message, therefore a communication process; Uzzell speaks of 'hot interpretation', a term he uses to describe a necessity to provoke an emotional response via heritage interpretation.

Designing heritage interpretation is, therefore, seen as a communicative process; a means of providing a variety of media, possibly via a variety of methods, to convey information that will

spark an emotion or experience by those who view it. The information chosen, and the way it is presented should be a primary role of the curator and the interpretation designer. To be able to perform this role, the curator/designer would need to be an expert in communication, possibly with a passion for conveying information that awakens or provokes new or past experiences.
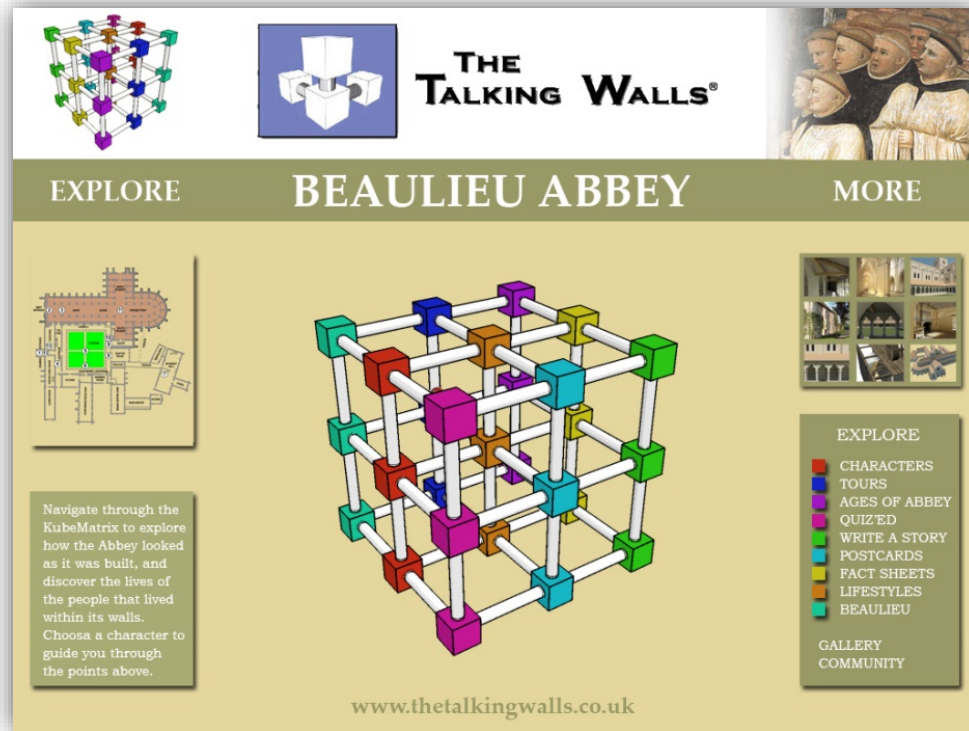
Information provided at heritage sites also requires considerable thought on who the recipient might be for it to provide the 'right' experience. The experts, most often curators, have the task of sharing knowledge in ways that will engage a wide range of individuals, each with their own set of expectations and knowledge base. A single plaque of information, therefore, can mean much to a few, but little for many others. The Beaulieu Abbey kiosk interpretation was curated and designed to provide information to different 'levels' of the audience: children, adults and experts/enthusiasts via a matrix (see Fig.31 above). The visitor chooses which 'level' they wanted to 'experience', enabling adults to interact with information designed for children to understand, or in an in-depth academic format. The same stories of medieval monastery life and culture, stories of Royals, monks and sanctuary seekers are provided via different methods: fact sheets, illustrated stories, audio, animations, 3D environments and technical drawings.

Who the audience might be and how they might choose to engage with information was a prime consideration, as was the type of content that would keep them using it, exploring more about the site and the people that lived at Beaulieu. Different platforms for accessing the information was also a significant consideration; web, print, information panels, DVDs, kiosks and handheld PDAs[18] were the existing platforms available; the smart-phone was too new a platform both in graphic and data capability[19].

The individual interpretations at the three case study heritage sites have been chosen and analysed to understand whether similar considerations are in place by the curators and designers at larger heritage sites and organisations.

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[18] Handheld devices were being used at a few of the more innovative museums such as the Tate Modern but were not generally used at heritage sites

[19] Smartphones were available from 1992 in the form of IBM's Simon, personal digital assistants (PDAs) combined with mobile, arrived in 2000 with Ericsson's R380 'Smartphone'. Many versions of PDAs were available, primarily for the professional on the go. The full size touchscreen, single button devices 'Smartphones' that are commonplace now were not available until the release of the iPhone in 2007 (Martin, 2014), therefore a new innovation with the associated risks. Although the kiosk interpretation was designed for mobile as well as kiosk, it was considered too big a risk for use at Beaulieu. There were concerns visitors would walk away with the devices instead of returning them after use. There were also issues with file size for the multimedia content, both in storage and playback.

As a practice-led design PhD consisting of 60% thesis and 40% practice element, I considered it necessary to present the practice element via an exhibition. An outline of what would be included in the exhibition was planned, with the intention of the Viva examiners, Chair and Supervisory team being able to interact with the 3D models, 'walk-through' 3D scenes and explore the kiosk interpretation. The development material, assets and heritage site interpretations designed and worked on throughout the doctoral study would also be available to view and experience, on different mobile platforms and via VR headsets.

Unfortunately, these plans had to change due to the pandemic of Covid-19 and Lockdown. The content would, instead, need to be added to my 'Talking Walls-Reflection of Practice website, a blog site for my work and study over the last 30 years (links are shown in italics and underlined): *http://thetalkingwalls.co.uk/wordpress/?page_id=2*.

A section has been added to reflect the thesis and the Beaulieu Abbey interpretation practice and development to form the 'exhibition' content that would have been displayed at the exhibition, minus VR content. The website will also have sections/posts and galleries to reflect the chapter sections of the thesis and additional supporting material such as information regarding the case study sites and outcomes from the case studies.

Content will, therefore, include the following in addition to the existing site material (not listed here):

Research:

Case Study Overview Infographics

- • *National Trust's Lacock Abbey (2013 interpretation)*
- • *English Heritage's Bolsover Castle (2011-12 interpretation)*
- • *Historic Royal Palace's Kensington Palace (2012-13 interpretation)*
- • *Heritage Organisations - Overview*

Practice:

The Talking Walls – Beaulieu Abbey Kiosk Interpretation

Beaulieu Abbey - Material, Design and Research

- • Practice - Historical and Visual References: *[Fowler's Sketches, Beaulieu Abbey, Medieval, Cistercian Monks], Models, Characters Music, Storybook of Characters,*

Characters' Stories, *King John's Tour*, *Animations for how parts of the abbey were built*, *2006 Walkthrough*, *2008 Updated Walkthrough*, *development sketches & notes*

• Launch: *welcome speech*, *demonstration speech*, *questionnaires*, *photos of the event*

• Post Launch: *Feedback*, *Organisation of Interviews*, *Interview Sheets* & *Interview Transcripts*

Beaulieu Abbey Progression

• Kiosk Application – *updates from Flash application to HTML based application*
• Mobile & Tablet Application – now available on mobile devices via the current Adobe Flash based website: *The Talking Walls – Beaulieu Abbey Kiosk Interpretation*
• New Unreal scene – updated Beaulieu Abbey model brought into Unreal to create a platform for multiple outputs, this is still work in progress and can be viewed on this gallery link: *http://thetalkingwalls.co.uk/wordpress/?page_id=3643*

Further projects applying practice and knowledge:

• Hyde Abbey: *video tours, Abbot Aston Tour storyboards, Contemporary Tour storyboards*, *3D views/models*, *visual research*, *Contemporary tour*, *Abbot Aston tour*, *Abbot Aston Life Anecdotes* and *History Anecdotes*
• Virtual Malmesbury: *Malmesbury 3D Views [Unreal Game Engine], Malmesbury Videos*
• Virtual Winchester: *Draft proposal*, *initial reference images*

Reflection on Practice - Blog Site highlighting stages of development of the original and subsequent models, scenes and platforms

Contribution to Knowledge

Outcomes, models, frameworks, practice led research, new applications, international use of the 3D Beaulieu Abbey model for other academics' research within the thesis chapters will be added to the website after Viva examination.

• *Proposed new CHSID model diagram, CHSID process diagram and sheet for printing as laminated cards.*

I see the Past, Present & Future
existing all at once
Before me.

(Blake, 1820)

INTRODUCTION

This chapter has been formed by three sections examining heritage site interpretation design practice: my design practice and process for the Beaulieu Abbey Kiosk interpretation, case studies of heritage site interpretation design practice and process at three specific heritage sites, chosen for different aspects of similarity to Beaulieu, and existing literature for heritage interpretation design in areas of curatorial practice, design practice and visitor practice.

The first section establishes how the aims of the chosen methodology were fulfilled, providing an explanation and justification of the research, practice and outcomes of the work undertaken at Beaulieu. In Section 2.2, three distinct areas (curating interpretation, designing for interpretation and using and engaging with interpretation) are analysed through the use of three heritage interpretation case studies: English Heritage's Bolsover Castle (Derbyshire), Historic Royal Palaces' Kensington Palace (London) and the National Trust's Lacock Abbey (Wiltshire). The interpretation

design at each of the sites was examined for their design process and methodologies used such as User Centred Design (UCD). Visitor experiences and feedback were explored to understand whether involvement with the interpretation design process enhanced their engagement and experience with the site.

The literature review forms the third section and critically reviews and analyses existing definitions and theories pertaining to design practices in the formation and creation of interpretation at heritage sites. The effectiveness of heritage interpretation design in providing positive, memorable visitor experiences, and how this is measured is critically examined through visitor feedback. The thesis research has originated from reflection on my practice and comparison of practice, a natural process as a designer. The comparison of HSI design processes led to a critical review of literature to investigate and analyse aspects raised from the comparison case studies. The placement of the literature, therefore, has evolved from stages of practice-led research and through the design of the thesis replicating an action research cycle/design process.

The sections have been designed to provide a thorough systematic review of personal experience in HSI design practice, how my practice compared to other HSI design practitioners and curatorial practitioners/organisations, and whether visitors are, or may be, involved in the HSI design process.

2.1. DESIGN CHALLENGES & OUTCOMES

During the practical craft of creating the Beaulieu Abbey kiosk interpretation significant design practice material was generated and collated. Developing the case studies and literature review, design practice and research data was also created and collated.

This research strategy (see Fig.32) was developed to understand how my practice in the creation of the Beaulieu Abbey kiosk interpretation compares to the practice of other professional interpretation designers. I wondered whether interpretation designers working within or with heritage site organisations were regarding visitor involvement in their approach and design process (Crilly *et al.*, 2008:p.22; Rahaman & Tan, 2011:p.107).

Research Strategy
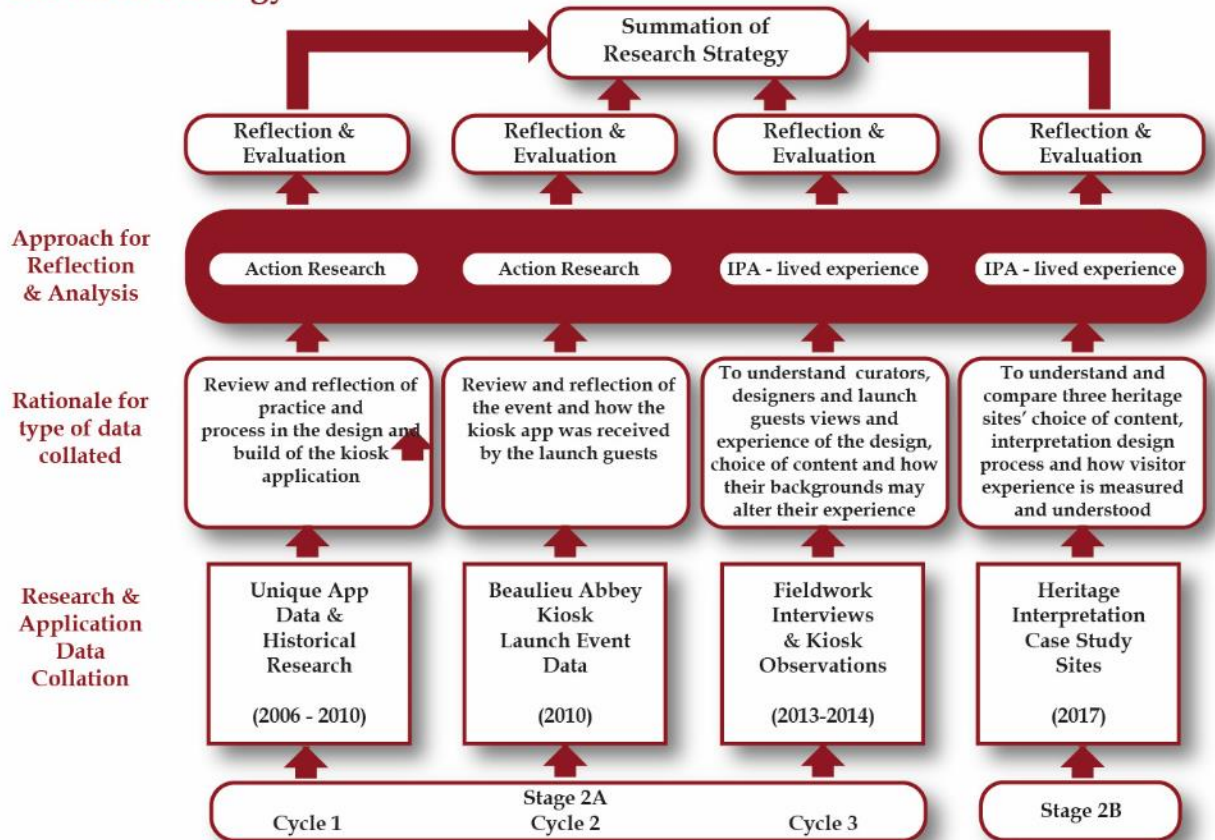
Figure 32: Research Design Strategy. (Wilson, 2018 ©)

I intended to explore and understand professional practices and processes within heritage organisations and interpretation design, based on my practice, and that of three different heritage site's interpretation design by three different heritage organisations for comparison (National Trusts' Lacock Abbey, English Heritage's Bolsover Castle and Historic Royal Palaces' Kensington Palace). The heritage sites and the specific interpretations were chosen as they were comparable in terms of sites' and process[20] with my process, the response by the stakeholders/owners and visitors on the completion/installation of the interpretations, and reflection on practice by those involved, in assessing and understanding their visitors' experiences. The comparison analysis aided evaluation of current models that exist in heritage site interpretation design.

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[20] The case studies' practices and processes can be viewed as infographic posters at the Viva exhibition and in Appendix M, which provide more detail about each site, the interpretation involved and the 'make-up' of the team(s)
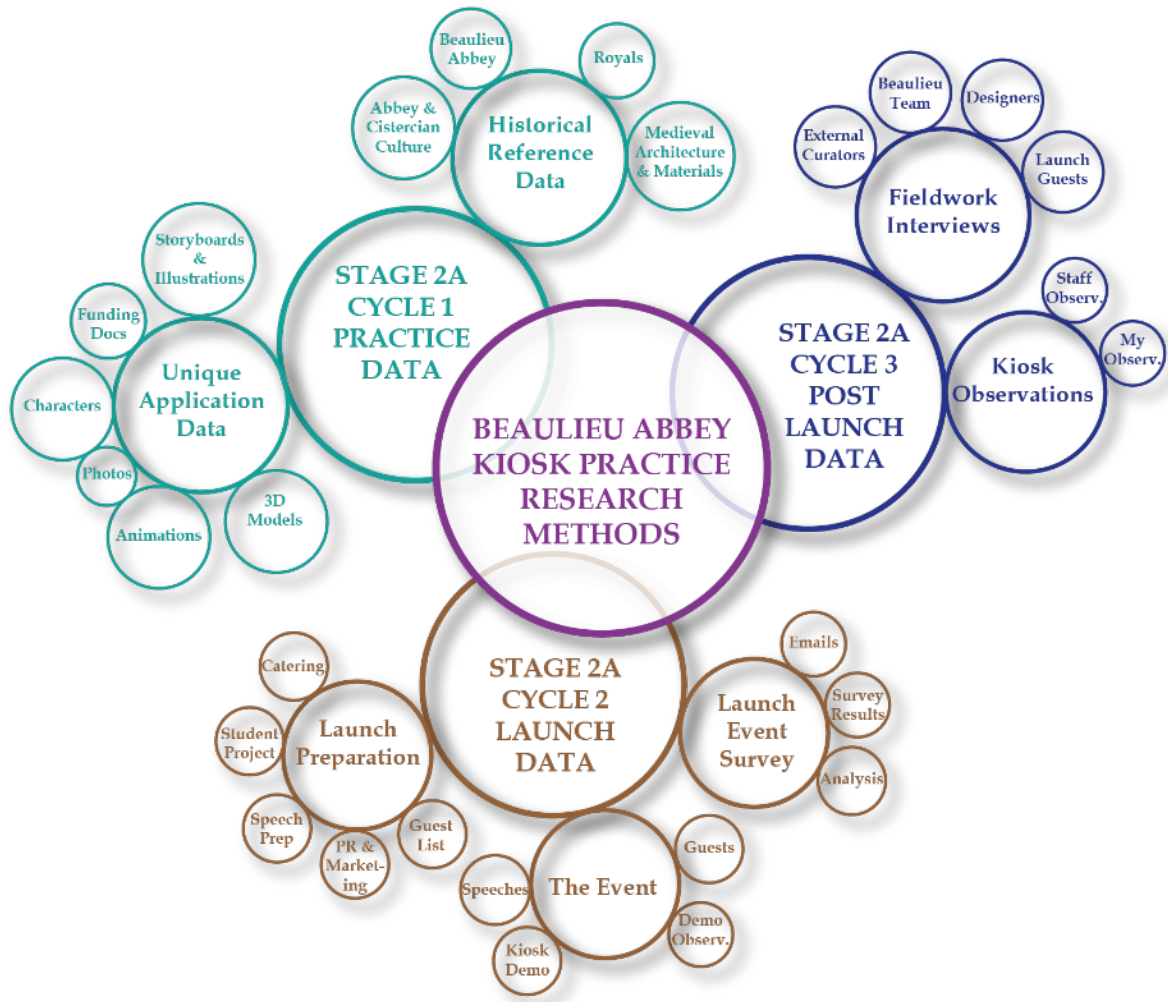
Figure 33: Beaulieu Abbey Kiosk Practice Research Methods & Curated Data. (Wilson, 2018 ©)

The diagram above (Fig. 33) highlights the methods used in relation to my Beaulieu kiosk design practice work cycles. Development of storyboards, illustrations, photographic research, 3D models, characters, funding application and navigation matrix information form a data collation labelled 'Stage 2A Cycle 1' in the diagram (Fig.33) (Gray & Malins, 2004). Underpinning the practice of designing and building the kiosk interpretation, historical research was also critical in understanding how Cistercian monasteries were built, their typical layout, their monastic culture and how the site was used. Understanding why Beaulieu was chosen as an abbey site and by whom, helped in setting the context for the size and significance of the abbey, and in creating the characters that tell the story of the abbey.

'Stage 2A, Cycle 2' collation comprises data from the Beaulieu Abbey Launch, particularly regarding the organisation of the launch, questionnaires completed at the launch, video clips,

photographs, Google analytics data and feedback communicated through email. The feedback and questionnaires from the launch have provided significant information regarding usability, navigation and content.

'Stage 2A Cycle 3' Post Launch data was through interviews with curators, designers and launch guests – as shown in Fig.33. The interviews with the curators/stakeholders at Beaulieu provided insights about relationships with their visitor groups. Interviews with other designers enabled comparisons of method and design models, as well as their relationship with clients and visitors.

Stages 1 and 2 were analysed using an AR approach to understand the effect of a cyclic process used in the design and production of the Beaulieu Abbey project, and the relationship built with the Beaulieu Team. Stage 3 analysis was via an IPA approach, to understand the participants' perspectives and experience relevant to their involvement with heritage interpretation. Through the combined analysis of the three stages, an understanding was reached of the design considerations, processes used and possible assumptions made in the design and development of the Beaulieu Abbey kiosk interpretation (Wilks & Kelly, 2008; Reid, Flowers & Larkin, 2005; Smith, Flowers & Larkin, 2012).

Understanding and reflecting on my design process was a valuable experience and informed how I approached and worked through future heritage interpretation projects (Schon, 1984; Chambers, 2003; McIntosh, 2010). A concern and a significant factor in undertaking elements of my design research was that this is 'my' individual process and not necessarily one that is replicated by other heritage site interpretation designers or can be replicated for larger heritage site organisations such as the National Trust or English Heritage. Nonetheless, the reflection on my design practice in the Beaulieu Kiosk interpretation creation prompted me to build a model that sets out the nature of the relationships and demonstrates how HSI can be improved. In looking for a theoretical 'lens' to help build the model, I needed to understand and evaluate that 'lens' from a number of different perspectives, and therefore conducted case analysis of other HSI design practices. These enabled a comparison of contrasting design processes and research in other contexts.

In May 2010, the kiosk launch for Beaulieu Abbey museum took place to an invited guest list. The project had taken four years from initial concept presentation.

The Beaulieu Abbey project required the development of a small team who were able to provide skills additional to mine at different times through the project. Scoping the project was necessary as part of the funding application process, which also required a break-down of how the project would be managed over a set amount of time, and who may be involved (Veverka, 2000; Black, 2005; Ziemann, 2014; Tilkin, 2016). Developing the funding application, or 'business plan' for the project, involved a steep learning curve in understanding processes for providing necessary grant application information. The process, supported by Business Link Wessex, took approximately a year, involving several iterations to perfect it to the required format. The thoroughness resulted in an award for my Business Link mentor for the best Micro Project funding application that year (2008), although predominantly providing a comprehensive method for producing the Beaulieu project (see Fig.34 below for an overview of the methods used):
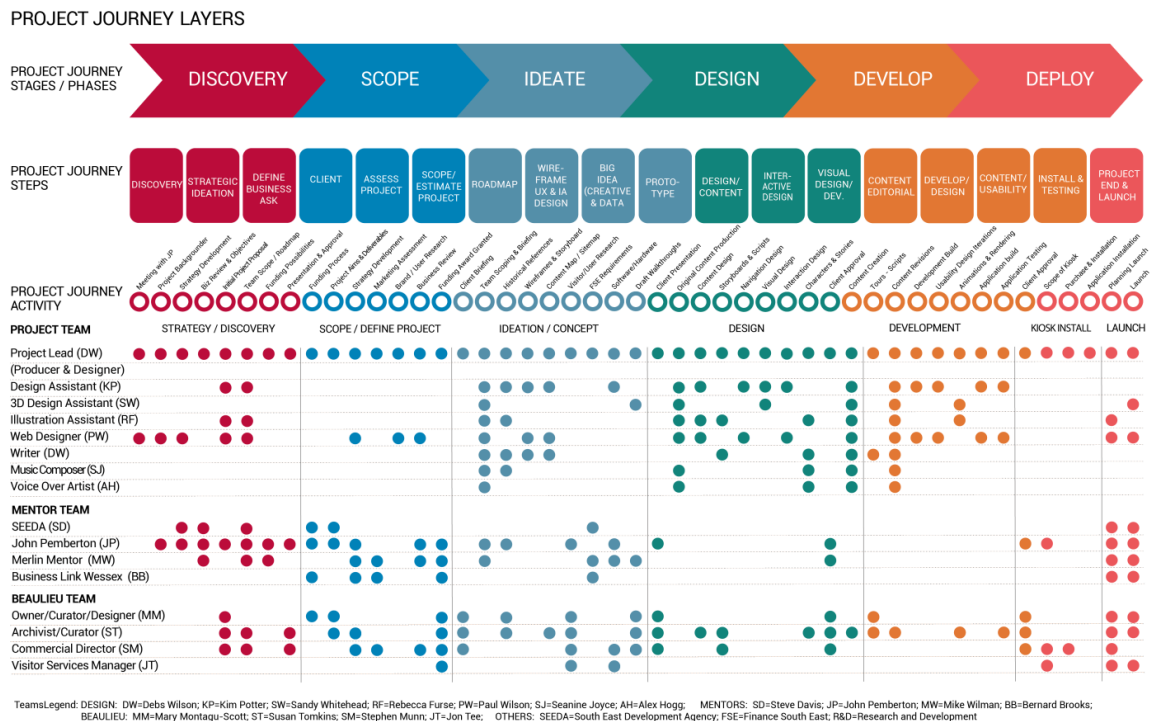
Figure 34: Beaulieu Abbey Project Journey, Processes & Methods Used. (Wilson, 2018)

Once the Beaulieu Abbey kiosk interpretation project was completed, reflection of my design process highlighted how important the relationship had been between myself and the Beaulieu curatorial team. Working closely with the team proved to be invaluable with expert information

about Beaulieu's Domus and Palace House visitors readily available. The visitor information helped to support design decisions for the range of content available via the kiosk interpretation, although it was not the same as having involved visitors in the decision making process (Ham, 2013).

The experience gained in developing the Dunster Castle project[21] was significant in understanding how crucial it was to have a team that understood your project, and, therefore, to be able to communicate ideas and concepts clearly (Gulliksen *et al.*, 2003). An in-depth understanding of the processes and methods used in the Beaulieu Abbey kiosk interpretation developed further through the collation and reflection of the varied forms of material produced at each stage of the process (O'Brien, 2001; Chambers, 2003; Gray & Malins, 2004). The following subsection provides information regarding the two categories of material collated and used for reflective analysis: kiosk interpretation material and historical reference information.

2.1.1.1. UNIQUE KIOSK INTERPRETATION MATERIAL & HISTORICAL REFERENCE INFORMATION

This body of material was formed by a combination of sketches, illustrations, storyboards, documents, presentations, photographs, animations and 3D renders, which were organized in a timeline via 'blog style' posts, an example can be seen below in Fig.35. The material produced and collated has been curated and forms part of a website called *'The Talking Walls – A Reflection of Practice'*[22]

Creating the timeline of events and development of visuals required for the kiosk interpretation, required reviewing and re-cataloguing archived material. As a funded project, regular reports on progress, timesheets, invoices and costings were also required; therefore, it was necessary to retain correspondence to reference in the regular reports and reasons for delays, purchases and time tracking. The material has aided in reflecting on my practice, the decisions made in taking ideas forward and the process by which this was done.

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[21] See Chapter 1 for more information

[22] The site includes the development of practice from the outcome of my Masters in Interactive Production – The Talking Walls – Dunster Castle. Information about this project and how it progressed to the Beaulieu Abbey kiosk is shown through emails, images and documents in a timeline blog post style format. *http://thetalkingwalls.co.uk/wordpress/*
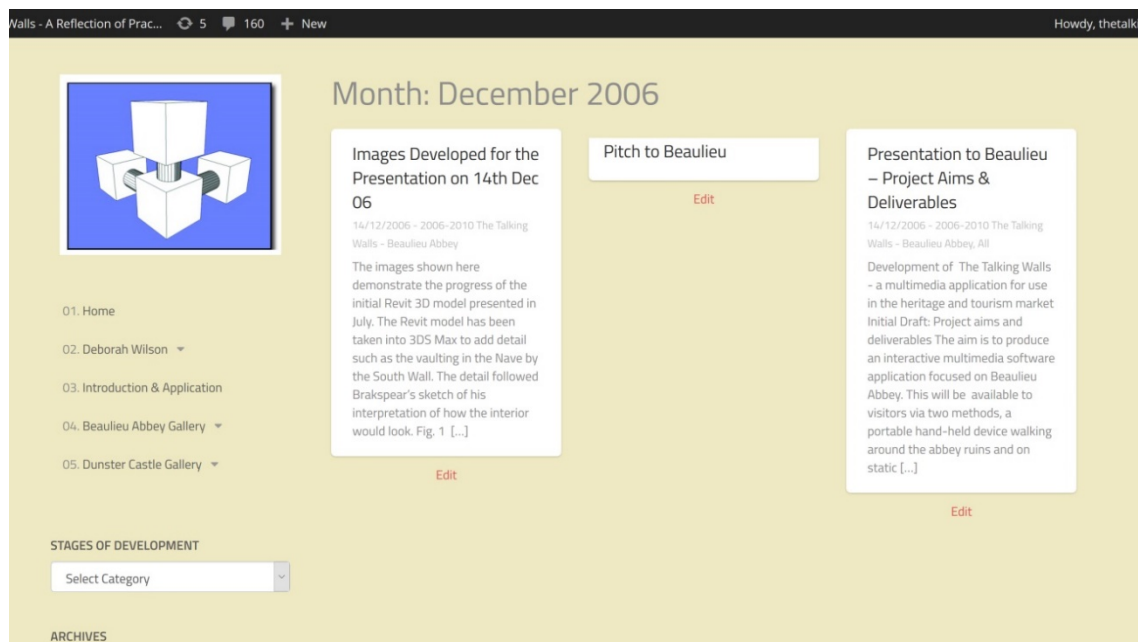
There are two separate but linked areas of archived material:

1. Unique Kiosk Interpretation Material – which includes:

    a. Correspondence leading to and throughout the development of the Beaulieu Abbey kiosk interpretation with the Beaulieu team, Finance South East and design team

    b. Storyboards, sketches, illustrations and renders created in the development of the kiosk interface, the characters' stories and the 3D abbey

    c. Personal reference photographs taken at Beaulieu

2. Historical Reference Information – which includes:

    a. Visual references to Cistercian monasteries and monks

    b. Brochures, guidebooks and artistic references of and by Beaulieu regarding the Abbey, Palace House and village

    c. Historical reference books and online historical archives relating to the history of the abbey and the people involved with the abbey

    d. Online photographs

The different sets of visual reference and unique material produced in the development of the

kiosk interpretation can be found on the following 'Beaulieu Abbey Gallery' web link[23] with

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[23] http://thetalkingwalls.co.uk/wordpress/?page_id=112

correspondence ranging from 2006 to 2010 available via the blog posts[24], and a series of Diary of Events Calendar Spreadsheets for 2006, 2008 and 2010.

2.1.1.2. REFLECTION IN ACTION

Working through the archive, sifting and collating my practice material highlighted aspects forgotten over the period involved and how they are now echoed through the more recent case studies' and literature. For the initiation of the kiosk interpretation, the consequence of being part of several networks was clear. For example, an approach to Beaulieu was made through John Pemberton[25], who was interested in The Talking Walls project[26] and how it might work for providing visuals for a book he was writing. A chance meeting led to working with John to draft a proposal to Beaulieu for a 'Talking Walls -Beaulieu Abbey project, similar to the Dunster Castle project. John was a Mentor for the Solent Enterprise Hub working with Arthur Monks[27]; I was a Mentoree of the Southampton branch working with Stephen Davis[28], with Mike Wilman as my Merlin Mentor for The Talking Walls heritage projects. It was only through John and his connections at Beaulieu that we were able to approach them and propose the 3D virtual Abbey interpretation project. It was also through the Enterprise Hubs and Mentor networks that funding for the project was possible, working with John and Mike, and then Bernard Brooks at Business Link Wessex[29] on the funding proposal for the SME R&D Micro Project grant[30] award. Without the help and support of the different networks, the project would, most probably, not have taken place. This aspect of the project to do with the importance of business and professional contacts and of mentoring would not have been as clear had review and reflection not taken place.

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[24] *http://thetalkingwalls.co.uk/wordpress/?cat=8*

[25] John Pemberton lives near Beaulieu and had been researching the Abbey in relation to his property which may have been one of the monks' outlying farms. Through his research, he met Susan Tomkins as a member of the Beaulieu history group, the archivist at Beaulieu. As a significant figure of the New Forest, he had also met Mary Montagu-Scott. John was therefore important and influential in the Beaulieu Abbey project.

[26] The Talking Walls Ltd was a small business which was one of several companies that had been granted a Mentor to support development and growth of the business.

[27] Arthur Monks was the Hub Director for the Solent Enterprise Hub, South East Development Agency (SEEDA) based at Technopole, Portsmouth.

[28] Stephen Davis was Hub Director for the Southampton Enterprise Hub, South East Development Agency (SEEDA) *(http://webarchive.nationalarchives.gov.uk/20081106003119/http://www.seeda.co.uk/About%5FSEEDA/Research%5Fand%5FEconomics/)*

[29] Bernard Brooks was recommended by Stephen Davis to work with me on the funding application after early drafts were not quite fulfilling the format required by SEEDA/Finance South East (FSE). This was also my first meeting with Dr John Richardson, who led the Innovation Hub in which Bernard worked. John Richardson now works at the University of Winchester in Business Management and is Co-Director with me for the Centre of Enterprise, Design and Innovation.

[30] The Micro Project grant was a small business research and development match-funded grant which could be applied for via the South East Development Agency.
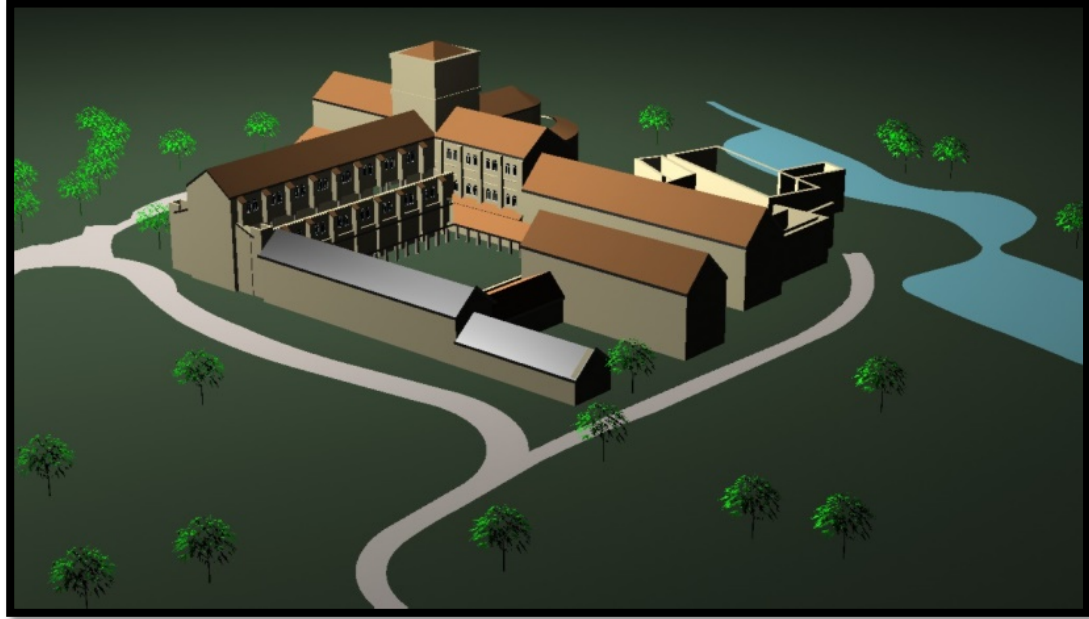
Figure 36: Fly-through Animation Mock-Up of Beaulieu Abbey for Presentation to Beaulieu in Dec 2006. (Wilson, 2006 ©)

The initial proposal meeting took place in May 2006 for which a presentation and simple mock-up of the Abbey buildings with a walk-through was developed. The mocked-up draft can be viewed in the presentation available on this link: *http://thetalkingwalls.co.uk/wordpress/?p=766* or by 'ctrl+click' on the image above (Fig.36).

The scene was created in Autodesk Revit[31] from reference to the following conjectural sketch by Brakspear in Fowler's (1911) book on Beaulieu Abbey (please see Fig. 37 & 38). The conjectural sketch and the floor plan were crucial historical references for the layout of the buildings and look and feel of the architecture. Further information was provided in Fowler's book, a series of 15 sketches,[32] demonstrating how the abbey may have looked in different areas, based on the remaining ruins.

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[31] Autodesk Revit is industry standard architectural building information modelling (BIM) software used by a majority of architectural practices. By using Revit, and importing the floor plan sketch, it took two days to build the draft abbey whereas building the same in a standard 3D modelling programme such as 3DS Max, would have taken at least twice as long. Revit was not generally in use for historical 3D replications of ancient buildings at the time, it was therefore interesting to see how well it compared to traditional methods using Autodesk AutoCAD or 3D modelling programmes.

[32] Please see this link to view the sketches involved: *http://thetalkingwalls.co.uk/wordpress/?page_id=1140*

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Figure 37: 'A Conjectural reproduction of the buildings of [Beaulieu] Abbey' illustration (Brakspear, in Fowler, 1911)
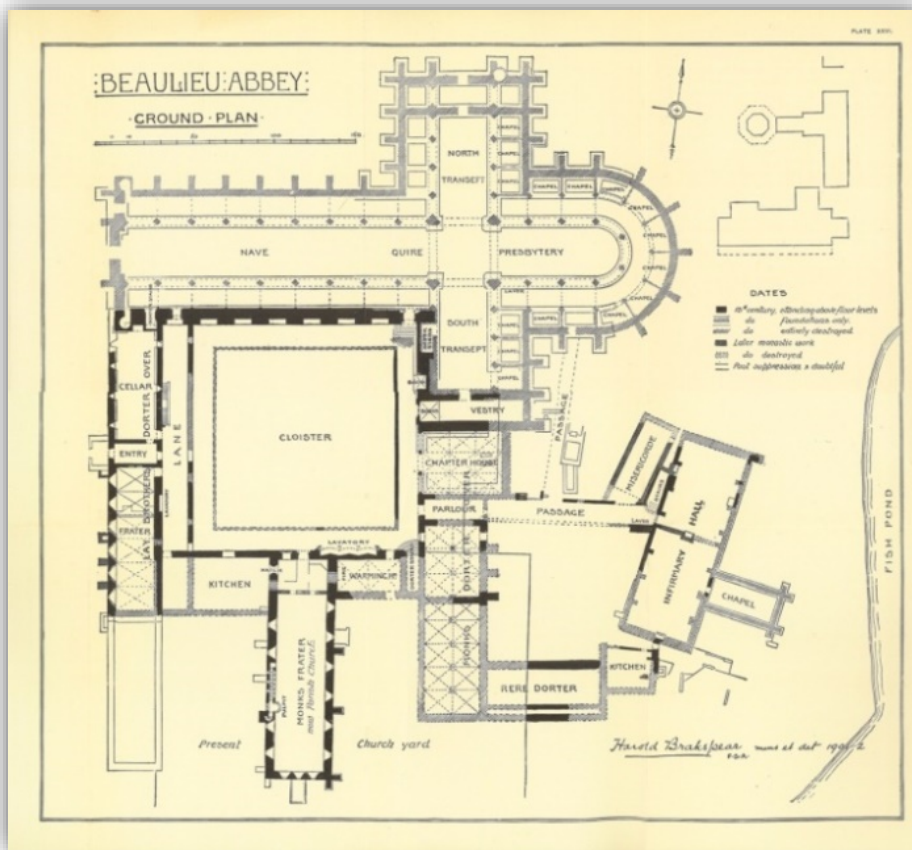
Figure 38: Ground Plan of the buildings of Beaulieu Abbey showing date information of the remaining ruins and the layout of what was once the Abbey Church and infirmary (Brakspear, in Fowler, 1911)

One of the sketches showing the vaulting and columns of the south wall of the nave was particularly crucial for recreating an element of the interior of the 3D abbey for the Beaulieu presentation in December 2006 (see Fig.39). The sequence of images demonstrates the use of archival images for 3D interactive environments where a deeper engagement with historical data may occur. These images and the basic walk-through captured Beaulieu's imagination for what could be provided for their abbey site and led to their interest in the project going forward.
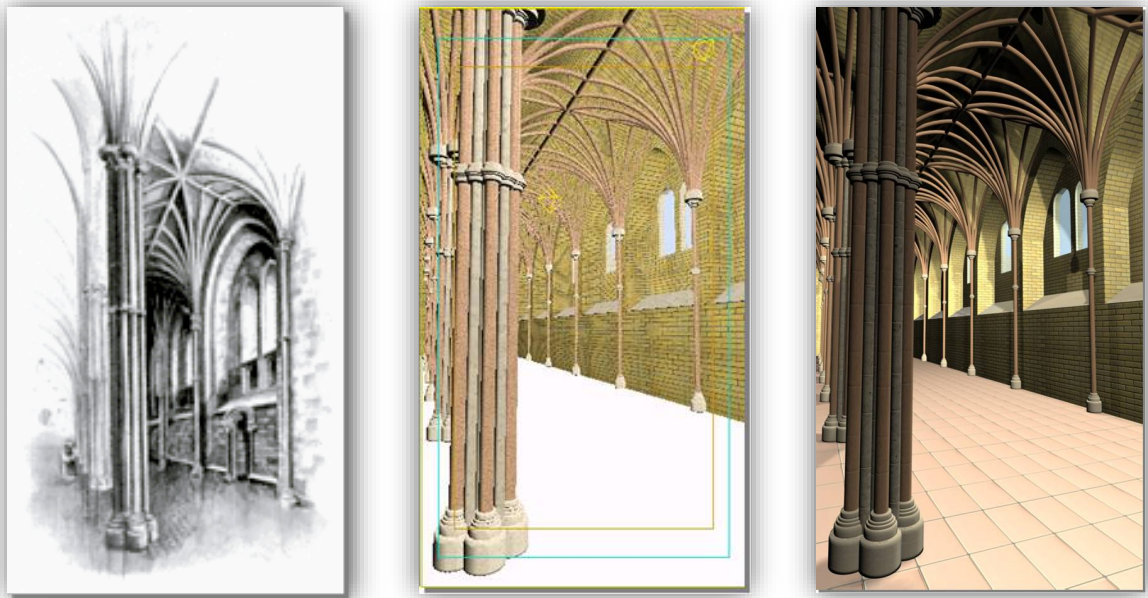
Figure 39: Sequence of development interpreting archival sketch information (Fowler, 1911) to a draft 3D interactive model for a presentation to Beaulieu in December 2006. (Wilson, 2006)

Additional information regarding the heights of the different abbey buildings was more of a challenge. The floor plan (Fowler, 1911) provided a scale of the site, but not of the heights involved. On-site measurement and photographic reference of the remaining buildings were required. Further historical references for verification in sizes and discussions with the Beaulieu archivist, Susan Tomkins, were critical in being able to rebuild a credible 3D version of the abbey.

Historical research[33] for references to typical Cistercian abbeys and monasteries was a necessity for validating the visual information and understanding the medieval construction methods, materials and differences between Cistercian and Benedictine Abbeys, monastic lifestyles, roles and hierarchies. Research continued throughout the project, with each area of the application

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[33] Primary resources included: Fowler, 1911; The Lord Montagu of Beaulieu, 1952; Hockey, 1976; Larkin, 1974; Saul, 1997; Given-Wilson, 1996; and Sternberg, 2013.

requiring historical resource and reference for creating an authentic experience when engaging with the kiosk interpretation.

The Beaulieu Abbey project officially started in May 2008 once funding had been awarded through a Micro-Project grant. The funding application had taken approximately one year with the help and guidance of my mentors. This was an essential guiding document to the project and is included on the website[34] for reflection and analysis.

There were two significant issues in the subsequent production and development elements. The first impacted the development of the character scripts, and subsequent voice-over recording and editing. Beaulieu had been working on an audio tour script with an external company. The tour script involved several iterations and stakeholder approval which resulted in the script not being available as the basis for the characters' individual tours until the November prior to the initial project end date of the 5th December 2008. The audio tour script provided the preferred visitor navigation points crucial for animating the flow around the abbey. The characters' tours would also follow the same points and flow, with the content at each point re-written to reflect the role of the character, i.e. the Infirmarian Albert talking more about his work in the infirmary than King John.

The second issue was in purchasing the kiosk. The purchase was an agreed responsibility for the Beaulieu team; their financial contribution to the project. 2008-09 had been a slower time for Beaulieu in terms of visitor numbers, which affected budgets for additional expenditure such as the Beaulieu Abbey kiosk. Agreement was made that the project would still be completed for February 2009, and made available as a website only until the kiosk was purchased and installed in early 2010. A positive impact was that the delay allowed further 3D renderings and enhancement to the 3D abbey model, fact sheets, lifestyle sheets and interface, resulting in an increased depth of historical information available through engagement with the kiosk interpretation and website.

Both issues were out of my control and required adaptation and permission from Finance South East (FSE) to the original project schedule[35].

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[34] *http://thetalkingwalls.co.uk/wordpress/?p=1626*

[35] The original project schedule and amended Gantt Charts can be viewed on these links:
http://thetalkingwalls.co.uk/wordpress/?p=1873 & *http://thetalkingwalls.co.uk/wordpress/?p=1876* &
http://thetalkingwalls.co.uk/wordpress/?attachment_id=1870

Network connections were also instrumental in quickly putting together a team for different areas of production. Each member of the team was known via other industry areas I had been involved with, for example, Seanine Joyce, composer and producer for the medieval music was a fellow 2010 Digital Horizons' participant. Prior knowledge of the team members, their experience with similar work and their skillsets/abilities allowed for a more immediate process than working with a team from which the only experience and knowledge known about them was from their curriculum vitae and interview.

The team members mostly worked from their premises; therefore, regular briefings were critical with updates communicated via email. This worked well for all involved, although on reflection, it would have been more companionable working together in a shared space. This would also have allowed a greater cross over and sharing of ideas and skills (Black, 2011).

Although knowledge of the type and demographic of visitors had been provided by Beaulieu's visitor services team and Tomkins, who led the Live History tours for school parties, I had not engaged with actual or potential visitors in scoping my design. Similar to the Dunster Castle project, I had built personas of typical visitors based on the information provided by Beaulieu. The personas were enhanced through an empathic design process i.e. stepping into their shoes (Kouprie & Visser, 2009; Postma *et al.*, 2012a), in this instance:

- a middle aged female interested in ancient buildings and medieval history
- an 11 year old female interested in technology and exploring history using technology
- a retired male academic with knowledge of medieval monastic buildings

Gauging the level of material that would engage each persona shaped the kiosk interpretation's content and the different tones of voice required (Gadamer, 1960; Overbeeke *et al.*, 2003). I found this relatively straightforward having visited several historic houses with my daughter and mother, experiencing/engaging with the interpretation available, yet difficult in defining the range between the levels of information.

2.1.2. CYCLE 2 - LAUNCH

Once the Beaulieu Abbey kiosk interpretation was completed and the kiosk installed, a promotional launch was planned for an invited guest list. To assist with the launch planning, a group of four MA Marketing students from Southampton Solent University[36] chose to research and develop a proposal report for The Talking Walls-Beaulieu Abbey's kiosk interpretation launch. The students' report 'The Talking Walls' Launch Proposal' (2010) can be found here[37].

Figure 40: Launch event with me (left), Mary Montagu (middle), and Lord Montagu (right) at Beaulieu on 19th May, 2010 (Wilson, 2010)

The Launch took place in the afternoon on Wednesday 19th May, 2010, with a speech by Mary Montague, accompanied by her father, Lord Montagu (see Fig.40 above), explaining the purpose of the kiosk interpretation and as an introduction to my demonstration of the content. The speeches can be found in two parts on YouTube using this link[38].

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[36] I was an Associate Lecturer on the MA Marketing programme at Southampton Solent University at this time; the opportunity to provide live client projects for the MA students was encouraged, therefore I had provided a brief for planning the marketing of the launch. This was one of five similar projects provided by companies for the students to choose from, with the students receiving mentoring from the clients and the lecturers under the guidance of Mike Wilman, their senior lecturer.

[37] MA Marketing Students final report for the kiosk interpretation launch at Beaulieu: *http://thetalkingwalls.co.uk/wordpress/?p=1629*

[38] The launch speech by Mary Montague (part1a): *https://www.youtube.com/watch?v=qS9pyOZJVhU*; my launch speech (part 1b): *https://www.youtube.com/watch?v=nIDPVXwv3CQ*

As part of the launch, a qualitative survey was designed by the Southampton Solent University MA Marketing students. The questions were driven to primarily elicit the launch guests' experiences of their use of the Beaulieu Abbey kiosk interpretation, and to gauge response to the new interpretation in format, ease of use and content. Feedback was also sought via discussion with the guests. Informal observations of guests using the application also took place. The survey and observations were important in obtaining feedback of the event. The data collated assisted in gaining an understanding of early users' experience with the application, and which content areas were most engaged with.

2.1.2.1. <u>LAUNCH PLANNING AND EVENT MATERIAL</u>

The launch planning consisted of a collaboration between the Beaulieu Team, their Marketing and PR department, their catering team 'Leith's', the MA Marketing students and myself. Once a date was agreed, the Beaulieu marketing and PR team provided details of the information they required, which the MA students were able to work with and produce outcomes against. In collating the information, records highlighting these crucial processes were retained.

There were two areas of archival information collated for this section:

1. Launch planning – which included:

    a. Correspondence with the Beaulieu team (inc. catering, marketing and PR), Southampton Solent MA Marketing students, University of Winchester Digital Media students, Finance South East and supporting companies regarding the use of handheld devices
    b. Promotional material such as press releases, invitations/leaflets and medieval music DVD and storybook insert
    c. Invited guest list and final attendee list

2. Launch event – which included:

    a. Speeches to launch the event
    b. Demonstration of the kiosk interpretation
    c. Observations of guests using the kiosk
    d. MA Marketing students' Guest questionnaire

<u>Launch Planning:</u>

There were four strands of correspondence and documentation forming an insight to the considerations required for planning an event such as the Beaulieu Abbey kiosk interpretation launch. The four strands consisted of:

- The Beaulieu team – Margaret Rowles, Beaulieu Enterprises PR Officer
- MA Marketing students – Eleni Elliott, Patricia O'Driscoll, Madalina Carastoian and Chantelle Legg
- Leith's at Beaulieu – Gemma Moody, Sales Manager
- The Talking Walls UK Ltd – Debs Wilson

The most relevant document for reviewing the details required to be actioned by the Beaulieu Team on the event day was the Special Visit Sheet (SVS)[39] produced by Margaret Rowles' PR and Marketing team (please visit this link[40] or view Appendix E). The press release was also written by Rowles' team with three photos[41] taken of the kiosk and the Beaulieu Live History 'Abbot' arranged and produced by the Beaulieu Press photographer, Tim Woodcock (Fig.41).

Figure 41: Press photograph with the Beaulieu live history abbot looking at the new kiosk and application on the 10th May 2010 (Woodcock, 2010)

The initial brief for the MA Marketing students was provided in February 2010 for their semester 2 live client project, having chosen to work with The Talking Walls - Beaulieu Abbey launch event. Through meetings with the students and email correspondence, the four students produced a report, a guest list, and a questionnaire for feedback at the event. The latter three items are available to view on this link[42] and provide a good resource for reflection on processes used and timeline for the event planning.

The documentation for the email invitations and flyer alerts for the event made use of the 'KubeMatrix,' which I designed for navigating the Beaulieu Abbey kiosk interpretation content. The front face of the KubeMatrix device cubes were translated to flat squares and the three layers retained for providing the launch date, time and the centuries covered within the interpretation content for the invite and flyer artwork (see Fig.42 below). The strap line was designed to explain the possible process of engaging with the content. The overall 'look and feel' for each element of marketing material followed the branding used within the application's interface:

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[39] Correspondence leading to this document has not been included, primarily because the data sheet provides the same information.

[40] *http://thetalkingwalls.co.uk/wordpress/?p=1637*

[41] The set of photos can be viewed on *http://thetalkingwalls.co.uk/wordpress/?p=1647*

[42] *http://thetalkingwalls.co.uk/wordpress/?m=201003*

Figure 42: Invitation 'postcards' designed (front and back) to reflect the kiosk interface with event information (Wilson, 2010 ©)

An additional flyer was created in March 2010 to advertise the Beaulieu Abbey kiosk interpretation was going to be available soon[43]. The two documents required approval, particularly the information on the back of the invitation, which needed to display the correct logos for the organisations involved in the kiosk interpretation and its launch. The procedures required developing the designs for promoting and reminding people of the event were not new or difficult, the difference was the range of permissions required, and it is this reason the artwork has been added to the data to be reviewed and analysed.

As the launch guests departed, the four Southampton Solent University MA Marketing students provided each guest with a DVD as a reminder of the day, and as a 'Thank you' for completing the Feedback Questionnaire. I designed the compilation, creation and artwork for the DVD case and storybook. The 'Abbey Characters' DVD contained music composed by Seanine Joyce for each of the abbey characters and a storybook presenting the nine characters. The artwork involved can be found on this link[44], and the different characters' music on this link[45]. The DVD also required

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[43] The flyer can be viewed on this link: *http://thetalkingwalls.co.uk/wordpress/?p=759*

[44] DVD artwork can be viewed on this link: *http://thetalkingwalls.co.uk/wordpress/?m=200904* and in the appendices.

[45] The music specifically composed by Seanine Joyce for the nine characters introduced through the Beaulieu Abbey Kiosk interpretation can be found on this link: *http://thetalkingwalls.co.uk/wordpress/?p=709*

approval by Beaulieu, who were very pleased with the 'keepsake', seeing it as a viable product they would be able to sell in the Beaulieu tourist information centre. The work put into developing the storybook insert, the graphics for the DVD cover and disc was extensive and time consuming. The reason for inclusion in the material collation is the unexpected favourable response by Beaulieu for what was an additional input and outcome during the delay in being able to launch the kiosk interpretation.

Launch event:

The data for the launch event consists primarily of video taken at the event, for Mary Montague-Scott's introductory speech, followed by my speech and demonstration of the kiosk interpretation. The video footage can be viewed on the link provided here[46] for Mary's speech and here[47] for my speech and demonstration. The transcripts can be found on this link[48].

After the speeches, I was able to observe guests using the kiosk. From later conversations, my mentoring team had also observed the guests using the application and were able to discuss their experiences with me.

The MA Marketing students' Guest Experience questionnaire (Fig.44) was completed by seventeen of the high profile launch guests with comments as feedback. The profiles of the launch guests included representatives of the New Forest District Council and New Forest National Park Authority, English Heritage, SEEDA and Winchester Cathedral, local Universities, Museums and Enterprise organisations such as Business South East and Set Squared. Although not all guests completed the questionnaire, there was a sufficient sample to analyse, for review and reflection regarding their experience and how the kiosk interpretation may be improved. The guests were able to answer anonymously, which was an important consideration due to the high profile attendees, although they could tick their age range and gender. The mix of questions was deliberately kept brief i.e. only seven questions of which only three required a brief comment. The questionnaire sought to discover the guest's experience in their use of the application and whether they had seen/used a similar application elsewhere. This was a key question in how the application was received and whether it was unique. If it proved to be quite unique, then it would be a more viable product for investment. The questionnaire also asked how the guest would

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[46] *https://www.youtube.com/watch?v=qS9pyOZJVhU*

[47] *https://www.youtube.com/watch?v=nIDPVXwv3CQ*

[48] *http://thetalkingwalls.co.uk/wordpress/?m=201005*

improve the application for use at Beaulieu Abbey. It is only through people using the application that improvements can be highlighted and considered for future iterations; consequently, it was crucial to ask this question of the guests who had experienced the application. Figure 43 is one of the completed questionnaires, the remainder can be found in Appendix F and on this <u>link</u>[49].

The verbal feedback, observations and questionnaires form part of the qualitative primary data collation which is reviewed and analysed in Chapter 3 Evaluation and Discussion.

2.1.2.2. REFLECTION IN ACTION

The launch of the Beaulieu Abbey kiosk interpretation was the culmination of a project spanning a period of three years. The event was personally momentous in promoting my concept in HSI for a site as prestigious as Beaulieu and Beaulieu Abbey. It was also of immense significance for the

Figure 43: Example of a completed 'Experience Questionnaire' by one of the Launch Event guests (Wilson, 2010)

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[49] *http://thetalkingwalls.co.uk/wordpress/?p=1858*

organisations that had been part of the development via funding, advice, research and support, most importantly Beaulieu.

Ensuring the event ran smoothly meant considerable planning and organisation which would have been difficult without the support of Beaulieu's staff in PR, marketing, catering, front of house and the management team. I had not considered that their support would be available although I should have realised that as an event held at Beaulieu, the 'event' team would ensure requirements for a successful event would be in place. The opportunity for the MA students to work with the Beaulieu team in understanding what was acceptable at a Beaulieu event provided a unique experience, although not always one the students were in accord with. For example, the students' initial ideas were to have students dressed in costume to greet guests. In principle, this may have been a good idea but for Beaulieu, the idea would have conflicted with Beaulieu's Living History team; a team of costumed guides trained in the history of Beaulieu's Palace House and Abbey. It was difficult to discourage this idea, and required confirmation from members of the Beaulieu team that the idea was not to be taken forward. The reason was to ensure costumed students were not mistaken for trained costumed guides, thereby possibly forming a detraction of the Living History brand, which, the students in their enthusiasm to do well, did not appear to understand. The confirmation required from the Beaulieu team rather than being informed by me, was a valuable insight and reflection as the students' client, and for possible future clients they may have.

The conversational feedback from the guests was positive and encouraging regarding the uniqueness of the KubeMatrix device. The depth of content received excellent feedback, in particular the 3D reconstruction of Beaulieu Abbey, and the range of characters available as 'tour' guides. The feedback generally was inspiring.

The Launch data has been collated and added to 'The Talking Walls – A Reflection of Practice' website[50], forming a chronological visual record of practice for the Beaulieu Abbey kiosk interpretation. The Launch data also forms part of the primary research which has been analysed and discussed in Chapter 3 Evaluation and Discussion.

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[50] http://thetalkingwalls.co.uk/wordpress/?page_id=2

After the launch, the kiosk interpretation remained installed within the Domus as part of the Beaulieu Abbey museum exhibition for approximately two years. The main reason for its discontinuation was due to the kiosk platform breaking and Beaulieu's decision not to replace/repair the computer element that had crashed.

Figure 44: Beaulieu Abbey Kiosk (Wilson, 2010)

During the two years, I observed different groups of visitors using the kiosk. The observations proved insights about areas chosen to engage with, which primarily were the tours, quizzes and character stories. The tours would not always be played completely through; instead different areas would be chosen such as the Nave, and re-chosen with a different character, possibly to understand the difference in each character's 'story' of their life at the abbey. Although the content was at one generic level, the individuals and groups of visitors interacting with the kiosk appeared to engage with the information, and appreciate the range of information available. The observations were supported by the feedback from the FoH staff, who also reported that groups of international students (14+ age range) would try to close the application to access the internet rather than engage with the application. The kiosk was 'closed off' for this not to happen, even so, the older student groups were still seen trying to break the system and access the web.

It had not occurred to me that this may happen; it took several additional visits to completely secure the system to prevent this from happening. The misuse may have contributed to the kiosk finally failing. Had visitors been able to access the content via their own or 'loaned/hired' devices provided by the site, this would not have been an issue, therefore an important consideration for future kiosk interpretations.

An additional factor that may have contributed to the system failing, was frequent moving of the kiosk to cater for hospitality events held in the Domus, evidenced by being in different positions in my observation visits. The kiosk was sensitive to movement, i.e. perhaps moved to an uneven area of flooring and therefore being rocked slightly during use, or simply mishandled whilst being moved. The larger monitor mounted on the top of the kiosk (see Fig. 44) needed to be stable at all times, but being away from Beaulieu this was not something I could control.

The website version of the kiosk interpretation still exists, although it requires the use of Adobe's Flash Player, and can be accessed on this link: *http://www.thetalkingwalls.co.uk/Beaulieu/*

Professional feedback

Feedback about the kiosk interpretation was necessary for understanding whether navigation through the content using the KubeMatrix template was intuitive, if the choice of nine different characters to guide users around the virtual abbey over three time slices, and whether the content was at a level of information suitable for a range of ages. The informal observations of visitors using the kiosk interpretation were beneficial in this respect. Comparing my practice and design process in crafting the kiosk interpretation, I needed to speak with other interpretation designers and curatorial professionals. To further evaluate visitors' engagement and experience with use of the kiosk interpretation, I chose a selection of the launch guests who had been able to use the kiosk, and had been able to speak to during the launch event. These launch guests and the other participants involved in the interviews, provided positive feedback on their use, understanding and experience of the kiosk interpretation. The positive feedback was the 3D models and time slices, the choice of characters (and accompanying medieval music), the novel KubeMatrix for 'jumping' to the different times involved in the different spaces, and the multimedia rich content providing life styles, historical facts and cultures of the Cistercian abbey and its inhabitants. There were three negative aspects that were common across the different forms of feedback: expectations that it should have been available on mobiles (PDAs or Smartphones), only one level of age-range available and queueing to use the one kiosk.

The three sets of interviews consisted of the Beaulieu Curatorial Team, the Design Team and a selection of Launch Guests forming the third team. There were two additional participants who were external heritage professionals. The interviews helped understand more about the people I had been working with during the Beaulieu project (DiCicco-Bloom & Crabtree, 2006). It was crucial to understand the participants' backgrounds to determine their level of experience of working with heritage interpretation. Participants genuinely seemed to appreciate the opportunity to reflect on their different journeys, understanding the connections between the paths taken to the resulting experience and knowledge. Having previously worked with or met all participants except one during my role as a designer/mentor/ educator, the interviews were more relaxed. A rapport built with each person through the interview, especially as the participant started to relax more into the interview. On reflection, this may have been more about being able to talk about areas with which they were familiar and had an obvious interest in. Furthermore, the interviews held were at their choice of place, either work or home.

Using NVivo for analysing the data was a steep and interesting learning curve, particularly so in recognising assumptions made in my initial themes. The data 'nodes' created from the various sources, highlighted areas which were more prevalent than I expected, and raised areas I had not considered. The three iterations of thematic analysis and subsequent word clouds sparked a realisation that there may be an additional outcome to explore for future research in the form of a 'heritage interpretation design' specific taxonomy. A common vocabulary which the curators, designers and visitors recognize and understand may also help to ensure possible barriers in communication are negated whilst working in multi-discipline teams.

This section analyses the three case studies[51] that have comparable features to my work on the Beaulieu Abbey kiosk interpretation. The three case study interpretations were chosen as examples of bespoke personalisation and storytelling of the building's previous inhabitants, designed to capture visitor interest and engagement – as was the case of the Beaulieu Abbey interpretation. The case studies were also chosen to involve different heritage organisations to compare process and methods of communication. A further consideration for choosing the sites was their process of involvement with visitors and the local community in the interpretation design. They were sites I had visited previously, prior to the interpretations being installed and remembered noting I would have liked to see more information about the people that had lived there. The most significant difference to Beaulieu was that the sites are owned by larger organisations, therefore possibly had access to larger design companies or in-house design teams. The following infographics provide an outline of each heritage site, the reason they were chosen and the interpretation analysed:
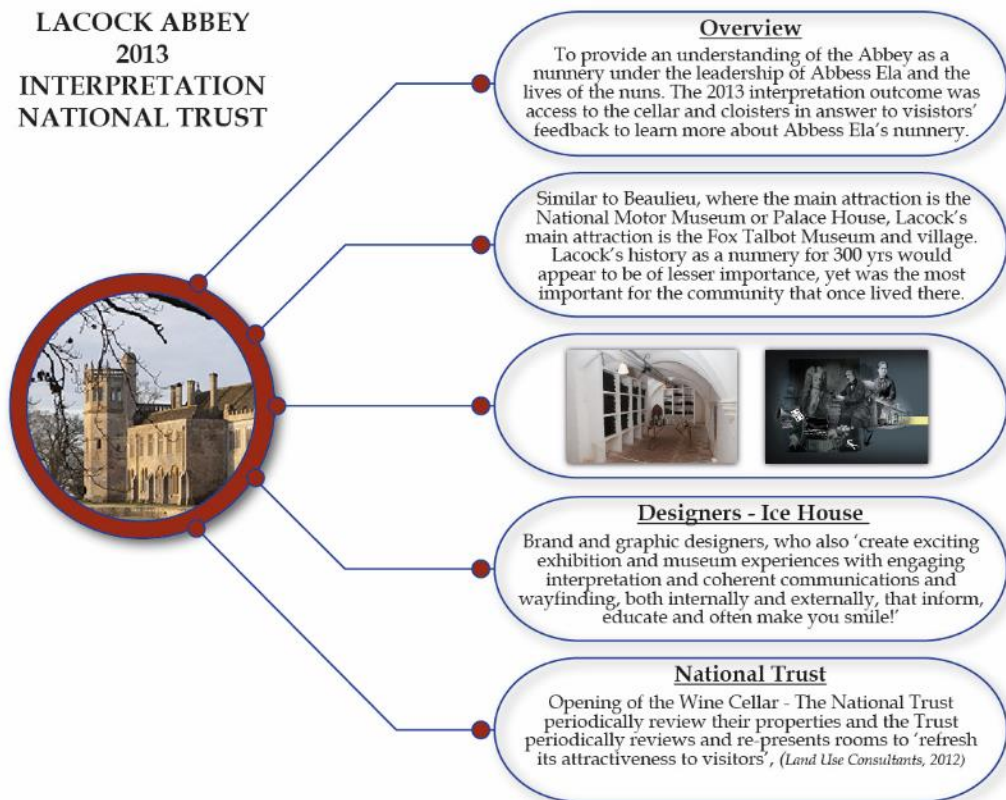
Figure 45 Lacock Abbey 2013 Interpretation Infographic (Wilson, 2018)

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[51] The case studies are English Heritage's 2011-12 interpretation for Bolsover Castle, Historic Royal Palaces' 2012-13 interpretation for Kensington Palace and the National Trust's 2013 interpretation for Lacock Abbey. Infographic posters outline the sites and the interpretations reviewed which can be found in Appendix M and in the online Viva Exhibition.

**BOLSOVER CASTLE
2011 - 2012
INTERPRETATION
ENGLISH HERITAGE**

Overview
To provide an understanding of the lifestyle of William Cavendish and his family in the Castle's 17th-century heyday, specifically during a royal visit. The new visitor experience interpretation to achieve this was in the form of a digital application.

Bolsover Castle was chosen primarily for the multimedia application as a design comparison to the Beaulieu Abbey kiosk interpretation. The storytelling of the Castle's heyday via the multimedia application, Cavenish's family and the exhibition were elements similar to Beaulieu Abbey's kiosk application.

Designers - ATS Heritage
Contracted to replace the existing audio guide with a multimedia guide and app for the site. They 'are passionate about enhancing experience' and 'always mindful of the end user and hope their experience will be improved.' *(ATS Heritage, 2015, pp.15–16)*

Leach Colour & Bivouac
Leach Colour for a 'dramatic exhibition within the Riding House Range introducing the visitor to the many passions in William Cavendish's life.' *(Leach Color, 2014)* Bivouac for Graphic Interpretation, Management and Creative Direction for the interpretation design.

Figure 46: Bolsover Castle 2011-2012 Interpretation Infographic (Wilson, 2018)

**KENSINGTON
PALACE
2012 - 2013
INTERPRETATION
HISTORIC ROYAL
PALACES**

Overview
To provide an understanding of the different royals who lived in Kensington Palace. The 'Enchanted Palace' and 'Welcome to Kensington Palace' interpretations were creatively produced specifically for the period of renovation work at the Palace.

Kensington Palace was chosen primarily because of the interpretation/renovation project that would transform the Palace to become an 'exciting, engaging and inspirational visitor experience' *(Historic Royal Palaces, 2009).* The specific similarities are the smaller teams involved and the flexibility/creativeness of the brief.

Designers - Various
The range of artists, designers and exhibition companies involved in the Enchanted Palace and Welcome to Kensington Palace interpretations was extensive: Coney, Wildworks, Chris Levine, Joanna Scotcher, Jane Darke and Stitches in Time.

Enchanted Palace Concept
The Front of House staff felt strongly that visitors want to know more about the people who had lived at the Palace rather than make believe or fairy tale scenarios. The Curators went with their suggestion, and the Enchanted Palace was created *(Humphreys, 2012).*

Figure 47 KensingtonPalace 2012-2013 Interpretation Infographic (Wilson, 2018)

The analysis will be via three sections: Curating Interpretation at Heritage Sites, Designing for Interpretation and Using and Engaging with Interpretation. Small, privately owned heritage sites may have teams which rarely include a designer to work alongside their curator, whereas larger organisations usually have an internal team of designers, with a team of curators. Relationships, therefore, between a curator and designer at larger organisations, such as English Heritage and the National Trust, may be more familiar, consistent and cohesive when working on an interpretation project. Based on the Beaulieu Abbey kiosk interpretation experience, I found the relationship between the curator and designer and how an interpretation is crafted for the visitor, is essential in forming the design. Petrelli et al. (2016) discuss three successful museum interpretations in which curators, designers and technologists proved working closely together enhanced the format of interpretation. The results were engaging, interactive narratives providing visitors with unique experiences. Workshops and meetings throughout the Beaulieu Abbey kiosk interpretation design process enabled collaboration, communication and testing of ideas (Petrelli *et al.*, 2016; Ciolfi, Bannon & Fernström, 2008; Maye *et al.*, 2014; Hornecker & Ciolfi, 2019; Heath & vom Lehn, 2009). The analysis of three selected heritage site case studies will reveal whether opportunities for frequent discussions between the different parties existed.

This also gives insights regarding whether curators craft a heritage site's interpretation project with specific goals in mind, what these are, and if they are 'directed' by stakeholders. Furthermore, the analysis will review how goals are formed for the individual heritage sites, and in their development, what assumptions, influences and constraints have taken place before being passed to the designer.

The first section (2.2.1) critically reviews and analyses the curatorial processes used for developing HSI concepts, and their expected goals and outcomes. It also explores the communication and design process between the curation team and/or organisation and design company/designer when forming HSI.

In Section 2.2.2, the focus is on the interpretations created by the design companies involved in the three case studies. Who the design companies are and why they were chosen is essential for understanding the style of interpretation already in the minds of the different curatorial teams and how they have conveyed this.

In section 2.2.3, the focus is on the visitors, who they may be, the reasons why they choose to visit the case studies' heritage sites, and the reactions experienced from their visits. This section also

aims to understand the visitors' views of the individual interpretations, and their engagement and/or experience with the designed interpretation. How reviews and feedback may be provided and measured has been explored in an attempt to understand whether the type of interpretations provided at the sites, were seen as a success by the visitors.

Audience (Visitor) advocacy (Burch, 2013) is also introduced and reviewed to determine whether the use of visitor advocates would help the HSI design process. Additionally, how advocates or visitors may be involved and when is reviewed through the use of a user-centred design process. With the growth of user-generated content and user reviews, such as Tripadvisor, pressures are being placed on visitors to continuously review, provide feedback and 'be involved' in the content they may engage with at heritage sites.

The synthesis of the three case studies forms an understanding of the HSI design practice at the three heritage sites and aids in the evaluation of current models that exist in heritage site interpretation design.

2.2.1. CURATING INTERPRETATION AT HERITAGE SITES

2.2.1.1. <u>DISSEMINATION OF KNOWLEDGE AND EXPERIENCE</u>

There is considerable research (Kotler & Kotler, 2000a; Coffee, 2008; Ray, 2009; Soren, 2009; Trant, 2009; Janes, 2010a; Thomas, 2010; Easton, 2011; Rounds, 2012; Davis, Horn & Sherin, 2013; Louw & Crowley, 2013; Owens, 2013; Proctor, 2013) that discusses a growing shift from the traditional style of curation to that of a more audience participatory and storytelling style. Expectations and suggestions encompass the need for developing and engaging a wider public and specific communities. Areas discussed are heritage sites managed by business and marketing professionals; social media engagement with audiences; new media-enhanced artifacts and interpretation via new media technologies. Within these discussions, there is an acknowledgement that curators may be required to work alongside other professionals with specific remits such as digital content, information data, social media and collection managers (Ciolfi, 2012a; Ham, 2013; Black, 2011; Avram & Maye, 2016; Heath & vom Lehn, 2009; Giaccardi, 2012a; Ciolfi, Bannon & Fernström, 2008).

The organisations highlighted in the case studies recognize the shift that is occurring and are adapting their processes (Thurley, 2005; Cowell, 2008; Jenkins, 2013; Department for Culture Media & Sport, 2014b). For example, English Heritage announced their strategy 'Making the Past Part of our Future' for 2005-2010[52], which was to *'create a cycle of understanding, valuing, caring and enjoying. For each part of the cycle, we have adopted strategic aims. These are underpinned by a further aim – to make the most effective use of the assets in our care.'* (Thurley, 2005). The Bolsover Castle interpretation was for a '*a broad 17th century rich, human interest story*' (English Heritage, 2013), to engage visitors with the Castle's inhabitants of its heyday (Ptolemy Dean Architects, 2013). Stories surrounding the visit by King Charles 1 in 1634 were used to create games and virtual tours 'to be as inclusive as possible' and '*break down barriers to participation*' (ATS Heritage, 2014b).

The National Trust revised their strategy in 2004 after a consultative process that reviewed best practice across Britain (Taylor, 2006a; Jenkins, 2013). Their new strategy comprised several aims and a 'Vision for Learning'[53]. The underlying philosophy of their interpretation approach *'is one*

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[52] English Heritage Strategy 2005-2010, see Appendix H for detail

[53] Nation Trust's 2004 Strategy - Vision for Learning, see Appendix I for detail

that understands who our visitors are and offers them a range of experiences so that every visitor leaves feeling that they have enjoyed themselves and enriched their lives either consciously or subconsciously, unlocking the doors to inspiration and knowledge' (Taylor, 2006a:p.102). The interpretations in place at Lacock Abbey center on stories of a particular time and people. In the Abbey, the story of Abbess Ella, forms one theme of interpretation (Thornber, 2015). In the Fox Talbot Museum, it is of William Fox Talbot and photography (National Trust, 2015a). Lacock Abbey, therefore, includes two very different eras and people, enabling 'each' visitor to leave with new knowledge and/or having enjoyed their visit, similar to Beaulieu Abbey with the National Motor Museum.

Historic Royal Palaces' (HRP) 2014 Trustees' Report, states: '*We are engaged in an extensive programme of change and development – in the way we present the palaces, help people explore stories, provide services and engage people's senses*' (Mackay, 2014:p.4). The Kensington Palace 2010-12 interpretations can certainly be said to have engaged people's senses from the visitor feedback and blog articles written (Humphreys, 2012; Woollard, 2015; May, 2015). The dissemination of knowledge regarding the Royal family members, mostly the princesses who lived at Kensington Palace, have been said to be done in an evocative, heart-wrenching storytelling narrative (SEGD, 2015; Rank, 2013). The visitors wishing to know more about Victoria, Margaret or

Figure 48: Scriptorium Monk at Work, (from Lacroix)

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Diana would have found it difficult not to be caught up in the unusual stories and snippets evoking what their lives were perhaps really like (Rank, 2013; Craig, 2015). HRP also claims to '*do everything with panache*' perpetuating the '*spectacle, beauty, majesty and pageantry' of the Palaces they maintain* (Mackay, 2014:p.2). With 4 million visitors across their properties in 2014, HRP handles the largest visitor attraction with regards to built heritage sites in England (Mackay, 2014). The design of the interpretations used to impart knowledge of the monarchy and the societal impact of the Royals cannot have been easy, yet HRP make this one of their aims.

The curatorial teams required at each of the organisations would need to have adapted to the new strategies being put in place, and able to communicate more widely, more creatively than perhaps previously. Roles such as HRP's Jo Neil's, Senior Creative Programming and Interpretation Manager, does not have Curator as part of her title, but her role is generally that of a curator and manager (Neill, 2015). As a manager, her communication skills would need to be at an excellent level. As an Interpretation Manager, communication skills are even more important.

English Heritage has Territory Interpretation Managers (TIM) under their Curatorial Department (Draper & English Heritage, 2012) which consists of four separate units: Historic Properties, Archives, Curatorial and Conservation, and Education and Interpretation, TIM sits within the Education and Interpretation Unit. The skills required as a TIM include '*excellent communication*' and '*experience in leading multi-disciplinary teams*' (English Heritage, n.d.). This would place TIM in a different category than a Curator i.e. a TIM assists in providing the interpretation, not curating (English Heritage, n.d.).

The National Trust also has several different categories with regards to roles. There is a Head of Digital, the Director of Brand and Marketing (for an in-house marketing team), a Web Editor, Visitor Experience and Communities Manager, Digital and Social Media Consultant and other similar posts (Ghosh, 2015; Scott, 2015). They work alongside a team of Curators, i.e. Curator of Pictures and Sculpture, Furniture Curator and Libraries Curator (Spectator, 2014). These are curators that have a specific collection to look after and understand in depth. With a thorough knowledge of their own area, they should be able to communicate clearly to whoever they are working with, an expert or a layperson. Ewin (2012) believes curators thoroughly understand a collection's value to the community, their context, strengths and weaknesses, and the importance academically. Curators '*keep our heritage alive through their understanding of cultural objects and*

their meanings' and are '*keepers of the flame: story tellers, who can bring the past to life, can explain or can provide the knowledge for communities to come together*' (Ewin & Ewin 2012).

Ewin provides a link to the Historic Royal Palaces' (HRP) Curators' Team Communication Plan, with a query regarding what others thought of this plan and whether other sites should put their case to their own teams and organisations in the same way. The document acts as a reference for the curatorial team and clearly outlines their role and function within HRP, with individual curator's comments highlighting areas such as caring, researching and communicating. Interesting to note is their '*Where we've come from and where we're going*' section that emphasizes change from '*dictatorial, elitist, fuddy-duddy, possibly mad and certainly eccentric*' to '*explorers or navigators, investigating history in order to bring the past and the cause to life for all types of audience*'(Ellner, 2013).

Although there are many heritage organisations and curators working towards a more inclusive sharing of knowledge, there may be a few who have found this more challenging. According to Bradbourne (1997), there has been a need for curators to be more active in their action to provide an informal learning environment for at least 25 years. He also advised '*Instead of looking at our job as creating 'exhibits' to show visitors scientific principles, we had to look at them as 'supports' that helped structure and sustain interaction between users*.' (Bradbourne, 1997:p.10) Almost a generation later, Bradbourne's advice is mostly being practiced in a few of the larger heritage sites.

Reviewing the case studies, it was noted that the National Trust, English Heritage and Historic Royal Palaces have extended their interpretations to include a variety of platforms to engage their visitors and provide memorable experiences. They are achieving this by adding snippets of life and elements of storytelling in different creative ways, across a variety of platforms, disseminating knowledge about the lives and therefore history of the site. The interpretation at Bolsover Castle, Kensington Palace and Lacock Abbey may be classed as what has become more widely known as 'transmedia' – elements of stories being told via different methods or platforms, using the unique properties of the platform or method involved to make their own contribution to the overall story (Phillips, 2012; Weitbrecht, 2011; Kidd, 2016). Examples are The Enchanted Palace interpretation (2010-11) at Kensington Palace and their more recent interpretation 'Welcome to Kensington

Palace'. In this later interpretation, the curatorial team involved a theatre company, Coney[54], who in turn employed artists and designers to portray stories of members of the Royal family using various methods and platforms. A game was created for the King's room which involved being able to '*choose-your-own-adventure story for [the] audience to play their own game of court, meeting performers and unlocking stories along the way*.' (Coney, 2013)

2.2.1.2. ASSUMPTIONS, INFLUENCES AND CONSTRAINTS

Over the last 30 years, the government has reduced its financial support to heritage organisations, which has, in part, caused changes in how they engage with their audience (Thurley, 2005; Jenkins, 2013). Visitors are now required to purchase tickets for many sites that were once free to access. The expectation of the visit's value has, therefore, risen, generating the heritage site's need to consider how this may be accomplished. The 'visitor-centred' museum is the result for many organisations, with managers marketing their museum as an attraction rather than an archive (Williams, 2009; Ballantyne & Uzzell, 2011; Poole, 2014). Organisations such as English Heritage and the National Trust have focused on creating their heritage sites as properties that people want to visit for the day with tea shops, gift and garden centres as part of the attraction (Hems & Blockley, 2006).

By encouraging higher visitor numbers through an extension of what is on offer, the heritage site can achieve higher levels of funding and/or revenue, although it fundamentally changes the reason for visit (Ballantyne & Uzzell 2011; Williams 2009; Re:Source The Council for Museums Archives and Libraries 2001). Curators and Interpretation Managers are, therefore, being placed in a position where they are required to market their collections, artifacts or site, at the same time as conveying information in a variety of ways to engage a more inclusive audience.

Accepting there are stakeholders, government and professional obligations and constraints for most built heritage sites, how do the organisations such as the National Trust, Historic Royal Palaces and English Heritage decide on what is going to be portrayed and become the basis for the different interpretations at their properties? Research has shown different methods for across the organisations:

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[54] Coney are interactive theatre makers based in London. *http://coneyhq.org/about-us/*

- The National Trust creates a Statement of Significance for each of their properties to ensure future focus is based on the local importance and main historical era(s) of the site involved. Their research is influenced by discussions with the local community and forms a 'blueprint' for future interpretations. (Taylor, 2006a)

- For Historic Royal Palaces, their '*cause is to help everyone explore the story of how monarchs and people have shaped society, in some of the greatest palaces ever built*' (Mackay, 2014; Collections Trust, 2014). Their decision appears to be from research rather than local community consultation.

- One of English Heritage's objectives is '*to promote the public knowledge and enjoyment of the National Heritage Collection*'. Another is to provide '*high quality interpretation based on research and scholarship*' for the public to learn about the history of England (Department for Culture Media & Sport, 2014a). English Heritage also aim to '*encourage communities to capitalize on their distinctive local heritage*' (English Heritage, 2009a) using Territory Interpretation Managers (English Heritage, n.d.). Their decision appears to be from regional consultations, primarily internal.

Through the Statement of Significance, the National Trust clearly shows an engagement with the importance of the property held by the local community. For HRP's properties, there is a much wider audience, national and international, due mostly to interest in the British monarchy. The 2012 interpretation for Kensington Palace was marketed as a 'Palace for everyone'. For this interpretation, HRP's brief to external design companies was to create '*radical new interpretation of the stories of Kensington Palace that would give their audience new ways to connect to the people and stories that populated the palace at the height of its glamour and power*' (Coney, 2013). HRP's Head of Interpretation, Gould stated '*Visitors should be enabled to explore an exclusive (and not elitist) journey… Witty and thoughtful use of scale might help to dramatise. …We will blend the 'real' with the 'unreal' or 'hyper real'… And present these powerful stories in contemporary ways*' (Gould cited in Gaffikin, 2012). Neill[55] talks about the collaborations and commissions involved for the 2015 landmark year interpretation 'Hampton Court 500'. One of the projects they initiated and developed was to tell the story of the 500 years of Hampton Court in a day (Neill, 2015). There is further research that highlights the basis for HRP's interpretation concepts is composed within the organisation and the interpretation team's knowledge of the

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[55] Jo Neill is Senior Creative Programming and Interpretation Manager, Historic Royal Palaces, working across all five properties.

Palaces, not involvement with their visitors (Gaffikin, 2012; Marschner & Mees, 2013; Historic Royal Palaces, 2011a). There is evidence of seeking approval by 'community groups and local people' for the Kensington Palace 2012 'Welcome to Kensington – A Palace for Everyone' interpretation proposals, but this would assume the proposals did not involve visitors at the initial concept phase (Historic Royal Palaces, 2009).

English Heritage also relies on the curatorial and interpretation team's knowledge of the site as the basis for their interpretation concepts. The core of English Heritage (EH) is to maintain and preserve the public owned buildings for future generations to enjoy (Thurley, 2005). With financial constraints resulting from reduction in governmental budgets, EH has needed to re-evaluate how they conserve the 409 sites in their care. By adding visitor centres with restaurants and shops, they were able to increase income, which in turn allowed them to restore more properties for visitors to enjoy. The restoring of properties for visitors to enjoy appears to be the basis of their interpretation concepts, alongside expert knowledge from their '*top historians, curators and archaeologists*' (Thurley, 2013). Through research reports, conferences and surveys such as 'Missing Out' (English Heritage, 2009b), 'Taking Part' (Department for Culture Media & Sport, 2014b) and 'Visiting the Past - An analysis of the drivers of visiting historic attractions' (Wineinger, 2011), EH is able to build an understanding of who visits their properties and why. They are, therefore, incorporating knowledge regarding visitors but this is not engaging or involving them in the ideation for interpretations at their sites. As a result, there is still an element of assumption on behalf of the visitors when forming an interpretation project.

Although there is considerable research involved by each of the organisations in understanding why their visitors want to spend time at their properties, and where, there does not appear to be involvement of visitors in determining the interpretation concept. The National Trust's Statement of Significance is determined by involvement with the community, importance of particular time slices and remembered local history. It does not mean the visitors are involved at the beginning of the interpretation. The 'Welcome to Kensington' interpretation received mixed feedback from visitors, some, mostly families, really approve of the mix of interpretations and storytelling, others have left negative feedback comments such as '*I was pretty disappointed they had made such a beautifully historical building so kitschy*.' (Kurt, 2011 cited in Humphreys, 2012:p.13). The mixed feedback may be due to assumptions in what would provide a good visitor experience and who the audience may be. Having sought to include families, HRP hoped their traditional visitor base would also engage with the creative storytelling they employed (Humphreys, 2012; Gaffikin,

2012). HRP's Worsely[56] (2012), explains '*Some parts will appeal to more traditional visitors but we also need to target a younger audience*' (Hardman, 2012); visitor feedback proved this was not the case.

In attempting to reach a wider audience, English Heritage and the National Trust's focus appear to have switched from curated artifacts to the ability to provide a backdrop and story for a 'grand day out' family experience (Thurley, 2005; Taylor, 2006a). Bolsover Castle and Lacock Abbey's interpretations involved placing visitors in a bygone era when owners were in situ, and had just 'popped out'. Rooms at Lacock House were staged to leave an impression that the visitors were walking in on 'a moment in time':

> "*I particularly liked the final room in the house which is dressed as if a shambolic party had just left the building. The spilt wine and wig left on the seat made me feel like the previous occupants were far closer than 100 or so years ago.*" (Selman, 2012).

Figure 49: Room scenes at Lacock House (Selman, 2012)

The story of Ela, the Countess of Salisbury, is a fundamental part of Lacock Abbey's history, as is the Fox Talbot Museum, yet her life and its importance in shaping Lacock Abbey is possibly overlooked in the popularity of the photography museum. Two previous (2013) interpretations were developed to help visitors visualize and understand the Abbey as known by Ela. The first was the opening of the cellar to reveal the vaulted undercroft that may have been guest accommodation at the nunnery (Lacock Unlocked, 2012; InfoBritain, 2013; National Trust, 2014).

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[56] Lucy Worsely, Senior Curator and Historian, Historic Royal Palaces

The second was to enhance information about the cloisters with new interpretation panels, reinforcing the story of Ela's abbey and subsequent use in the Harry Potter films (Thornber, 2015).

The vaulted cellar interpretation at Lacock Abbey was partly in response to visitor queries about the life of the Abbey's nuns (National Trust, 2014) yet also in response to the National Trust's 2012-13 strategy to improve the number of visits to their properties. One of their main aims stated for interpretation is to ensure content is '*bespoke to the property.... themes and stories are rooted in the place*' (Taylor, 2012). Lacock Abbey visitors wished to know more about the Abbey, where the original site existed, and the lives of the nuns. By opening the vaulted cellar and displaying how the space may have originally been used by the nuns, it was easier for visitors to visually understand their conditions. The newly opened space, showing the medieval vaulting mixed with later use as a wine cellar, provides more atmosphere and resonance than just 2D portrayals on information panels. Sonia Jones, Lacock Abbey's House and Collection Manager[57], stated:

> '*not only will it enhance the experience of visitors to the furnished Abbey Rooms, but the wine cellar is also another part of the abbey where it's possible to see the layers of architectural history that subtly reminds us how the use of the building has changed over the last 800 years*' (National Trust, 2014).

The National Trust has responded to visitor comments and feedback to provide further information about the life of the Countess of Salisbury and her nunnery. There does not appear to be evidence to prove visitors were involved in the planning of the interpretation chosen to portray this, other than listening to feedback and comments provided.

The EH interpretation at Bolsover Castle covers significant '*alteration and reinstatement of lost historic features*' (Ptolemy Dean Architects, 2013) and a variety of interpretations. The aim was to tell the story of its heyday in the 17th century, bringing life back to the castle with important elements such as the stables and thereby improving the visitor experience. An extensive feasibility study was undertaken by Ptolemy Dean Architects (2013) which focused on four areas under consideration:

- '*Reinstatement of the wall walk parapet.*
- *Unblocking of the historic balcony doorways.*

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[57] Sonia Jones was also one of the attendees at the Beaulieu Abbey kiosk launch

- *New glazed doors to an historic garden room within the Wall Walk.*

- *Reinstatement of the historic Garden Room floor levels'*

(Ptolemy Dean Architects, 2013)
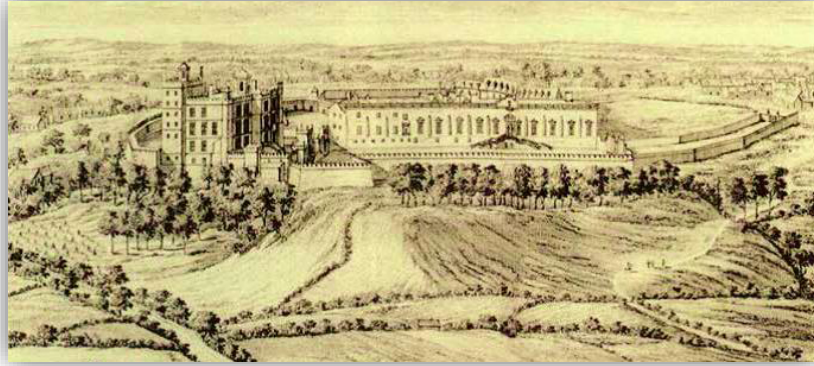
Figure 50: A detailed C17th drawing of Bolsover Castle (Ptolemy Dean Architects, 2013)

Figure 51: Bolsover Castle seen from the west with the Little Castle on the left and the Terrace Range on the right hand side
(copyright: Martin Bignell Abipp, Ptolemy Dean Architects, 2013)

The choice of which elements of the Castle site were to be included in the alterations were thoroughly researched by Ptolemy Architects based on what would '*reinstate the historic appearance of Bolsover Castle as a rare survival of the age of chivalry*' (Ptolemy Dean Architects, 2013) and improve physical access to enhance the visitor experience. The Ptolemy (2013) report clearly states the proposed alterations needed to adhere to specific policies[58] and their guidelines, in addition to English Heritage's project expectations and feasibility study to ensure conservation and accessibility for all.

Alongside the architectural alterations and repairs, EH invited interested design and/or exhibition companies to tender for a choice of interpretations across the site which would enhance the 17th

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[58] National Planning Policy Framework (2012), the 'saved policies' of Bolsover District Local Plan (2000) and The Historic Environment Supplementary Planning Document (2006)

century heyday storytelling. EH's overall vision for their properties is to '*be true to the story of the places and artefacts*' through '*careful research'* to bring history to life by '*thinking creatively'* to surprise and delight people via '*vivid, alive and unforgettable'* experiences (English Heritage, 2015). This was, therefore, also the premise for the interpretation at Bolsover Castle. The curatorial team specified areas they required design companies to consider, via a Service Contract[59] (English Heritage, 2013). The requirements included:

> '*audiovisual experiences (talking head, video, projections, soundscapes, smell diffusers), models and interactive displays, graphic and 3D design and build, object displays, reproduction dressing of historic spaces including painted and fabric wall hangings, reproduction costumes and furnishings.*' (English Heritage, 2013)

It was interesting to note there was no specific detail regarding content or narrative, other than a broad 17th century rich, human interest story in the tender invitation. As a design brief, this meant the design agencies/designers applying for the tender had a broad remit in how they were able to portray their vision of 17th century Bolsover. ATS Heritage, a leading audio and multimedia guide company, were one of the winning tenders with their proposal to provide a multimedia guide and app which would '*break down barriers to participation'* and '*be as exclusive as possible*' (ATS Heritage, 2014b). The design team produced a family and adult tour suitable for the 'predicted

Figure 52: One of Cabinets of Curiosity (Leach, 2015b)

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[59] English Heritage Service Contract for Bolsover Castle was advertised on Tenders Daily Contract (TED), 28th March 2013. Only one day was allowed for expressions of interest via a questionnaire. Invitations to tender were then announced on the 6th May 2013. The companies then had up to Easter 2014 to design, produce and install their interpretations.

visitor profile' provided by English Heritage (ATS Heritage, 2015). The two visitor profiles were classed as 'Culture Seekers and Experience Seekers' (ATS Heritage, 2014b). It is not clear how the profiles were initiated or determined (i.e. although the use of personas, or other knowledge or assumptions that may have indicated the types of visitor, etc.).

Another successful tender was by Leach Colour, an interpretation and exhibition design company. Leach pride themselves on creating thought-provoking and memorable experiences for visitors (Leach, 2015a). Their multi-skilled team provided an exhibition for two areas of the Castle, the Riding House Range and Little Castle, conveying some of William Cavendish's many interests and passions. It would appear Leach worked closely with English Heritage, but no evidence of working with the intended visitor profiles. The website provides clear information about how they work with their clients, and highlight their confidence in providing engaging experiences for their visitors (Leach, 2015b).

Leach Colour sub-contracted to several artists and designers including design company Bivouac. Bivouac is experienced in HSI design and illustration. Their remit was to provide 'eye-catching banners', artwork for the interactive boxes and cabinets of curiosity to engage younger audiences, and external panels for the different walks (Drury & English Heritage., 2015). As a sub-contracted company, Bivouac worked with Leach as their main contact for discussing the interpretations and what they were needed to do. In their case study, they clearly state having worked closely with the English Heritage team, but do not mention how they may have worked with the intended visitor profiles.

2.2.2. DESIGNING FOR INTERPRETATION

2.2.2.1. DISSEMINATION OF KNOWLEDGE AND EXPERIENCE

The range of interpretation knowledge and experience amongst the design companies and curatorial teams at the heritage site organisations was extensive; therefore, any interpretative work undertaken would be bound to create memorable and informative experiences for visitors to each of the case study sites. Is this a correct assumption though? There are a few aspects to consider. For example, what are those experiences, are the people involved skilled at disseminating their knowledge and experiences, how do they know what would create a memorable or informative visitor experience, who are the visitors, i.e. are they all the same and

looking for the same experience? This section explores these aspects using the case study examples to understand, on the basis of available materials, how the designers form the interpretations to engage visitors with the stories of the heritage sites in a way that crafts memorable experiences.

From the research available on the design companies' websites and promotional material, the leading design companies involved have experienced heritage staff undertaking the projects. For example, Leach Colour's team includes an Interpretation Manager, a Heritage Commercial Coordinator, Heritage Design & Build Project Manager, and a Heritage Commercial Manager alongside their team of designers and project managers (Leach, 2013). ATS Heritage does not list their team's roles. Instead, they mention they have 'over 15 years' experience working with museums and heritage sites' (ATS Heritage, 2014a), creating 'great visitor experiences'. English Heritage has therefore chosen two very experienced design companies to work with for Bolsover Castle. At Lacock, the National Trust chose Ice House Design, a design team experienced in heritage interpretation is firmly put across through their website as being a team rather than individuals with specific roles. HRP has chosen experienced theatre-makers, set and exhibition designers, i.e. Coney, Joanna Scotcher and Chris Levine instead. Although not experienced in HSI design, they are experienced in creating experiences for audiences.

Examining how they start and the process followed, Leach's initial approach is to produce a brief that will provide 'great impact, exceptional quality and long-lasting results within their budget' (Challenger in Leach, 2015a:p.5). Based on typical design bids and processes, the proposed 'Interpretation Plan' would be a more substantiated tender bid document resulting from further discussion with the English Heritage team at Bolsover Castle, and Leach Colour's various heritage interpretation specialists. The work to be undertaken resulted in several disciplines and tasks:

Interpretation Design Crafts and Task - (Leach, 2015a:p.1)	
Building surveys	Space planning
Concept Design and Exhibition Planning	Graphic Design & Illustration (Bivouac Ltd)
3D Design	Historical Research and recreation of furniture
Upholstery	Digital Carving
Artefact mount design and manufacture	Interactive Design and manufacture
Prototyping and sampling	Offsite build
Packing and transport to site	Installation
Artefact handling and placement	Site management

Figure 53: Interpretation Design Crafts and Task - (Leach, 2015a:p.1)

Leach states that they work closely with the client to 'agree clear and measurable outcomes, including operational, learning, financial and emotional objectives.' They undertake audience testing and focus groups on testing ideas and providing user feedback, which would imply they follow an iterative process typical of a UCD process (Otto & Schell, 2016) (see Fig.54).

1. User research
2. Concept design
3. Detailed design
4. Build
5. Launch and monitor

continuous structured user involvement
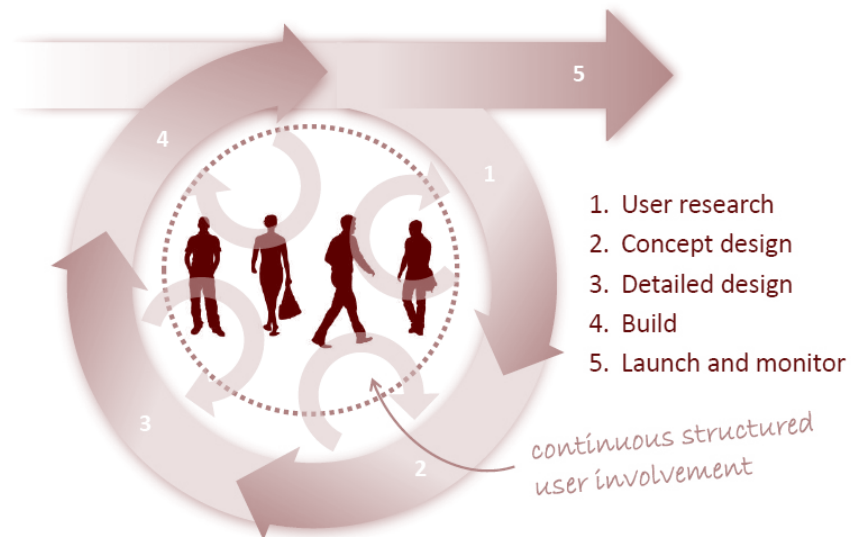
Figure 54: UCD Process Diagram (Otto & Schell, 2016, p.18)

The statement is supported by another comment '*and visitor journey allow us to fit story and space seamlessly together*.' (Leach, 2015a:p.5) It is not stated that the 'audience' or visitors are used at other times, for example, the initial design stage 'ideation', but it is good to see an iterative testing process used as in the Design Thinking diagram Fig.55 (Teo Yu Siang, 2016). Under the 'Collaborative Approach' heading, Leach state they act '*as visitor advocates'* (Leach, 2015a:p.5) in working with the client to achieve a successful project. The phrase assumes a role on behalf of the visitors, rather than involving visitors throughout the process. They also state they are aware the designs 'need to appeal to a wide range of visitor ages and abilities' (Leach, 2015a:p.6). To achieve this would involve user journeys (Caddick & Cable, 2011; Hanington & Martin, 2012; Beckmann, 2015), or personas, with visitor advocacy presumably resulting from other data gathering exercises such as focus groups. As this information has been drawn from their promotional material, it would be reasonable to assume this is Leach's general design approach and not specific to just the Bolsover Castle interpretation.
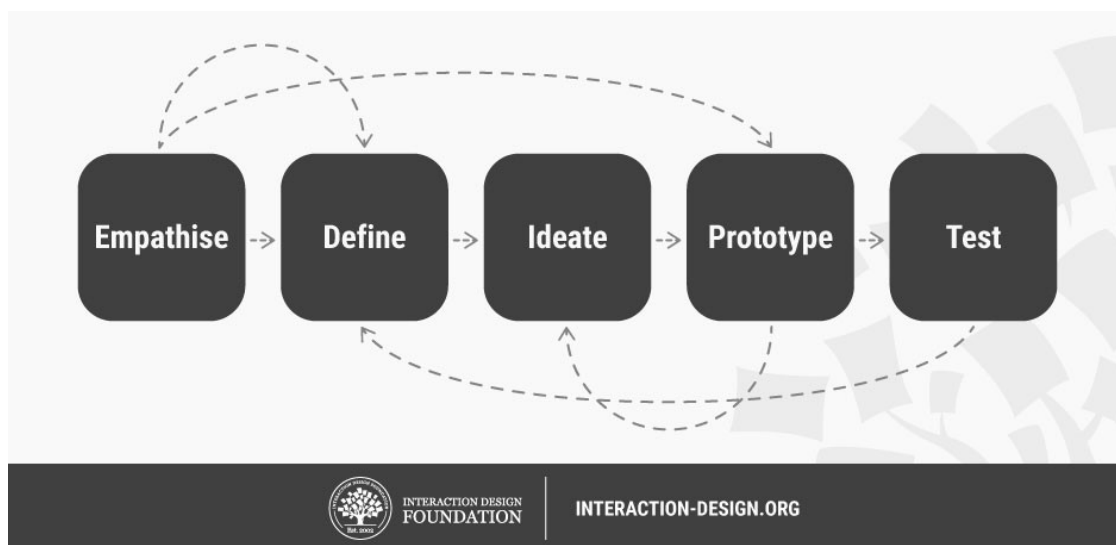
Figure 55: Design Thinking (Teo Yu Siang & Interaction Design Foundation, 2016)

With regards to ATS Heritage, they promote their '*creative approach…. driven by the understanding of our client's audiences and awareness of the language, tone and style of interpretation that is fitting with each site*.' (ATS Heritage, 2014b:p.18) They also state they '*are passionate about enhancing …experience*' and '*always mindful of the end user and hope their experience will be improved*.' (ATS Heritage, 2015:pp.15–16) There are other similar statements but no detail of their design process throughout the promotional material, other than they allocate a Project Manager to ensure accurate and professional delivery of scripts and smooth liaison between the writer, the client and the production team for their multimedia tours and accompanying app. The site provides overviews of all the services they offer, some areas more comprehensive than others, with the general tone of a business to business site, rather than one that encourages visitors or users of their multimedia media apps to explore further examples of their work.

Part of their work undertaken for Bolsover Castle meant rebuilding the 17th century Little Terrace as a 3D model, flying over the present day terrace with a filming drone, the two were composited, providing footage for the 17th-century family and adult tours. The teams involved are described as innovative, skilled and experienced in all areas of creating apps and multimedia heritage tours. Whether they followed a typical UCD process is not evident in their material. Interaction and engagement with the two visitor profiles 'Culture Seekers and Experience Seekers' (ATS Heritage, 2014b:p.1) provided by English Heritage has perhaps only taken place via the creation of personas from research or previous experience building heritage applications. They have obviously worked closely with the English Heritage team, from both their comments and the feedback provided. It is

expected that it is this relationship that has provided knowledge of what was required from the multimedia tours, similar to my experience at Beaulieu. With ATS Heritage's creative storytelling and technology, the tours were designed to convey the heyday of William Cavendish's era to visitors using the app, and engage younger members with interactive games, animations and challenges using Jane, the daughter of William Cavendish, as the on-screen character. Screen characters are an engaging method of providing information via storytelling (Vayanou *et al.*, 2014), in this instance it has been used to see the visit of the Royal family through the eyes of a child, therefore providing information that may stir the imagination in younger visitors. It is not explained whether visitors were asked if the types of stories created inspired and engaged them in imagining the Royal visit through Jane's eyes.

Lacock's main attraction is the Fox Talbot Museum and the village, its history as a nunnery for approximately 300 years would appear to be of lesser importance in terms of visitors, yet was perhaps the most important for the community that once lived there. The stories of the Nuns at Lacock would help visitors understand community life in the related eras. Visitor feedback and observation by the curatorial teams highlighted community and life stories were important to them for understanding the sites' historical importance, hence the interpretation of Abbess Ela's monastery at Lacock Abbey.

Ice House Design followed a similar storytelling interpretation used by ATS Heritage, although rather than through the use of a multimedia application, it was told via the use of image panels, rooms set replicating a moment in time, audio and wall/glass graphics. The 'storyteller' is Matilda Talbot, the last owner of the Manor.[60] Matilda provides a brief overview of the history of the Abbey, small snippets of information, easy to 'take in' or remember and understand as an overview. The information displayed by Ice House Design's interpretation panels was probably sourced from a combination of liaising with the curatorial team and the existing printed information, i.e. the guidebook, it is not clear on Ice House Design's site. Nor is it clear whether they followed a user-centred design process, involving visitors throughout their ideation and development of ideas, or simply worked with the curatorial team. They promote their way of working with their clients by '*[taking] time to understand our clients' ethos, commercial aspirations and objectives – and grasp what needs to be done. Only then will we get the pencils*

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[60] The Nunnery was changed to a Manor House by a previous owner, Sir William Sharington, in 1540. The Talbot family took ownership via his niece on his death in 1566, when she married into the Talbot family. Matilda signed the Manor over to the National Trust in 1944. (Lacock Unlocked, 2012; Thornber, 2015)

out.' (Ice House Design, 2015b) Ice House Design has worked with the National Trust for several projects and has stated how the National Trust 'a*ren't content with you just having a rather pleasant day in pretty surroundings. They want you to think, smile, be stimulated, surprised – shocked even*.' (Ice House Design, 2015a) They also state '*Using subtlety, sympathy and an understanding of the historical context, good interpretation must invigorate, inform and inspire*.' (Ice House Design, 2013) The interpretation, therefore, appears to have been designed to do this on behalf of the visitors, rather than knowing what visitors would like to 'experience' at Lacock Abbey.

Designed by theatre and lighting designers, the House of Cards and the Enchanted Palace at Kensington Palace were very different styles of interpretation to previous exhibits. The designs were created to provide '*thought-provoking playfulness*' (Scotcher, 2013) through the use of visual elements forming narratives of the Princesses' lives and Queen Victoria's at the Palace. Chris Levine's expertise in light art was used to provide almost ghostly figures or 'echoes' (Historic Royal Palaces, 2011b) of the princesses. The ghostly figures were designed to capture the visitors' peripheral vision as they walked through the Palace; a form of shock perhaps, similar to the National Trust's desire to provoke smiles, stimulation and shock. Joanna Scotcher and Coney designed the House of Cards to impart snippets of gossip of the lives of Queen Victoria, Princess Diana and other royal members, '*through the eyes of the comparatively lesser-known late Stuart and early Hanover monarchs*.' (Rank, 2013) The designs are more 'whimsical' than typical of

Figure 56: The Enchanted Palace – Kensington Palace (Scotcher, 2013)

traditional interpretation panels and placards, with visitors following a trail of imagery, hanging, floating and interactive elements although very little by way of textual information (see Fig.56).

How the ideas and interpretative concepts were formed was perhaps through discussion with visitors, or, typically, just the HRP team. The contracted artists and craftspeople may have involved visitors in the formation of ideas, although the desired 'surprise' element of their interpretation exhibits would perhaps have been negated. There was certainly a collaborative design process employed although this does appear to have been mostly between HRP Kensington Palace staff (including volunteer guides) and the artists and designers (Gaffikin, 2012). By involving the volunteer guides in the ideas and creation, the guides presumably acted as visitor advocates, although they may have viewed their involvement from their position of engagement with, and knowledge of, the Palace, rather than the visitors. It would be interesting to discover how the 'team' worked in coming up with the variety of imaginative concepts, and if their typical visitors and those they were aiming to reach, thought the 'experience' was positive and engaging. In the next section, how their visitors reacted to the very different interpretations will be explored and whether they considered it a success.

2.2.2.2. <u>ASSUMPTIONS, INFLUENCES AND CONSTRAINTS</u>

From my work at Beaulieu Abbey, I recognised that a thorough understanding of what was required, or expected by a sponsoring organization or stakeholders, was extremely important. Communication was pivotal for ensuring the final interpretation matched the stakeholders,' and curator's, expectations. For those involved in the design of the interpretation, there needed to be a clear strategy to achieve the result. Therefore a process, and management of that process, were also required. Influences and constraints were mostly time, budget, technology and access to specialists. Regular meetings with the Beaulieu team provided a detailed vision for what was required leaving little room for assumption and therefore possible misunderstandings.

The case studies highlighted this is not always the case. For example, HRP invited Coney to create a '*radical new interpretation of the stories of Kensington Palace that would give the audience new ways to connect to the people and stories that populated the palace at the height of its glamour and power*.' (Coney, 2012:p.2) English Heritage requested companies to tender for '*a new*

presentation and interpretation of the castle interior and gardens' (Banks, 2013) at Bolsover Castle, stating in the service contract:

> *'[Bolsover Castle] was designed and used by a family of exceptionally important and interesting personalities and there is a very rich story to tell, with interleaved layers of historical significance and human interest. These stories can be challenging to our visitors and so a representation project is highly desirable as a way to bring this once vibrant place to life.'*(English Heritage, 2013)

Both 'briefs' were open to a wide range of interpretations. HRP's perhaps the broadest, there were no obvious constraints mentioned, such as 'academic rigour' and 'intervention on the fabric of the building' to be 'technically reversible' in English Heritage's Bolsover Castle's service contract. Therefore, the designers were able to create almost anything as long as, in Bolsover's case, it was about William Cavendish, his family and life in the 17th century, and in Kensington Palace, it engaged with stories of the people who were connected with the property in its heyday. Without a more prescriptive and detailed brief, it must have been difficult for the designers to know what to produce or craft as an interpretation which would tick the heritage organisation's mental vision criteria box. There appears to be room for assumptions. The rationales provided by the different designers for their work with the heritage organisations demonstrated they were not fazed by the openness; in fact, it allowed them to experiment with ideas, different materials and innovative methods of storytelling:

> *'It was a real opportunity to use new technology and traditional techniques to achieve results that are beautifully crafted but with all the cost, time and longevity advantages that high tech whizz-bangery can offer.'* (Pettite, 2014)

They would not necessarily have known whether their experimental ideas would be acceptable. They would still have needed to create a design brief specifying their intentions and planned outcomes, with time and materials specified and costed to ensure their plans were achievable. The lead design companies would have liaised closely with the heritage team to ensure acceptance of what they were doing which is evidenced by some of the reviews, for example:

> *'Working closely with English Heritage's team and with Leach, Bivouac designed a completely new exhibition in the Riding House Range.'* (Pettite, 2016)

The National Trust's interpretation for Lacock Abbey was twofold: firstly, to open up the cellar to expose the vaulting which would allow visitors to understand the building as it once was, secondly

to provide information panels, interactive maps and audio for the cloisters to help explain how the nuns lived at the nunnery with more personal information about Abbess Ela, the owner:

Step into the atmospheric medieval cloisters and walk back in time. Imagine how the nuns would have spent their days here 800 years ago and pick up one of our new information maps to learn about Lacock Abbey's monastic past.' (The National Trust, 2015)

The latter interpretation was created by Ice House Design, a local (Bath) design company, who have worked with the National Trust for other interpretations properties such as Tyntesfield:

'*The Ice House Team have helped Tyntesfield create an extremely effective identity and brand out of the existing NT brand guidance. Their creativity and understanding of the brief enabled us to look really differently to any other NT [National Trust] site whilst ensuring we still feel part of the wider National Trust. The way of working and results now mean that Tyntesfield is viewed as a brand exemplar and an example of how to do things right within an organisation. Throughout our work together Ice House Design have also been extremely capable and effective at helping us get to the right outcomes, often challenging us in the process to rethink how we do things. We would always use them for future projects.'* Anna Russell, General Manager, Tyntesfield Estate. (Ice House Design, 2012)

The quote provides an insight to how well they understood the brief and worked together to achieve the 'right outcomes'. A difference with the National Trust Lacock Abbey interpretation compared to the two other interpretations (Bolsover Castle and Kensington Palace) was that there was a clear and detailed brief provided, with the design company a known entity. It was also a smaller project, and one that would be a long-term installation, unlike The Enchanted Palace interpretation projects for Kensington Palace which were only for a period of 2-3 years whilst restoration work was taking place. (Historic Royal Palaces, 2011b)

Does knowing who you are working with and having experience of working with them help in being able to communicate ideas and vision? This definitely seemed to work for Lacock Abbey and Ice House Design, but perhaps by working with new designers brought new ideas mentioned by Pettite (2014), new skills and ways of thinking. This seemed to be the case with Kensington Palace's The Enchanted Palace interpretation and Bolsover Castle's interpretation. The design companies crafted innovative methods of storytelling in many forms including light installations, curiosity cabinets and performance.

Working with heritage properties brings constraints in just the building alone. Many heritage buildings are listed buildings and as such, adherence to restrictions on fixtures and fittings must be complied with. Solid, thick walls may defy visitors being able to receive mobile data or WiFi; electrical cables cannot be chased into walls, and instead may be mounted or placed in certain areas only and therefore limit the use of power. There are constraints in time, technology and budget, the three often intertwined, each having an impact on the other. Physical space for moving around the exhibits safely, complying with accessibility, and ensuring ease of flow for visitors are also constraints to consider in the design of an interpretation or exhibit. Set designers, exhibition and spatial designers would be aware of possible constraints, not necessarily graphic designers, especially those new to working with spaces such as heritage sites. Therefore, designers who have experience in working with heritage organisations or exhibition spaces may be a preferred option, hence Ice House Design, ATS Heritage, Leach Colour, Coney, WildWorks, Joanna Scotcher and Bivouac whose promotional material stated various years of experience with heritage interpretation.

Designers have previously been known to dictate or disregard others' ideas and provide what they think best. In some ways similar to the view of the traditional curator, i.e. they choose what is on display and how it is interpreted (Poria, Biran & Reichel, 2009:p.94; Cairns, 2013:p.9). This may still

happen, but from research regarding design practices, the push to be more user-centred or user-focused is shown through a new raft of design roles. For example, User Experience (UX) Designer, User Interface (UI) Designer and User Centred (UC) Designer (explained in more detail in section 2.3.2). The influences placed on a project should, therefore, be based on the expectations of visitors, what they would like to engage with or see. The designer's task is to translate this in conjunction with the curatorial team's brief and design the interpretation to fulfil and hopefully exceed those expectations, creating experiences visitors will remember because it may evoke a memory or a feeling they did not consciously expect to experience.

The designer's (and curator's) own biases should not be the primary influence; it should be the site's stories and the visitors' reasons for visiting the site. The National Trust's case study shows how this has worked from the Trust's involvement of the community in creating the Statement of Significance for each of their properties, and then visitors' feedback wanting to learn more about Lacock Abbey when it was run as a nunnery. This is not so evident at Bolsover Castle or Kensington Palace, where assumptions may have been made on behalf of the visitors in the design and interpretation of the brief.

2.2.3.1. <u>DISSEMINATION OF KNOWLEDGE AND EXPERIENCE</u>

Understanding why people visit heritage sites helps to provide a knowledge base for curators and designers to refer to when initiating ideas for disseminating information about the site visited. Understanding why people visit different heritage sites, i.e. why one as opposed to another, would enhance this knowledge base allowing perhaps a site categorisation to be formed. Each site has specific history and stories to tell, but how this is interpreted for visitors is often very different across a range of heritage properties.

Generally, the Front of House staff and volunteer guides are often more knowledgeable than the curatorial team and designers regarding what visitors may engage with. This is obviously because of their visitor facing role and thereby talking with visitors on a daily basis. By being 'around' visitors as part of their job, FoH staff and volunteer guides build an understanding of the sites' type of visitor demographic from seeing and observing the types of visitors, the groups, individuals and families, the places visited frequently, and hear the visitors own stories of why they are there, their likes and dislikes. How their understanding and visitor knowledge helps to inform interpretation would be via meetings with stakeholders, managers and curatorial team, a design team, education team as available. They are invaluable in helping to understand the type of interpretation that would 'fit' with their heritage sites' visitors.

This section seeks to understand the types of visitors who enjoyed visiting the case study heritage sites. In doing so, it was essential to have an indication of how many visitors had visited when the interpretations were in place, and to understand why visitors had chosen to visit the sites selected. Heritage sites are constantly seeking to increase visitor numbers; new or additional interpretations form a significant part of their strategy, or goal, to achieve this. Therefore, knowing whether there was an increase of visitors to the heritage site at the time of the chosen interpretations, would provide evidence in whether the interpretation had succeeded in achieving this goal.

In 2011-12, there were 153,039 visitors to Lacock Abbey/Fox Talbot Museum, 209,485 visitors to Kensington Palace and 69,248 visitors to Bolsover Castle, an approximate total of 432,000 visitors (see Figure 58 below). According to Visit England's report for 2011, historic properties saw an increase of 14% by overseas visitors and 22% local/day trip visitors (VisitEngland, 2012) from 2010's figures. The increase may be due in part to the new interpretations, i.e. resulting from a

launch and public notices of the new exhibitions, multimedia tours, and improvements. Alternatively, the increase may have been due to a national trend in the rise of visitor numbers. Since 2008, heritage property visits have seen an increase in visitor numbers of approximately 20% (VisitEngland, 2012:p.13). There is, therefore, a general rise in people choosing to visit historic properties. Whether the increase in numbers was also due to improvements in marketing and promoting heritage at the case study sites can be determined from visitor feedback and organisational statistics, although not included as part of this thesis.

Case Study Visitor Numbers

	2010	2011	2012	2013
Lacock	122,736	153,039	152,711	154,365
Kensington	251,817	209,485	359,456	403,167
Bolsover	60,332	69,248	66,029	81,401
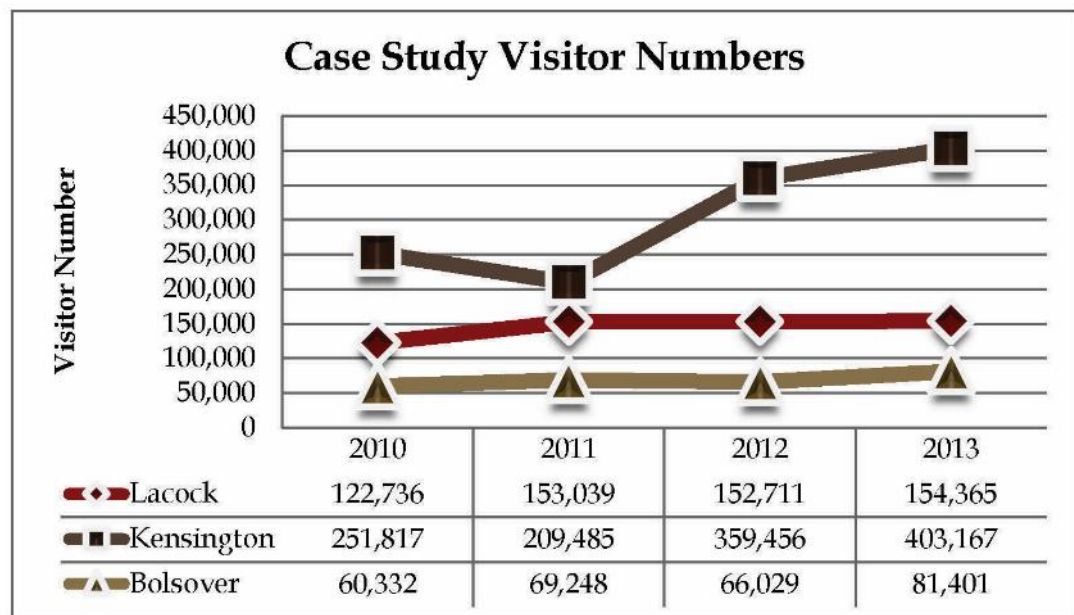
Figure 58: Visitor Numbers between 2010 and 2012 at the case study sites: Lacock, Kensington Palace and Bolsover Castle (ALVA, 2010, 2011, 2012; National Trust, 2012; Jenkins, 2013; Mills, 2010; Derbyshire County Council, 2014; National Trust, 2010)

- Lacock Abbey's 2013 interpretation therefore saw an increase 1.08% from 152,711 visitors in 2012 to 154,365 in 2013

- Kensington Palace's 2012 interpretations therefore saw an increase of 71.6% from 209,485 visitors in 2011 to 359,456 in 2012

- Bolsover Castle's 2013 interpretation therefore saw an increase of 23.28% from 66,029 visitors in 2012 to 81,401 in 2013

The subsequent question is why they have chosen to visit. Beck and Cable (2011) recognise visits to cultural sites form part of visitors' leisure time which can have different meanings for different people. Leisure may mean for some to simply relax and enjoy aspects they might come across, or engage with. Leisure time for others may mean expanding their knowledge. Beck and Cable also speak about the 'Greek ideal of leisure (or "schole")' which means to seek truth, setting side goals

or agendas for the sake of experiencing, or as Beck and Cable explain 'to expand the range of one's physical, mental, or spiritual capacities' (Beck & Cable, 2011:p.146).

To discover the types of visitors such as those referred to by English Heritage as Experience Seekers (ATS Heritage, 2014b) and reasons for visits has been through researching TripAdvisor Visitor Reviews[61] (TripAdvisor, 2010a, 2012, 2010b) for each of the heritage sites. The Trip Advisor reviews selected were over a six to eighteen-month period during the specific interpretations detailed in the case studies, and sampling 30 reviews from each site. The reviews provide a scale (Fig.59 below) indicating how they have rated their visit, age range, gender and tags, i.e. 'history buff' and 'peace and quiet seeker,' more importantly, a descriptive review often detailing what they liked most or least about their visit.

Figure 59: Trip Advisor Ranking Indicator (Puorto, 2016)

The Lacock Abbey reviews on Trip Advisor start in October 2012, Bolsover Castle reviews start from May 2011, whereas Kensington Palace reviews started in 2004. The decision was therefore made to select reviews between six and eighteen months following the opening of each new interpretation: Lacock Abbey October 2012-December 2013, Bolsover Castle April-September 2014 and Kensington Palace April 2010-August 2011. A sample of 30 reviews per heritage site was chosen based on the amount of information provided by the reviewer, i.e. comments, age, sex, where they were from and the description tag/label indicator provided by Trip Advisor. Please see Figures 60 and 61 for the different areas of information.

The search results from the Trip Advisor samples taken provided a good overview for understanding the type of visitors to the three heritage sites. For instance, 70% of the sample for Kensington Palace were female, 57% female reviewers for Bolsover Castle, and an equal amount of male and female visitors reviewing Lacock Abbey. The majority of visitors to each heritage site were in the 50-64 age range.

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[61] In using Trip Advisor for an overview of the types of visitors visiting the three heritage sites, I have made the assumption that people reviewing on Trip Advisor are actual visitors. Each of the reviews selected stated they had visited the heritage site, provided opinions of their experiences, and how they rated their 'Trip' interests through the use of 'tags'. Nonetheless, I was fully aware that this is a limited assumption, based on the data that I was able to access.
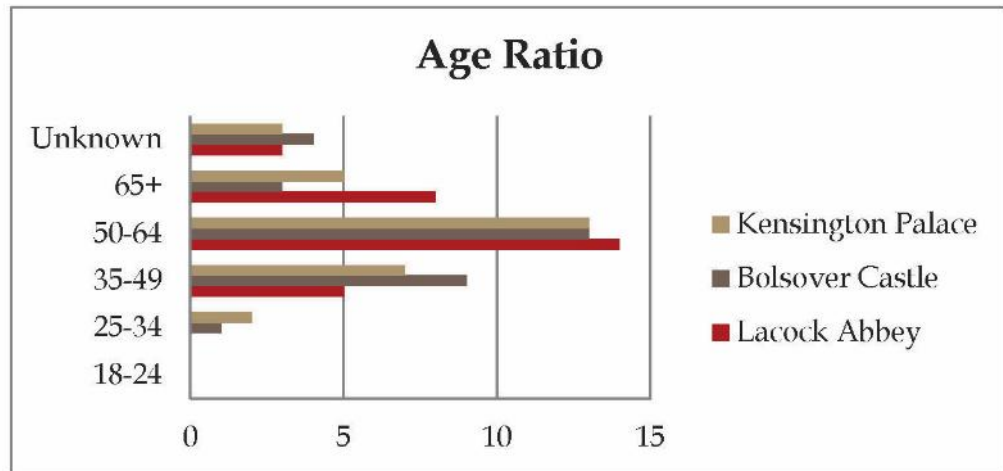
Figure 60: Age ratio of Trip Advisor Reviewers for the Case Study heritage properties (Wilson, 2017)
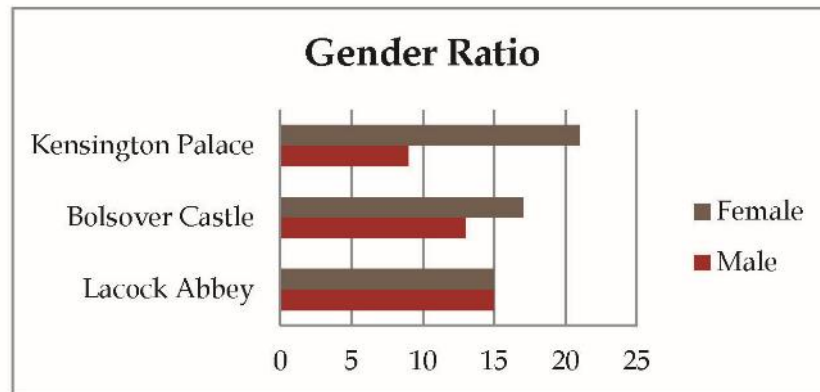
Figure 61: A: Gender ratio of Trip Advisor Reviewers for the Case Study heritage properties (Wilson, 2017)

Figure 62 below displays several of the indicators (known as 'tags') provided by Trip Advisor for reviewers to describe the type of traveller/personal interest.[62] The tags highlight 'types' of people visiting the different heritage sites. It is not a surprise to see 'History Buff' as the most popular type for Bolsover Castle and Lacock Abbey. 'Like a Local' is the next highest, again for Bolsover Castle and Lacock Abbey which have shown they have higher numbers of UK visitors. Bolsover Castle appears to attract more local visitors than Kensington Palace, and often family groups, perhaps nature lovers seeking peace and quiet, and activities for children.

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[62] There are 19 tags to choose from to describe the type of traveller you are when you join Trip Advisor; the tags not mentioned above due to their lack of relevance for the case studies are: Vegetarian, Beach Goer, Nightlife Seeker, Foodie, Backpacker, Shopping Fanatic, Trendsetter and Eco-Tourist.
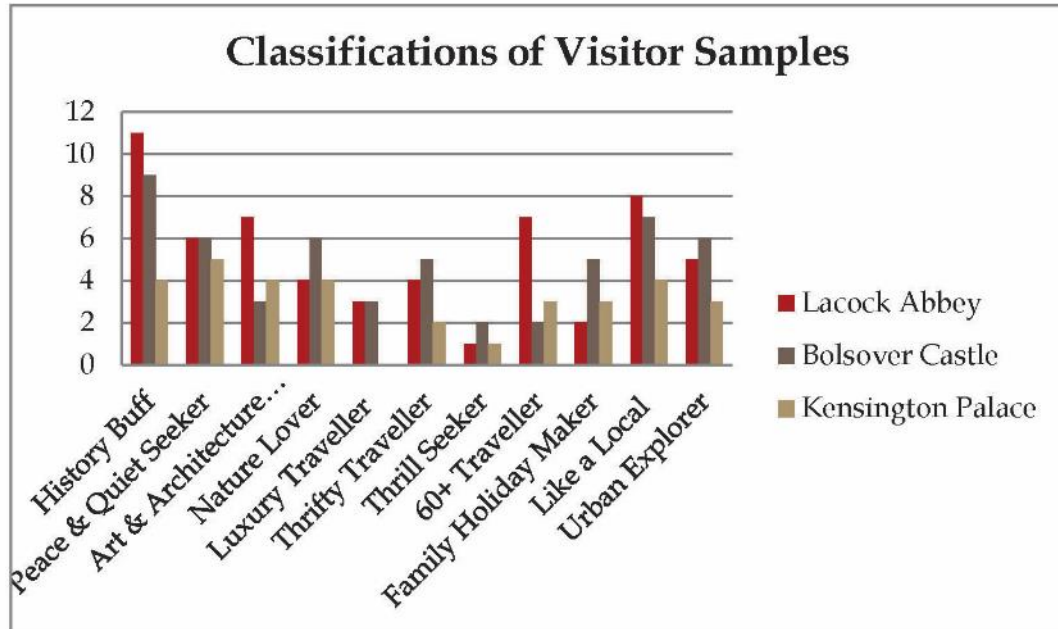
Having an insight to the Trip Advisor 'types' of visitors interested in the three case study heritage sites, helped to understand the type of information they would be interested in, i.e.:

- Lacock Abbey visitors would be most interested in history, art and architecture and usually are over 60 years old, and spend time exploring local heritage sites.
- Bolsover Castle visitors would also be most interested in history, additionally appreciating nature, peace and quiet and spaces for children/grandchildren to play during a day out locally.
- Kensington Palace's mix of visitors would appear to be relatively evenly spread across all tags, aged mostly 50-64, with family groups, perhaps looking for peace and quiet as a priority for part of their scheduled day out.

English Heritage had specified for their Bolsover Castle interpretation, a focus on 'Experience Seekers' and 'Culture Seekers' to widen their visitor base. With regards to the Trip Advisor tags, the latter could consist of History Buffs, Like a Local and Art/Architecture Lovers, with the former more difficult to surmise, as it would depend on the type of experience sought i.e. they may be seeking a 'thrilling' experience (Thrill Seeker tag) or a shared family experience (Family Holiday Maker) or both. From the Trip Advisor reviews and sample, the interpretation should therefore be

seen as having achieved their aim; their visitor base was primarily Culture Seekers, and depending on how 'Experience' is interpreted, there were also elements of several tags that could equate to providing an 'experience' and therefore fulfilling the 'Experience Seekers' focus. The family day out was certainly a key message coming from the reviews, with staged events making the 'day' more of an experience. English Heritage's overall vision for the interpretation at their sites involves five core values: Authenticity, Quality, Imagination, Responsibility and Fun. Under Fun, they state:

> *'We want people to enjoy their time with us. This doesn't mean we are frivolous or superficial. We want to provide experiences that elicit emotion as well as stimulate the mind. We want to entertain as well as inspire.'* (English Heritage, 2015:p.4)

English Heritage also has a strategy for minimal signage at their sites. Although this is meant to enhance the naturalness of the site, a small percentage of the reviews commented on the lack of signage negatively; they felt more signage would have helped them to navigate around the site and provide context for certain aspects of the audio and multimedia tours.

The National Trust has a similar strategy with regards to minimal signage with an additional emphasis of ensuring a 'personal approach' (Taylor, 2006b:p.107) via volunteer guides who are available with stories of the property to engage the visitors, as in the Kensington Palace Enchanted Palace interpretation. National Trust volunteer guides are trained in storytelling and the history of the specific property to be able to recount the lives of the people who lived there. Minimal signage is also enhanced with ambient sounds, helping to build an image in the minds of visitors of Lacock Abbey's social history.

A main focus of *t*he National Trust's strategy is to 'resonate with people's lives' via a 'two-way [lifestyle themed] communication process' through their volunteer guides' stories and room settings (Taylor, 2006b:p.102). The Trust also provides different levels of interpretation to suit different audiences and a range of ages which can be seen from the comments made by one of the visitors. The feedback provided by the Trip Advisor reviews for Lacock Abbey consistently rated highly at 5, with only a couple rated at 4. From the reviews, the overriding opinion was a good appreciation of the quality of interpretation and mix of things to do which would support the National Trust's aim to offer '*a range of experiences so that every visitor leaves feeling that they have enjoyed themselves and enriched their lives either consciously or sub-consciously, unlocking the doors to inspiration and knowledge.*' (Taylor, 2006b:p.102)

It is apparent from the sample of Trip Advisor reviews that experiences are an important reason for visit, the type of experience depends on the type of property and what is being offered as part of the visit. The offer/multiple offers are what has attracted the different types of visitors and with whom they visited. Quite often, the visits were for a day out, or to form part of a day out; the intention does not appear to be to learn but to enjoy a different space with partners, friends or family. The activities and volunteer guides' stories appear to be remembered more as enjoyable experiences, with learning a possible sub-conscious element forming part of the experience.

2.2.3.2. USING AND ENGAGING WITH INTERPRETATION: ASSUMPTIONS, INFLUENCES, AND CONSTRAINTS

There may be multiple reasons involved in the visitors' decision to go to a particular heritage site over another, and many considerations in making that decision. Reasons could range from external influences such as a promotional flyer for an event such as a re-enactment, demonstration of a particular craft or art installation, or internal factors, i.e. wanting to learn about a particular historical event for a school project or personal, cultural interest.

One of the outcomes of the previous section highlights that visitors have an expectation that their visit, however arrived at, will form an experience. This may be either via an activity, engagement with volunteer guides' stories, or imagined lifestyles brought about by room settings of a particular time slice of the site's history as a tour progresses, or simply just a happy, relaxed family day out. This section explores whether the different interpretations visited match the assumptions in the selected case studies. If they did not, how might this be changed to alleviate disappointment?

Tilden firmly believes that the '*chief aim of interpretation is not instruction but provocation'* and forms one of his six guiding principles of heritage interpretation (Tilden, 1957:p.35). Visitors to Kensington Palace's 'Enchanted Palace' exhibition were provoked to a reaction, but not necessarily in the same way as others, or, perhaps as intended by Tilden's principle. From the reviews, it would appear traditional visitors made assumptions for their visit that they would see elements of the Palace and its associations with Princess Diana (Humphreys, 2012:p.6). In section 2.2.1 Curating Interpretation at Heritage Sites, it was mentioned that Historic Royal Palaces' aim is to '*help people explore stories, … and engage people's senses*' (Mackay, 2014:p.4), which was obviously part of the reason for the Enchanted Palace interpretation. It was clear HRP successfully

involved team members across HRP's staff, the front of house staff and volunteers but it was not clear whether a range of existing/regular visitors were also part of the planning process for the Enchanted Palace interpretation. Maybe if they had involved their existing, more traditional visitors in their discussions about expanding visitor reach to include more 'families and young, urban Londoners' (Woollard, 2011 cited in Humphreys, 2012:p.6) there would have been a different form of temporary interpretation.

HRP's Enchanted Palace and House of Cards interpretations attempted to provide a magical theatrical world in which visitors learnt about the lives of the princesses associated with Kensington Palace, and for 25% of the Trip Advisor sample, this was appreciated and enjoyed. The intention of providing the Enchanted Palace interpretation was to increase the range of visitors.

Figure 63: Back of Flyer for the 2012 Enchanted Palace Exhibition (blog.travelmarx.com, 2012)

Had HRP planned a temporary exhibition which contained elements of how the newly restored Palace would look, with artefacts from the usual tour(s) included, weaving a story about the changes to the Palace, perhaps from the perspective of the Princesses, this may have been a more successful interpretation for their 'traditional' visitors. It may also have drawn in new visitors to see how the Palace has changed over the years with the different events that took place and built

an interest to visit again once the renovations were complete. School groups, architectural students, young urban Londoners, 'History Buffs' and international visitors may have found this type of interpretation more in keeping with their interests, the reason for the visit and therefore expectations. The educational groups showed an increase of 40% in the number of visits taking part in workshops (Wedgbury, 2011 cited in Humphreys, 2012). Kensington Palace, through the Enchanted Palace exhibition, was able to extend from Key Stage 1 and 2 educational workshops to a wider range of subjects including GCSE Art. The Palace team also increased the opportunities for young people to visit by staging a series of events of an evening, which '*proved an effective strategy*' (Humphreys, 2012:p.8).

The Enchanted Palace interpretation, although successful for working across the different teams at HRP, and full involvement of their front of house staff, was not as successful in their initial aim to attract families and young urban Londoners (Gaffikin, 2012:p.5; Humphreys, 2012:p.35). The promotional material should have explained the type of interpretation visitors would see, the visitors would, therefore, have been aware of what they would experience (see Fig.60 above).

There have been several discussions about visitors' motivations/reasons for visits to museums or heritage sites with different perspectives. Falk and Dierking (2000) suggest visitors have an agenda combining '*motivations, interests and prior museum experiences*' (Falk & Dierking, 2000:p.76). By comparison, Tilden (1957) writes that '*the visitor's chief interest is in whatever touches his personality, his experiences, and his ideals*' (Tilden, 1957:p.36). He believes, for whatever reason the visitors are there, it is for the museum or heritage site to determine what will interest them while they are there. Exactly what brought them there, they may not know themselves, but it is what they are presented with that will capture their interest or spark enthusiasm to look further, especially if it relates to themselves, perhaps a personal experience or memory. There is a good example provided by Tilden in which he cites a message to park educational officers delivered by Ansel F. Hall (1928):

> '*…Remember always that visitors come to see the Park itself and its superb natural phenomena, and that the museum, lectures, and guided trips afield are means of helping the visitor to understand and enjoy these phenomena more thoroughly. … A few believe it is our duty to tell as many facts as possible, and therefore take pains to identify almost every tree, flower and bird encountered. Others have taken as their motto "to be nature minded is more important than to be nature wise," and feel that it is more important that the visitor carry away with him an intense enjoyment of what he has seen, even though he has not accumulated many facts.*' (Hall (1928) cited in Tilden, 1957:p.60)

To be able to recognise and understand the type of interpretation that will engage visitors and provide the experiences they seek, either consciously or sub-consciously, the interpretation planning/design team need to understand and recognise the different visitors that have chosen their heritage site to visit. There is consensus that this happens (Black, 2011; Ham, 2013; Ballantyne & Uzzell, 2011), but to what degree this is being done, i.e. how much information is based on direct association with the visitors, and how much is based on assumptions, is unclear.

Elements of a UCD process for the case studies' interpretation designs are indicated through the use of visitor journeys, focus groups and audience testing (Leach Colour for EH's Bolsover Castle), but the involvement of visitors throughout the process does not seem to have been employed. Based on the information about visitors' motivations or reasons for the visit, it may be an assumption that visitors would like to be involved in the idea generation and concept planning process. There may have been regular local visitors that perhaps would have liked to have been more involved with their local heritage site and enjoyed being part of the process, but not notified of the opportunity to do so. As with the tender for designers, perhaps there could have been a 'tender', i.e. a call, for local visitors to be involved and therefore enable a richer understanding of visitors in the interpretation design process.

If not visitors per se, then perhaps visitor advocates at heritage sites or organisations might be useful in the interpretation design process, such as HRP's volunteer guides (interpreters) or front of house staff acting as advocates. There would be a risk that assumptions could still be made, or perhaps certain visitor types' needs and motivations overlooked in preference for others if not represented by the advocates chosen. Experienced volunteer guides and front of house staff are constantly in contact with their visitors, and therefore build a good reference of areas liked/disliked, types of visitors, who they bring with them and why. Interaction with guides, their mix of academic and 'gossipy' stories, can often have a transformative effect on a visitor's visit and their overall experience (Howard, 2003:p.256).

English Heritage's Bolsover Castle team understands the importance of volunteers bringing 'buildings to life' in their engagement with visitors and enhancing their experience of their visit. In 2014, The Chesterfield Post published a call for 'Volunteers Needed For Exciting New Project at Bolsover Castle' (The Chesterfield Post., 2014). The article explained that the Castle was looking for:

'*Volunteer 'Explainers' [who] will play a central role in helping people from all over the world to explore this fabulous heritage site and to enhance their experience. Acting as the first point of contact for visitors, they will be the welcoming and friendly face of the castle, equipped with interesting facts, stories and information on the Little Castle and its contents.'*(The Chesterfield Post., 2014: p.1)

The Property Manager, Keith Holland, extended this by saying *'they will help bring the Castle to life by providing information and encouraging visitors to explore the rooms and collections'* and saw it as *'an exciting opportunity to be involved in the re-presentation of our beautiful and intriguing Little Castle'* (The Chesterfield Post., 2014:p.2)*.* What would also be good to see are those same volunteers involved in the interpretation concept and planning discussions.

The number of volunteers[63] has also increased within the National Trust, with the Trust continually seeking to improve their visitors' enjoyment of their properties. The Trust also actively aims to increase the involvement and enjoyment of their volunteers, i.e. creating a dedicated 'MyVolunteering' intranet section for the volunteers to engage with others about their work and role (Jenkins, 2013:p.12).

HRP's front of house staff at Kensington Palace managed to persuade the interpretation team from their initial concept of fairy tales to 'tales' of the actual princesses (Humphreys, 2012:p.5). The Front of house staff believed their visitors would appreciate real stories of the Palace rather than fictitious characters, which was also supported by the experienced Wildworks' interpretation design team (Falmouth University, 2011). The theme of 'fairy tale' did not change; instead, it was adapted to suit, resulting in the Enchanted Palace. It was also FoH staff (Visitor Services Manager, Karen Bolger) on listening to visitors feedback who recommended the opening of the cellar at Lacock Abbey, for visitors to see the context of the Abbey alongside the house and cloisters (National Trust, 2014).

With the precious knowledge volunteer guides, guides and heritage site interpreters have about specific sites, and their visitors, it is possible as visitor advocates, they would be suitable influencers throughout the interpretation design process.

An alternative to physically involving visitors within the design and planning process would perhaps be to implement the feedback provided via social media and/or review channels. As

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[63] 70,494 in 2012-13 from 67,000 in 2011-12 (Jenkins, 2013:p.12; National Trust, 2012:p.4)

shown with Trip Advisor, visitors like to provide feedback about their visit for other visitors to review before a visit in their planning of a day out. 'E-Word of Mouth' (Leung *et al.*, 2013; Tham, Croy & Mair, 2013) has become an increasingly accepted method of review before purchase, travel booking, restaurant booking or trip out. Trip Advisor, VisitBritain and mainstream social media channels such as Facebook, Twitter, YouTube and Instagram also offer people a means of sharing their information, photos and experiences of their day out. There is, however, evidence that this might not be considered trustworthy (Lee, Law & Murphy, 2011; Ayeh, Au & Law, 2013; Baka, 2016), and this should be considered when planning to make use of this content. For heritage sites such as the National Trust, English Heritage or Historic Royal Palaces, this nonetheless provides a valuable resource for visit reviews, suggestions and individual likes and dislikes of the heritage site. If not already being done, it would seem logical to implement observation and review of the comments and use within the discussions for new interpretation design and throughout the planning.

SUMMARY

Section 2.2.1. reviewed how the case study organisations determine interpretations at their properties, who was involved in this process and what that process may be. Reviewing the case study interpretations from a curatorial perspective, there were several questions raised concerning dissemination of knowledge and understanding, not just about the property to their visitors but also amongst those involved. The three case studies organisations' curatorial teams have shown they review the property in terms of its history, events considered important by the local community and visitor feedback to gauge an idea of what may encourage a deeper engagement and understanding of the property's history and its inhabitants. With HRP Kensington Palace's interpretation, there is evidence of involving front of house staff, volunteer guides and different departments such as education, interpretation and surveyors in a collaborative design process, yet no evidence for the three organisations of visitor involvement in that process, or measurement of visitors' engagement found in their published documents. Therefore, it would seem the heritage organisations have a general concern/interest in how the subsequent specific interpretations are received by visitors. They hope visitors will be inspired, understand and enjoy the experience, and through feedback will discover if this was the case. Their stance would appear to be a kind of 'we have planned this for you, we think it is great, it ties in with everything we set out to do and therefore we think it is successful, we think you might quite like it, and hope you

think it is successful too' attitude. Lack of evidence of visitors being involved in the process would suggest there is a general assumption on the organisations' part, albeit based on the team's previous interpretation experience, research and post visit feedback comments.

It is feasible that the heritage organisations' overall concern regarding 'success' for the interpretations was in achieving the planned interpretation concept in terms of time and budget, initial additional footfall and increased membership. Furthermore, 'success' appears to be how well the design companies interpreted and fulfilled their commission rather than a deeper understanding and engagement of the property by their visitors. This is not what the design companies say in their promotional material, but without fully involving visitors in their process, how can saying visitors are at the centre of what they do, really be the case? Reading about the care and enthusiasm curators and their teams have for the different interpretations, and an almost assured stance in each interpretation providing what visitors would like to see and experience, it may be easy to see why they believe they have the visitor at the heart of everything they do. With focused improvements to be 'inclusive and visitor centred' the industry has changed considerably from previous approaches to curation.

The Curation section set out to understand the interpretation process through who is involved, (skills and experience), what has been the process, and why (changes in legislation, stakeholders, funding, footfall, management/curators and visitors' feedback). Previous research (Kotler & Kotler, 2000a; Coffee, 2008; Ray, 2009; Soren, 2009; Trant, 2009; Janes, 2010b; Thomas, 2010; Easton, 2011; Rounds, 2012; Davis, Horn & Sherin, 2013; Louw & Crowley, 2013; Owens, 2013; Proctor, 2013) has shown that although curation at heritage sites has improved considerably in the last ten years, there are still areas that need further reflection within the area of interpretation planning, particularly considering the various capacities involved. The case studies examined in this chapter highlighted the importance of completing interpretation projects by all involved i.e. on time and in budget. They also highlighted the importance of a general overview of a visitor's day out and therefore experience at the heritage site. What is noticeable is a lack of visitors' involvement in the interpretation planning process; the planning team may consider them but not actually involve them. There is also a lack of measurement in specific areas such as the interpretation, designed to engage and communicate stories about the site. Without the ability to understand how well the stories are communicated and/or engaged with, it would be difficult to improve. The literature review (section 2.3) takes these points further to be able to understand how they might be improved or are being improved.

Section 2.1.2 has presented an analysis of how the case studies' interpretation designers have worked with the heritage organisations to create interpretations to engage visitors with the stories of distinct 'characters' and elements of their life at the heritage sites. When making decisions on what may be required, assumptions can occur based on designer's past experiences, knowledge and practice. Therefore, this section explored reasonable assumptions such as what the heritage organisation's (client's) expectations for the final interpretation design may be, and designers' assumptions of what their intended audience may wish to experience from their visit.

The main reason for awarding the contracts to the chosen designers was for their experience in designing HSI, their experience in crafting theatrical exhibitions or having worked with them previously. The tender process or call for interpretation design companies seemed to vary between the organisations, with some being by invitation, others via a tender agency (English Heritage, 2013). The briefs or contracts were found to be quite broad in what the interpretations might comprise in telling the story of each of the main characters at the different properties. It was interesting to discover the heritage organisations wished to stimulate, surprise, maybe shock their visitors with the interpretations, although it was not clarified why. This desire came across in each of the designers' explanation of their interpretations for fulfilling the brief and obviously formed the basis for the overall concepts. The designers' interpretation certainly produced fantastic and innovative forms of interpretative storytelling, particularly for Kensington Palace Enchanted Palace and House of Cards' interpretation, although the majority of visitors were not necessarily appreciative of the surprise element. Section 2.2.3 expanded on how visitors received the interpretations.

On the basis of my review of the case studies' documentation, the lack of visitor involvement actions or processes supports my view that the HSI design companies may not use a full UCD process in their design of heritage site interpretation.

Section 2.2.3. reviewed the types of visitors to heritage sites, why they might visit, their expectations of the visit and their experiences with each of the three heritage case study sites' interpretations. Valuable insight was provided from the comments about individuals' experiences of their visit.

Volunteer guides and visitor services have been seen to be immeasurably crucial in the different factors which help to form positive experiences for all types of visitors, according to the reviews on Trip Advisor and Facebook. Volunteer guides and visitor services staff can also be excellent

advocates for visitors if involved in the interpretation planning. HRP's example for the Enchanted Palace and House of Cards interpretation design shows how inclusive this can be and the effect it has on staff in their ability to help visitors engage with the interpretation. Social media channels and review sites such as Facebook and Trip Advisor have shown to be an insightful method of measuring how the case study heritage sites' interpretations have been received and perceived by visitors, although cannot be trusted implicitly.

The literature review (section 2.3) to follow will contribute to the knowledge of how effective a user (visitor) centred design process may be and how visitor interpretation had been monitored and measured.

In this section, the focus is on three themes involving effective communication of knowledge, process and experience in the design of interpretation at built heritage sites: dissemination, assumptions and visitors' experiences. The three themes were presented in the Research Aim Model presented in Chapter 1 (Fig. 1) designed to highlight a perceived gap regarding involvement of visitors.
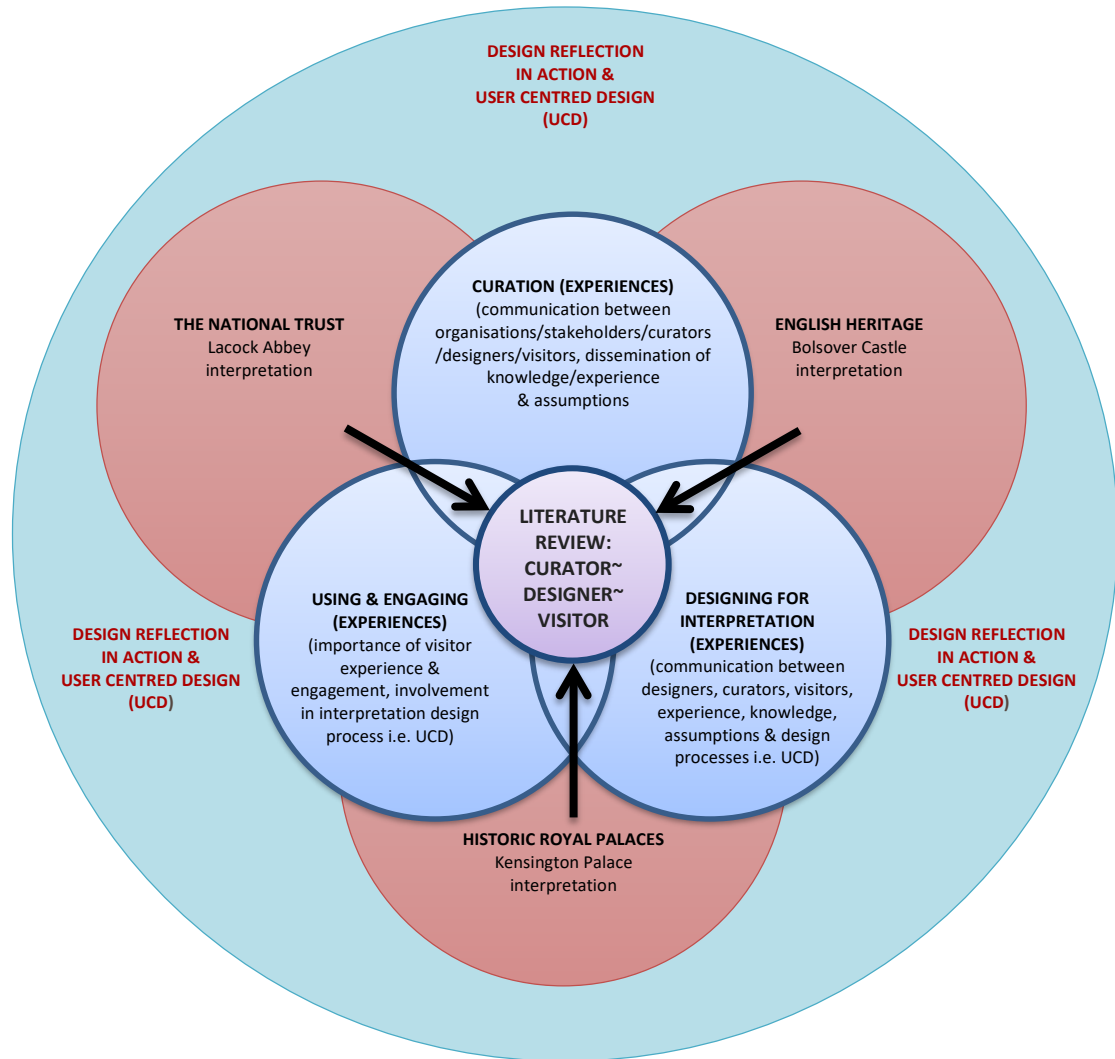
The first section of the literature review critically analyses different organisation's processes of designing interpretation, how knowledge and experience are communicated to others, what assumptions are made in the process and whether the visitor experience is at the centre of interpretation planning and decision making.

The second section of the literature review aims to understand assumptions that may be made in the design process of heritage interpretation design, between the curators and designers involved, and possible assumptions of their visitors.

The third section of the literature review aims to understand who visits built heritage sites and why. It also explores whether the use and engagement with heritage site interpretation provides a more fulfilling experience if visitors are involved in the concept and design stages. The practice of how this is being achieved, or could be achieved, is explored via reviews of visitor feedback for the three case study interpretations. Please see Fig.61 which maps the connections between the different components forming the structure of the literature review.

There has been considerable research (Bagnall, 2003; Griffiths, 2004; Karp, 2004; Russo & Watkins, 2004; Veverka, 2005; Hems, 2006; Tallon & Walker, 2008b; Kocsis & Barnes, 2009; Ray, 2009; Trant, 2009; Williams, 2009; Simon, 2010; Ballantyne & Uzzell, 2011; Linge *et al.*, 2012; Giaccardi, 2012b; Cairns, 2013; Louw & Crowley, 2013; Steiner & Crowley, 2013; Ioannidis, Balet & Pandermalis, 2014; Ciolfi & Bannon, 2002; Avram & Maye, 2016; Heath & vom Lehn, 2009; Maye *et al.*, 2017; Hornecker & Ciolfi, 2019) regarding interpretation at large scale museums such as the Tate, the Natural History Museum and the Victoria and Albert Museum, which focuses on developments in digital media, the use of social media for communicating with their audience and developments in participatory/co-design approaches i.e. involving visitors in the design of interpretation. The work and research in these areas demonstrates that collaboration and inclusion of museum visitors adds a better level of engagement, and more meaningful visitor experiences. Organisations such as the Museum Computer Group (MCG), Museum and the Web, (MWW), Museums and Heritage, and Museums Association also provide excellent articles in the use of technology for interpretation. In America and Australia, research by notable figures in the

museum industry i.e. Nina Simon[64], Angelina Russo[65] and Jerry Watkins[66], and Nancy Proctor[67], has continued to influence other countries in the innovative use of technology and audience participation at museums. The body of work from these and others has helped considerably in understanding curatorial practice and interpretation at museums, in particular the use of a participatory approach for enhancing engagement, and use of technology for more visitor interaction with the exhibits. However, information available regarding curation at heritage sites (historic houses, abbeys, ruins) is minimal by comparison; hence my systematic review has needed to include interpretation design and visitor experiences at heritage museums as well as built heritage sites.

The general nature of interpretation at a museum is to inform the visitor about each of the items on display, putting items in context, threading a narrative about how they may have been used. For a heritage site (buildings or ruins) the focus usually follows an important period covering the life of the owner or community that lived there. Their personal stories or stories of their life build the narrative rather than specific items, imbuing a sense of place (Uzzell, 1996; Scott, 2012). Both aim to enhance visitors' awareness of the past and provide an understanding of time and place (Uzzell, 1998). The focus of this thesis is primarily on built heritage sites, stemming from my experience and practice of crafting heritage site interpretations (HSI), such as the ones for Beaulieu Abbey and Dunster Castle. Therefore, although I appreciate that understanding the role of curation and methods used are important for all heritage categories, this section continues to focus on heritage site interpretation.

The summary reflects on each of the three themed sections, comparing practice from the case studies with the theories analysed through the systematic literature review. The Chapter summary is then taken forward for discussion with the fieldwork interviews in Chapter 3, section 3.1 Evaluation & Discussion.

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[64] Nina Simon, Director of Community Engagement: Santa Cruz *Museum* of Art & History, author of the *Museum 2.0 blog* and her book '*The Participatory Museum'* (2010)

[65] Angelina Russo, Associate Dean, Research in the Faculty of Arts and Design, Professor of Cultural Practice, University of Canberra. She is co-founder and Director of *Museum3*.

[66] Jerry Watkins, Associate Professor, Communications, Director, News & Media Research Centre, Faculty of Arts & Design, University of Canberra. Co-author with Russo for several papers including Digital Cultural Communication.

[67] Nancy Proctor, Deputy Director for Digital Experience, Baltimore Museum of Art. Co-Chair of the Museums and the Web annual conference. *www.museumsandtheweb.com/author/nancyproctor/*

2.3.1. DISSEMINATION OF KNOWLEDGE & EXPERIENCE

The case studies' 'Dissemination of Knowledge and Experience' review raised areas concerning:

- The importance of experience, knowledge and cultural backgrounds in the different roles involved in developing heritage site interpretation, i.e. how sites adapt to the growing need for a wider set of skills and experiences in developing engaging interpretation projects for multiple audiences
- Lack of visitor involvement in interpretation project conception and development

As a heritage site visitor, stories imbued with the buildings and 'place' pique curiosity and imagination. The use of a range of factually concise and brief interpretation panels such as shown in Fig.65, 66 and Fig.67 below, generally provide little evidence of engaging 'life' snippets of the inhabitants to satisfy these questions or visitors' curiosity of a past culture. From research, information was generally sparse[68], visitors relied on talking with volunteer guides to glean more information, refer to a guidebook or research after the visit (Black, 2011; Falk & Dierking, 2013; Ham, 2013).

Figure 66: Hyde Abbey Gatehouse Interpretation Panel (Wilson, 2014)

Figure 65: Beaulieu Abbey Domus Interpretation Panel (Wilson, 2014)

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[68] Interpretation panels at National Trust and English Heritage sites are designed to be unobtrusive, the objective being for visitors to enjoy the ambiance of the room set in a particular era, or external space, without labels jarring the setting. (Hems & Blockley, 2006; LookEar & Lovell-Chen, 2010; Ham, 2013)

Figure 67: English Heritage Interpretation Panel at Kenilworth Castle (Furse, 2017)

Children's guidebooks purchased for their storytelling and cartoon style images to reveal information about the lives of the inhabitants, providing knowledge of the building's history, the community, culture and era involved, almost at a glance (see Fig.68 and Fig.69 examples below). Adults were expected to understand the same information from facts and figures on the panels and in guidebooks, or refer to volunteer guides to bring the past inhabitants to life with similar stories embellishing the facts. Adults also digest knowledge more easily than blunt facts, through the use of storytelling (Nash, 1994; Miller, 2008; Phillips, 2012; Tallon & Walker, 2008b), therefore, various levels of storytelling should be a consideration in all heritage site interpretation.
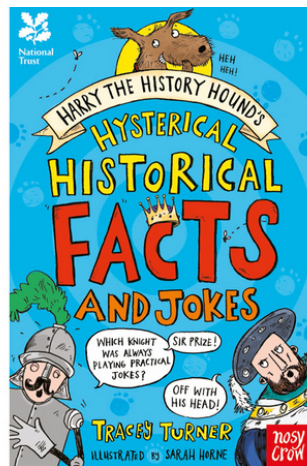
Figure 68: National Trust Hysterical Historical facts Children's Book (The National Trust, 2014)
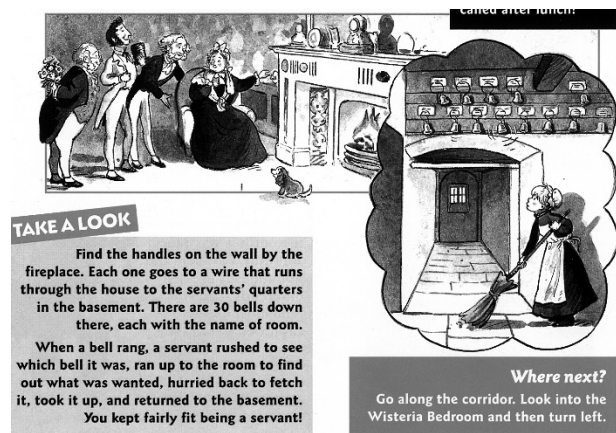
Figure 69: The National Trust's Children's Dunster Castle Guide Book (The National Trust, 2003)

The 'facts' provided on the interpretation panels are generally decided on by the curator or archivist, to highlight important historical events. In the case study examples, it was the volunteer guides who humanised the facts through storytelling, which is also the case in many other heritage sites and museums (Gaffikin, 2012; Taylor, 2006a; Falk & Dierking, 2013). The provision of audio and video tours help in this respect, but again, the content is directed, it is mostly factual and an extension of the interpretation panels. The rich storytelling provided by the guides and those engaging snippets providing an insight to past lives, vary depending on the guide in place at the time. Through conversations with previous visitors and involvement with the site, guides are able to add to their stories, re-shaping and moulding the stories to their audience. Return visits to sites which use volunteer guides, therefore offer visitors an opportunity for new stories, new snippets, unlike those with primarily audio guides and interpretation panels. Visitors may also unknowingly become part of the guide's storytelling (Taylor, 2006a; Falk & Dierking, 2013; Scott, 2012). The richness and personalization of the guides' stories create an experience for visitors they may remember, and possibly discuss beyond the visit (Johnsson, 2006; Joeckel, 2002; Scott, 2012).

Although the National Trust has over 60,000 (2013-14) volunteer guides across their properties (Jenkins, 2014), access to guides at larger sites is not always possible. Providing the snippets and rich stories via additional means such as games, social media channels and interactive touch screen panels may, therefore, be ideal. The internet allows visitors to explore an area of interest in more detail post visit, yet information provided at the time of visit helps to create more memorable experiences by eliciting emotional responses (Black, 2005; Beck & Cable, 2011; Ham, 2013:p.82; Falk & Dierking, 2013:p.192). Engagement with interactive panels can be for the whole group, unlike audio tours where wearing headsets or earphones may exclude interaction creating a more solitary experience (Black, 2005:p.193; Falk, 2009b:p.218; Roberts, 2014:p.194).

The variety of platforms available at a heritage site is perhaps not the problem in engaging visitors with information. This often lies in the content that is made available through them, and how this is developed and managed; traditionally the domain of the curator. Evolving changes in technology provides additional ways in how visitors can access information (Black, 2011; Soren, 2009; Fahy, 2004). Visitors may have personal mobile devices which can be used to access information. Through their own devices they are also able to personalize their experience by searching the web for further information on areas of specific interest (Hems & Blockley, 2006; Falk & Dierking, 2013; Ham, 2013), although this information may not be from trusted and reliable sources, therefore possibly resulting in misinformation (Falk & Dierking, 2013). According to Falk and Dierking:

'Professionals worry a great deal about the misinformation they hear conveyed in their museums, yet they may contribute to it by providing information that does not answer the questions important to the visitor or by using concepts or vocabulary unfamiliar to the visitor.' (Falk & Dierking, 2013:p.124)

Curators are, therefore, being required to learn how to incorporate the additional platforms and generate interpretation content in many different ways, or work with others already experienced in doing so. The case studies highlighted collaboration between a variety of experts and heritage organisation staff for building their visitor experiences through a range of interpretation platforms and methods. Research has shown that multiple platforms are becoming a more usual occurrence for museums and heritage organisations in general (Falk & Dierking, 2013; Scott, 2012; Soren, 2009; Hooper-Greenhill, 2003; Ciolfi & McLoughlin, 2012; Avram & Maye, 2016; Jafari, Taheri & vom Lehn, 2013; Heath & vom Lehn, 2008; Maye *et al.*, 2014; Hornecker & Ciolfi, 2019), therefore, a range of skills and expertise in choosing and communicating differing levels of historically correct information via a multitude of methods is becoming a necessity. Scott (2012) and Dicks (2000) discuss the importance and validity of what is chosen to represent cultural histories at museums and heritage sites, and by whom. Dicks cites an example of the complexity involved with 'Rhondda Heritage Park'[69] which resulted in a set of audio-visual shows conveying messages about an 'imagined' Rhondda community mixed with 'wider issues of class solidarity and gender divisions' (Dicks, 2000:p.67). This was mostly due to the government's 1980s push for local authorities to become more independent and the subsequent positioning of Rhondda as a flagship for their 'entrepreneurial model of development'. To achieve this, they used an external heritage and entertainment company, experienced in creating the Yorvik Viking Centre 'Experience' (Dicks, 1997) to develop the site as a heritage centre. The community were concerned that the consultancy would not portray their history realistically, therefore a local historian, and mining struggles' documenter, Dai Smith, was brought in to embed local historical information in his known style of positing the past as inspiration for the present (Dicks, 2000:p.65) (see Figs. 70 & 71).

Visitors to Rhondda are thus presented with information about a community in which the 'reality' has been altered. Had the local authority approached this in a different way – such as the National

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[69] Rhondda Heritage Park, South Wales, former colliery buildings transformed into a heritage museum in the 1980s by a foremost heritage and leisure professional company which caused considerable speculation about the validity of how the community would be represented. A local historian was then tasked to work closely with the heritage company to ensure facilitation of suitable interpretation. Three audio visual shows were created to cover 'the consultant's creative treatments based on 'thrills and spills', and the historian's detailed and socialist-driven historical narrative'. (Dicks, 2000:p.65)

Trust does with their 'new' properties, i.e. spoken with the community and drafted a statement of significance, Rhondda Heritage site's 1980s interpretation may not be cast as a 'sinner'. A phrase used by Uzzell (1996) when describing how heritage can be used for creating a 'reactionary, superficial and romantic view of the past' (Uzzell, 1996:p.1).

Figure 70: Rhondda Heritage Park Museum, Black Gold Experience (Rhondda Cynon Taf County Borough Council, 2014)

Figure 71: Rhondda Heritage Park Museum, Black Gold Experience (Rhondda Cynon Taf County Borough Council, 2014)

Creating a heritage centre from buildings and an industry recently closed down, should have fully involved the community with a local heritage curator to glean the community's experiences of working in the colliery and how the community was formed. By working more locally with a professional curator, rather than a well-known historian/documenter would have helped to ensure a non-biased view of the recent living and historical past. It may also have pulled the community together more and helped to create ownership and perhaps, therefore, a continuation of their community and a sense of place (Uzzell, 1996; Scott, 2012). The community experiences would have created rich, compelling stories for visitors to understand life in and around a colliery, instead of the politically imbued narratives provided.

2.3.1.1.   KNOWLEDGE BUILDING EXPERIENCE

In each of the case studies, and the Rhondda example above, the heritage organisations involved employed a range of experts who were experienced in their roles as curators, specific subject curators, historians or interpretation managers. Their knowledge and experience enabled them to ensure the content of interpretation projects were at a particular level that would be suitable for their visitors; this has not always been the case.

Traditional curators and designers were once considered arrogant, to know best, to instruct rather than share knowledge (Bradbourne, 1997; Russo & Watkins, 2005; Poole, 2011; Linge *et al.*, 2012;

Ellner, 2013). With the rise of digital technology and use of social media, the traditional approach is being forced to adapt, to liaise and communicate more widely with their public (Kotler & Kotler, 2000a; Coffee, 2008; Ray, 2009; Soren, 2009; Trant, 2009; Janes, 2010a; Thomas, 2010; Easton, 2011; Rounds, 2012). Heritage organisations/sites are looking to reach a wider visitor demographic (Thurley, 2005; Taylor, 2006a; Cowell, 2008), mostly due to government changes in legislation and financing, and therefore, the need to expand visitor numbers. The increased use of digital platforms and social media has brought many changes for the heritage industry (Fahy, 2004), especially in the way they disseminate knowledge and communicate with their visitors as noted above. From the mid-80's, museums and heritage sites installed technology *'for their promise to democratise knowledge'* (Griffiths, 2004), to engage visitors and widen their demographic. For example, the use of virtual environments and 3D representations allow visitors to explore 'collections' in context, either during their visit or after, via dedicated websites or social media, therefore information can be sought at will and shared (Pine II & Gilmore, 1998; Hogsden & Poulter, 2012; Cooke, King & Stark, 2014). Through social media and mobile technology, visitors are able to communicate their experience of a heritage site to a wider circle of friends, acquaintances and the heritage site visited (Simon, 2010).

The 'sharing' of experience and knowledge amongst friends, family and peers, being able to present an idea, and listen to other viewpoints has been proven to help the 'meaning-making' process (Copeland, 2006; Scott, 2012; Uzzell, 1996; Dicks, 2000; Soren, 2009; Veverka, 2005). Copeland suggests:

> '*When constructed meanings are shared through social interaction, including shared views or shared affective experiences often 'cognitive dissonance' is engendered as previous experience is tested against new ideas*.' (Copeland, 2006:p.92)

Involving visitors within discussions for new heritage site interpretation projects and throughout the development of a project would, therefore, bring a richness of understanding for all involved, challenging perceptions and past experiences. The knowledge built from experience in visits to different heritage sites, as visitors and not curators, can only add to the specialist curatorial and design knowledge provided by the curators and designers in the discussions.

Collaboration within a heritage organisation has not always been possible; working in 'silos' formed part of the 'traditional' mode of operation for many museums. Lang, Reeve and Woollard (2012) suggest museums have '*been through a rite of passage in transforming themselves*' and have '*seen phenomenal change, expressed in not only new policies, political interests and findings,*

but in the ambitions of all involved' (Lang, Reeve & Woollard, 2012:p.228). Dicks (2000) also suggests the appearance of a '*new breed of experience-centred heritage museums*' providing 'a *full interpretation of the past'* with aspirations '*to be inclusive and people-centred'* (Dicks, 2000:pp.61–62). Combined knowledge through collaboration within the organisation has proven to be beneficial for visitors as well as staff and volunteer guides in the Historic Royal Palaces' interpretation case study. Here it was shown that communication and dissemination of the interpretation intent proved highly beneficial to staff and visitors. The leadership and planning involved in sharing knowledge and inviting feedback across all staffing levels, created a cohesive, engaging experience and 'buy-in' of the interpretation vision for all involved in providing that interpretation. As Woollard (2012:p.220) states:

> '*[an] organisation as a whole needs to appreciate, encourage and invigorate both individual and collaborative learning. It needs to discuss and evaluate practice, to communicate lessons learnt to others and ensure that resources (time and funding) are set aside to enable further improvement through training, appraisals and regular cross-department team meetings.'* (Woollard, 2012:p.220)

A method of including visitors in the collaboration would, therefore, be a useful addition, providing benefits in shared knowledge and a feeling of ownership and community (Black, 2005; Scott, 2012; Soren, 2009; Ciolfi *et al.*, 2016; Ciolfi, Bannon & Fernström, 2008; Damala *et al.*, 2014; Heath & vom Lehn, 2009).

Designers, artists and other external organisations and companies working with a heritage site also need involvement at each step of the interpretation planning process. It was demonstrated via the case studies that the heritage organisations regularly worked with designers who had experience in creating interpretation for heritage sites. They specifically chose people/companies with heritage experience and were specialists in their areas. The curators would have a strategy, such as what is going to be interpreted, ideas on the type of interpretation and who the target audience may be. Designers then work with the curators and heritage team to 'execute' the strategy (Howard, 2003). 'How' should be in the form of an interpretative plan which is constantly reviewed and reflected on by a combined team of heritage staff (curators, front of house staff, marketing and volunteer guides), designers and selected visitors to ensure all objectives are met. This seems an obvious process and is probably in place in most interpretation projects, except for the inclusion of visitors (see next section for more detail).

The most successful of the case study interpretations (based on visitor feedback) were also where designers and the local community had worked closely with the heritage organisation to develop the concept or strategy, i.e. the National Trust at Lacock Abbey. The purpose of one of the interpretation projects had been instigated from visitors' interest in a certain period of the Abbey; they wanted to see how the abbey may have looked to understand how life was then, compared to now. The example highlights how a heritage site, displayed to represent information of a particular period (Matilda Talbot's era), although decided on with the local community at the outset, may still not fulfil all visitors' expectations. Choosing just one era (seen in each of the case studies) has a tendency to hide the heritage site's earlier or more recent history (Howard, 2003), presenting one lifestyle, and therefore dictating what visitors may learn and experience. Uzzell (1996) states: '*Museums and interpretive exhibitions have a crucial role to play in communicating to their visitors a sense of the identity of the place they are visiting*' (Uzzell, 1996:p.2), yet if the interpretation comprises lifestyle stories and images of a single generation of inhabitants, this may not be possible. Hems (2006:p.4) also speaks about the importance of the 'actual then and the fictitious now' for visitors to understand the significance of a heritage site in different periods rather than just one. With a room set as a period staged event, it is not possible to show how it might have looked or been used in a different period or periods; it might also be perceived as fictitious. Other events may have been glossed over which could have held more meaning for certain visitors, resulting in a lost opportunity to connect, construct and enhance their beliefs and experiences (Copeland, 2006; Soren, 2009; Hems & Blockley, 2006). It is perhaps an important aspect, therefore, to ensure there are opportunities for visitors to understand the full history and significance of the heritage site from which they can draw meaning and context.

Based on the literature, choice in what is being presented, with regards to interpretation, would appear to be an important consideration in creating meaning-making experiences for visitors.

Curators and designers are either being required to expand their skillsets to accommodate the increased choice, or work with experienced experts able to provide these skills.

It would also appear that the design of interpretation is more successful where there is collaboration, and engagement with suggestions and feedback from all involved, including visitors, throughout the interpretation process.

2.3.2. ASSUMPTIONS IN THE DESIGN OF HERITAGE INTERPRETATION

The purpose of this section is to explore literature around possible assumptions made between different combinations of the curator, designer, visitor triangle shown in Chapter 1, Fig. 1's research aim model. The purpose of this section, therefore, explores whether the processes used are sufficient for ensuring a successful visitor experience focusing on the two main areas arising from the case studies:

- The minimal use of design processes such as a collaborative or user centred design process in developing interpretation projects i.e. involving visitors in the design of interpretation projects
- The use of defined interpretation project briefs as opposed to broad and less well defined in developing successful interpretation projects as part of the design process.

As we saw in the previous section, the focus on academic practices of in-depth research of artefacts, sites and collections now needs to change to include being able to engage the public with the results of their research. Curators have, therefore, needed to add to their skillset, methods of communicating to a wide range of ages, interests, backgrounds and levels of knowledge. The developments at built heritage sites to facilitate wider access have brought new roles, some of which may overlap with the role of the curator, for example, an education/interpretation officer. Internal and external influences may affect the intended interpretation before it reaches the designer or visitors. Understanding the effect of possible influences will help in developing a process that factors in results of the possibilities at the outset and/or diminish the overall effect on the outcome.

How curators arrive at their interpretation concept will often be influenced by the stance of the organisation in which they operate. Hewison and Holden in Clark, (2006) suggest that there are three influencing groups of stakeholders: public, professionals and politicians/policymakers (Clark, 2006:p.16) which link to three areas of cultural values: intrinsic, institutional and instrumental. This model works well in explaining the types of external influence the curator may be subjected to within their role. Although used in a different context, Lowenthal's (1997) expression that '*no historian's view is wholly free of heritage bias*' maintains this theory (Lowenthal, 1997:p.x preface). The curator's cultural background, interests and disposition act as the internal influences that may also shape the concept and subsequent outcome of the interpretation (Lawson & Walker,

2005:p.15; Terwey, 2008:p.12). With the external and internal influences in place, the curator still needs to '*accurately capture – and appropriately analyse – audience requirements from the bottom-up, in order to design an entertaining, stimulating and representative exhibit*.' (Russo & Watkins, 2005:p.4)

One of the case studies highlighted a requirement by the curatorial team for the interpretation to be designed to entertain and surprise visitors (Historic Royal Palaces, 2011b); another required interactive interpretation such as 'talking heads', projections and a multimedia tour (Banks, 2013). Decisions appeared to be made from suggestions of 'what might be good to have, to surprise or to shock' rather than from any curator bias or knowledge of visitors' expectations. There can be a greater sense of self-satisfaction and accomplishment in discovery, creating a memorable experience. Conversely, if not successful in their personal quest, an adverse experience may occur. Curators and designers, therefore, need to be careful in assuming that all visitors want to be led and fed information in a particular order; some visitors may prefer to discover their own information about a particular space or historical event (Hooper-Greenhill, 2003; Scott, 2012; Howard, 2003; Falk, 2009a). We saw in previous sections how visitor feedback from the Enchanted Palace exhibition highlights this quite well, with some visitors (primarily those who had not visited the Palace previously and had come to see the exhibition) enjoying the theatrical elements, whilst the traditional visitors (those re-visiting) were disappointed and disliked the 'new' style of interpretation (Humphreys, 2012; Gaffikin, 2012; Rank, 2013).

Designing interpretation for different audiences in a mix of styles (led/self-directed) and media is widely discussed by academics and museum professionals (Hooper-Greenhill, 2003; Howard, 2003; Black, 2005; Falk & Dierking, 2011; Lang, Reeve & Woollard, 2012; Scott, 2012; Ham, 2013; Ciolfi, Bannon & Fernström, 2008; Ciolfi, 2012b; Maye *et al.*, 2014; Heath & vom Lehn, 2009) with terms such as collaboration, greater engagement and experience occurring frequently. In Kotler and Kotler's 1998 edition of Museum Strategy and Marketing, they state in their preface:

> '*The most successful museums offer a range of experiences that appeal to different audience segments and reflect the varying needs of individual visitors …To the extent possible, successful museums provide multiple experiences: aesthetic and emotional delight, celebration and learning, recreation and sociability...*' (Kotler & Kotler, 1998:p.xx).

In their 2008 edition they have updated this to reflect the changes that are occurring in museums by adding:

'Regardless of style, all museum visitors seek benefits, value and unique experiences. To the extent possible, successful museums provide multiple experiences satisfying multiple needs...Competitiveness in the marketplace has made necessary the adoption of consumer-centred approaches'(Kotler, Kotler & Kotler, 2008:p.xxiii).

Ham (2013), Veverka (2010) and Black (2005) suggest processes by which elements of multiple experiences can be achieved, with Black providing information of the UK Heritage Lottery Funds' Audience development plan (Black, 2005:p.63) (see Appendix J for more detail). Listed in the plan are questions that would be logical for any organisation or company wanting to grow their consumer/customer/audience base and therefore their offer, such as 'who do we want our audiences to be in the future, how do we reach them and what will we offer them?' They form part of a fundamental set of questions used within marketing and management (Drucker, 1999). These are also questions that designers may seek to answer in the form of personas, typical of a user-centred design process (Potter, 2002; Abras, Maloney-Krichmar & Preece, 2004; Kuniavsky, Goodman & Moed, 2012; Smashing Magazine, 2015; Curedale, 2016). Design theorist Donald Norman coined the term 'User-Centred Design' (1986) to describe a process stemming from user testing. User-Centred Design (UCD) means that as a designer, you immerse yourself in your users' world to understand what they do and why (see Fig 72 below).
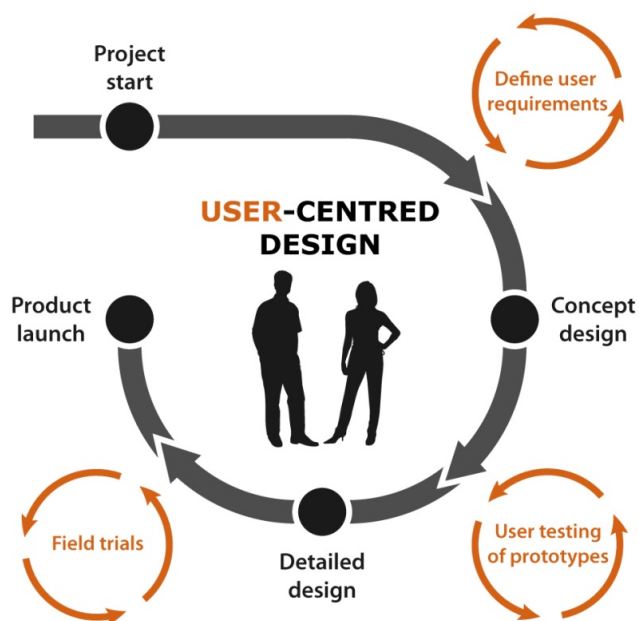
Figure 72: User Centred Design Diagram. (Wellings, 2013)

By integrating insights from sociology, anthropology and psychology into the design process, designers are able to have a richer understanding of their needs and wants, enabling a more successful experience with the designed artefact/interpretation. Checking and testing with actual users throughout the process helps to ensure the outcome has 'buy-in' from the users, and therefore, is successful. Personas or user profiles are used as part of the UCD process to focus on the different user types as fictional characters, synthesised from observations of many. Profiles include daily routines, interests, fashion styles and age, perhaps varying with each design project, and used to share with team members.

Nonetheless, although designers, through the use of personas and user journeys, may have a thorough understanding of who their visitor may be, they may not know the reason for visit or have control on their emotional state during their visit to a heritage site, therefore personas are used as an insight and guiding element in their design process (Roberts, 2014:p.194). Design as a process has several specialisms within different design disciplines such as engineering, architecture, industrial and interpretation design (Cross, 1984). Each follows a design process similar to a user centred design process which can be seen in the table below (Fig.73):

Typical Design Process	Engineering Design Process	Architectural Design Process	Product/Industrial Design Process	User Centered Design Process
Initiate	Identify need or problem	Define the problem	-	Define user requirements
Investigate	Research Criteria	Collect information	Research	-
Generate	Brainstorm possible solutions	Brainstorm	Concept	Concept design
Ideate	Select best solution	Analyse	Design	-
-	Construct Prototype	Develop solutions	Development	User testing of prototypes
Evaluate	Test	-	-	Detailed design
Communicate	Present Results	Present ideas	Design documentation	Field trials
-	Re Design	Improve Design	Prototype	Product launch
			Engineering	
			Production	

Figure 73: Design Disciplines and their Process. (Wilson, 2017)

The notable variables when each process is compared to the UCD process are primarily 'defining user requirements' and 'user testing'; there are elements of testing which may include users in the engineering process, and may also occur in other design processes although are not mentioned above. The core difference is that users are core to UCD at each stage of the process, with

research carried out through to the field trials' stage. UCD is considered a subset of Human Centred Design[70] and is becoming more important in the design industry for developing positive experiences through collaboration with multi-disciplinary teams.

Another important aspect to most design processes is that they have moved on from a traditional, closed, linear process to a more open-ended, cyclical process. This has become a key aspect especially for the majority of the design disciplines, in particular interpretation designers and other disciplines that follow the Design Thinking methodology such as User Experience (UX) designers and Experience designers (XD). Lockwood (2009) provides a succinct overview of Design Thinking which explains how it fits within the design industry:

> *'Design thinking is essentially a human-centred innovation process that emphasizes observation, collaboration, fast learning, visualization of ideas, rapid concept prototyping, and concurrent business analysis, which ultimately influences innovation and business strategy. The objective is to involve consumers, designers and business people in an integrative process, which can be applied to product, service, or even business design.*
>
> *It is a tool to imagine future states and to bring products, services and experiences to market. The term design thinking is generally referred to as applying a designer's sensibility and methods to problem solving, no matter what the problem is. It is not a substitute for professional design or the art and craft of designing, but rather a methodology for innovation and enablement.'* (Lockwood, 2009:p.xi)

Although there are several sets of design processes, designers continue to adapt processes to suit their preferred method and their discipline. An excellent example of this can be seen in Fig.74, where McWeeney (2016) expresses his version of a design process that mixes a UCD, HCD and Design Thinking[71] approach.

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[70] Human Centred Design (HCD) methodology involves the human perspective but does not necessarily involve users in the process used for planning and crafting of a designed artefact that will suit their needs. IDEO states: 'HCD is a creative approach to problem solving and the backbone of our work at IDEO'(IDEO, n.d.). The process is simplified to three stages of 'Inspiration, Ideation and Implementation'(McWeeney, 2016).

[71] Design Thinking was applied to business by David Kelly, founder and chairman of IDEO in 1991. Prior to this the term design thinking has been used to frame the concept of 'design thinking', the most notable examples are Lawson's book 'How Designers Think', Cross's 1982 article 'Designerly Ways of Knowing' with more recently a book titled 'Design Thinking' and Rowe's 1987 book 'Design Thinking'.

The five sections stemming from a typical UCD process, but subtly changed to describe the actions McWeeney has experienced in his role as a UCD designer, highlight how different designers' experiences reflect their actions. The diverging and converging thinking curves through the three

MY USER CENTERED DESIGN PROCESS REMIX

1. DISCOVER	2. DEFINE	3. DECIDE	4. PROTOTYPE	5. EVOLVE
The hypothesis	Find meaning	Generate solutions	Create prototypes	Release
Gather inspiration	Frame the challenge	Refine ideas	Test with users	Analyze learnings
Develop empathy	Think broadly	Think narrowly	Iterate, Iterate, Iterate	Iterate, Iterate, Iterate

INSPIRATION — IDEATION — IMPLEMENTATION

USEFUL — USABLE — DELIGHTFUL

DIVERGE — CONVERGE — DIVERGE — CONVERGE

Figure 74: Designer role: summary of meaningful text segments from practitioner interviews.(McWeeney, 2016)

HCD principles of Inspiration, Ideation and Implementation to demonstrate the areas of the design process where they think widely about the problem, narrowing the ideas then expanding in their exploration of developing those ideas before then narrowing again to a solution that is implemented. The abduction thinking process contrasts significantly with previous design reasoning of deduction and induction (Cross, 1984, 2011; Chandler, 2015; Lockwood, 2009). Another example is McKinsey Digital Labs' model in Fig.75 overleaf. The linked cycles of design, technology and strategy through the UCD process have been considered through a business perspective. The colour coding works well in highlighting the importance of timing for the three cycles, particularly regarding different considerations of available technology. McKinsey's braided design model clearly defines the steps for each element of the process demonstrating the involvement of customers, designers, technologists and stakeholders.

The multinational company, McKinsey, promotes the HCD derived Design Thinking approach to large companies and organisations as a method of bringing staff together through design, i.e.

design-led. They believe that: *'design should take an active role in bridging multiple functions— including finance, legal, IT, marketing, and operations—so that these groups can not only be part of the process but also start to directly understand the value that design can deliver'* and people with the right skillsets and experiences are utilised in the right space for the collaborative discussions to be effective (Kilian, Sarrazin & Yeon, 2015:p.3).
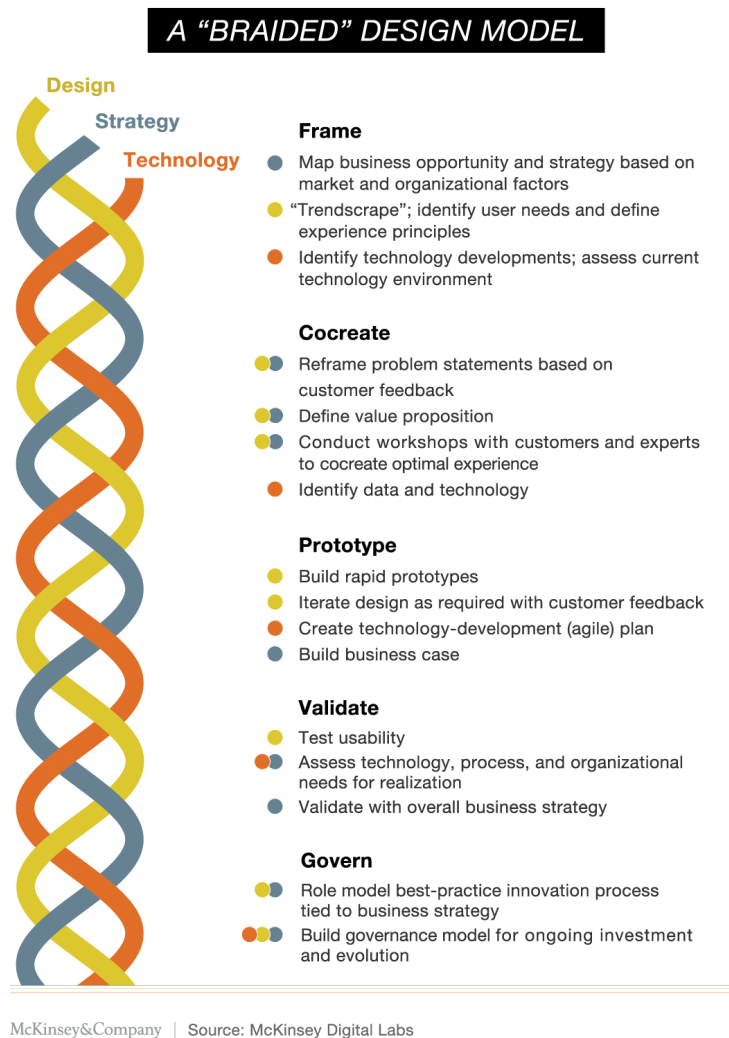
Figure 75: Design driven culture model developed by McKinsey & Company. (Kilian, Sarrazin & Yeon, 2015)

Each project or problem that needs solving requires designers to draw upon their different experiences, skillsets and abilities. Interpretation designers often require experience in many disciplines. They need to be able to communicate clearly and diplomatically, leading/guiding clients to understand the complex issues involved in what may appear to be a simple solution.

They need to collaborate with a range of different craftspeople, tradespeople as well as the curatorial team, stakeholders and visitor groups or visitor advocates, on occasion possibly also acting on behalf of visitors in explaining visitors' needs and behaviours. The designer would generally work with their preferred design process, although it may be dependent on the project which approach, process or method a designer will use, and the designer's skills, abilities and experience.

In Roberts (2014) Interpretation Design study, she interviewed eight designers (five consultants and three in-house) about their role in interpretation design; some of the issues raised included: '*audience testing and evaluation are rarely included in the design process*' (Roberts, 2014:p.195). Fig.76 below highlights the summaries from her discussions with the designers:

Interpretation Designer Roles:
Consultant Designers
• Our role varies so much from project to project, depending on the content, site, client experience and intent.
• A designer puts together the way in which the public interacts with not only the objects, but the experience of being amongst those objects, in a live sense.
• My role is to question the intent of the proposed exhibits and to make them work harder and become more meaningful.
• Our role starts with creating an environment where people (stakeholders) feel safe to express their opinions to collaboratively develop an approach that everyone owns, that is achievable and clear.
• Some designers are aesthetically driven; some design for the appreciation of their peers; some focus on telling stories through objects, which may over-ride aesthetic principles.
• A designer has to prove to the institution that they care about their collection, share their passion and aspirations.
• Ideally, designers have an ongoing conversation with curators, specialists and writers to shape stories and create focal points.
• Designers shape cognitive understanding, but also deeper, emotional aspects that are potentially life-changing.
• Designers act as advocates for the audience needs and interests in the design process.
Design Staff in Major Institutions
• A designer's role within the broader project team is pretty clear, guided by a detailed brief.
• The design team plays a significant role in shaping the project physically and conceptually.
• We've got to embed meaning in everything we do rather than using design for design's sake.
• You may have to design for an audience very different from yourself and your peers; the designer has to represent the audience in the development process.
• A designer's role is to consider the most effective ways to engage all of the audience's senses to connect them with the subject.

Figure 76: Designer role: summary of meaningful text segments from practitioner interviews. (Roberts, 2014: p.196)

Overall, Roberts found that the interpretation designers were not always brought in at the right moment of the interpretation planning, their roles often expanded beyond that of the project brief to include '*extensive research, curatorship, mediation, cultural liaison, text development and solving way finding problems*' (Roberts, 2014:p.199). The expectation of work and role provided by the briefs also did not match the actual project requirements i.e. once the work was progressed, changes developed due to a lack of design experience by the organisation in their initial planning stages. The last aspect reflects findings from two of the case studies in that the project briefs were quite broad, perhaps intentionally, to provoke a broader creative outcome, but possibly also due to a lack of understanding in the different roles that may be involved in designing the overall interpretation.

The Design Thinking business approach believes in design-led projects, which is becoming more popular for business organisations, for example IBM. This may not work with heritage site organisations, although similar to business organisations, the move towards more involvement with consumers, is being echoed in an increasing involvement with visitors by heritage organisations, and designers with users.

Assumptions are highlighted as the main consideration in this section: assumptions made in the initial planning regarding what visitors may wish to 'experience', who the visitors are, the possibilities that a contracted design team may bring to an interpretation, and how the interpretation project will be experienced. There are also assumptions in what a design process might involve.

In research regarding UCD examples, visitors/users are considered; they are core to the planning and decision making processes, and therefore can be attributed to following a UCD process. One or two business examples such as case studies outlined by McKinsey Digital Labs specify users' 'physical presence' involvement and active engagement, rather than a mental consideration of them (Kilian, Sarrazin & Yeon, 2015; Breschi *et al.*, 2017). For HSI, this does not seem to be the case, i.e. visitors as part of the design and planning team throughout the interpretation process. Instead, they are represented by personas or advocates. However well informed or researched, assumptions have been made about how visitors may behave, or may change in behaviour depending on emotions they bring with them on the day of visit, or invoked/provoked by the heritage sites' interpretations or sense of place (Black, 2005:p.195). There are instances of

involvement at the beginning, i.e. the National Trust's community strategy on newly acquired sites, and towards the end, for testing or feedback, but not throughout the process.

Broad briefs allow assumptions for the design team in how they will interpret the brief, and assumptions by the heritage organisation in how that brief will be delivered. Bringing in designers, visitors and others that may be involved at the beginning of the process to discuss the 'what, why, who and how' (Veverka, 1994) through the UCD process steps of 'Discover, Define, Decide, Prototype and Evolve' (McWeeney, 2016) would help to create a unified project plan in which all parties collaborate to create a shared interpretation vision or strategy and therefore a better understanding of what would be required (Lawson & Walker, 2005:p.23).

The project brief and meetings would benefit by not being didactic and instructive, instead allowing for discussion and divergent thinking when and where it is needed i.e. plans might change, new opportunities arise, but the brief should still adhere to the long term vision (Potter, 2002; Black, 2005; Ham, 2013). The voices and experiences of the stakeholders, professionals, historians, designers, technologists and visitors should form an ongoing discussion through an embracive UCD process, with regular meetings (attended by all as a priority) and sharing of experiences to create deeper understanding of the complexities involved in designing and creating successful heritage interpretation (Petrelli *et al.*, 2016).

2.3.3. THE IMPORTANCE OF VISITORS' EXPERIENCES IN SHAPING HERITAGE SITE INTERPRETATION

The purpose of this section is to explore literature on how visitors' feedback and critical understanding how visitor involvement might work for all heritage sites. Therefore, the areas that will be covered in this section include the following:

- The importance behind how heritage organisations view and measure the success of a heritage interpretation project via the use of visitor experience questionnaires
- The importance of social media and review data as a measuring tool for understanding visitors' experiences from their perspective
- Credibility and validity of reviews
- The importance of visitor services, advocacy and involvement of communities/visitors in shaping visitor experiences

Visitors visit heritage sites for many reasons, not always for information or learning (Markwell, Bennett & Ravenscroft, 1997; Doering, 1999; Pine II & Gilmore, 1999; Falk & Dierking, 2000). Many are seekers of experiences of the past, perhaps to make sense of where they are now and how they came to be there (Falk, 2009a). From the heritage site case studies, it was clear that curators are becoming more receptive to the 'needs' of their visitors which help to form their experiences. In the last fifteen years, museums and heritage sites, in general, have begun to consider the needs of their visitors first, rather than the traditional attitude of 'this is what we have chosen for you to learn about', i.e. a dictatorial stance, structured and controlled (Markwell, Bennett & Ravenscroft, 1997:p.106; Russo & Watkins, 2005:p.10; Cairns, 2013:p.9). What is also becoming more evident is a growing interest in understanding the importance of experiences formed during a visit, and how visitors choose to communicate their experience to others, i.e. family, friends and the heritage site visited (Hooper-Greenhill, 1994; Falk, 2009a; Ciolfi, 2012b). The importance of designing and planning the 'right' style of interpretation visitors may be expecting from their previous experience, or from reviews they may have read, is as important as providing comfortable facilities, welcoming guides and a place for relaxation in forming those experiences (Kotler & Kotler, 1998; Laws, 1998; Taylor, 2006b; Morgan, 1996:p.25).

Museums and heritage sites now have to compete to provide a day out with other venues, who are more used to catering for visitors wanting to spend time free time relaxing or seeking enjoyable experiences such as leisure centres, theme parks and adventure parks (Morgan,

1996:p.24; Pine II & Gilmore, 1999:p.3; Kotler & Kotler, 2000a:p.272; Falk, 2009a:p.186). Built heritage sites[72] have traditionally been a large part of the UK tourism industry and growing in popularity (Markwell, Bennett & Ravenscroft, 1997), particularly so with televised historical dramas and specialist historical architectural and archaeological documentaries (Morgan, 1996; Laws, 1998; Hooper-Greenhill, 2004). One third of the UK's population agree that heritage is a major consideration of where they visit (Eliot cited in Baroness Andrews. *et al.*, 2020). Cowell, Director General of Historic Houses, stated (2020) that there are approximately 26 million visits to historic houses, with 48% of inbound tourists visiting historic houses and castles (Baroness Andrews. *et al.*, 2020). Where museums and heritage sites once relied on funding to preserve objects and provide historical and educational references to social customs, funding resources have since reduced, forcing them to become more commercial in their outlook and needing to charge higher fees (Markwell, Bennett & Ravenscroft, 1997; Kotler & Kotler, 1998:p.348; Falk, 2009a:p.244). Therefore, visitors are now an important commodity for their existence, or in the case of heritage sites, their upkeep (Morgan, 1996:p.19). Visitor expectations may also be raised with the amount they are required to pay, whether on entry or via membership, often researching reviews to judge what they may experience against what they are required to pay for their day out. For example, most of the low rated Trip Advisor reviews for the Kensington Palace case study interpretation mentioned the amount they had to pay was too expensive for what they experienced. In this instance, visitors' perceived value helped in forming a negative experience (Falk & Dierking, 2000:p.75).

As a consequence, it is important for heritage sites to understand visitors' perception of value to their visit, the quality of services and facilities provided, the breadth of the offer i.e. activities, events and differing forms of interpretation for engaging all members of the visiting group or individual (Black, 2005; Falk, 2009a). It is also important for heritage sites to market their offer as a distinctive, possibly unique, place to visit to compete with other nearby venues (Morgan, 1996:p.16; Kotler & Kotler, 2000a:p.282; Falk, 2009a:p.244). With well known 'brands' such as the National Trust and English Heritage, visitors become familiar with the type and quality of facilities that will be available; there is a formula for each of the organisation's properties, both physically and online. As a member of one of these organisations, visitors are sent offers and discounts through the year, to encourage repeat visits or to 'experience' a different property. A magazine

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[72] There are different types of heritage referred to as either 'cultural', 'natural' or 'built' (Poria, Butler & Airey, 2003). Museums are generally cultural, parks natural and architectural buildings as 'built'.

provides articles on renovation work being done, and/or new interpretations available at properties across the country, with possibly an inset pamphlet on local heritage properties. Marketing and the ability to do so, therefore, is an added, and vital, ingredient to the many roles and departments within a heritage organisation, or independent heritage sites such as Beaulieu.

Thirty to forty years ago, museum and heritage sites would have relied on government, local council or Tourist Centre staff for promoting and marketing the exhibitions and events (Markwell, Bennett & Ravenscroft, 1997; Howard, 2003; Falk, 2009a). Larger museums and heritage site organisations now include marketing and advertising departments (Kotler & Kotler, 2000a:p.286), although the smaller museums and heritage sites are still managing with one or two members of staff covering many roles with help from volunteers, such as King John's House in Romsey, Hampshire. It is much more difficult for the smaller properties/museums to capture prospective visitors, partly because of the lack of skilled staff, (Markwell, Bennett & Ravenscroft, 1997:p.96) but also because of the cost of marketing and advertising (similar to most small businesses). Web and social media platforms enable the ability to market to a wider audience, creating a level 'playing field' across varying sizes of museum and heritage sites, although the different sites and organisations still need to expand their skillset and/or staff to make the most of the new opportunities social media provides.

The advent of social media has also provided the ability to directly connect with visitors (Ciolfi, 2012b:p.73; Giaccardi, 2012a). Visitors can engage with the heritage site via Facebook, Instagram, Twitter, Flickr, YouTube and/or similar social media channels. Visitors are able to post reviews on social websites such as Trip Advisor after their visit. Measuring visitors' experiences by using Trip Advisor reviews, enables heritage sites/organisations to see areas visitors are satisfied with or those which could be improved. Traditional visitor surveys either completed at the end of a visit or post visit have been designed to capture information from which the heritage site can glean statistical data such as: demographic breakdown, analyses of behaviour, and attitudes that can be compared across different groups (Black, 2005; Falk, 2009a; Hashim, 2013; ALVA, 2013). Qualitative feedback can also be gleaned via comments about tangible resources/facilities and intangible aspects (Black, 2005; Falk, 2009a; Goodacre, 2013) such as the welcome received from visitor services staff, warmth and friendliness of the gardeners, or their overall enjoyment (see Fig.77).

Figure 77: National Trust Survey for Lacock Abbey Question 1, Section 2 of 6 Sections (National Trust, 2015b)

Motivation or reasons for visit are requested as part of the National Trust's online survey indicating this is important data in understanding why the visit has taken place. The National Trust specified the following to choose from, requesting selection of all that apply for the main reason(s) for their visit:

- 'To see/experience something or somewhere new
- To learning more about the place and its stories
- To develop an interest (e.g. gardening, pottery, etc.)
- To enjoy the beauty of the place
- To discover or explore the nature or wildlife
- To enjoy peace and tranquillity
- To spend time with friends and family
- To go for a walk
- To enjoy a seasonal event/exhibition (Bluebells, Easter Egg Hunt)
- To eat/drink and/or shop
- To make the best use of my/our membership
- None of the above'   (National Trust, 2015b)

The 2015 National Trust visitor experience survey was thirty-five web pages long with a few of the questions covering two pages, adding to this amount. Some of the pages were simply messages

stating what the next section covered. The questions above formed part of web page 6, question 3 of section 1; in section 3, question 1 (web page 18) asked a similar question with a similar range of responses to choose from:

'Please answer from the following list, which is the most important to you when looking for a day out?
Tick one answer only
- A relaxing social day out with friends and family
- To see major attractions in the area
- To learn something new or to pursue an interest
- To experience fascinating, beautiful or awe-inspiring places
- Food for the soul
- To get an adrenalin buzz'   (National Trust, 2015b)

The web page consists of four questions, the first three are multiple choice i.e. directed questions with the fourth as an agree/disagree category which did not offer comment fields to be able to rationalise why the visitor agreed or disagreed:

'Do you agree or disagree with these statements?   Agree   Disagree
- I would rather go shopping than visit a stately home or the countryside
- The arts are important to me
- What leisure time I have, I prioritise seeking out new experiences
- Children find museums boring'   (National Trust, 2015b)

This set of questions would be difficult to answer, as the answer would not have been a clear decision between agree/disagree. It would depend on why the visitor was visiting and who with (Falk, 2016:p.368). It was also difficult to understand what importance the answers provided would have for the National Trust in understanding visitors' intention to visit. Adding a comment field would have allowed visitors to enter additional points and/or explain why they agreed or disagreed. The survey took twenty plus minutes to complete, which was more time than a visitor might want to spend without reward. Experiences of completing online surveys when they are short, perhaps five questions long, enable people to 'quickly' provide feedback, but when starting a survey, it is often not stated how many questions or how long it might take. What may have started with good intentions of providing feedback because the visitor had such a great (or not) experience, could leave the visitor feeling trapped in continuing and taking a longer amount of time than they had allowed, or cancelling out of the survey.

Completing a paper survey with a visitor services member of staff at the end of a visit may also be an imposition on time, resulting in short, blunt responses or a lack of responses. The point to this reflection on how visitors may feel in providing answers to end of visit and online surveys is to highlight how differently they may be completed because of time constraints, annoyance or other factors. Information gathered thus may not, therefore, be a true representation of their visit, which in turn, provides unreliable information for the heritage site, except perhaps for the demographic statistical information (Veverka, 1994; Black, 2005; Hashim, 2013:p.20).

The negative response to feedback and requests for feedback may be from a small percentage of visitors compared to visitors that like to engage with the heritage site and provide feedback that aims to improve future visits. Completing a survey enables them to have a 'voice', to talk about their visit and what they found to be positives, and negatives, in creating memories of their day. Capturing visitors' experiences, especially at the end of a visit from the heritage site's perspective can be extremely valuable. Visitors may be feeling content, happy and very willing to relay their experience whilst freshly remembered. Talking with a Front of House/Visitor Services Manager who may have stopped them to enquire about their visit, may draw out specific information about their experiences during the day. It is also an excellent opportunity for visitors to feel valued by the individual attention and concern about their visit. Their feedback and responses are valuable in that they can be used in conjunction with other feedback methods to provide focused improvements at the heritage site.

The Lego user experience map of an executive's journey to Lego, New York in Fig. 78, (Mears, 2013) demonstrates how at each point in the traveller's journey, before, during and after, his experience is denoted with a happy or unhappy face (positive or negative experiences). The diagram helps in understanding different touch points where the travel company can affect a difference to ensure a smiley face, therefore a satisfied customer or consumer (Mears, 2013). It could also be a good exercise for measuring a visitor's experience i.e. the amount of happy/unhappy faces at the different points of a visit.
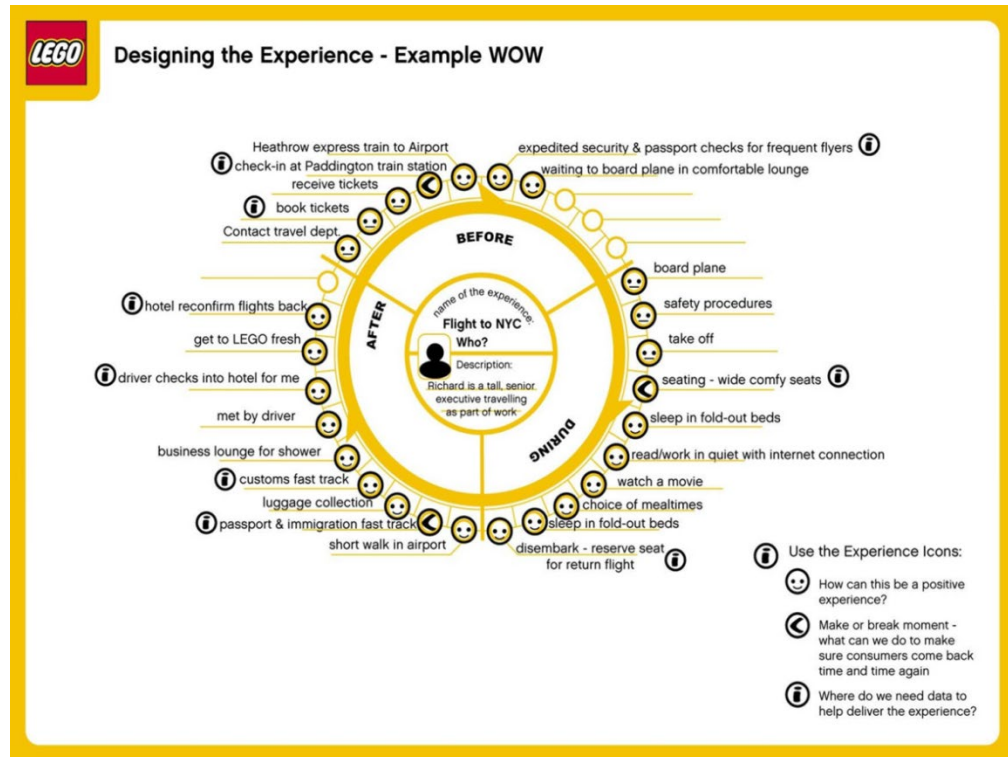
Black (2005) describes a similar process which uses a range of evaluations including one named the 'Customer Journey' which product designers would also be familiar with. The process Black has termed 'Service Blueprinting', is a process that checks/analyses quality in the '*sequence of service elements experienced by a range of clients*' (Black, 2005:p.106). There are similarities of consideration when designing products and designing heritage interpretation to provide engaging experiences. The user becomes the visitor and how you design for them to engage with your product or heritage site for a successful experience should consider the following planning rules (Overbeeke *et al.*, 2003:p.11) which I have adapted (shown in non-italics, Fig.79) when planning for heritage site interpretation:

1. *Don't think products* [**tours/interpretation panels/activities**], *think experiences: A design should offer the user* [**visitor**] *the freedom for building his or her experiences.*

2. *Don't think beauty in appearance, think beauty in interaction. The emphasis should shift from a beautiful appearance to beautiful interaction, of which beautiful appearance is a part.*

3. *Don't think ease of use* [**visit/flow/interaction with exhibits**], *think enjoyment of the experience. Bringing together 'contexts for experience' and 'aesthetics of interaction' means that we do not strive for making a function as easy to access as possible, but for making the unlocking of the functionality contribute to the overall experience.*

4. *Don't think buttons, think rich actions. The goal is not differentiation for differentiation's sake, but the design of actions, which are in accordance with the purpose of a control.*

5. *Don't think labels, think expressiveness and identity. Designers should differentiate between controls* [**interpretation panels in different rooms/artefacts/tours**] *to make them look, sound and feel different. More importantly though, this differentiation should not be arbitrary. The 'formgiving' should express what purpose a product or control* [**artefact/exhibit/tours**] *serves.*

6. *Metaphor sucks. The usefulness of metaphor is overrated. The challenge here is to avoid the temptation of relying on metaphor and to create products* [**tours/interpretation panels/activities**], *which have an identity of their own.*

7. *Don't hide, don't represent. Show. It is the designer's task to make physical hold-ons visible and make optimal use of them in the interaction process* [**touch, hold, 'feel' exhibits**].

8. *Don't think affordances, think irresistibles. People are not invited to act only because a design fits their physical measurements* [**visitor type i.e. age, educational level, expectations**]. *They can also be attracted to act, even irresistibly so, through the expectation of beauty of interaction.*

9. *Hit me, touch me, and I know how you feel. If we design products, which invite rich actions, we can get an idea about the user's* [**visitor's**] *emotions by looking at these actions*

10. *Don't think thinking, just do doing. Handling physical objects and manipulating materials can allow one to be creative in ways that flow diagrams* [**interpretation panels, participatory activities and or tours/re-enactments**] *cannot. In the design of the physical, knowledge cannot replace skills. You can think and talk all you want, but in the end, the creation of contexts for experience, the enjoyment and the expressiveness require hands-on skills.*

Figure 79: Overbeake's Planning Rules Adapted for HSI design (Overbeeke et al., 2003:pp.11–13)

Sengers (2003) also suggests that to create engaging experiences designers should '*think of meaning, not information*' and '*instead of representing complexity, trigger it in the mind of the user*' (Sengers, 2003:p.27). Cited in Roberts (2014), '*Stoinksi, Allen, Bloomsmith, Fortman and Maple (2002) argue, 'in the end, no matter how skilful the exhibition makers, no matter how calculated or inspired their choices, the ultimate act of meaning making is idiosyncratic and*

belongs to the viewer' (Roberts, 2014:p.194), i.e. that visitors are individuals with a range of backgrounds, cultures and personal ways of viewing, doing and interpreting information.

Laws (1998) speaks of visitor satisfaction diaries for gaining information about visitors' experiences from their perspective, rather than that of the organisation via a '*modified service blueprint approach*' at Leeds Castle. In his article, he cites Walle (1997) who discussed the need facing tourism researchers to *'utilize diverse forms of evidence and information when the feelings of people are being studied' (p. 525),* noting that *'In order to deal with such phenomena, scholars and practitioners often employ intuitive and subjective evidence which is emic, not etic, in nature.'* (Walle cited in Laws, 1998:p.534). The visitor satisfaction diaries allowed visitors to provide an excellent insight to their experiences of Leeds Castle. The combined results of two diaries (see Fig.80) formed the basis of a semi-structured interview with Leeds Castle's Enterprises' Managing Director, in which he was also asked to provide rationales for each item (see Fig.78). The visitor diary comments highlight thoughts about the different aspects of a visit affecting their satisfaction, and therefore ultimately their experience. It is interesting to note how positive aspects became negatives because of having to wait too long, or too many people either in the way or making too much noise. Even though they said they enjoyed the visit, this became a negative because London was not signposted on exiting the Castle grounds (Laws, 1998:p.550). The negatives include aspects that may not be possible to change or improve, as demonstrated in Fig.81 with the Managing Director's responses. It is clear the heritage site has tried to facilitate a good ratio of staff to visitors and ensure there is a directed flow with guide books available to buy on entry (Laws, 1998:p.551), yet too many people visiting resulted in lost opportunities to speak to the guides creating a negative experience. When reviewing the comments with the National Trust survey questions, and similar other surveys, the factors that affect visitors' experiences seen here, are not those generally asked about in the surveys. Surveys, therefore, are perhaps the best way to gain statistical demographic break-down data, comparative data and feedback about organisational facilities and resources, but are they sufficient in being able to elicit information about visitors' experiences, particularly from the visitors' perspective? (Black, 2005:p.113; Falk, 2016:p.359).

	Account of experience	Effect on satisfaction
1	After parking, we walk towards the entrance to the Castle grounds, but a barrier across the roadway, and buildings to each side confuse us	−
2	We queue behind a school group for tickets, after a while a steward indicates another ticket counter for individuals	−
3	We wish to buy a film, the shop is crowded	−
4	The group of youngsters is now blocking the main entrance, and we feel concerned that we may be in for a noisy visit	−
5	The group waits for all members to pass the entrance, so we walk ahead quickly	+
6	The Castle comes into view across the lawn. The sun is shining and we are again glad that we decided to visit	+
7	As we get nearer, a dark cloud obscures the sun. We begin to wonder if we should go back to the car for our coats, but decide not to	−
8	The stonemason's plaque in the Barbican catches our attention, and we look more closely at the old walls	+
9	I want to take a photo of the castle framed by the archway, and have to wait while a long stream of people are walking through it	−
10	As we walk towards the Castle, two stewards jovially direct us away from what seems to be the main entrance	−
11	At first we feel disappointed, but rounding the corner we see to our delight the Gloriette rising from the lake. I cannot get far enough back to photograph it, having only brought a fixed focal length lens	+
12	A small group of people have congregated around a small doorway, wondering if that is the right way in to the Castle	−
13	We all enter, and would like to know more about the cellars and barrels, and why an old stairway was walled off	−
14	Everyone is delighted with the heraldry room. A couple are talking animatedly to one of the staff, asking about the Field of the Cloth of Gold. Another couple is asking about the hangings to be seen in the Queens bedroom	+
15	There are few visitors here, and we walk through the corridors and the first exhibits at our own pace	+
16	We catch up with a party of about a dozen people including some young children. They are noisy, and move very slowly	−
17	We enjoy viewing the living accommodation, but can't ask questions as the guide is occupied in talking in detail to other visitors	−
18	After leaving the Castle, we stroll to the restaurant and shops. There is a school group in the courtyard and the area is quite noisy	−
19	We are pleased with the visit, but concerned that London is not signposted at the first roundabout after we leave	−

Figure 80: Satisfaction Diary of a visit to Leeds Castle (Laws, 1998:p.550)

1. The approach to the Castle (points 2, 4, 6, 7, 11, in the visit diary, Table 2).
The Castle was opened to paying visitors in 1974, when Leeds Castle Foundation was established. At the outset, it was decided that views of the Castle and its lake, set in spacious lawns, were to be sacrosanct. From this, it followed that the car parks and most visitor amenities were located a considerable distance from the Castle. A notice is printed on entrance tickets, and the walk is well signposted, special transport is provided in the grounds for the elderly, or disabled. A duckery and attractive gardens were constructed to soften and enliven the walk, with strategically located benches. However, the use of wheelchairs inside the Castle itself is limited to three at any one time because of the many narrow staircases.

2. Signing (points 1, 2, 10, 12, 19 in the visit diary, Table 2).
Signs in the grounds are kept to a minimum and are presented in a consistent style, using red or grey lettering on a cream background. However, as people often fail to read the information provided, there is a need for staff to be available to talk to visitors. At Leeds Castle, the ideal is for visitors to see a member of staff at every turning point. All staff are encouraged to interact with visitors, but for some gardeners, this may be less easy. They are primarily employed for their trade skills, although some enjoy talking about their skills with visitors, who are often very interested in the carefully designed and tended gardens which are also home to the national collections of catmint and bergamot.
Leeds Castle has a higher staff to visitor ratio than most historic attractions, all contract staff are paid on one rate, £3.65 per hour in 1997, the rate is reviewed annually in September. There are about 200 part-time and casual staff, each working 2–3 days per week. A potential problem at the time this study was undertaken was the proposed introduction of a higher minimum wage, by the European Union. It was anticipated that this could result in higher entry charges.

3. Interpretation of Leeds Castle (points 8, 13, 14, 17 in the visit diary, Table 2).
There is very little signage within the Castle, as it is a policy that signs would intrude on the visitors' enjoyment of the building and its contents, giving visitors more the impression of a museum than a lived in house. During normal visiting hours, staff are stationed in each main room or area of the Castle and are expected to be proactive, responding to visitors' interests rather than reciting factual information by rote. This system enables people to move through the various parts of the Castle at a pace dictated by their own interests; some spend more time in the displays of the Heraldry room, others are more attracted by other areas such as the furnishings of the drawing room or the Thorpe Hall room. The Castle is regularly opened early for pre-booked coach parties and for special interest groups, and in these cases visitors are guided through the Castle by staff using their more specialized knowledge, and if required, in a foreign language.
The Leeds Castle guide book is now available in nine languages, as 50% of visitors are from overseas. One in seven visitors purchase a copy on entry at the ticket boxes, the large print run mean that it is profitable at £2.50 per copy: although £250000 is tied up in three years' stock. The guide book is particularly useful when visiting the grounds where there are fewer staff, but also helps expand visitor enjoyment and understanding within the Castle.

4. Flow of visitors through the Castle (points 2, 9, 10, 11, 15, 16 in the visit diary, Table 2).
The structure of old buildings such as Leeds Castle is not ideal for large numbers of visitors, and it was essential that they all followed one route through the building. From the first day of opening the Castle to the public, it was decided that visitors would enter through the Norman cellars, thus gaining pleasure from the unique exterior view of the Gloriette (an ornate tower rising from a small island in the lake and connected to the main Castle by a corridor in a high stone arch). The visit then proceeds in chronological order through the Castle. Visitors have no choice but to follow the prescribed route through the Castle: unobtrusive rope barriers are placed to guide them.

Figure 81: Visitor Satisfaction Management Response (Laws, 1998:p.551)

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The relatively recent ability to provide reviews and feedback via Trip Advisor, Facebook and other social websites and media channels (Kempiak *et al.*, 2017:p.381) allows visitors to reflect on their visit experience in their own time i.e. when they are ready to (Giaccardi, 2012a:p.3). The time to reflect on their experience and talk about their day with family, friends, work colleagues may remind them of elements of their visit they had overlooked, or had not realised its effect until speaking about it with others (Falk & Dierking, 2000; Kirchberg & Tröndle, 2012:p.438). If they felt strongly about their experience, they may post feedback or a review, but it would be more considered, and volitional, rather than being directed to do so, under possible time constraints (Falk, 2009a). Would more 'considered' sharing of their experiences via reviews and feedback be more valuable as tools for measuring visitors' experiences than surveys? Are reviews and feedback trustworthy, creditable or useful? Would these concerns also apply to online surveys? The table by Malhotra, Nunan and Birks (2017) presented in Fig.82 suggests that providing a platform where 'Participants can express themselves in ways that they are comfortable with' (Malhotra, Nunan & Birks, 2017), is a strength in the use of social media for marketing research. Immediacy is also seen as a strength of social media feedback and reviews, supporting comments above with regards to visitors' possible time constraints at the end of their visit.

Table 17.1	The Relative Strengths and challenges of traditional marketing research and social media research methods	
	Strengths	**Challenges**
Traditional marketing research	Robust theoretical underpinnings to sampling, research methods and data analyses	Gaining access to participants – declining response rates
	Robust development of ethical codes of practice, especially in protecting participant anonymity	Complaints of boring research experiences
	Breadth of quantitative and qualitative research methods to measure and understand participants	Debates over the quality of samples used in survey work, particularly when access panels are used
	Focus upon specific existing or potential consumers to capture behavior, attitudes, emotions, aspirations and sensory experiences	The costs and time taken to conduct high-quality research relative to other forms of data that may support decision makers
Social media research	Can research target participants who would otherwise be very difficult to reach	Newly developed methods with little theoretical underpinning
	Engaging experiences; technology and context suited to participants	Representatives – can count incidences of behavior, but research tends to be qualitative
	Participants can express themselves in ways that they are comfortable with	Ethical challenges in maintaining participant anonymity
	Speed of capturing a great amount of disparate data	Inability to target specific types of participants and/or specific issues

Figure 82: The relative strengths and challenges of traditional marketing research and social media research methods
(Malhotra, Nunan & Birks, 2017:p.495)

The table helps to explain there is no one method that will provide a 'correct' measurement or understanding of visitors; it is about using complimentary methods to gain the best insight.

There is considerable recent research about user-generated content (UGC) for tourism and travel, and the phenomenon of growth in consumer-to-consumer information search platforms such as Trip Advisor (Kotler, Bowen & Makens, 2010; Kang & Schuett, 2013; Li *et al.*, 2013; Hernández-Méndez, Muñoz-Leiva & Sánchez-Fernández, 2015). Why people leave reviews, rate reviews and feedback is not the main focus of this thesis, yet to understand the creditability and trustworthiness of the reviews, the 'why' is important. According to Kang (2013), by 2012 Trip Advisor posts had increased by 97.33% from 2005 to 75 million (Kang & Schuett, 2013:p.94) creating a strong, growing, social community of 'reviewers'. In becoming a Trip Advisor reviewer, that person would join an active community where their opinion (posts) may be valued by others to form a decision (Kang & Schuett, 2013:p.97). Because reviews are mostly written for the benefit of others i.e. potential visitors/travellers, it is normally expected or assumed that the reviewee is being honest about their experience(s). How would a reviewer know this is the case? There is much research about social influence theory that cannot be covered here (Liu, 2010; Giaccardi, 2012a; Tham, Croy & Mair, 2013; Kang & Schuett, 2013; Susarla, Oh & Tan, 2016; Malhotra, Nunan & Birks, 2017), which helps to identify how people's behaviour changes from social interaction with others, but to briefly answer this question, it is about an individual's need or desire to express opinion, provide benefit from personal experience and knowledge, and to be part of a participatory culture (Giaccardi, 2012a:p.3). For this to be accepted, and trusted by others, the reviewer would need to ensure the reviewees posted 'honest' opinions over a period of time, receiving 'likes' or comments that supported their opinion. Reviewers would read their post, and then track what other people may have said; they may also review the reviewee's 'status' i.e. how many times they may have posted and whether these are also supported by others. In checking people's reviews, their status or rating, how many times they posted and whether they always posted positively or negatively, will build trust in that reviewee. Posts that are always positive/negative could persuade looking elsewhere or to other reviewees; logic being that not every visit/trip can be free of negatives or positives.

There is then the consideration of the type of person that posts content and those who like completing surveys or being interviewed. There are certain types of people that enjoy taking part in different communities, volunteering, contributing and making a difference (Kang & Schuett, 2013:p.95). Being part of an online community and therefore contributing their opinions,

knowledge and experience via social media broadens their reach to a wider set of communities, physical and virtual (Kang & Schuett, 2013:p.98). Others may enjoy the gamification element of how many likes they might receive for the posts they provide; the acknowledgement that they have said something that others also agree with or like, may not mean as much as the amount of 'pings' or likes they receive. There are also those that like to categorise what their interests are as travellers or visitors. Trip Advisor makes this straightforward with their different 'tags'. By choosing tags, they 'advertise' their interests or what they would like to be considered by way of specialism(s) for those that may read their reviews. From the heritage site's perspectives, the tags could be valuable in discovering demographic data about their visitors and, therefore, able to compare with other forms of visitor research methods. Bearing the above in mind, and the growth in communities sharing their experiences, it would be reasonable to assume user-generated content, in the forms of reviews and social media feedback, is generally trustworthy information. How creditworthy will still depend on the reviewers' opinion of the reviewee.

To ensure the reviews are positive, HSI planners and designers have an unenviable task of trying to please people all of the time for positive experiences to be formed. Ways in which this might be achieved in part have been discussed in sections 2.1.1 and 2.1.2. In addition, audience advocacy enables museums and heritage sites to facilitate understanding of visitors' needs, wants and expectations at each stage of the planning and design/development process, (Burch, 2013; Hashim, 2013) not just interpretation per se, but resources, rest areas and activities. An audience advocate may be assigned to individual teams or projects as an independent advisor, strategist, communicator between stakeholders and project teams, assessor and/or trainer. Pine & Gilmore (1999) would possibly rephrase the term 'audience advocates' as 'collaborative customizers' in a retail environment. They describe collaborative customizing as '*a process by which a company interacts directly with customers to determine what they need and then produces it for them'* (Pine II & Gilmore, 1999:p.87). A 'collaborative customizer' would, therefore, need to have negotiating/sales skills, knowledge of the product, what level of customisation it may have, good listening and communication skills, an understanding of the consumer's needs and wants (empathy), and be able to customise the product/offer until it reaches a level of satisfaction for the consumer. In this sense, Audience Advocates are collaborators between the company/organisation and the consumers/visitors. Training provided by Advocates may be to simply remind the team members what it is to be a visitor; being immersed in a heritage site i.e. seeing it daily, it may be difficult to view with fresh eyes and experience what different visitors of

different ages may experience for the first time (Burch, 2013; Hashim, 2013). Visitor guides can form another type of audience/visitor advocate, providing qualitative data (verbal feedback from conversations with visitors) which may help to validate other forms of visitor research data in developing existing and new interpretations at a heritage site.

Ciolfi (2012b) describes using active participation and collaboration with a range of different stakeholders, including visitors, at four quite different sites[73] '*different voices surrounding heritage [could] be heard: curators, visitors, volunteers, but also other stakeholders and wider communities of interest*' (Ciolfi, 2012b:p.83). She explains it was important to highlight the spontaneous connections formed between guides and visitors which may not occur with more formal members of staff such as management, and how inspirational the guides were in the concept and design process (Ciolfi, 2012b:p.79), supporting the idea of including visitors within a design process i.e. visitor centred design. Each project comprised '*complex social relationships*' and were 'i*nfluenced by different objectives, goals and constraints*' (Ciolfi, 2012b:p.78) demonstrating how by being inclusive, listening and understanding, collaboration, co-ordination and negotiation, the projects were successful.

This section has reviewed literature on how heritage sites' visitors' experiences are traditionally measured and whether visitors' voluntary feedback via social media channels and reviews is growing to be more relevant than surveys when planning new interpretations. Although heritage organisations, tourism and academics generally make use of surveys to collect data about visitors' experiences at heritage sites, the information required has mostly been to fulfil statistical evidence for organisational and funding stakeholders when it could also be used to understand the visitors' views of the interpretations' part in their heritage site experience. Comment cards, visitor books and word of mouth (visitor services and volunteers/guides) enable visitors to leave feedback whilst visiting, and help considerably in gaining insights to their visit experience, providing insights that surveys cannot (Schwager & Meyer, 2007:p.11). The development of social media channels and platforms has enabled visitors to provide feedback as and when they wish, and say what they wish without direction from the organisation involved, during their visit or post visit. Feedback from the latter is generally more considered, reflected upon and from the visitors' perspective and not the

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[73] Interaction Design Centre, Limerick case studies ranging from 2001 to 2010 involved four different sites: The Hunt Museum, Limerick, Shannon International Airport, Co. Clare, The Milk Market, Limerick City and Bunratty Folk Park, Co. Clare. (Ciolfi, 2012b)

organisation's, providing a valuable insight to what has provided them with a successful (or not) visitor experience.

Whether reviews can be trusted was explored in research from Travel and Tourism journals, and Electronic Commerce journals which highlighted the importance of online communities and social influence theories. Further research would be necessary to fully understand the psychology and behavioural aspects of online communities, specifically with regards to credibility and trust, but for this thesis, the suggestion is reviews provided by visitors can be considered as reliable as the information provided through online surveys. With a growing participatory culture, reviews on social websites such as Trip Advisor and the plethora of social media channels will become more important as a valuable insight to visitor and consumer experiences.

Consideration of how visitors are represented throughout the planning process has also been explored through the use of audience advocates, visitor services, guides and volunteers. Although audience advocates are fundamental in some of the larger museums, they are not often available as a resource for smaller museums and heritage sites. The inclusion and involvement of the local community and volunteers would be a good consideration for the smaller heritage sites, and generally this occurs (Claisse, 2018). It is the larger organisations and sites that have distinct roles and departments where this does not seem to occur as frequently.

Heritage site interpretation experiences still appear to be generally viewed from an organisational perspective, rather than the visitors' perspective. For example, a commercial perspective, as opposed to a 'day-out/leisure/family-time/memory-making/meaning-making' experience from the visitors' perspective. The most successful experiences seem to be when there is collaboration and involvement of all parties involved, including stakeholders, volunteers, visitors and communities, throughout the process.

The critical review and analysis of literature documenting extant theories and design processes undertaken in section 2.3, has confirmed there is a need for development of a new model for designing heritage site interpretation. The development of the model needs to ensure clarity of the teams i.e. who should be included, their roles, experiences, skills and tasks, constancy of team members, and the importance of collaboration and communication across the team. This section's three sub sections individually highlight collaboration and inclusion as major components of a successful heritage site interpretation design team. The new model that has been developed from this thesis, and practice, is presented in section 4.2 and explains the distinctive roles, processes and interactions required for crafting engaging heritage site interpretation experiences for visitors, developed further from Chapter 3's analysis of primary data.

Many of the issues raised pointed to a need to understand visitors, their motivation for visit, who they are and why some visit and others do not. Surveys produce statistical demographic data but not a complete insight to visitors' experiences. Designers generally fulfil briefs, whether provided by the heritage organisation or sub contracted. Their measure of success and the heritage organisation's view would appear to be how well they fulfilled the brief, not necessarily how well the visitors engaged with the outcome, or the impact made on their visit experience.

This has begun to change. There are many museums and heritage sites that are much more 'visitor-centred' and participatory, with interpretations designed to engage a wider range of visitors for longer with more comfortable facilities to enable them to relax and enjoy their day out (Black, 2005:p.190; Simon, 2010) helping to provide a fulfilling visitor experience. Museums, in particular, are providing participative projects encouraging visitors to create content collaboratively with the museum, becoming a platform provider rather than a content provider as shown in Simon's (2010) illustration (Fig.83).

TRADITIONAL INSTITUTION   PARTICIPATORY INSTITUTION

Authority is content provider   Authority is platform provider
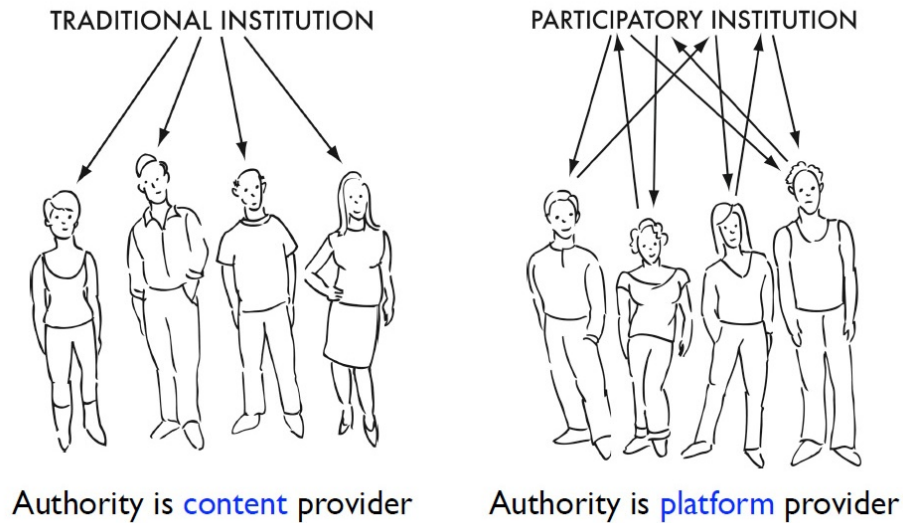
Figure 83: The Participatory Museum (Simon, 2010 cited in Weaver, 2010)

There is also considerable interest and growth in UX design within the design industries, of which UCD is a key component. The design focus on the user's experience echoes that of the visitor centred experience focus by museums, heritage organisations, and the marketing industry for the consumer's experience, (and now Universities with their students).

There has been, and still is, a growing amount of research in how to design and provide users/visitors/consumers with engaging experiences, but as stated by Hassenzahl (2003):

> 'There is no guarantee that users will actually perceive and appreciate the product the way designers wanted it to be perceived and appreciated' (Hassenzahl, 2003:p.33).

This can be taken further by applying to curators, professional services, educators, craftspeople, stakeholders, i.e. the team involved in planning and producing heritage interpretation[74]. If it is not possible to guarantee how visitors will perceive, receive and appreciate the interpretation (including all elements on offer at the heritage site), how is it possible to measure their impact, i.e. how they are received by visitors? (Falk, 2009a:p.248) Attempting to engage with all visitors is most probably impossible (Pine II & Gilmore, 1999:p.12; Kotler & Kotler, 2000b:p.287).

In an attempt to gain an understanding of visitors' views, perceptions and opinions, research has shown a mix of comment cards, user satisfaction evaluations, reviews and feedback via social

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[74] I would also add all professions from architecture to web/app/game design; any service where there are users, consumers and visitors.

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media channels which would seem to be preferable tools from a visitor's perspective to share/ provide information about their experience(s). These are items, along with observations (including Laws' (1998) visitor satisfaction diaries and user satisfaction evaluations (Black, 2005) and discussions held with guides or visitor services staff, which are not easy to measure if needing to provide statistical data for stakeholders/funders. They are, though, a rich insight to the variables that may form good and bad visitors' experiences. There are a variety of methods and resources available to build an understanding or insight to different demographics and personalities for heritage organisations. The broad range available does not appear to be used widely, yet. Having an understanding of the many differences people present in their needs and wants, provided via volitional personal feedback data, would help considerably in designing 'satisfying' and therefore successful experiences. Yet, as Hassenzahl's quote above, will what has been designed be appreciated in the way it was intended?

Section 2.3 has shown what may also be needed is a knowledgeable, dedicated, consistent, collaborative, cross-disciplined team, experienced in working and communicating with other professionals and non-professionals who have a range of skills, backgrounds and reasons for being involved. As a team member, it would be fundamentally important they view their team role as a priority, i.e. attend each meeting and respond promptly to communication. A practical knowledge and use of a UX/UCD process would appear to be relevant for designing HSI, placing visitors at the core of all considerations. Involving visitors (and their experiences) or visitor advocates (i.e. guides) through the design and planning of interpretation at heritage sites may help in ensuring the style and level of interpretation is relevant to the typical visitor base and the extended base the heritage sites aim to reach.
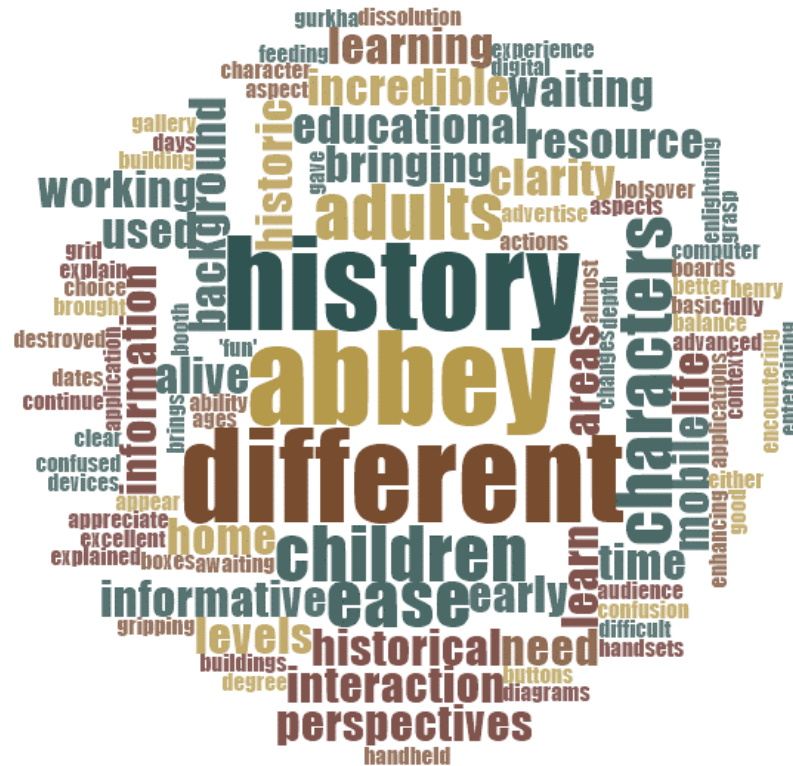
Knowledge is invariably a matter of degree:
you cannot put your finger upon
even the simplest datum
and say this we know.
(T.S.Eliot 1989)

3.1. EVALUATION AND DISCUSSION

This chapter provides an analysis and evaluation of my practice, the launch event and post launch fieldwork and feedback. Thematic analysis of the fieldwork and data collated was via Interpretative Phenomenological Analysis using NVivo as my choice of tool to help organise, structure and manage the coding of the body of material collated. The results shaped further development of the emerging new model for collaborative HSI design.

In this first section (3.1) there are three sub sections which discuss the evaluation of my practice in crafting the Beaulieu Abbey kiosk interpretation, the launch event and post launch feedback. Initial assumptions of practice and process have been clarified, comparing my practice working with Beaulieu to other HSI designers and interpretation professionals working with larger heritage

organisations. The interviews with the Beaulieu team highlighted several positive working practices that have been incorporated into a new HSI design process.

The section also discusses a lack of visitors involved as a core part of the planning and interpretation design process evidenced by the analysis of existing theory and practice in Chapter 2. The case studies' research results highlighted that the use of a UCD approach did not occur frequently in the interpretation design process used by design agencies/companies. Considering the importance in understanding visitors and their experiences for shaping heritage interpretation, the chapter proposes a new model. The new model includes three teams: the curatorial team, the design team and a visitors' team, and is explained in more detail in Chapter 4, section 4.2.

3.1.1.1. <u>PRACTICE: CRAFTING & IMPLEMENTING THE INTERPRETATION (CYCLE 1</u>)

This section evaluates the results of the analysis regarding the design process for the Beaulieu kiosk interpretation and the organisational processes used at Beaulieu. The data set analysed for this section is primarily that of the interviews with the four core members of the Beaulieu Team:

Participant	Interview Date	Role
Beaulieu Team		
Mary Montague Scott	Friday 1st March 2013	Owner/Director, Designer & Curator, Beaulieu Enterprises
Stephen Munn	Thursday 18th July 2013	Commercial Director, Beaulieu Enterprises
Susan Tomkins	Wednesday 10th July 2013	Archivist & Learning Interpretation Adviser/Curator, Beaulieu Enterprises
Jon Tee	Wednesday 3rd July 2013	Visitor Services Manager, Beaulieu Enterprises
Designers		
Rebecca Furse	Friday 6th Sept 2013	Design Assistant for Beaulieu Application & Senior Designer, RKA Architects
Russell Richards	Wednesday 3rd July 2013	Senior Lecturer & Designer, Southampton Solent University
Katya O'Grady	Tuesday 8th Oct 2013	Fine Artist/Designer
Alex Hoare	Thursday 18th July 2013	Glass Designer for Museum Installations
Launch Guests		
Very Rev'd James Atwell	Wednesday 13th Nov 2013	Dean of Winchester Cathedral
Rupert Thomson	Friday 25th Oct 2013	Publisher & Set Squared Mentor
John Pemberton	Tuesday 1st Oct 2013	Software Consultant & SEEDA Mentor
Dr John Richardson	Wednesday 14th May 2014	Blue Planet Innovation, Senior Lecturer, University of Winchester and iNetProject Manager
Additional Heritage Professionals		
Ruth Taylor	Monday 23rd July 2013	Freelance Learning, interpretation and engagement consultant (formerly at National Trust HQ as Learning & Engagement Manager
Andy Lane	Monday 8th July 2013	Marketing Manager, INTECH (previously Marketing Manager at Beaulieu Enterprises

Figure 84: Interview Participants

Reflection of personal practice developing the Beaulieu Abbey kiosk interpretation, was a primary instigator for embarking on further research regarding design processes for this thesis. Not

involving visitors in the planning process was a concern which led to wanting to know if this was the general scenario in heritage site interpretation design.

Through the interviews with the Beaulieu team, I came to understand that their planning structure for interpretation at the Abbey, Palace House and Bucklers Hard was different from that of the National Motor Museum. A separate independent charitable trust runs the National Motor Museum: 'National Motor Museum Trust', consisting of various stakeholders, Beaulieu management team and family members. The Trust employs a team of professionals and a team within the Museum consisting of researchers and curators. During an interview on 1st March 2013, M. Montagu-Scott, she stated that for a redesign within the National Motor Museum, a professional museum designer would be employed. Interpretation for the Abbey, Palace House and Bucklers' Hard is under a separate remit and therefore team, which consists primarily of Mary Montagu Scott (stakeholder, project manager and designer) and Susan Tomkins (archivist, educationalist and researcher) with an in-house design team. Permissions are still required, from the Beaulieu Management team and different specialist organisations for areas such as scheduled monument consent for landscaping changes, but it is a more flexible team with access to quick decision making.

An aspect that helped considerably in the flexibility and quick decision making is the experience, and knowledge Montagu Scott has of the site. With Beaulieu as her family home, the memories and experiences of growing up at Beaulieu and the changes her father made, combined with her experience as a designer (theatre, set and costume design, interior, exhibition and museum design) has provided the team with a unique insight and practical understanding for designing interpretation at Beaulieu. In the interview held on the 1st March 2013, with M. Montagu-Scott, she stated:

> '*it is unusual here at Beaulieu that I have that privilege really because being able to be able to work right across from the design side and in the sort of archive side and research side'. (M.Montagu-Scott 2013, interview 1st March).*

Although this can also have its problems as highlighted in her following statement:

> '*if someone comes in from outside to a new subject you will draw out of it the strands that are really key. Whereas I will be over burdened by my knowledge, my historical context. So doing anything here, I have a lot of baggage in my mind of how things were*

in the past perhaps, yes, I suppose that's one disadvantage, you don't come at it afresh.'
(M.Montagu-Scott 2013, interview 1st March).

One aspect Montagu Scott mentions is the acknowledgement that by working with an internal team as opposed to bringing in a professional designer, the team is working with possible pre-existing biases in how they may choose and represent information. An external professional may not only view the site with fresh eyes but possibly bring with them their own biases, or filter information in a different way. This is supported by the literature review, particularly in section 2.3.2 Assumptions in the Design of Heritage Interpretation and the area of project briefs where theatre designers, Coney, explain the difference in designing for heritage interpretation, yet brought 'theatre' to the interpretation designed for Kensington Palace. Additionally, the assumptions a broad brief may provide in content and delivery by a contracted design team.

Unusually, the Beaulieu Abbey kiosk interpretation was not steered by a brief coming from Beaulieu, but from a brief presented to Beaulieu, which I developed further in the process of writing a funding application for the project. I say 'unusually' because Montagu Scott usually writes the briefs for the different exhibitions and landscaping changes at Beaulieu as explained in the interview with M. Montagu-Scott:

> *'I've written the architects' brief, researched the architects, so I do that as my stakeholder hat really and I will definitely be writing the brief for the architects and I've written designer briefs…. in the past when we've interviewed ten design companies for the Motor Museum, it was one of the most satisfactory things when we interviewed all these design companies, they all walked in the door and said 'that's one of the best briefs we've ever had.' I smiled at our managing director who was with me and because I'd written this brief and he'd helped me, between us we felt that we really knew what we were after and it helps to refine the process and make it easy for everyone.' (M. Montagu Scott 2013, interview 1st March)*

The project was, therefore, unique, not just in the circumstances of the Beaulieu Team I was working with, but also the relative freedom of creating a brief from the basic premise of a virtual flythrough of the 3D abbey and abbey site. In the review of three case studies, the closest experience regarding freedom provided by a brief was that of Coney with the Kensington Palace (HRP) staff. Having a defined brief is a standard design process (Read & Bohemia, 2011:p.1; Jones & Askland, 2012:p.1; Tjell & Bosch-Sijtsema, 2015:p.3) allowing structure, management of time

and costs, and a measure of what has been completed, when and by whom. This applies to all of the design disciplines, with the completion of the brief often being the only measure of success.

Working closely with Tomkins, it was clear she was extremely knowledgeable about the visitor types the kiosk needed to attract, which helped considerably in mapping out the content for the application. When interviewed on the 18th July 2013, S. Munn also stated:

> *'different people will consume the information in different ways. There are some people who will not go up to a guide, electronic is the perfect medium for them because they can find out what they want, when they want it, without interaction, which they don't seek with real people. There are others who will want the real person there' (S. Munn 2013, interview 18th July).*

One of the most interesting outcomes from each set of interviews was that for the participants it was important to layer information, i.e. a headliner with brief information (one to two sentences), followed by more detail and context in a smaller font (a paragraph or two) and then a link for further information. This form of layering is commonly used in magazines, newspapers and websites, allowing readers to choose how much information they wish to absorb (Harper, 1998). For the Beaulieu Abbey kiosk interpretation, the KubeMatrix navigation device provides a similar form of layering for accessing varying depths of information (see Chapter 1, section 1.3, Fig.24). The device also allows layers for choosing different time slices of the heritage site's architectural history, and for choice and level of content, i.e. accessing material suitable for children, adults or professionals/academics/'history buffs'[75]. A range of varied material at different levels is not possible at the majority of heritage sites, other than through the use of an application or website. During the interview conducted on 1st March 2013, M. Montagu Scott stated:

> *'quite a lot of museums you visit now that have been recently done are quite dumbed down. They've reduced text to the minimum, it's all based on a child's level of thinking and understanding and actually, that's quite unsatisfactory for quite a large percentage of visitors, particularly for something like the abbey or Buckler's Hard because they are quite mature things' (M. Montagu Scott 2013, interview 1st March).*

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[75] History Buffs are on of Trip Advisor's categorisation for its members' self-profiling (Trip Advisor, 2017)

Personal experience and experiences related in the interviews and feedback suggest information/interpretation panels are generally too brief or do not provide relevant information for the different age groups or interests. By using a mobile device application, this issue would have been eased. Unfortunately, as mentioned in section 1.3.1, the mobile devices available in 2008-2010 were not powerful enough to store or play back the rich multimedia Flash content.

As a kiosk interpretation, there was a possibility that a percentage of visitors would dwell too long, or create a blockage, i.e. visitors watching other visitors using the kiosk. Keeping the flow of visitors moving was a concern of the kiosk. During an interview with Munn and Montagu Scott (2013) they commented on the importance of flow, and the value of layers of information which could be accessible before or after a visit:

> *'in an ideal world, there is a mound of information which they can get in layers. I wouldn't want to advocate you stick one page up there, so to speak, it needs to be multi-layered. However, having said that, depending on where it is and what it is about, from an operator's point of view, you don't necessarily want all the information, because someone could stay there for an hour and you've got a whole queue behind you of people who also want to access that, so that gives you operational problems' (S. Munn 2013, interview 18th July)*

> *'you need to layer your information if possible so that you still provide that specialist knowledge in some form, but it's not always easy' (M. Montague Scott 2013, interview 1st March).*

The kiosk interpretation consists of layers in two contexts: level and choice, although the adult and academic levels were not available. The amount of work required to fulfil the three levels of content was too much for the timescale of the funded project. From the comments made by the designers and the launch guests, the additional content would still be valuable to add to the Beaulieu interpretation. Choice in information/content and how it is accessed has proven to be a 'would be good' aspect visitors would like to see in place at heritage sites. When interviewed on 14th May 2014, Launch Guest, John Richardson (commented:

> *'people are saying oh this adds value, this makes my visit better, this makes it more of an experience, more memorable, or I come back in a year's time, and because there's new information on that system I get a different experience, so it's worth coming back. And*

that's kind of a reason of well should we go round the house again? ... if I went back to one of these castles every year and either used my own device or one of their devices I wouldn't just get the audio which costs quite a bit to go round, I'd be going like this with my [mobile] and seeing it in 1942 when the army were in there or in 1710 when it was being knocked down for… And every year there might be a new thing added, so I haven't seen it, I haven't seen this time zone… you know, go back to 1200, and there'd be loads of trees and a few ducks' (J. Richardson 2014, interview 14th May).

Richardson references the ability to choose a time-slice to explore within the Beaulieu kiosk interpretation in his comment above. The Beaulieu Abbey Kiosk interpretation provides visitors with three time-slice choices to explore: when the abbey was being built, its heyday and the time of dissolution. A choice of nine characters ranging from King John and Queen Eleanor to a novice monk would then provide you with a tour of that time. The majority of built heritage sites stage their building in a single period of time for their primary interpretation theme (Taylor, 2006b). The period of time often relates to a significant period of time such as Bolsover's 17th century heyday when there was a royal visit (Ptolemy Dean Architects, 2013; English Heritage, 2013), or relates to a period best-known by the community forming a Statement of Significance (Taylor, 2006b; National Trust, 2014). In the case studies, there would be one tour either by a character of the time (ATS Heritage, 2015), or a standard modern-day narrator. Being able to choose a range of content with stories/tours told by a range of characters over a choice of time periods provides choice that 'would be good' on a platform that visitors can use onsite or offsite. It also made learning about the site and the characters engaging, which is important in the creation of memories and therefore experience. The Very Rev'd Atwell was one of the Launch Guest interview participants and during his interview conducted on 13th November 2013, he describes his experience of the kiosk interpretation:

'What I was excited about was here you were using modern technology, as it were, at its best to interpret and give people [choice]. I can remember when you could do a tour of the abbey and you could get someone to take you round, and get King John and whatever. Actually, I thought it was very clever to have King John taking you round; was brilliant. You were absorbing bits of information about King John, without realising it. And I felt wow, this was really interesting, really engaging and you were picking up this information almost effortlessly. You didn't realise you were learning. I think that was brilliant and it brought to life, again King John not just being a date and Magna Carta

and whatever. And a sense of his excitement in what he was about to build and this is rather a French style; this isn't English, this isn't sturdy enough, all those continental ideas coming across, which will give them a sense of how culturally united we were with Europe in those days.' (Rev'd J. Atwell 2013, interviewed 13th November)

The Launch Guests' feedback has suggested they would like to know more regarding certain aspects of either the history of the building or the inhabitants. Heritage organisations are not always able to provide the level of choice visitors may like. A plethora of interpretation panels can mar the look, feel and ambience of a site (M. Montagu Scott 2013, interview 1st March). Panels are limited in the amount of information they can convey, therefore 'stories' are chosen carefully to ensure the limited word count still communicates the premise of the story (S.Tomkins 2013, interview, 10th July). The Beaulieu team are aware of the need to provide what visitors will find interesting (S. Munn 2013, interview 18th July) and in 2006, could see the Beaulieu Abbey 3D 'fly-through' would appeal to visitors in terms of providing an additional resource by visualising the size of the abbey as it once was. Each of the Beaulieu team emphasises that it is difficult for visitors to understand the sheer scale of the abbey. Therefore it was particularly pleasing to see Tomkins' positive reaction to the first visuals showing the interior of the abbey nave with monks sat on the pews.

3.1.1.2. LAUNCH: CURATING THE LAUNCH EVENT (CYCLE 2)

This section evaluates the results of the planning and execution of the launch event, observations of guests using the kiosk interpretation at the event, and analysis of the launch speech by Montagu Scott[76]. The planning of the event was organised between Beaulieu, myself as owner/director of The Talking Walls Ltd and three MA Marketing students from Southampton Solent University. The students had elected the Beaulieu Abbey Launch project as part of their client based module, working with 'The Talking Walls' to plan the event. Beaulieu's Public Relations and Catering departments were in charge of the Beaulieu side and the services required on the day.

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[76] The launch speech provided details of why, how and who were involved in the development of the kiosk interpretation, from the Beaulieu stakeholder perspective, and their view of the interpretation in answering the brief. The inclusion was pertinent in understanding how heritage site interpretation may be measured by stakeholders.

The event was received well, although feedback from Solent University's MA Marketing students' surveys highlights a disappointment that the application was not available on the PDA's loaned by Wild Knowledge[77] (Participants 1, 4 and 14). Unfortunately, the PDAs did not have enough onboard storage to run the Flash-based application, which was only realised the day before the event. Suggestions were also made about having more than one kiosk, with Participant 17 stating:

> *'waiting to use - would also need lots of time to fully appreciate use of application, not good when people are waiting to use, puts pressure on …'* (Participant 17, 2010)

There was a queue to use the kiosk after the speeches and demonstration, although had the mobile devices worked, the queue would have been eased. The 'queue' also supported Munn's and Montagu Scott's concern about flow.

The queue demonstrated that the launch guests wanted to interact with the application and discover how the abbey used to look, the abbey's characters and tours. The verbal feedback and surveys demonstrated these were the most popular choices in engaging with the application with Participant 7 commenting:

> *'the different characters/perspectives on history/brings it to life. I love the walkthroughs and tours. 3D views and videos of Abbey itself an incredible 3D resource.'* (Participant 17, 2010)

On reflection, the placement of the kiosk could have been better positioned, allowing people to use the interpretation application without causing disruption to the flow of people visiting the Abbey museum, perhaps at the end of the exhibition (Economou, 2007:p.5). The two screened kiosk had been considered to enable others to watch the taller, large screen, whilst other visitors engaged with the content, and therefore the visitors watching becoming more of an audience rather than engaging and interacting with the content (vom Lehn & Heath, 2005). In my observations, this worked well for the younger members of the visitor group to explore whilst the members not so keen to engage with the technology could watch. The sharing of participation and multiple display screen kiosk form two of 5 'design sensitivities' recommended by vom Lehn and Heath (2005)[78] for the use of interpretation technology within museums. Ideally, more than one

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[77] Wild Knowledge was a spin out company from Oxford Brookes with a mobile device (PDAs) application for identifying wildlife set up in 2006. Neil Bailey and Stuart Thompson kindly offered the use of their PDAs for the mobile version of the kiosk interpretation after a connection with them was made via Steve Davis of the South East England Development Agency, Chilworth.

[78] The 5 recommended design sensitivities are: 1. Portable technology that is not tied to an individual user, but designed to facilitate sharing between multiple visitors may be preferential. 2. Display technology may be used that allows for multi-party participation and facilitate overhearing and co-participation. 3. Screens that deliver information to be viewed or read should allow multiple

kiosk would have been beneficial; one in the visitor entrance as well as in the Abbey museum, and possibly also in a quiet area with seating, which would have enabled visitors to dwell and not feel they are in the way.

The ability to choose from the range of content was very well received at the event, with several of the participants remarking that having this choice was 'enlightening,' 'educational fun', 'encountering a real character of history' and being 'able to see the rooms as they were' (Participants 1, 7, 9, 10, 12, 14, 16). Choice is supported by the secondary research (Copeland, 2006; Soren, 2009; Hems & Blockley, 2006; Black, 2005; Veverka, 2000) to provide 'opportunities to interact and construct their own meanings' (Black, 2005:p.140). My wish in designing The Talking Walls' application for Dunster Castle, and subsequently the Beaulieu Abbey application, was to enable a choice of information and platform as a visitor to a heritage site, having felt frustrated by heritage site interpretations in the past. The positive feedback regarding this aspect was therefore pleasing and encouraging. The negative aspect was that the only level of choice available for the launch was that of an 11-13yr old child as described in Section 3.1.1. For 'Q3-Briefly describe any disappointing experiences in the use of the application' of the event feedback survey, the comments were generally about the lack of the other two levels being available and the simplistic tone of voice:

> 'would like to see the history explained at different levels of understanding - children, adults with limited historic knowledge, adults with reasonable grasp of historical background. The narrative at points could appear a bit simplistic' (Participant 12, 2010)

Subsequently, a recommendation would be to complete the application at each level and re-evaluate with Beaulieu Abbey visitors and the Beaulieu Team. Participant 12 also suggested that for the more advanced levels, links to historical events with more in-depth information and facts about why an event happened could be built in, for building a deeper understanding of context. This is an interesting insight to the type of information visitors may want to explore at the academic level and reinforces the need to supply layers of information for the different types of visitors (Black, 2005:p.206).

Also of value for feeding into the revised version, are the varied suggestions for usability and navigation improvements such as integrating voice interaction (Participant 11), being able to

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people to view it from different angles. 4. The structure of the content may encourage visitors to view the exhibit at certain points and thus facilitate the interweaving of information from the device with the exhibit itself. 5. The content may be designed to stimulate comments and discussion about the original exhibit (vom Lehn & Heath, 2005:pp.15–16)

interact with different parts of the building by touching the screen (Participant 6) and providing visible labels to the KubeMatrix navigation 'cubes' (Participants 1 & 5). Feedback regarding the usability of the interface navigation system, the KubeMatrix, has a mixed response with most survey participants commenting that it worked well, but there were a couple of participants who found it difficult or complicated. The system was designed for mobile first and extended to each side of the screen for desktop/web-based platforms. It was, therefore, a shame that the mobile version was not working on the PDAs for the Launch Guests to use and have an opportunity to understand the premise of the KubeMatrix navigation.

Launch Speeches:
The first speech introducing the Launch Event and the Beaulieu Abbey kiosk interpretation was performed by Mary Montagu Scott, with her father Lord Montagu accompanying her.[79] In preparation for the event, I had met with Montagu Scott to run through what the speech would include, what she would say and what I would say in my speech. Nonetheless, on the day, I was surprised by the positivity of her feedback regarding the project, myself and the application. In the introduction, Montagu Scott explained the collaborative nature of the project:

> *'We were very excited by this project and thought it would be a great idea and we then, or she then started to look to secure funding for this project to work with them and delighted to say that SEEDA, the South East England Development Agency, came in as a major partner, and the Business Link South East were also great partners in this project, supporting her financially to develop this, then with Southampton Solent University and the University of Winchester, so we had many partners in this project. It is a great example of a partnership working, and together with our archives at Beaulieu, and our archivist Susan Tomkins, she started to work on this, putting together a story of the history of Beaulieu Abbey onto this interactive [application].' (M. Montagu Scott 2010, launch speech, 19th May)*

The collaboration/partnership was extensive, and although I thought it had worked well, it was reassuring to hear that Beaulieu thought the same. Chapter 2 Section 2.1.1. describes the networks that were so important in the formation and outcome of the Beaulieu Abbey kiosk interpretation. Thomas (2015) states how vital networks are to an organisation and that 'you are

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[79] The full speech has been transcribed from the video taken at the event. The video can be viewed on this link: *https://www.youtube.com/watch?v=gS9pyOZJVhU* Photos available on this link: *http://thetalkingwalls.co.uk/wordpress/?p=957*

only as good as your networks' (Thomas, 2015) supporting the significance of Montagu Scott's recognition of these networks, and my reflective observation in Chapter 2.

Also, Montagu Scott's speech mentioned a brief outline of the kiosk interpretation's content, in which it was described as 'very in-depth'. The content was more in-depth than initially planned, i.e. it was meant to be a fly-through of the 3D abbey with characters providing the storytelling of life at the abbey. To provide choice, further content was developed such as the quizzes, postcards and fact sheets which different visitor types may find engaging. At the same time, I had not considered additional choice of content may possibly keeping visitors dwelling too long at the kiosk (vom Lehn & Heath, 2005:p.11), disrupting the flow, an aspect commented on by Munn and Montagu Scott in their interviews conducted on 1st March 2013 (M. Montagu-Scott) and 18th July 2013 (S. Munn). Therefore, Montagu Scott's suggestion that the site was 'live on the website' for guests once they were home may have been reference to 'not dwelling long' now. Montagu Scott also explained that in the future, visitors would be able to download the site/application to their smartphones once they are more in use (M. Montagu-Scott 2010, launch speech 19th May). Although smartphones have been popular since the launch of the iPhone in 2007 (Arthur, 2012), the application delivery to mobile at Beaulieu has not yet happened, but it is possible it will be available with the revised non-Flash version[80].

Nonetheless, it was very encouraging to hear the use of smartphones at Beaulieu was being considered, albeit via downloading the application or viewing the site on visitors' personal mobile devices. The consideration may be caused by the concern shown in Montagu Scott's next launch speech comment about too many interpretation panels spoiling the heritage site's ambience (M. Montagu-Scott 2010, launch speech 19th May). Mobile devices installed with the website/ application provide a method of accessing much more information than can be portrayed by interpretation panels across the site, and therefore allowing the site to look more natural.

3.1.1.3. POST-LAUNCH: FIELDWORK (INTERVIEWS & LAUNCH SURVEY) (CYCLE 3)

This section evaluates the interviews with the Beaulieu Team, Design Team, Launch Guests and External Professionals.

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[80] Currently being optimised to work on multi-platforms via a responsive website and application making use of HTML instead of the original Flash software.

The Interviews are the most significant data relating to assessing the expectation of being able to provoke rich descriptions of the participants' past experiences, backgrounds and professions (Bloomberg & Volpe, 2012). Re-visiting people I had worked with, hearing about how they came to be where they were at the time of the interview, and their remembered experience of the launch and application, provided data that also enriched my experience. The insight to their achievements and their journeys in achieving their goals and roles were crucial in understanding their professional life, and a privilege with regards to their personal life.

Backgrounds & Experiences:

The educational qualifications of the participants varied although not as much as I thought they might, considering the areas each participant now worked within. Reviewing the various degrees undertaken, I rationalised the range to a broader categorisation (see Fig.85) to make a comparison between the initial areas of educational study to the subsequent career areas each participant is
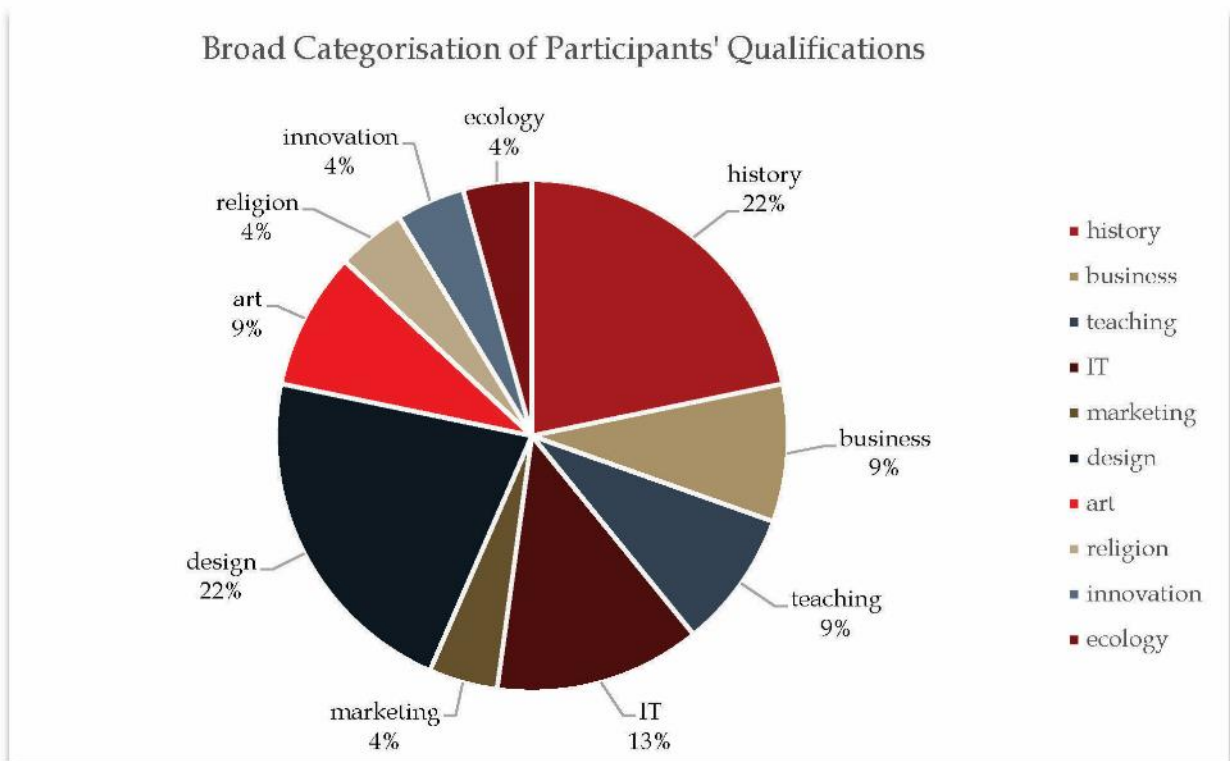
Figure 85: A Broad Categorisation of Participants' Qualifications (Wilson, 2018)

now situated (see Fig.86). One of the notable differences is the lack of 'religion' in Fig.86, this is due primarily to one of the Launch Guests, who although was the Dean of Winchester Cathedral, a considerable amount of his work dealt with the curation and design of the religious houses,

including Winchester Cathedral. His specialism became more to do with historical places, assets and audience interpretation which was explained as follows in an interview conducted on 13th November 2013:

> *'I found myself suddenly having to deal with really quite considerable historical assets and open them up to the community and interpret them.' (Rev'd J. Atwell 2013, interview 13th November)*

Rev'd Atwell felt the religious aspect was about engaging the visitors with the 'beauty and wonder' of the story of faith and 'unlocking that sense of awe and wonder' (Rev'd J. Atwell 2013, interview 13th November).
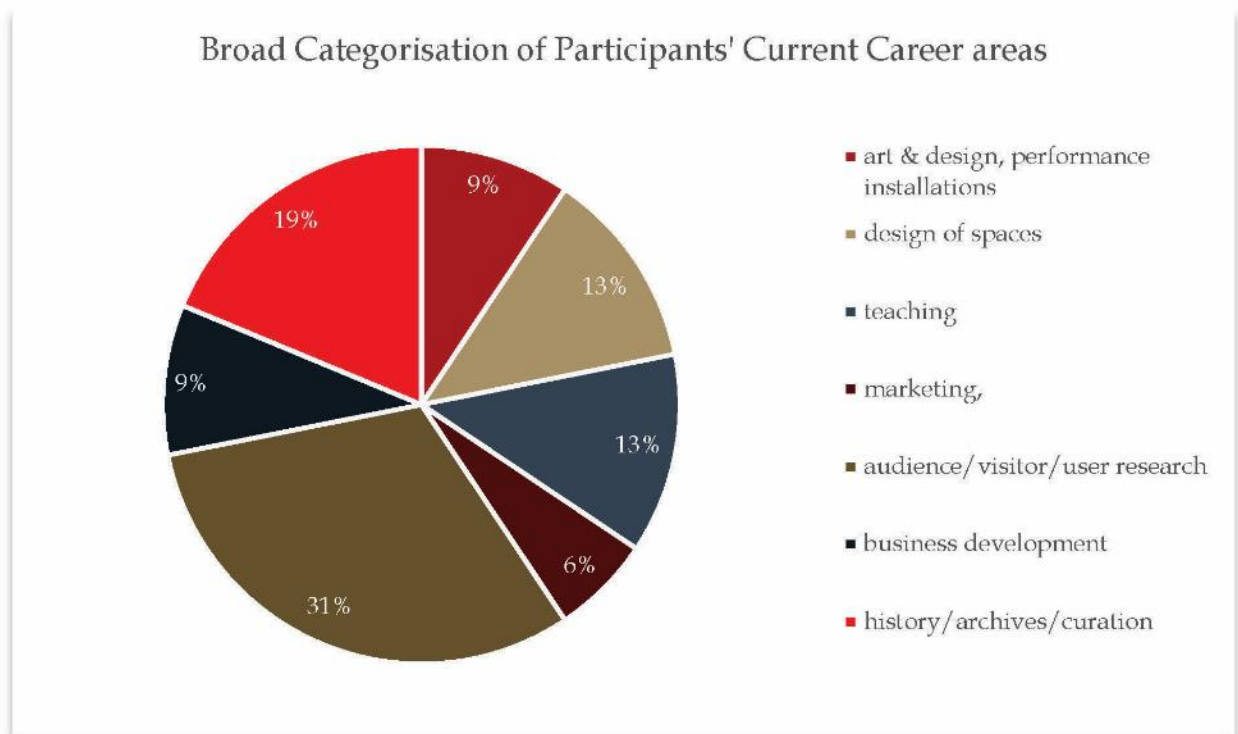
Figure 86: A Broad Categorisation of Participants' Current Career Areas (Wilson, 2018)

Another area of change between the two diagrams is the addition of 'audience/visitor/user research' in Fig.86. Evaluating the careers overall, the need to consider audience/visitor or user in their current roles, 10 of the participants saw this as a major part of their profession and would not be able to do their role justice without this consideration. Designers, educators, marketing, art/performance installations, curation and business development work with/for audiences, visitors or users, consequently the majority of the participants will have researched this area.

The participants with a background in history then took this forward in either a teaching, curatorial or archives specialism, often as a combination. What became clear, was the multiple skills and specialisms each of the participants were able to call upon within their current roles, with the roles often also multiple. The importance of being able to have multi-skilled professionals collaborating on different interpretation projects as a team was also highlighted in the case studies and literature review (Lockwood, 2009:p.xi; Roberts, 2014:p.203).

The purpose in researching the background and current roles of the different teams was to understand whether their knowledge, experience and expertise influenced the development of their career focus, and subsequently, in the case of the Beaulieu Team, the interpretation design/process. Different cultural and educational upbringing provides a unique set of experiences in addition to skills and interests, but it is the ability to translate experiences to others that is valuable in sharing that knowledge. The Beaulieu Team's backgrounds and experiences support this view.

Launch Guests Feedback of the Kiosk interpretation and Launch:

The general feedback from the Launch Guests concerning the event and application was quite positive. Two of the Launch Guests knew of my work with 'The Talking Walls – Dunster Castle' application, before the Beaulieu Abbey kiosk interpretation, and had been advocates of the choice of levels, time-slices, tours, characters and storytelling presented in the Dunster version, and subsequently the Beaulieu Abbey version. During an interview with Dr John Richardson conducted on 14th May 2014, he commented that he had: 'been a good advocate of your product. I always thought that that rich information, yes it should already be out there.' Rupert Thomson, in an interview conducted on 25th October 2013, also comments on his support of The Talking Walls concept:

'I remember the first impression was I really liked the idea. I mean this was quite early days for the media and the development of the media… and I don't think at the time there were any applications like this, but it wasn't far away.' (R. Thompson 2013, interview 25th October)

The Dunster Castle heritage site application had six time-slices[81], ranging from the 1100s through to modern day, to match the six major architectural changes. Beaulieu Abbey has only three: when it was being built in the 13th century, its heyday (14th century) then the dissolution in the 16th Century. The navigation of content, therefore, had to change[82], but the principal of three levels (child, adult and academic) remained, as did the character choice, different tours narrated by the different characters and visuals of the different time-slices. These areas were the main focus of attention and comment. They were also the areas that differed in a typical heritage site interpretation and 'theme', i.e. one period of history. This aspect was commented on in an interview with Dr. John Richardson (2014):

> 'National Trust will fix up a building, they'll pick a certain timeframe, and they will make it, right that's it, and then it's locked, that is how it was… you could pick 12 different history styles and see through the ages how this thing evolved and take it from a ruin that it is now back to….' (Dr. J. Richardson 2013, interview 14th May).

Rupert Thomson also commented regarding the choice of level concept:

> 'they can only communicate at one level so, and yet the people that are visiting are multi-layered. (R. Thompson 2013, interview 25th October).

The kiosk interpretation enabled visitors to 'be' in a specific space and then see how that space would have looked in each of the other time-slices. The ability to view the different periods of time, or be guided around the site by a character of personal choice provided a much richer experience in understanding the culture of the time and the space. As in Rupert Thompson's comment, visitors are multi-layered. Therefore, a multi-layering of information regarding content, time and space would seem appropriate.

John Pemberton (2013) takes this further with regards to the opportunities for visitors to visually explore a building that no longer exists, in part or completely:

> 'I was impressed with it, I was particularly impressed with, I think an underlying theme of mine which was only one component of what you were doing but was the idea, because Beaulieu Abbey and almost all the other abbeys are in ruins in Britain because of the

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[81] Time-slices in this instance equate to the different major architectural changes at the heritage site.

[82] Difference in navigation for the earlier Dunster Castle prototype and the Beaulieu Abbey kiosk interpretation can be seen on this link: http://thetalkingwalls.co.uk/wordpress/?page_id=1070

dissolution of the monasteries; in France to the French Revolution and so forth and what you could do with this graphically is you could start out with a graphic image of the foundations or what remnants of the building there were standing and then you could build it up visually on a screen into the form that the whole building took. And you could do that; you could also do it historically over time so you could build it up into its initial form which was often quite small and modest and then when they added additional wings to the buildings or new buildings, you could add those on and you could do something visually through visual media that is totally unachievable in any other way; you could build this image of a building being constructed and through time how it had developed. And that whole notion really intrigued me; it was that particular notion that drew me in. I know there were other components to what you were doing but that was the driver for me.' (J. Pemberton 2013, interview 1st October 2013)

John Pemberton's observation of the kiosk interpretation's focus on the architectural aspect of a heritage site was similar to Rev'd Atwell's; both having an interest in built heritage albeit for different reasons. In portraying how buildings used to look, the design of the buildings at different stages, and how they were constructed were an important part of the application as an educational resource. It was pleasing to see this understood and remarked on. Re-construction of heritage sites is not unique, nor was it in 2006 when I first approached Beaulieu. Technology and software in recreating heritage sites has advanced considerably since, making it possible for small companies to achieve reasonable results in a shorter space of time. The difference in the models between now and early 2000s, was that the buildings were often not built at true scale. They were also usually box models mapped with an image. Being able to use architectural software which can then be used within game engine software, allows interaction with the buildings and site, not possible before. It also enables the same models to be viewed as 'architectural plans, elevations and sections, highlighting the different time periods and construction, adding to the reality of the reconstruction.

Narrative and storytelling through a choice of characters provided positive feedback from the Launch Guests participants, supporting the Beaulieu Team's feedback, and interpretation professionals' research (Veverka, 1994; Joeckel, 2002; Black, 2005; Ham, 2013; Howell & Chilcott, 2013). A couple of the comments focus on how popular the characters were in helping to bring the site alive for visitors. Dr. John Richardson stated positively about the characters in his interview conducted on 14th May 2014:

'Characters, which again is a great asset and just making it rich and alive for people, otherwise you've got to look at it and kind of vision what it was like and most people wouldn't have the ability or the context...' (Dr. J. Richardson 2013, interview 14th May).

as did John Pemberton (2013):

'Certainly the tour aspects are one thing which I know the public like very much about it is the way you've used personalities from an abbey, such as a monk or one of the servants of the abbey or the different staff the abbeys have and so on and expressed it in their view as to what they felt about it using an actor to read their sort of monologue of their description of their daily activities.' (J. Pemberton 2013, interview 1st October).

Beaulieu has costumed guides which form their 'Living History', mostly at Palace House although also used at the Abbey, demonstrating an awareness of how 'characters' can impart information about a particular period of time. The Beaulieu archivist/educator was extremely knowledgeable about the characters the application should include and recommended King John, Queen Eleanor, Perkin Warbeck, Abbot Sulbury and Durandus, the Master Mason. Each of these figures were connected to or lived at Beaulieu and helped to provide authenticity for the storytelling of their time. The remaining four characters were created to provide an understanding of monastic life.

Negative feedback of the launch event mainly concerned the lack of mobile devices working with the application which was indeed a shame and disappointment. John Pemberton commented in his interview, conducted on 1st October 2013:

'I know it wasn't your fault, but there was one shortcoming of the Beaulieu project particularly which is that it wasn't followed through to the point of having, was to having the point of a single display, static display, which was a touchscreen and people could work with that, but it wasn't in terms of having either a handheld device …and I think that's a real frustration because it would take off, even more, were one able to do that.' (J. Pemberton 2013, interview 1st October).

Rupert Thompson also commented about the lack of the mobile devices in his interview conducted on 25th October 2013:

'we looked at the screens because the handsets weren't available and yeah, that's what I remember but I'd of course seen the material before.' (R. Thompson 2013, interview 25th October).

I have spoken about the reason in the two previous sections, but it was interesting to evaluate and understand the Launch Guests' view of the missing handsets, and how, ultimately, mobile devices should be used in addition to, rather than a replacement for other methods of interpretation. Pemberton's (2013) and Thompson's (2013) feedback highlighted their awareness of how the concept was ahead of the technology available at the time to deliver.

From the comments and feedback provided by the launch guests participants, the kiosk interpretation provides a rich source of different facets of content for engaging a variety of different visitor types while on or off site. More importantly, it should not be just on one kiosk and screen, but available on more kiosks, more sites and mobile devices. The levels should also be completed to include adults and academics. The feedback across each of the participant groups and launch survey supports the success of the kiosk interpretation, providing an awareness of how relevant the design, design thinking and research in creating the application has been, and that it should be developed further to complete as originally planned.

This section evaluates results of the analysis in the use of design processes in heritage interpretation, whether a user-centred design forms part of the design process and whether HSI designers typically communicate with visitors. Curatorial teams at heritage sites are the most knowledgeable about their visitors, and provide this information in their briefs to the designers. Evaluation of the case study sites' design processes is included in this section to discover if designers have built on this knowledge, in forming an understanding of the heritage site's visitors, either through the development of personas, or direct communication.

The aim of this thesis was to evaluate the current models that exist in heritage interpretation design and consider whether a new model is required to explain the distinctive roles and interactions between curators, designers and visitors in crafting engaging heritage site visitor experiences. Understanding the design processes used in the models for designing heritage interpretation and whether the processes included/involved visitors at the formation is essential. Through choosing and examining individual interpretations at three separate heritage sites that were similar to those I worked in, I discovered there are aspects of a UCD process (Mattelmäki, Brandt & Vaajakallio, 2011) used, similar to my process. These were mostly the creation of personas to describe a small selection of visitor types to aid consideration of what visitors may wish to see and engage with rather than direct visitor involvement.

Analysing the three case study sites' processes for designing HSI demonstrated visitors' feedback is the main form of consideration when deciding on the type of interpretation to install at the heritage site. It also highlighted the use of visitor advocates (Historic Royal Palaces), the inclusion of front of house staff or visitor guides' feedback from observations and discussions with visitors. At each site, including Beaulieu, this is where visitors then appear to be 'put on hold' until the interpretation is in place ready for visitor engagement. Interviews with the designers and the Beaulieu team support this 'process'.

With regards to Beaulieu, my experience working with the team and the opportunity to create the kiosk interpretation has been commented on as being considered unique:

> *'the client normally has a brief so they know. It should be set within an interpretation plan where there may be different interpretation in different ways' (R. Taylor 2013, interview 23rd July).*

The private 'family run' site affords opportunities for people to approach them, as in my case, and once approved by the family and the management team, the support to deliver the outcome was excellent. According to the secondary research and analysis of the fieldwork, the 'typical' process stated by Taylor, is through a heritage interpretation design brief or statement that is generally put out to tender or sent to specific companies previously worked with, to invite ideas. Submitted tenders are then vetted by the heritage organisation, and the 'winning' concept is invited to produce a scoping document, stating the concept in more detail, with costs, schedule and team that will be involved (Black, 2005:p.253; Read & Bohemia, 2011:p.3). The consideration for the contracted company is then to fulfil their contract according to the details and schedule provided. The measures of success for both parties are whether it was finished on time, looks and works as detailed/described, and is within budget, therefore fulfilling the agreed brief/contract.

Comparing the results regarding the planning process and the feedback provided by the fieldwork with recommendations from Taylor (2006a), Veverka (2010) and Black (2005) regarding who is typically involved, the initial model instigating the thesis was confirmed. Typically, there is a communication gap by the curatorial and design team in speaking to/involving visitors in the planning process, put simply by artist/designer Katya O'Grady (2013):

> 'working just with designer and curator projects like this is nothing; it should be historian, it should be some kind of a psychologist who can analyse with behavior, with visitors.' (K. O'Grady 2013, interview 8th October)

Overall, the 'existing' diagram (Chapter 1, Fig.3) visualises the lack of visitor representation that has emerged from the data analysis of primary and secondary research, and in the design and planning of heritage site interpretation. The results prove similar for other design disciplines, for example, spatial and architectural design in which one of the design team for the Beaulieu Kiosk project now works:

> 'There's [the] client and there's [the] user, and we very rarely interact with the user …'
> (R. Furse 2013, interview 6th Sept)

The client is the primary concern here, which is further supported by the case studies and literature review regarding heritage site design teams. The 'user/visitor' is the reason for the design, yet they are not liaised with, in the design process, the decisions are made by the 'professional,' i.e. the curatorial/stakeholder team at a heritage site. A design process in which a

'user/visitor' team is included would allow a more realistic view of visitors' expectations, needs and wants from being able to discuss the Visitors Team's visitor experiences at the heritage site (Ciolfi, 2012b; Kilian, Sarrazin & Yeon, 2015; Breschi *et al.*, 2017).

With regards to the process, Black (2005) provides a detailed step-by-step guide for museum 'interpretation master planning' which includes a proposed 'interpretative planning process' (see Design Processes Infographic, Appendix L). The process represents the initial steps necessary for understanding the context and strategy for the interpretation exhibition about to be designed and installed. Veverka (1994) also provides a planning model, adapted pictorially for quick comparison (see Design Processes Infographic, Appendix L) which provides a flexible model for most types of interpretation planning (Veverka, 1994:p.32). In a museum, this would relate to a collection or themed exhibition and may be required to be a touring exhibit. Consequently, the factors and considerations of other sites the exhibition may visit would form part of the research in the process shown. Museum interpretation planning or strategy could, therefore, be a more fluid, flexible process depending on the type of exhibition/interpretation i.e. needing to be appropriate/relevant to single or multiple sites. By comparison, a heritage site interpretation may exist and therefore be relevant to just the site involved. Subsequently, the 'Gathering of Information' may include pre-determined interpretation strategies, such as in the National Trust's 'Statement of Significance' example for Lacock Abbey, making it easier to determine the type, and context, of the proposed interpretation.

The initial planning process should then move, typically, on to the formation of an initial brief for sending out to tender, teams contracted, more detailed briefs, design and building of the exhibition ready for installation. Each step has a series of actions and consequences, often not detailed. In Chapter 2, Fig.34 is a more detailed review of the actions in each step undertaken for the Beaulieu Kiosk project, albeit with different headings compared to Black's (2005) process, and Interaction Design Foundation's Design Thinking stepped process (see Design Processes Infographic, Appendix L).

Working through my process, I realised that there are many actions impacting considerably on other actions, yet are not recognised in some of the design process models shown in Appendix L, or perhaps in the right order. The Project Journey Stages, shown in Chapter 2, Fig.34, are representative of my experience in the design process for the Beaulieu Abbey kiosk interpretation (and subsequent projects). The six stages are similar to those of Interaction Design Foundation's

Design Thinking (Teo Yu Siang, 2016) and McWeeney's User Centred Design Process Remix (2016). There is an additional stage 'Design' in the Beaulieu Abbey kiosk interpretation, which is part of the 'Prototype' stage in the two design process models mentioned.

'Design' in the Beaulieu model includes the design of peripheral items such as the design of brand identity, flyers, invites, story books and the characters, rather than simply the interaction design, user interface design and user experience design that the kiosk interpretation application required. Design, similar to 'research' is a fundamental, iterative ongoing process and perhaps, therefore, does not need to be mentioned as a stage in the design process, but in the experience of designing the Beaulieu Abbey kiosk interpretation, the 'Design' stage was a significant phase. Significant in that it covered critical variables for ensuring a useable, engaging and aesthetically pleasing outcomes.

3.1.3. VISITOR INVOLVEMENT IN HERITAGE INTERPRETATION DESIGN PROCESS AND HOW SUCCESSFUL VISITOR EXPERIENCES MAY OCCUR

In the previous sections, it was confirmed that the involvement and engagement with visitors throughout the heritage site interpretation planning and design process were lacking. Visitors are considered but not part of the interpretation team(s). A new model placing a permanent team of visitors/visitor representatives with the Curatorial Team and Design Team was therefore created in the 'Collaborative Heritage Site Interpretation Design' (CHSID) model (see Chapter 4, section 4.2). This section discusses how the model may work and how the visitor's team may be formed by comparing the fieldwork and survey data with the case studies and literature review data.

The use of visitor advocates has been used successfully in museums, for example, the Science Museum (Burch, 2013), and visitor guides in the Kensington Palace interpretation case study (Gaffikin, 2012). The National Trust works with the community to form a Statement of Significance for the individual heritage sites. Beaulieu undertakes considerable visitor research to have a thorough understanding of their visitors, and use this knowledge and experience to 'champion' for the visitors during their planning and interpretation design (S.Munn 2013, interview 18th July; J. Tee 2013, interview 3rd July).

For the proposed model, the recommendation is to have a team of visitor representatives, i.e. a mix of local visitors, visitor guides and representatives from local schools and community interest groups such as a Local History group. A 'tender' may be a feasible method of recruiting a Visitors Team. The 'tender' would enable local community members, interested in heritage/history/design but perhaps who do not have the time, or feel comfortable being a visitor guide, to have an input in the process, i.e. similar to Parent Teachers Associations or Board of Governors. I have recently 'tendered' for a team of Student Ambassadors to help lead a series of 'Design~Think~Create - Sustainable Living Challenge' workshops planned for 2021, and received interest from 12 students ranging from undergraduate to PhD level across various subject disciplines. Their enthusiasm for the subject was the primary reason for applying, then the benefit to them in areas such as their CV and employability came second. These students will be working with me in planning, designing and running the workshops, working with and supporting the attendees in developing outcomes to a range of sustainable living design issues. For a future heritage site interpretation for the City of Winchester, it would be an opportunity to further test the 'tender' concept for bringing in a team of local visitors to the overall Project team.

The project currently underway for 'Malmesbury Abbey and Market Town' interpretation, has already taken this on board with a 'Malmesbury Town Team' consisting of members of different community groups, visitor guides and history enthusiasts, alongside representatives of the town council and abbey. The Malmesbury Town Team has been fully involved through the process, sharing their knowledge, providing opinion on the design and navigation of content, and testing. Representatives of the team were taught how to upload content, which, with a training guide, was passed on to the team of volunteer 'local' visitors so they could also be part of enriching the application with content. Their enthusiasm to have an application that promoted their town and enabled visitors to explore the history, buildings, people and walks formed their purpose for being involved. The contracted design and development team also has representatives from different groups and organisations such as the University of Winchester's Centre of Enterprise, Design & Innovation, Digital Media students and Sprechen, a WiFi specialist SME[83]. Using a team communication tool such as Slack, team members can chat, upload documents, visuals and schedules easily and it ensures all project information is accessible in one place.

The proposed 'Visitors Team' may also serve as ambassadors/advocates, promoting the work that goes into planning and designing interpretation:

> *'The successful companies always say how many advocates have you created and it's these advocates that will spout throughout the world and be your salespeople, and they'll do it because they've fallen in love with something you do… or an experience you had on a day out and I think people now listen much more, they probably always did, but because of the internet, they'll take reviews of peers, … they'll put more credibility on that than they will on a professional review because they're very cynical about a PR spin. (Dr.J. Richardson 2014, interview 14th May)*

Therefore, it is possible with the proposed model the Visitors Team will provide the more 'grass-roots' aspect of visitor experiences, adding to, not replacing the deep knowledge of how visitors behave and engage with interpretation provided by Front of House Staff, Curators, Educators, combining to act as advocates for visitors (Burch, 2013; R. Taylor 2013, interview 23rd July; J. Tee 2013, interview 3rd July). This can be seen on a small team scale in Claisse (2018) with her study

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[83] The project seems to be working well; it will be interesting to test the interpretation with Malmesbury visitors once completed in 2020 and compare/evaluate for future applications.

regarding exhibition design for a house museum, in which she involved volunteers and visitors in the design of her exhibition (Claisse, 2018).

Visitor Team Input:

The current process for designing interpretation relies on understanding visitors described in previous chapters and sections, through the occasional use of personas, touch points, user journeys and scenarios. An empathic approach helps to look at each part of a visit by different visitor groups from their perspective:

> *'it is very difficult to not look at things through your own eyes. I mean I've just had children, I've got two toddlers at the moment, so in fact my understanding of what they want has been obviously greatly improved so I've started looking at things very differently.' (J. Tee 2013, interview 3rd July)*

The inclusion of a Visitor Team (VT) would facilitate a more thorough understanding of the personal experiences, the touch (or pain) points of a visit, and how those experiences may change depending on the type of visit, i.e. with the family, as a couple or with elderly relatives (Ham, 2013; Black, 2005; Roberts, 2014; Falk & Dierking, 2013; Pine II & Gilmore, 1998). The stories and experiences the VT would be able to provide at each step of the process would be invaluable. If the VT included a representative from a School's Group, information regarding educational visit experiences could be first hand, and up to date with regards curriculum subjects and areas. Observed feedback regarding how the school children are relating to the interpretation, pre, during and after their visit, would be valuable to have related at different stages of the process.

Personas are a well-known form of building an understanding of who users/visitors might be, but they do need to be properly undertaken to ensure their value in the design process (Grocott, 2010; Matthews, Judge & Whitaker, 2012; Churruca, 2013; Flaherty, 2018). My small sample of personas for the kiosk interpretation was developed through observation of my daughter and mother in visiting heritage sites, plus an understanding of my personal preferences and experience in visiting heritage sites. I knew this was not sufficient, yet time did not allow for the weeks of observations that would generally be considered when creating personas. I also realised that this was not the case for the case study heritage sites, i.e. the time involved allowed. Therefore, the combined experiences of the VT would also be invaluable in helping to build personas for a range of visitor types not included as part of the team. The tone of voice for different age ranges or 'levels' can be checked. The 'layering' and 'dumbing down' of information mentioned by Tomkins,

Montagu Scott, Munn and Thompson could also be checked. Assumptions are, therefore, diminished, and more appropriate, relevant and 'insightful' interpretation design should result for visitors' engagement and experience.

Social media and Trip Advisor were considered particularly useful for 'honest and detailed' feedback. I chose a sample of 30 consecutive reviews per heritage site, in a period of six months from the time of each interpretation's installation. The selection was based on the amount of information provided by the reviewer, i.e. primarily where they were from and the description tag/label indicator provided by Trip Advisor. The reviews were deliberately not read until 30 per site were selected to avoid bias regarding positive or negative experiences. Using Trip Advisor provided an insight to a comparatively small demographic of visitors who have chosen to talk about their visit experience on Trip Adviser. There are other social media platforms and more traditional methods that should also be used to gain a more balanced insight and measure of visitor experiences (Alexander, Blank & Hale, 2018; Su & Teng, 2018). Beaulieu receives 'relatively good feedback' via social media which Jon Tee (2013) found surprising; he thought visitors would use the platform for moaning *(J. Tee 2013, interview 3rd July).* Chapter 2 discusses this further and argues that visitors using social media or Trip Advisor wish to have a more professional profile than that of a 'moaner'. Nonetheless, the social media platforms, including Trip Advisor, generally provide honest, unbiased opinions of visitors' experiences, (Lu & Stepchenkova, 2012:p.704; Baka, 2016:p.153; Stoleriu *et al.*, 2019:p.196) with steps taken by the social media platform 'to address credibility concerns' (Ayeh, Au & Law, 2013).

3.2.1. REFLECTIONS ON THE PLANNING AND DESIGN OF THE DOCTORAL WORK

The planning, design consideration and resulting 'designed' structure of my doctoral work and, therefore, this thesis, evolved from recognition of the combination of Black's (2005) Interpretation Planning Model and the Beaulieu Abbey kiosk design process being similar to the reflective cycles of Action Research (Gray & Malins, 2004). The Introduction, Research Approach, Research Design & Methods and Background (Professional & Academic) & Context (Chapter 1), albeit with different titles, formed Stage 1 i.e. discovering, scoping, defining. The Design Challenges & Outcomes, HSI in Practice: Case Study Comparisons and Curator~Designer~Visitor-Shaping Heritage Site Interpretation Design (Chapter 2) formed Stage 2 i.e. analysis and evaluation of practice, design and design theory. Evaluation & Discussion and Reflections as a Design Practitioner, Design Researcher & Academic (Chapter 3) form Stage 3. Reflection takes place for each Stage and each cycle of the three Stages. Each Stage has three Cycles: A, B and C. The structure of the thesis, therefore, follows how I would work as a designer/design researcher but within an academic framework. The three Cycles of the three Stages tie in with the design of the kiosk interpretation's navigational device, the KubeMatrix, also three by three, although cubes not cycles, and the cycles of Action Research.

Working to render my work in this format highlighted the difference in language used between the different disciplines and professionals within HSI design. The method of exploring and understanding the words and phrases in common use by the different disciplines could be further explored with a wider data set. A possible outcome of which, could be the formation of a 'Heritage Interpretation Design Taxonomy' based on Bloom's Digital Taxonomy[84] (Kleinsasser, 1996; Armstrong, 2006; Churches, 2007), enabling a common vocabulary for communication amongst the multi-discipline teams necessary in heritage site interpretation design. However, this goes beyond the scope of this thesis.

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[84] Bloom's Digital Taxonomy is an adaptation by Andrew Churches of Bloom's Taxonomy of Verbs

3.2.2.1. <u>PRACTICE: CRAFTING THE INTERPRETATION (STAGE 1C: CYCLE 1)</u>

The reflective process, as a method of analysis through an action research approach (Schon, 1984; Chambers, 2003; McIntosh, 2010), has enabled re-assurance and acknowledgement, as a professional designer and as a design researcher, of the benefits of thoroughly scoping a project at the outset (Veverka, 2000; Black, 2011). By working through a series of iterations for the funding application, the process resulted in funds, project requirements (hardware, software) and people that were in place from the beginning of the project.

The planning and Gantt charts detailing the key tasks and their impact on other tasks were critical as a project manager/designer for being able to check and report on progress for the funder, and allow each team member to easily recognise how a delay in one area would affect the progress of another (Black, 2011). The Beaulieu team also would be cognisant of the different stages of development and project start/end date.

The interpretation work developed for the Beaulieu Abbey kiosk provided significant challenges, of which only a few have been noted for this thesis. The experience has been beneficial in many aspects, particularly for understanding the importance of teams throughout an interpretation project and the value of networks in being able to source skilled people, and access their support for the different stages and processes. Archiving rather than deleting records of development such as sketches, reference sources and emails, has also enabled to reflect on practice and refer to it, or resurrect for subsequent projects (Bergeron, 2011; Kilian, Sarrazin & Yeon, 2015).

Knowing your team, i.e. having prior experience of their work and abilities to be able to 'mesh' well and share an understanding of the project/tasks was essential for the Beaulieu Abbey kiosk project to reach a successful outcome in a short time frame. In subsequent projects, this has also been critical for a successful outcome. A thoroughly scoped project brief, and an experienced 'known & trusted' team was critical for implementing and reaching the planned outcome on schedule (Kitimbo & Dalkir, 2013).

Making use of empathic design processes and techniques for designing HSI may be sufficient for allowing insights to a heritage site's visitors' expectations as in the Beaulieu Abbey kiosk, but the reflective process highlighted an uncertainty as to whether this area of the design process could have been improved. Having explored how a sample of heritage site design teams manage their

process in the design of HSI and whether they involved visitors, helped determine and propose a new interpretation design model and process for heritage sites of this kind.

3.2.2.2. LAUNCH: CURATING THE LAUNCH EVENT (STAGE 1C: CYCLE 2)

The initial reasons for the kiosk interpretation was to increase footfall to the abbey and for visitors to understand and recognise the importance of the historic site in addition to the Palace and National Motor Museum. Knowing whether the kiosk achieved such aims required feedback from the use of surveys, and from observation by guides and other Beaulieu staff. The initial verbal feedback at the launch was positive, which then compared favourably with questionnaires completed by the departing launch guests. Using an Action Research approach for reviewing, analysing and reflecting on the data produced leading to the launch and at the launch event has led to a greater understanding of the impression the kiosk interpretation has made on the Beaulieu Team.

The launch event allowed various opportunities for receiving feedback, including the process leading to the event. For example, meetings with the MA Marketing students allowed an understanding of how other people may have chosen to organize the event proceedings differently, and how crucial it was to communicate clearly.

The collation and curation methods for the archival data has been an insightful journey, as well as a pleasing, occasionally frustrating but satisfying process for building a visual record of the planning, development and understanding the significance of the launch event. This practice of documentation and reflection, and reviewing practice and process, has improved my professional practice. The value of considering the file formats (need to be in an appropriate web format), the longevity of the files archived and the platform to do so has been an important aspect of creating the Reflection on Practice website. From the start of a project, using a date order/naming system has aided cataloguing and archiving material in chronological order for ease of reference for future interpretation projects (Ferguson, 2012).

3.2.2.3. CREATING POST-LAUNCH: FIELDWORK (STAGE 1C: CYCLE 3)

Action research was followed by IPA as the dominant research approach for the Post Launch interviews to allow reflections on the experience with the Beaulieu Abbey kiosk interpretation and stakeholder involvement in the design and development of the kiosk interpretation. The interviews helped me in understanding how important backgrounds, interests and experience

helped to form a body of knowledge, which although varied, had managed to steer each participant in their career path, rather than each having followed a pre-planned career path. The feedback about the work was positive, validating design decisions with regards to levels of content, time-slices, characters, rich visuals and ultimately the visitors' ability to choose content to explore further.

For one or two of the participants, their reflections on their different journeys in reaching their current roles caused occasional self-exclamations of surprise. These appeared to be in recognition of understanding the impact of certain life choices, which they had not expected as part of the interview process. Sense-making is a core value of IPA, for participants and for the researcher analysing the transcripts. I also found the process surprising, discovering interests and expertise in a few of the participants which I would not have expected for the professional role they were in.

Three interviews were more stressful, as far as I was concerned, due to unfortunate circumstances. On one interview occasion, I was late due to roads being closed and the diversion taking twice as long to reach; on another occasion, there had been an accident ahead resulting in a lengthy queue, and in another, the batteries decided to run out during the interview. New batteries were packed prior to each interview as a fail-safe, therefore, although disruptive, at least the interview could continue. While the participants were kind hearted and understanding, nonetheless I felt slightly ill at ease having arrived late, and therefore possibly rushed some of the aspects of the interview.

3.2.3. REFLECTIONS ON ACADEMIC PRACTICE LED & PRACTICE BASED DESIGN RESEARCH

As I have undertaken a Practice-led design PhD, my submission includes an exhibition of my practice i.e. all the developmental work and outcomes in the crafting of the Beaulieu Abbey Kiosk interpretation. As far as I was concerned, my practice is as important as my research, the two co-exist, one cannot be done without the other, despite the two carrying different "weights" in the submission of my doctoral work.

Another query concerned the inclusion of a reference list and bibliography. For my PhD, the same as other PhD students, I have undertaken considerable research, which has crossed several disciplines. Reviewing literature and dissertations of practice-based PhDs to gain comparisons and answers, was necessary. Through this process, I discovered there were several approaches for design practice and research, one of which was Practice-led. Reading the difference provided by Candy (2018), I realised that my thesis was Practice-led design research.

The additional research regarding design practice and design research has been surprising. The discussions/debates on the value of design practice in and for research needs more attention which I hope to review further as an academic/practitioner and design researcher.

This chapter has evaluated the three main areas of research undertaken to answer the research question. The result demonstrated there is a lack of an inclusive and collaborative design model and process within heritage site interpretation design. From the analysis of design models and processes used in museums and design practices, it became evident that this was generally not the case for heritage site interpretation design and, therefore a new collaborative heritage site interpretation (CHSI) design model and process has been developed. (Detail of the new CHSI design model and design process can be found in section 4.2)

During the evaluation and discussion of my practice in crafting the Beaulieu Abbey kiosk interpretation, the launch event and post launch feedback, analysis of material and feedback has provided a deeper understanding of the importance of knowing who you are working with, their skills and abilities, regardless of role, to be able to work collaboratively. The interviews were insightful, particularly in understanding that roles do not always convey your skillsets, past experiences or interests to colleagues, therefore, misunderstanding or assumptions may occur. By having a consistent team who have experience of working together, and have built an understanding of their colleagues' background and experiences, would provide trust and understanding of available expertise in working together on HSI projects.

What also emerged from the interviews and feedback includes suggestions for the kiosk interpretation from user experience perspectives with regards navigation and choice. An appreciation of the rich visuals and storytelling conveying life and culture of the abbey in its heyday, the varied methods to engage with the characters and their stories were highlighted, with recommendations to further the Beaulieu Abbey kiosk interpretation application.

Furthermore, feedback provided about choice of content, platform and provision of handheld devices has been valuable in recognising technology has to be thoroughly considered rather than included because it can be. The placement of technology such as a kiosk also needs careful consideration for not interrupting flow of visitors, and possible delay to accessing information due to queueing. The Launch also highlighted that expectation of technology by curators, stakeholders, designers and visitors varies significantly, and if not met, creates disappointment, possibly providing a negative experience for those involved.

Other than the valuable visitor insight social media, such as Trip Advisor, may provide curators and interpretation designers, it is possible a more comprehensive use of social media channels by the heritage sites would help visitors understand what was available and when, saving disappointment in visits. Further research questions validity of social media reviews, and that traditional methods for obtaining visitor experience reviews and feedback should be included to provide a more accurate measure of visitor experiences. The task of anticipating and satisfying visitors' expectations when they have differing expectations, needs, wants and approaches for a visit, can be considered almost impossible, although often an expectation for the role of most visitor services' staff and volunteer guides. Therefore, visitors as part of a collaborative team for heritage site interpretation design and how this might work was discussed. A workable suggestion was to send out a 'tender' to the local community to seek a team of 'visitors' who would have time to be involved at each stage of the interpretation process. The resulting Visitor Team would be advocates for the heritage site's visitors and therefore need to be fairly representative of a range of visitor types. The Visitor Team addition to the design and planning process, would provide the missing link, or gap, in understanding what visitors may expect or prefer to see and engage with during their visit to a heritage site, and therefore aid in creating positive visitor experiences.

All human knowledge begins with intuitions,
proceeds from thence to concepts,
and ends with ideas.
(Kant, 1781)

4.1. CONCLUSIONS

4.1.1.   CURATOR~DESIGNER~VISITOR INTERACTION IN HSI DESIGN

Over a period of 10 years, I have been on a professional practice and research journey in heritage site interpretation (HSI) design. As a design practitioner, I continued to work on HSI projects, also working with clients on multi-disciplinary group student projects as part of my roles as a digital media lecturer, trying to ensure the students understood a collaborative and project based method of working with their peers. In that time, I have seen a growth in the interest, use and development of Design Thinking, with UX and UC design becoming a focus, initially in American museums, and then in UK museums. Participatory design, also known as co-design, (Damala *et al.*, 2014; Fuks, Moura & Cardador, 2012; Simon, 2010) has also been researched and analysed in

museum environments. Museum visitors have been encouraged to participate with interactive exhibits, take part in funded workshops and collaborate with museum staff, stakeholders and University researchers to understand how visitors and, more in general, citizens can engage more with museum exhibits and with heritage (Avram & Maye, 2016; Giaccardi, 2012a; Ciolfi & Bannon, 2002; Ciolfi, Bannon & Fernström, 2008; Heath & vom Lehn, 2009; Hetland, Pierroux & Esborg, 2020).

Despite some exceptions (see for example Petrelli *et al.*, 2016) heritage sites were not as advanced; there was a slower take up, trust and understanding of digital technology in this time, particularly at local smaller sites, which has since changed/is changing. The launch of the Beaulieu Abbey kiosk interpretation in 2010 was at the cusp of a period of change for heritage site interpretation. There is now more acceptance of mobile technology, with augmented reality and interactive exhibits in place amongst the more traditional interpretations (Vermeeren *et al.*, 2018). Heritage sites are generally presented as a specific moment in time, with the rooms 'dressed' in the relevant period as though the inhabitants have just left. In the last 5 years, with technology and high end 3D gaming software more accessible with regards costs and computing power, additional 3D applications, virtual and augmented, more engaging interactive exhibits can be found at larger heritage sites as well as museums.

Roles have changed and evolved within HSI as a result; designing interpretation is generally still reliant on decisions by the stakeholders (owners and managers), curatorial team, education team and front of house/visitor services' team. Interpretation briefs are generally still put out to tender or design teams invited/commissioned to fulfil the brief. This has been evidenced by the selected comparison case studies, and by my own practice working with the Beaulieu Abbey team.

In this thesis and my Reflection in Practice website, I have detailed and explained my professional practice in HSI design, how it compares to other HSI practice at larger heritage organisations by other design professionals. This was undertaken to answer the research question, which queries the nature and scope of communication gaps in the interrelationships between designer, curator and visitors in the ideation, designing and crafting of interpretation at heritage sites.

In answering the research question, I have undertaken multi-disciplinary research across the academic areas of User Experience Design (UX) and Interaction Design, and Heritage Practice, also bridging analytical and methodological frameworks such as Action research, IPA, Practice-led and Practice-based design, and Reflective Practice. From my perspective as a professional practitioner,

my deeper knowledge in these areas, strengthens and informs my expertise in the design of heritage site interpretation and interactive technology applications. My experience as a business owner helps me to see the value of business models, processes, team work and collaboration required in developing and crafting digital interpretation at heritage sites and museums. Through this, I am able to recommend suitable digital technologies and processes for different types of heritage interpretation, and understand what may be needed for 3D reconstructions of cultural heritage sites and how they may be portrayed. In addition, through understanding the value of visitor research and understanding, I know how to design the interpretation content and navigation in a way that different types of visitors are able to engage with the cultural history of a heritage site over specific periods of architectural change/time.

Through the set objectives, my research showed there was a communication gap between designers and visitors throughout the HSI process, through to installation and evaluation of the outcome. The review and comparison of three examples of professional interpretation design at three different heritage owned sites that were similar to those I worked in, highlighted that the relationship I had experienced working with the smaller Beaulieu team was unique. The cases showed that the design teams that were contracted in to deliver the interpretation were often different to a previous interpretation's design team. The curatorial team was also fluid in who was available, locally or regionally within the organisation, i.e. the teams were not consistent, as in the case of the Beaulieu curatorial team. Only one of the case study sites' interpretations involved visitor advocates in the design process. The two other sites relied on their knowledge of the visitors and visitors' feedback for planning the interpretations.

Understanding how the case studies' design teams worked with visitors in the interpretation design process was significant in highlighting two key factors:

- A lack of visitors involved in the design process
- A lack of consistency in teams to build knowledge, experience and trust in further interpretation projects.

The literature review further revealed that few interpretation design companies involve a visitor team or visitors in their design process; designers and visitors rarely worked together. Instead, a reliance on the use of personas built on information received or observed, was generally the approach used. Yet the literature stipulates how important it is to understand who is being designed for, and this can only be achieved by consistently working with them. Curatorial teams

and visitors were in communication, with the heritage organisation/curatorial/education and front of house teams employing the use of multiple methods for understanding visitors' experiences and engagement with the heritage site. Nonetheless, visitors as representatives through the ideation and design process were absent, although the use of visitor guides or audience/visitor advocates was evident in a few cases

A consistent team emerged as being a significant factor in building experience, knowledge and trust. As trust builds, assumptions are eroded, teams can work more effectively and quickly. Consistency also brings known skills and abilities which will grow with experience, forming expertise as a team.

Therefore, I designed and proposed a new model for professional HSI practice based on user centred design, to ensure visitors/visitor representatives were part of the full HSI design process followed by professionals, collaboration and therefore communication was possible between the curatorial, design and visitors team throughout, and recommendations to ensure those teams were consistent for each site. The model's name reflects the importance of the collaborative relationship in designing heritage site interpretation: Collaborative Heritage Site Interpretation Design (CHSID) (Chapter 4, section 4.2, Fig.87).

The CHSID model answers the questions raised in Chapter 1, Fig.1 as the research aim, namely:

- *'Visitors' who are they?* – a visitor team replaces this question and will help to understand other visitor types and the types of visitor expectations to design for
- *Is the Curator/Designer relationship important in crafting an interpretation*? – a combined team of consistent team members which has proven to be important for designing heritage interpretation
- *How can we measure and understand the gap in understanding who the visitors are, and whether it is important?* – again, a visitor team will help in understanding by being a permanent team working with the designers and curators. And yes, research has reinforced that it is important to measure/evaluate visitor feedback by all team members, not just the curatorial team members.

4.1.2. HOW SUCCESSFUL VISITOR EXPERIENCES ARE DETERMINED:

Throughout the thesis, I remarked on the importance of understanding who heritage site visitors are in, how to determine their visitor experience. Analysis of and reflection of surveys, observations, anecdotes, and feedback via comment cards, visitor books and social media have been undertaken as part of my work to determine the most effective method for gaining an understanding of their expectations and experiences. In this respect, Beaulieu has many years' experience in understanding their visitors with Munn (2013) explaining that they prefer to analyse their data rather than it being done externally because they 'live and breathe' Beaulieu and therefore have a better understanding of nuances in the data (Munn, 2013).

The growing use of online/social media platforms by heritage interpretation sites for interacting with their visitors also provides a rich source of visitor feedback. Third party online platforms such as Trip Advisor are known to provide honest, unsolicited feedback, i.e. visitors may provide feedback they want to provide rather than be directed by questions (Baka, 2016:p.153; Stoleriu *et al.*, 2019:p.3). When there is a need to direct comments, perhaps to improve a certain aspect of the site, questions can be posted on social media channels. For example, Beaulieu's team occasionally ask their Facebook followers 'name one thing that we could do better?' (Tee, 2013) with good effect.

The proposed CHSI design model advocates the inclusion of visitors to help professional practitioners in providing successful visitors' experiences. The combined team following the proposed design process model would also review feedback, discuss and evaluate throughout the planning and design stages in determining how visitors may relate to and engage with interpretation. The inclusion of a final evaluation and feedback stage is an additional and important step. The various stages, including the final evaluation stage, ensure that it is not just the heritage site that evaluates their visitors' opinions and experiences, as has been the case, but the whole team involved, i.e. the Design Team, Visitor team, and Curatorial Team, with lessons learned and taken forward to the next interpretation design project.

Similar to the layering of information and choice of content, the use of multiple feedback tools provides a rich resource for analysing and understanding a broad range of visitor types and their varied experiences. Designing visitors' experiences for heritage site interpretation, should, therefore, consist of the following:

- Visitor Feedback: using multiple qualitative methods i.e. finding out their stories, their opinions and comments. Statistical survey data is relevant for finding out demographic information with regards to targets and growth, but of relatively limited value for determining experiences. Enabling visitors to provide feedback without being led/biased by questions, i.e. completely volitional, should provide the most honest comments (Kouprie & Visser, 2009).

- Planning and Design Team: using a consistent team from which experience and understanding of the visitors forms a knowledge bank, shared understanding and trust which can be drawn on for future interpretations

- Design model: using an inclusive and collaborative design model, the CHSID model, in which a Visitors' Team (VT) forms a permanent part

- Design Process: using a thorough evaluative design process such as the new CHSID process, in which all members of the planning and design teams are consistently involved.

- Multimedia Interpretation Content: using storytelling/narrative of the inhabitants of a heritage site, providing a choice of time slices at the heritage site through the use of visualisations (2D and 3D), a choice of content at different levels, easy to use gamification providing interaction with content and knowledge gained of the site at different or generic age levels dependent on the heritage site

- Technology and Platforms: multimedia content should be available on multiple platforms, kiosk placement should be considered with regard to visitor flow, with more than one kiosk (or touch screen) available across the site. If the content is likely to increase dwelling time, as in the case of the Beaulieu Abbey interpretation, an area where visitors can engage with the content more leisurely without disrupting or delaying other visitors. By creating the multimedia interpretation as a responsive web application, access may therefore be achieved via visitors' personal devices, using their own data, or by accessing a guest login to the heritage site's WiFi, as well as other more static devices such as kiosks and fixed touch screens.

- Volunteer Guides: Volunteer guides provide a variety of 'stories' about the heritage site which are often personalised to the visitor group in front of them. They are also a friendly face that may make a huge difference to a visitor's experience, and can feedback to the CHSI team regarding visitors' comments from their interaction with visitors.

Undertaking research for this thesis has been invaluable for understanding whether the kiosk application and content is a suitable resource for learning about the size of the abbey and its context in the community. Interviews with the Launch Guests, Beaulieu Team and External Professionals provided positive and constructive feedback regarding the importance of choice for different visitor types. Choice in whether, as a child, adult or professional/academic visitor, exploring the content made sense from the comments provided, as did the ability to see the abbey and abbey buildings in the different periods of time, as they would have been used. The cultural lifestyle of the Cistercian monks, the Royal visits, building the abbey and the dissolution are related via nine characters, each with their particular story. These were considered positive and engaging attributes by the launch attendees.

The positive responses support and validate completing the kiosk application to include:

- the two remaining levels: adult and professional/academic
- updated from Flash Player (PC only) to be multi-platform including mobile
- test usability of the KubeMatrix for mobile devices and touch screens
- research the addition of voice activation for people with disabilities
- research the addition of augmented reality in certain areas of the application

. There were a couple of suggestions for improvement such as labelling the KubeMatrix boxes and incorporating the different levels, i.e. adult and professional/ academic, with the 'child' version mostly used for the kiosk interpretation. The majority of the Launch Guests commented they would like to see the application available at other heritage sites, on mobile platforms and multiple kiosk placements.

A general concern by the Beaulieu Team for interpretation elements within an exhibition, either at the Abbey's Domus museum or the National Motor Museum, was the flow of visitors. For example, where there may be a queue forming at a particular spot such as the kiosk interpretation: a concern held by most heritage organisations. At the Launch event, a small percentage (17.6%) of the Launch Guests commented about not being able to use the kiosk because of a queue, therefore, adding mobile platforms and more kiosks for access would alleviate 'queueing to use' frustration for visitors and help to ensure flow through the interpretative exhibits.

Having reflected on the Launch event feedback also through HSI design literature, there is a clear need for an application such as the Beaulieu Abbey kiosk interpretation that provides choice and layering of information. There is evidence to support a requirement for additional information for a range of visitor types, including educational groups, which visitors can engage with in their preferred choice i.e. on site, off site, in front of an exhibit or in a space away from the exhibit (coffee shop, outside, nearby seating etc.). Provision of multiple resources of interpretation that tell a story of the building and the people who lived at or were involved with the site, helps to augment visitors' preferred method of learning and engaging with information. By enabling visitors' choice in how they interpret information may also help to provoke meaning and memories, therefore forming enhanced knowledge and experience in their visit.

In updating and completing the interpretation application as a responsive website, it can then be made available for the Beaulieu Team to use by their Abbey visitors. Research through the use of observations and talking with visitors using the application on their mobile devices, and iPads or touch screens installed at different points within the Domus museum could then take place. The resulting research could be analysed to discover aspects such as:

- the types of visitors that prefer to engage with digital applications and those that prefer not to
- whether the application's voice activation works well for people with disabilities to share the same exploration and learning experiences as people without disabilities
- the effectiveness of the choice of levels i.e. the correct level of information for child, adult and professional/academic
- whether the familiarization of using a heritage interpretation application which has a consistent approach, interface and brand would enhance use of the application and lessen perceived barriers to the use of technology at heritage sites (built heritage, ruins, places/spaces and museums)

Additional research for discovering how the KubeMatrix could be used for accessing content within other disciplines is a consideration based on feedback from the Innoventions Award (2004) and subsequent conferences and demonstrations. For example: accessing properties for sale in regional areas with the ability to view the property's room interiors, navigating around a museum, or a hospital, navigating other application content where there may be choice for different levels/age ranges of information such as online learning applications. With the technology

available, accessing 'rooms' and 'spaces' using the KubeMatrix as a navigation tool to choose the 'rooms/spaces' through virtual reality and/or mixed reality headsets would also be a significant design research area to consider.

Software technology has also increased in its ease of use, making it simpler and quicker to create applications using 3D environments and augmented reality for mobile devices. Researching the impact mobile and augmented reality may have on visitors being able to become more 'immersed' in the augmented world of past environments, would be valuable for future heritage site interpretation design. Research regarding whether visitors would be able to experience the heritage site through augmented and mixed reality in the same way as physically visiting the heritage site would provide further understanding of how visitors prefer to understand and learn about different heritage sites.

NEW CHSI DESIGN MODEL:

In answer to the research question: 'What is the nature and scope of communication gaps in the interrelationships between designer, curator and visitors in the ideation, designing and crafting of interpretation at heritage sites, and whether this is important?' both the primary and secondary research I conducted confirmed that involvement and engagement with visitors throughout the HSI planning and design process are currently lacking. In the vast majority of heritage site interpretation design practice, visitors are considered but not part of the team. In order to ensure HSI design follows a growing movement towards a more 'user-centred' design framework within
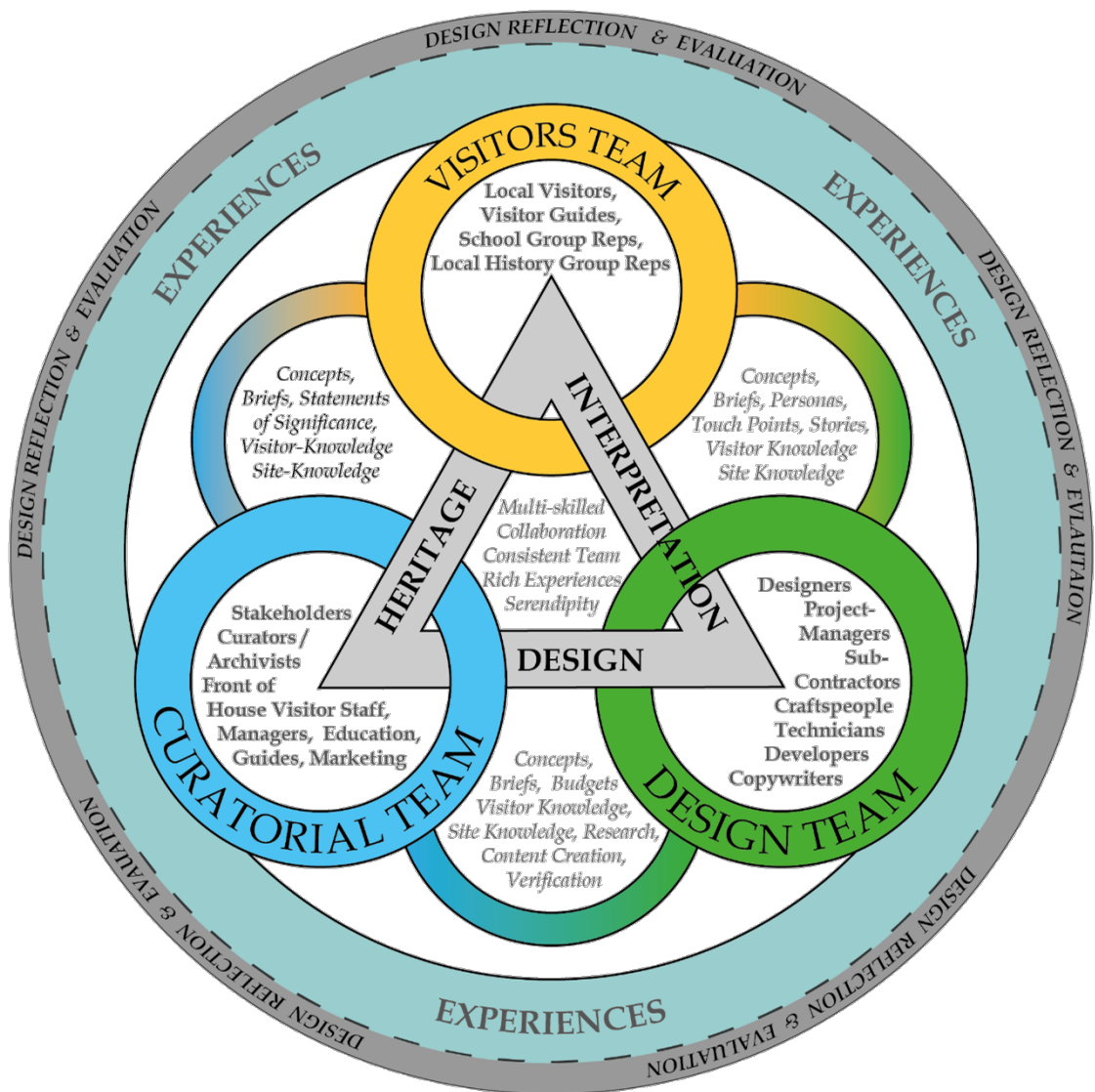

Figure 87: *Collaborative HSI Design Proposed Model (Wilson, 2020)*

the majority of design disciplines, I extended the user-centred design model to accommodate HSI design, by recommending the placing of a permanent team of visitors/visitor representatives with the Curatorial Team and Design Team in what could be called 'visitor-centred' design (Ciolfi, Bannon & Fernström, 2008; Hashim, 2013; Ch'ng *et al.*, 2020). Involving a team of permanent visitors/visitor representatives throughout the process would fill the 'gap' (Chapter 1, section 1.1, Fig.1) perceived and subsequently confirmed through my doctoral research. What also emerged was that the curatorial team and design team were not always consistent, and therefore trust and communication needed to be built/re-built for each interpretation design. Shared experiences, skillsets and knowledge of the site through collaboration of the specialist teams and stakeholders would not be able to grow, to create a consistent, reliable, communicative team of experts for the heritage site. Knowing how well our consistent, close working, reliable Digital Media Team worked together, it made sense to echo this in the development of the 'visitor-centred' model to reflect such a collaborative consistent team. The result, therefore, was the development of a new 'visitor-centred' interpretation design model for heritage sites: the 'Collaborative Heritage Site Interpretation Design'(CHSID) model, which is presented as a diagram in Fig.87[85] and further explained.

The proposed CHSID model includes a visitors' team, a physical presence of a representation of local visitors for the relevant heritage site. A tender or 'call', similar to a call for local volunteer guides, could be used to create a visitors' team of local people willing to be involved in their local heritage site and the design of interpretation. Dependent on the success of the call, a selection can be made to include as many visitor types as possible. Their involvement would be throughout the planning and design stages, therefore involved and engaged with the other teams rather than a (sub) conscious consideration.

Compared to the existing Beaulieu model (shown in Chapter 1, section 1.1.2, Fig.3), the new Cultural Heritage Site Interpretation Design model (Fig.87) includes three core changes:

Experiences Sphere:
The 'Visitors' sphere of consideration has been replaced by an 'Experiences' sphere' of consideration. The consideration for each of the teams would be how to create experiences for the visitors in the design of heritage site interpretation. The experiences of working together

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[85] A larger image of the model can also be viewed on this link *http://thetalkingwalls.co.uk/wordpress/?p=3540*

would also build forming a useful knowledge bank for future HSI design projects, and trust, thereby eliminating possible assumptions in individuals' abilities, experience and knowledge (Black, 2005; Roberts, 2014). The model reflects the co-curation and participatory design processes already being used at certain larger museums (Ciolfi, Bannon & Fernström, 2008; Simon, 2010; Ciolfi *et al.*, 2016) and a few smaller sites (Claisse, 2018), although the emphasis on a consistent set of teams is not apparent in these existing cases as in the proposed CHSID model.

Design Reflection & Evaluation Sphere:

In the analysis of the Beaulieu Team, Launch Guests and External Professionals interviews, evaluation of the kiosk interpretation design was important to gain insights of the visitors' engagement, and therefore reflect on whether the kiosk interpretation required adaptation. In the different design processes, reflection is an important element throughout, yet this does not always seem to occur after delivery/installation. As an external designer for the Beaulieu project, I reflected on and evaluated the design on a regular basis to ensure the design, navigation and content formed a comprehensive view and understanding of the abbey for visitor engagement. I was able to test stages of development with colleagues at University and with my company colleagues, especially in the use of the KubeMatrix as navigation for mobile, web and kiosk platforms. On completion and delivery of the project, evaluation and reflection was initially concerned with whether I had completed and fulfilled my contract with Beaulieu and with the funding provider. I was also curious to know how visitors engaged with the range of content and choices available through the kiosk interpretation and keen to observe how they used the kiosk interpretation. The observations achieved have helped to develop the application further.

The analysis of the case studies' design companies and the Design Team interviews, reinforced my initial concern, i.e. that the client's brief was fulfilled on time and budget, not how visitors used their interpretation. Consequently, the new model highlights reflection and evaluation should be considered throughout the project process by each of the teams and their members. The CHSI design process (see Fig.84) also stipulates a final evaluation of the project, observations and feedback from visitors, reflection on what went well, what could be improved, experiences gained and feedback of the overall design experience.

Visitors Team:
The included Visitors Team would provide insights about their individual expectations, the aspects that may affect their experience and how they might be improved. Their personal insights and

experience would help to develop further visitor types and scenarios in discussion with the curatorial and design team. By also using an empathetic approach[86] (Kouprie & Visser, 2009; Scott, 2012:p.4; Devecchi & Guerrini, 2017:p.4; Dam & Siang, 2020), deeper insight and understanding of the type of heritage site interpretation design would form as a result.

Visitors do not just vary in type (Falk & Dierking, 2013:p.62)[87], they also vary in motivation and how they may visit, i.e. the same visitor may visit as part of a group, as part of a couple or alone. Each occasion means a different type of visit, and of experience. The Interpretation team would be able to make use of these experiences, building a 'visitor story journey', highlighting the different touch points where experience(s) may be formed. Personas, user journeys/stories and empathic design are all part of the user centred design (UCD) process, which is core to the Design Thinking methodology (Beckman & Barry, 2007; Lockwood, 2009; Dam & Siang, 2018). The two main differences that have emerged in the use of a UCD process are:

- the lack of consistent involvement of users/visitors (i.e. an active team) throughout the design process
- a lack of the designers' evaluation and understanding of their users'/visitors' engagement and experience with the outcome (Kouprie & Visser, 2009; Roberts, 2014)

By incorporating a representative team of visitors through the design process, the new model would negate the differences highlighted above.

Design Team:

Generally, the CHSI design team may comprise of sub-contractors (craftspeople, technicians, developers, copywriters) working under a project manager. The team may be an in-house CHSI design team (larger organisations) or contracted via a tender process; either situation tends to bring in the skills required for a particular heritage site interpretation project as and when required (Montagu Scott, 2013). The most effective outcome appears to be when the CHSI design team is reasonably local and known by the heritage site curatorial team, and where the teams have experience in working with each other, and in heritage site interpretation design.

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[86] An empathetic approach (or empathic) is used with Design Thinking and Participatory Design to understand others' experiences by imagining ourselves in their role, their culture and background.

[87] Visitor types for this thesis also refers to Experience Seekers, History Buffs, labels or 'tags' used by English Heritage and also by Trip Advisor.

Curatorial Team:

The research I conducted did not lead to identifying a 'typical' Curatorial Team; the case study heritage organisations differ in how they are structured, and therefore the make-up of the different teams also differs. The main premise, reviewing the case studies and Beaulieu, involves stakeholder and managerial representation, curators, archivists, the front of house staff, visitor guides and education representatives. In the case of Beaulieu Abbey (plus Palace House and Bucklers Hard), the curatorial/interpretation team consists of one archivist who is also responsible for education (Living History) and one designer who is also a stakeholder and curator. The team refers to the Management Team and Stakeholders, although as the team consists of one of the stakeholders, the decision-making process can be expedited more simply than possibly the case study teams' decisions. The Beaulieu team as a small, multi-skilled team (Montagu Scott, 2013), brings in additional skills when they need to, using people they have already worked with, ensuring consistency and understanding.

Outcomes: collaboration, understanding, experiences, serendipity and trust:

The curatorial and design team would work closely together to be most effective; consistency in teams would aid collaboration and understanding between the team members, i.e. they would already know each other, built trust in abilities and recognised each team member's soft (and software) skill strengths. The research has shown that it is beneficial if there is a consistent team (Roberts, 2014:p.203). Projects can usually move more quickly, learning curves diminished, collaboration and communication made easier/smoother, due to the trust that has been built and recognition of others' expertise within the team. Chance acquisition of new knowledge (serendipity) provides added value to each of the team members' experience, increasing their knowledge and skills (Nonaka, 2007; Copeland, 2017). The Beaulieu team is a consistent team; they are experienced in what they do but also in working with each other. Their knowledge of each other, their strengths and abilities were highlighted in the interviews. Working with such a cohesive team was a good experience and a valuable lesson that I have been able to use in forming our Digital Media team[88].

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[88] The Digital Media team consists of multi-skilled practice based lecturers who teach on a range of Digital Media degrees at the University of Winchester, Department of Digital Futures.

NEW CHSI DESIGN PROCESS:

Two of the thesis aim's objectives stated: 'evaluating methods used to measure and understand visitors' experiences of interpretation design' and 'how this translates through the design process and interpretation'. In developing an understanding of the different design processes used within professional HSI design, I realised there was a definite lack of a detailed step-by-step process for the various stages involved. There were a few examples (Black, 2005; Veverka, 2011; Tilkin, 2016) which provided a reasonable outline, but I could not find a comprehensive detailed design process, which could be used as a flexible template for the majority of HSI design.

I would not have been awarded the funding for the Beaulieu Abbey kiosk interpretation had I not provided a detailed plan, schedule, timeline and costs within the funding plan. To map and provide this information, I needed to work out and clarify what was involved at each stage of the project i.e. a detailed step by step process. Having had to do similar as a business owner, I was able to achieve this reasonably well albeit with research. The successful business plan became the project brief, for which the step process was also required, making it clear for those involved what the tasks were and when they needed to be completed.
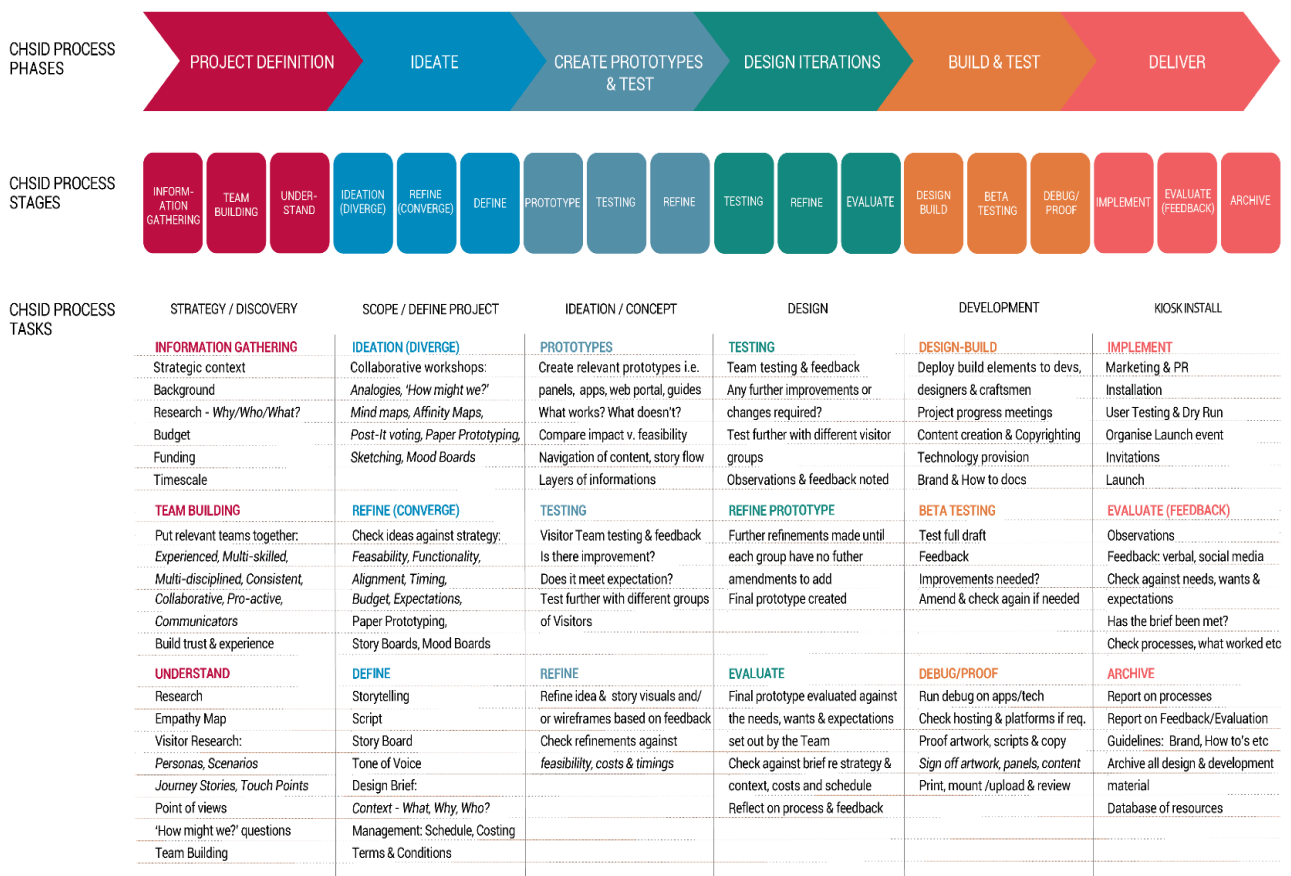
CHSID PROCESS PHASES: PROJECT DEFINITION → IDEATE → CREATE PROTOTYPES & TEST → DESIGN ITERATIONS → BUILD & TEST → DELIVER

CHSID PROCESS STAGES: INFORMATION GATHERING | TEAM BUILDING | UNDERSTAND | IDEATION (DIVERGE) | REFINE (CONVERGE) | DEFINE | PROTOTYPE | TESTING | REFINE | TESTING | REFINE | EVALUATE | DESIGN BUILD | BETA TESTING | DEBUG/PROOF | IMPLEMENT | EVALUATE (FEEDBACK) | ARCHIVE

CHSID PROCESS TASKS:

STRATEGY / DISCOVERY	SCOPE / DEFINE PROJECT	IDEATION / CONCEPT	DESIGN	DEVELOPMENT	KIOSK INSTALL
INFORMATION GATHERING	**IDEATION (DIVERGE)**	**PROTOTYPES**	**TESTING**	**DESIGN-BUILD**	**IMPLEMENT**
Strategic context	Collaborative workshops:	Create relevant prototypes i.e.	Team testing & feedback	Deploy build elements to devs,	Marketing & PR
Background	Analogies, 'How might we?'	panels, apps, web portal, guides	Any further improvements or	designers & craftsmen	Installation
Research - Why/Who/What?	Mind maps, Affinity Maps,	What works? What doesn't?	changes required?	Project progress meetings	User Testing & Dry Run
Budget	Post-It voting, Paper Prototyping,	Compare impact v. feasibility	Test further with different visitor	Content creation & Copyrighting	Organise Launch event
Funding	Sketching, Mood Boards	Navigation of content, story flow	groups	Technology provision	Invitations
Timescale		Layers of informations	Observations & feedback noted	Brand & How to docs	Launch
TEAM BUILDING	**REFINE (CONVERGE)**	**TESTING**	**REFINE PROTOTYPE**	**BETA TESTING**	**EVALUATE (FEEDBACK)**
Put relevant teams together:	Check ideas against strategy:	Visitor Team testing & feedback	Further refinements made until	Test full draft	Observations
Experienced, Multi-skilled,	Feasability, Functionality,	Is there improvement?	each group have no futher	Feedback	Feedback: verbal, social media
Multi-disciplined, Consistent,	Alignment, Timing,	Does it meet expectation?	amendments to add	Improvements needed?	Check against needs, wants &
Collaborative, Pro-active,	Budget, Expectations,	Test further with different groups	Final prototype created	Amend & check again if needed	expectations
Communicators	Paper Prototyping,	of Visitors			Has the brief been met?
Build trust & experience	Story Boards, Mood Boards				Check processes, what worked etc
UNDERSTAND	**DEFINE**	**REFINE**	**EVALUATE**	**DEBUG/PROOF**	**ARCHIVE**
Research	Storytelling	Refine idea & story visuals and/	Final prototype evaluated against	Run debug on apps/tech	Report on processes
Empathy Map	Script	or wireframes based on feedback	the needs, wants & expectations	Check hosting & platforms if req.	Report on Feedback/Evaluation
Visitor Research:	Story Board	Check refinements against	set out by the Team	Proof artwork, scripts & copy	Guidelines: Brand, How to's etc
Personas, Scenarios	Tone of Voice	feasibility, costs & timings	Check against brief re strategy &	Sign off artwork, panels, content	Archive all design & development
Journey Stories, Touch Points	Design Brief:		context, costs and schedule	Print, mount /upload & review	material
Point of views	Context - What, Why, Who?		Reflect on process & feedback		Database of resources
'How might we?' questions	Management: Schedule, Costing				
Team Building	Terms & Conditions				

Figure 88: *New 'Collaborative HSI Design Process' (Wilson, 2020)*

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I therefore considered that in providing a new model for designing HSI, with an accompanying flexible stepped design process to follow for each stage, would be beneficial in helping to take the model forward for future HSI design (Roberts, 2014:p.194). Taking this into account, I re-worked my original Beaulieu design process (Chapter 2, section 2.1.1. Fig.34) to create a detailed design process for future HSI design (see Fig.88)[89]. The new CHSID step process involves six consecutive 'Phases' each containing three 'Stages' of 'Tasks', guiding the teams on what should be considered at each Stage, similar to the Beaulieu Abbey existing design process. The list of 'Tasks' cover generally what may be required for the design of an HSI design project, there may be tasks that are not relevant or tasks that may change slightly depending on the type of interpretation; they are for guidance, consideration and possibly discussion at the start, and during, the HSI design process.

With the Beaulieu Abbey kiosk project (and subsequent projects such as Hyde and Malmesbury Abbey), research to inform the design was vital throughout the process. For the abbey, it was initially to learn more about the subject areas, then how the abbey was built, understanding the culture of Cistercian monks, what they wore, how they lived, how the building developed, the historical references regarding the use of the abbey and then the dissolution. In addition, research about the best method of 3D modelling, the textures to ensure a certain level of realism and authenticity, the technology and kiosks to purchase was required; research regarding the visitors, and researching the guest list. Research is, therefore, an assumed process to be undertaken at each Stage as necessary for each project. The only Phase where it has been consistently mentioned is in the first Task list: 'Strategy/Discovery' when research is required for 'Information Gathering', 'Team Building' and 'Understand'. The Task lists, thereafter, suggest research is required for each list item.

The new CHSIDP (Fig. 88) has also been designed as a set of laminated 'cards' which could be used in the collaborative team meetings as prompts for discussion, reminders or checklists (see Appendix K).

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[89] A larger image of the model can also be viewed on this link *http://thetalkingwalls.co.uk/wordpress/?p=3540*

The work I have undertaken for this thesis highlighted areas that would be valuable to re-visit for further research and analysis. Further research to evaluate how the CHSID model and process compares with the design processes of smaller heritage site organisations would be essential in establishing their use in the field of heritage site interpretation design.

The additional research would also provide an opportunity to review the changes that are happening in curatorial and management practice at heritage sites, and changes in the technology now available and used in museums (for example, augmented reality or mixed reality via headsets or mobile devices for viewing (and walking through) rooms, buildings, and gardens that once existed). Furthermore, it would be beneficial to HSI design teams to understand how visitors respond to differing forms of technology at similar heritage sites.

Reflection on how the proposed CHSID model and process would have worked in my heritage site interpretation design for Hyde Abbey, and how it is currently working for the Malmesbury Abbey HSI design in comparison to the 2008-10 Beaulieu Abbey kiosk interpretation would add to a valuable body of knowledge involving applied research and knowledge exchange impact for future CHSI design. Hyde Abbey and Malmesbury Abbey (and Market Town) HSI involved community groups and media companies working with Digital Media at the University of Winchester. The difference in approach to each is significant in understanding the resulting interpretation. For example, Hyde Abbey involved a disparate team with completely separate projects, consistently changing, with additional requirements, whereas Malmesbury consists of a cohesive team with each sub project clearly aligned to an overall outcome. Ideally, reflection of practice involving the team of visitors throughout the planning and design stages of the proposed CHSID model and process would be the next step from the completion of the Malmesbury Abbey HSI design. The reflection and subsequent evaluation would focus on the effectiveness of the visitor team, team collaboration and communication in the planning and design of the Malmesbury Abbey heritage site interpretation design.

My team and I are about to embark on a new 'CHSI' project 'Virtual Cities - Winchester', covering approximately 6 time 'slices'. This will be undertaken by our Centre of Enterprise, Design & Innovations' Digital Heritage Interpretation team over the next couple of years, using the CHSID model and process. This will involve a larger, mostly in-house design team, working with different Faculty experts. It will be an important project to thoroughly test the new model and process.

Before undertaking research regarding Practice-led and Practice-based design research PhDs, I found it confusing in trying to find a 'formula' or PhD structure that would suit a design practitioner, design researcher or research designer. Design is a growing field in areas of Design Thinking, Human Computer Interaction, User Experience and User Centred Design involving critical thinking, critical inquiry, analysis and innovation. As design importance expands within a multitude of industry disciplines, so will the amount of design professionals who wish to take their practice to a greater level of research, such as a PhD, to inform their practice or advance their career. Design Research and Design Practice as Research will, therefore, require a flexible framework (and language) to bridge design practice/design research with academic research. My table, 'Figure 9 - Design PhDs' in Chapter 1, section 1.2.1 is aimed at addressing such a framework, and is an additional contribution to the growing body of work in Practice-led and Practice-based design research PhDs.

A further outcome of this doctoral work is the possibility of developing a taxonomy for a common design language which can be used by heritage site interpretation design teams, based on Bloom's Digital Taxonomy[90] (Kleinsasser, 1996; Armstrong, 2006; Churches, 2007). The difference in terms used within the field of design and the different design disciplines may appear to be confusing for designers from the different disciplines, but, more importantly for CHSID team members not involved or trained in design[91]. A by-product of the thematic analysis of interview and feedback data was recognition of the frequency of words and terms used by the curatorial professionals, designers and launch guests, and how they differed according to their discipline. Research has proven that for teams to be able to communicate clearly, a common language is normally required (Veldpaus L, 2016). Initial research has proven that there is a collaborative design taxonomy (Ostergaard & Summers, 2009), although this is collaboration amongst engineers primarily, a UX Web taxonomy (Wondrack, 2015) and a taxonomy of design methods process models (Céret *et al.*, 2013), but as yet not a common language taxonomy for multi-disciplined, collaborative heritage site interpretation, or interpretation design per se. Further research can determine whether a heritage interpretation design taxonomy would be valuable in communication between the team members, and if considered positively, I would like to develop this further as an addition to the CHSI design model and process.

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[90] Bloom's Digital Taxonomy is an adaptation by Andrew Churches of Bloom's Taxonomy of Verbs

[91] A range of word frequency 'Wordles' for the three groups i.e. curators, designers and visitors, which highlighted the difference in terms used, can be found on this link: http://thetalkingwalls.co.uk/wordpress/index.php/nggallery/thumbnails?page_id=1689

4.3.1. IMPACT OF THESIS ON PERSONAL DESIGN PRACTICE AND DESIGN RESEARCH:

By undertaking my doctoral research, my theoretical understanding of design processes has grown considerably. In addition, self-understanding and confidence in and of my role as a professional heritage site interpretation designer has also grown. From this research, I have already received requests, and completed work for smaller heritage interpretation projects, in which our digital design and development students have assisted, making use of current technology such as Augmented Reality and Virtual Reality, 3D interactive game software such as Unreal and Unity, QR codes and web apps. Through these interpretation projects, 'we' are collectively learning about navigating through 3D virtual space and how to deploy interactive 3D content to websites and web apps, as stated by Lawson (2006):

> *'Design is a collective process in which the rapport between group members can be seen as significant as their ideas.'* (Lawson, 2006:p.240).

The impact on my work as a design lecturer, is also significant. The theory of design and design thinking has been built into the programmes, with students learning through collaboration across modules for multi-disciplinary projects, including client projects. The formation of the 'digital design and development' team has benefitted from the collaborative design research, with student groups also benefitting from research regarding team communication, and how to understand the team's individual skills and strengths. Engaging students in 'doing' and 'making' and encouraging independent study by layering information are aspects brought through from the interpretation design research. Each project the 'student teams' undertake are critical to their process of self-development and understanding of working collaboratively.

In addition to my lecturing role, I am also the Co-Director/Founder of the Centre of Enterprise, Design and Innovation (CEDI) which has been formed to engage in knowledge exchange activities, research and consultancy. As part of this centre, a unit for Digital Heritage Interpretation Design has been formed, in which I will be working with colleagues and students to design and create heritage applications, applying research and practice from this thesis further into the future.

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APPENDIX A: KIOSK INTERPRETATION & MUSIC DVD AND STORYBOOK

- Links to the Beaulieu Abbey Kiosk interpretation, Reflection of Practice website, Music DVD and Storybook

APPENDIX B: STAGE 1 MATERIAL

- Unique application Data: 3D Models, Characters, Story Boards, Illustrations, Funding Docs, Animations and Photos
- Historical Reference Data: History of Beaulieu Abbey, Abbey and Cistercian Culture, Medieval Architecture, Royal Visitors and Medieval Music Grid produced for the characters

APPENDIX C: STAGE 2 MATERIAL

- Launch Preparation: Students' Marketing project, Beaulieu's PR and Marketing, Guest List and Catering
- Launch Event: Speech Transcripts & Video, Kiosk Demo, Attendees and Questionnaire Sheet (see Appendix F for the completed Questionnaires)
- Launch Event Survey: Questionnaire results and Web Application Google Analytics

APPENDIX D: STAGE 3 MATERIAL

- Fieldwork Interviews: Beaulieu Team, Designers, Launch Guests, External Curators
- Kiosk Observations: Beaulieu Staff Observations, My observations

APPENDIX E: Special Visit Sheet (SVS)

- Beaulieu's Special Visit Sheet for the Launch event is included in this appendix.

APPENDIX F: Launch Questionnaire Participant Sheets (17)

- The MA Marketing students' completed Launch Questionnaires are included in this appendix.

APPENDIX G: Interview Sheets

- The fieldwork interview sheets which outline the questions to prompt the interview discussion are included for the 14 participants.

APPENDIX H: ENGLISH HERITAGE STRATEGY 2005-2010

- English Heritage Strategy 2005-2010 document

APPENDIX I: NATIONAL TRUST'S 2004 STRATEGY - VISION FOR LEARNING

- National Trust's 2004 Strategy – Vision for Learning document

APPENDIX J: UK HERITAGE LOTTERY FUNDS' AUDIENCE DEVELOPMENT PLAN (BLACK, 2005)

- Audience Development Plan (Black, 2005)

APPENDIX K: SET OF CARDS FOR THE CHSID PROCESS

- Set of 9 cards for collaborative heritage site interpretation design process presented as a single sheet.

APPENDIX L: DESIGN PROCESS MODELS

- A range of Design Process models reviewed as part of the thesis research.

APPENDIX M: CASE STUDIES

- The three case study sites and their interpretations selected presented as an overview per site and per organisation involved.

APPENDIX N: INITIAL ANALYSIS OF DATA SOURCES USING KEY WORD FREQUENCY IN NVIVO FORMING A DRAFT OF THE HERITAGE INTERPRETATION DESIGN WHEEL

APPENDIX O: THEMING - SECOND INTERATION OF DATA NODES

APPENDIX P: FINAL ITERATION OF THEMED GROUPS AND HIERARCHIES, BASED ON THESIS CHAPTERS 2 & 3 AND INCORPORATING SUBJECT DISCIPLINES AND CATEGORIES

Link to the web based copy of the Beaulieu Abbey Kiosk interpretation:
www.thetalkingwalls.co.uk/Beaulieu

Link to The Talking Walls Reflection of Practice website:
http://thetalkingwalls.co.uk/wordpress/?page_id=2

The Music DVD and Storybook insert are included in a wallet. Below are images of the DVD artwork and storybook:

The story book was initially designed to form a DVD of the medieval music created for each of the characters. The story book was created to provide information about the characters, and provide images from the stories for children to colour in.

ABBEY
CHARACTERS - MUSIC

THE TALKING WALLS®

STORYBOOOK

www.thetalkingwalls.co.uk

Abbey Characters' Medieval Music

Instruments used:

Nostra Phallans	Bass x 2
Gregorian Antiphon	Gregorian chant singers Church of the Immaculate Conception
7th Estampie	Veille in G, Frame Drum Gittern, Shawm
Danse Real	Veille in G, Harp, Ric Lute, Frame Drum, Shawm
Miri it is	Harp, Soprano
Gregorian Kyrie	Gregorian chant singers Church of the Immaculate Conception
Ad Completorium Psalmus	Gregorian chant singers Church of the Immaculate Conception
6th Estampie	Flute in D, Bells, Lute
Responsorium Subvenite	Gregorian chant singers Church of the Immaculate Conception
Antiphon in Paradisum et Psalmus 121	Gregorian chant singers Church of the Immaculate Conception

Instruments used:

Gregorian Chant	Sackbut x 4
Sackbut Fanfare	Sackbut
Annua Gaudia	Frame Drum, Ric, Symph, Soprano, Bass, Sackbut
Alle Psallite Cum Laya	Tenor Recorder, Ric, Harp F Cymbals, Symph Frame Drum, Soprano Bass, Shawm Sackbut
Le Depart de l'Ame	Veille in G, Harp
Deus in Auditorium	Tenor (C) Recorder, Harp
Verbum Patris Humanatur	Soprano & Alto Recorders Harp, Cymbals, Symph Frame Drum, Soprano x 3 Bass x 3
Amour au Trop Tard	Veille, Soprano
5th Estampie	F Alto Recorder, Ric Frame Drum
Falla Con Misura	Ric, Frame Drum, Shawm Sackbut

Abbey Characters' Medieval Music

Chapter 7 Farming & Food: Story:	**Laybrother Simon (1320)** 7th Estampie Danse Real
Chapter 8 Life as a Monk: Story:	**Novice Peter (1386)** Miri it is Gregorian Kyrie
Chapter 9 Building the Abbey: Story:	**Master Mason Durandus (1210)** Ad Completorium Psalmus 6th Estampie
Chapter 10 Images from prototype:	**Dunster Castle** Responsorium Subvenite
Chapter 11 Images from demo:	**Jane Austen** Antiphon in Paradisum et Psaltus 121
Music composed and produced by:	Seanine Joyce www.seaninejoyce.co.uk
Graphics and animations by:	Deborah Wilson MA Rebecca Furse Sandy Whitehead www.thetalkingwalls.co.uk
DVD produced by:	Deborah Wilson MA www.thetalkingwalls.co.uk

Abbot Sulbury - (Date 1425)

"Hello, I am Abbot William of Sulbury. I have recently been elected Abbot and with taking on this role, I will also be King Henry VI's envoy for the different religious meetings and councils, including those in Rome. This means I will travel a great deal, although I am used to this.

You might think travelling as part of the job is really good, but it isn't the same as in your day. To get to Rome takes months, especially if the weather closes in. If this happens we have to wait until it clears, which could be weeks. Or worse, the weather could close in whilst on board the ship.

This is really bad for me as I suffer quite badly with sea sickness. The last time I travelled, three of the crew died from dysentery (a very bad tummy upset for you little ones). We were worried we all might suffer but thankfully I was saved, as were the others."

Durandus, Master Mason - (Date 1210)

"Hello, I am Durandus. I am the Master Mason and have been requested to come to Beaulieu and manage the building of the Abbey by the Abbot.

It was such a long way to come, a difficult passage, and worrying about how the building at Rouen Cathedral is going now that I am not there. Goodness knows if they will manage without me, although it is comforting to have my apprentices still there.

There was such a fuss at the docks when I arrived, I was very cross. The material I was asked to bring with me was detained by the tax officials (Customs and Excise as you know them now, I believe). We had to wait for the Abbot to arrive and sanction it. Such a delay when there is so much work to do."

King John - (Date 1204 - 5)

"Good Morrow, I am King John, the founder of this Abbey and for several years I will be contributing lots of money to ensure this is the best and biggest Abbey in England, nothing but the best for my dear Abbot.

Do you know, I had this horrible dream, I cannot remember all the details other than when I woke I knew I had to do something to appease the religious house of the Cistercians. I had been a bit tough with them, but hopefully by building this they will thank me and pray for me each day.

Although I am the King, I never seem to have any luck, I am always losing battles and have very little in the way of friends I can trust. Most of the people around me only want to know me for how I may be able to help them or keep them alive! I hope you are not one of them?"

Lay Brother Simon - (Date 1320)

"Hello, I am Brother Simon. I live out at Ippley on the monks' farm there. My job is to work on the farm, keeping the animals and helping to ensure the grain is brought in on time. It can be quite tough, especially at harvest time, oh and when the sheep have to dipped and sheared. There used to be more of us, but several have left recently.

I have not long been here, so don't intend to go yet. The monks need us to help them in this way as they are not allowed outside of the Abbey. Mind you, I don't know what else I would do really, at least I have a roof over my head here.

I do get to visit the Abbey occasionally, we have to visit there at least four times a year to be 'bled' at the infirmary. It is supposed to keep us healthy, but for that day at least, I am absolutely washed out, really weak. Some suffer more than me, or at least say they do. They might just be making excuses to get out of going back to work straightaway."

Brother Thomas, the Infirmarian - (Date 1297)

"Hello, I am Brother Thomas, I am in charge of the Infirmary here at the Abbey. I have been at the Abbey for over 50 years now and have seen a lot of changes in that time as you can imagine.

My role is to look after the sick and help them get better. Some of the brothers in the infirmary will probably never leave now, they are too frail and there is no-one else to look after them, or somewhere else for them to go.

I can still remember the day of the dedication. I was only a lad then and had never seen royalty before. What a day! Poor Queen Eleanor, her little boy was so poorly, she was so worried. I can remember Brother Gabriel being very anxious, he was the Infirmarian then, I was still only a novice."

Peter the Novice Monk - (Date 1386)

"Hello, I am Peter, I have just joined the monastery and will one day be a choir monk. At the moment I am having to learn so much, how we spend our days, so many things to remember. Do you know we even have to sleep with our clothes on so that we are ready to pray as soon as we get up. Sleep, mmm well, we do not seem to get much of that.

I have a huge book to learn to read and then there are the Rules of St Benedict, masses of them. My master, Brother Alphonso, is teaching me to write and he is quite strict, as I found out recently! On the whole though, he is very kind and looks after us really well, much better than at home.

I was with him the other day 'meditating'. I shouldn't have, but I kept peeking at him, wondering what happens next and hoping he would give me a clue. He must have realised eventually as he turned to me and whispered 'This is it - nothing else happens, enjoy the quiet and the rest'. Ah well, I am sure I will one day."

Queen Eleanor of Provence - (Date 1246)

"Hello, I am Eleanor, wife to Henry III, the son of King John who founded the Abbey.

We came to the Abbey for the dedication, unfortunately Edward my son, John's grandson took ill during the ceremony, so we are still here, and will remain so until he is well. I am very worried about him, he seems so frail.

This has rather upset the Brothers here though. Women are allowed to visit but not to stay apparently. so they are trying to sort things so that we have somewhere comfortable to stay. I am certainly not leaving Edward, so they will need to get something arranged, whatever it is."

Brother Michael the Scribe/Choir Master - (Date 1505)

"Hello, I am Brother Michael. I am the Choirmaster and Master Scribe here at Beaulieu. My job is to train the novices for the choir, and to teach them to read and write. You would know me as a music / English teacher I suppose, in your time. It is a very rewarding role, and when the choir sings it is so good to hear the young voices lifting high to pitches most of my brother monks can no longer reach.

Being a scribe can be a tedious role within the Abbey, especially preparing the accounts. I can understand the novices getting bored, the times I have had to reprimand young Matthew for doodling in the margins. I used to do it myself so I feel I can't be too harsh on him. Writing can also be rewarding though, seeing the completed book, with the coloured letters on new vellum. It is also a challenge, to get to the end of the page without smudging the letters or making mistakes, or the ink blotting! Even after all these years of practice it still happens."

Perkin Warbeck - (Date 1497)

"Hello, I am Perkin Warbeck. I am seeking sanctuary here at the Abbey, it is such an amazing place, thank goodness I reached it on time. Oh yes, you may not know, I was being pursued, along with my band of men. We started an uprising in Cornwall, against Henry VII, due to my claim on the throne. I have been told that I am one of the missing princes in the Tower, which for me, has helped make everything fall into place. You see, there is a huge gap in my memory, I vaguely remember a long journey and then living with some people who said they were my parents, but I cannot remember anything before this.

So the question is, am I or am I not a pretender to the throne? I will leave you to make up your own mind on this one. Meanwhile I have a bolt hole for a month or two, and while I am here, King Henry and the Sheriff cannot get me, thank goodness. There is a possible chance I will receive a pardon, so fingers crossed on this, otherwise I am going to have to plan what happens next."

Unique application Data: 3D Models, Characters, Story Boards, Illustrations, Funding Docs, Animations and Photos.

Rendered and sketch images of the full size 3D Models created specifically for the Beaulieu Abbey Kiosk interpretation:
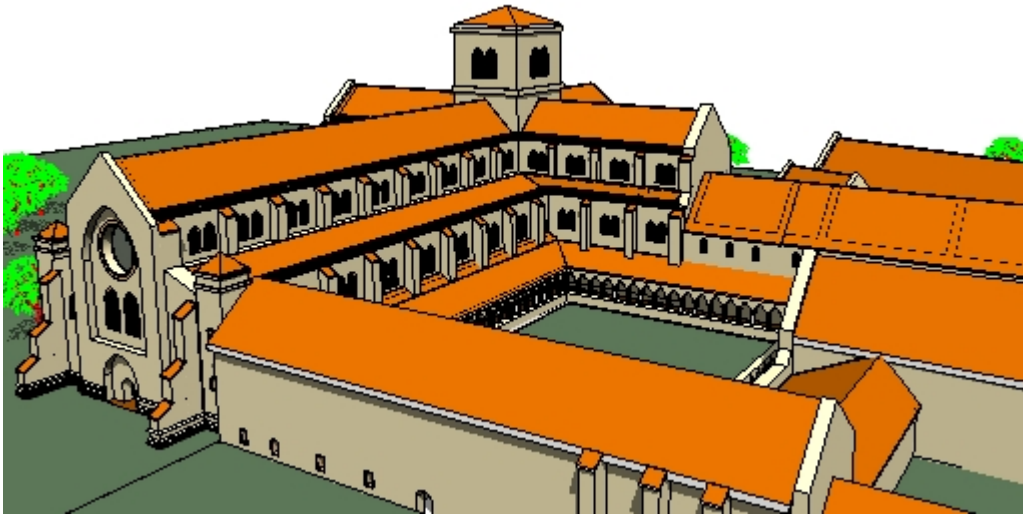
2008 Autodesk Revit non-rendered model of Beaulieu Abbey and the monastic buildings
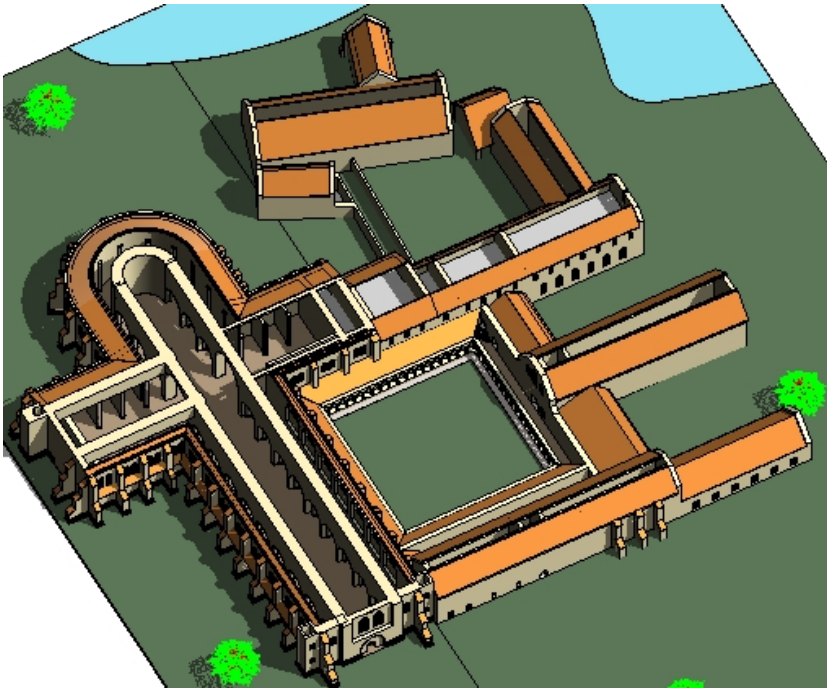
Birds eye 'cut' view of the 2008 Autodesk Revit 3D model

Basic non rendered view of the east presbytery of Beaulieu Abbey in Autodesk Revit

Basic non rendered view of the west entrance of Beaulieu Abbey in Autodesk Revit

Rendered view of the same 2008 Autodesk Revit 3D model
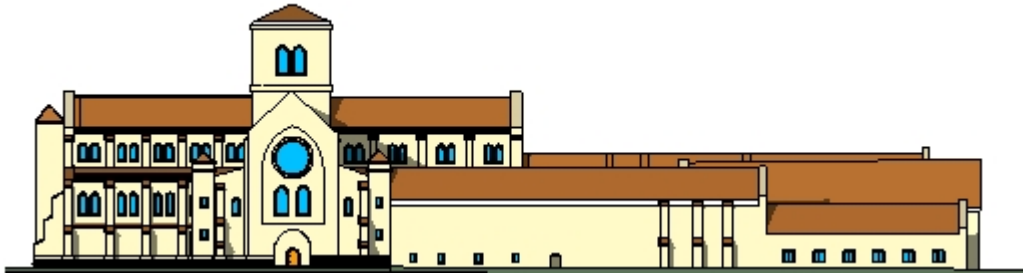
West elevation – 2008 Autodesk Revit 3D model

North elevation – 2008 Autodesk Revit 3D model

South elevation – 2008 Autodesk Revit 3D model

East elevation – 2008 Autodesk Revit 3D model
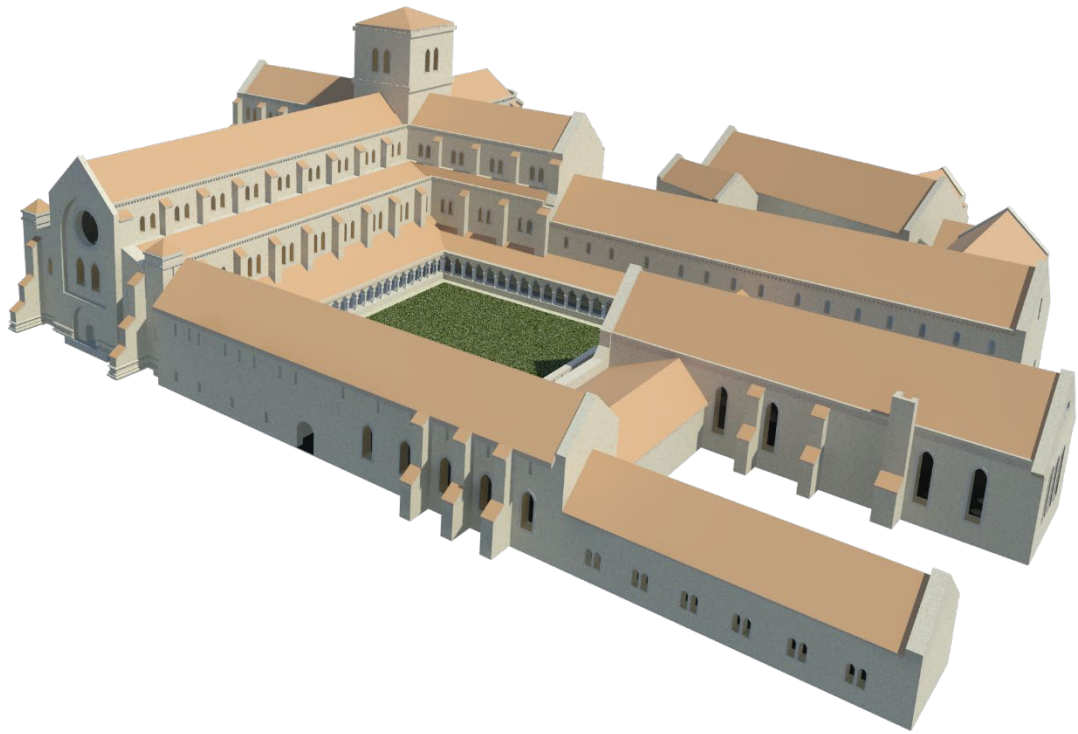
Simple rendered view of the 3D Beaulieu Abbey model in Autodesk 3DS Max
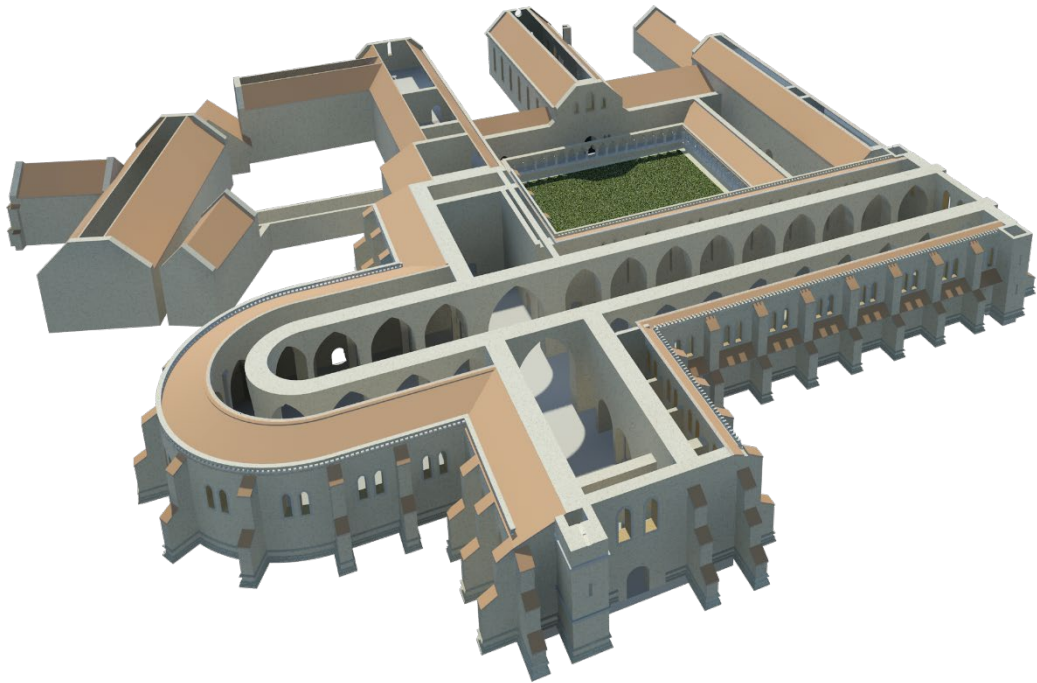
Simple rendered 'cut' view of the 3D Beaulieu Abbey model in Autodesk 3DS Max

The following renders demonstrate how the vaulting ribs are constructed using Autodesk 3DS Max:
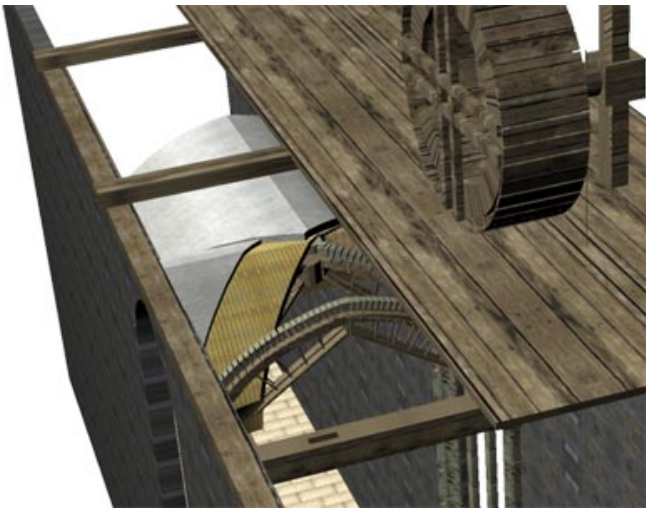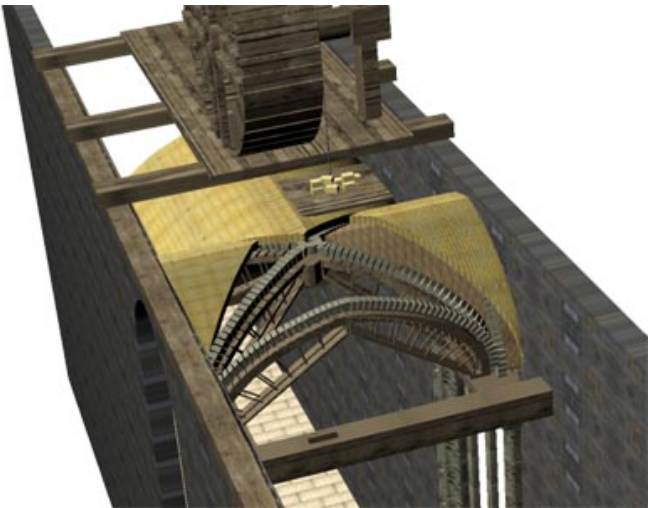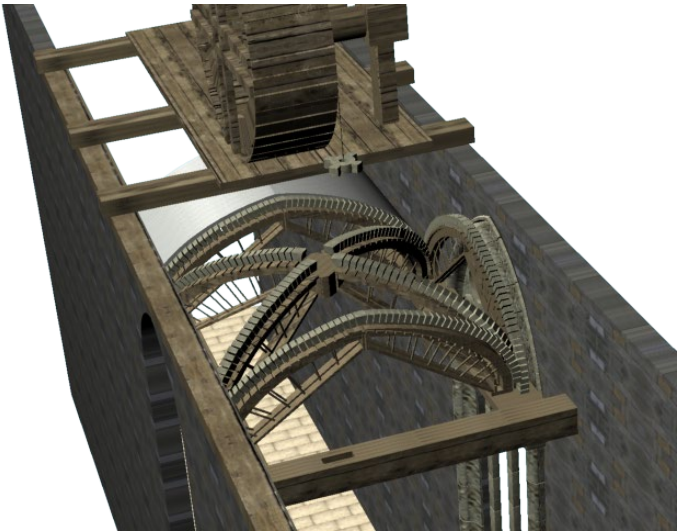
The following renders demonstrate how the columns are constructed using Autodesk 3DS Max; the stills are from an animated sequence available on this link

http://thetalkingwalls.co.uk/wordpress/index.php/nggallery/page/1?page_id=592
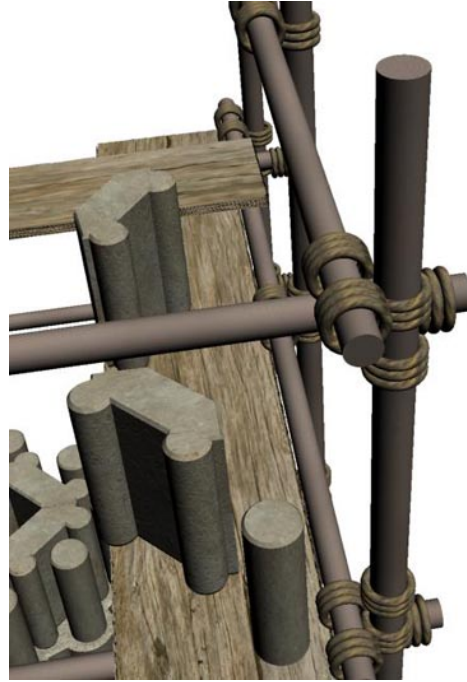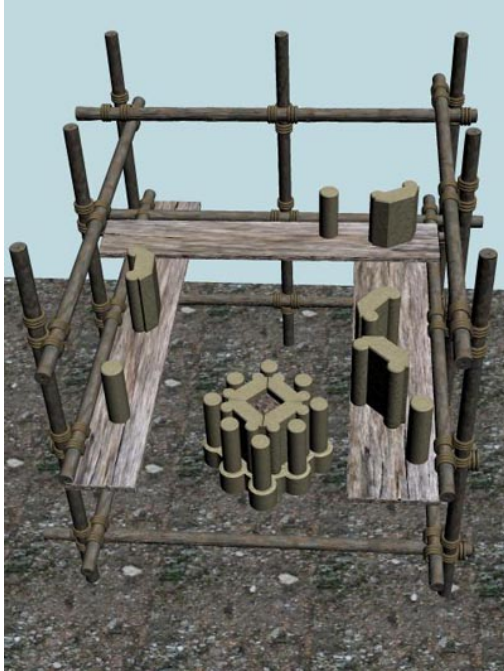
The following images show a range of Autodesk 3DS Max renders of the cloisters:
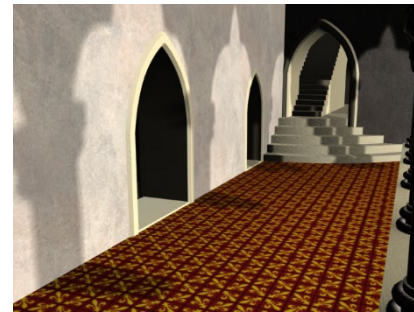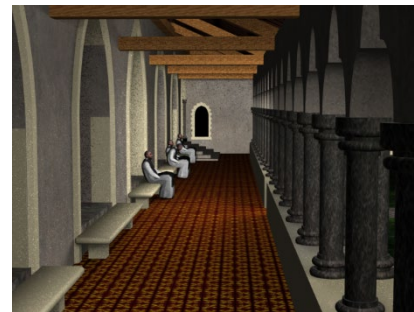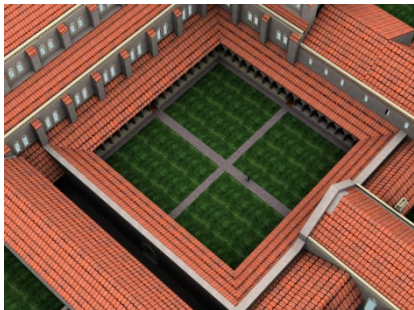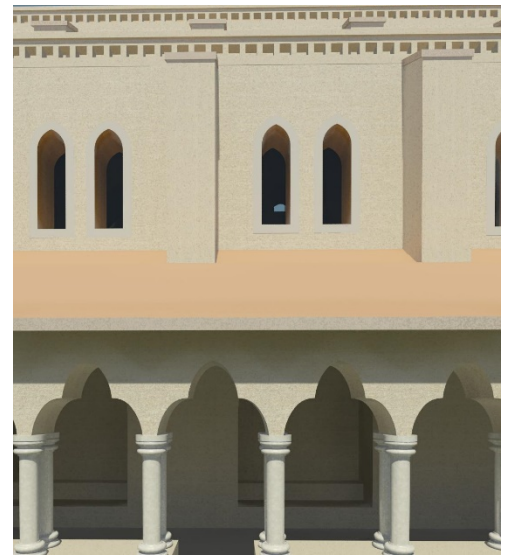
The above renders demonstrate a high render quality using 3DS Max Mental Ray, unfortunately the render times for each frame were prohibitive for creating the animated walk throughs for the kiosk interpretation. The 'Ages of the Abbey' animations were consequently rendered using a cel render in 3DS Max as shown below:
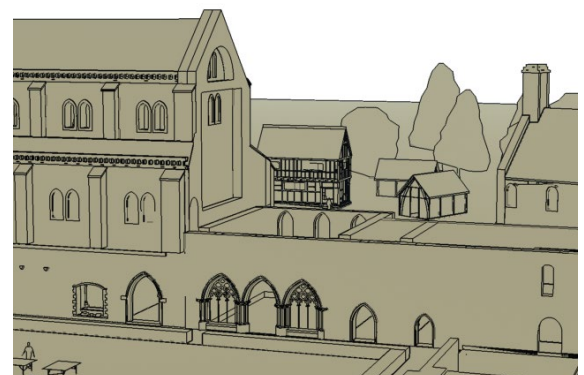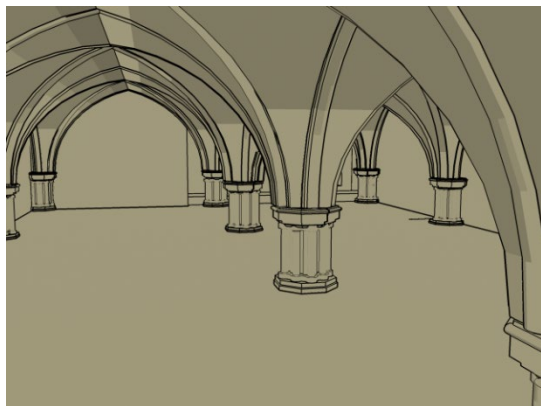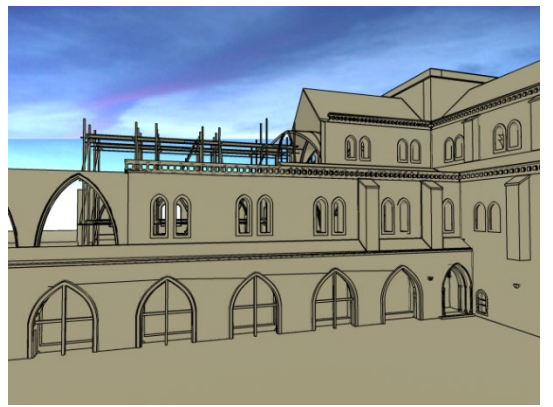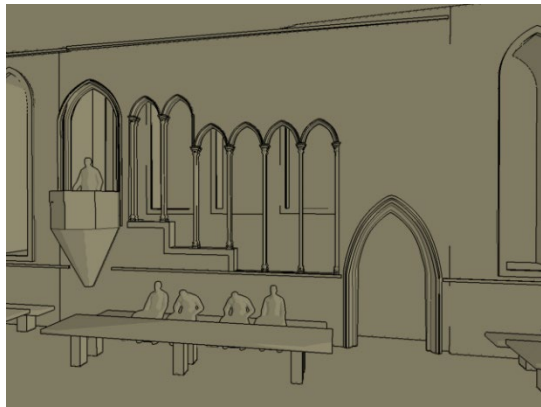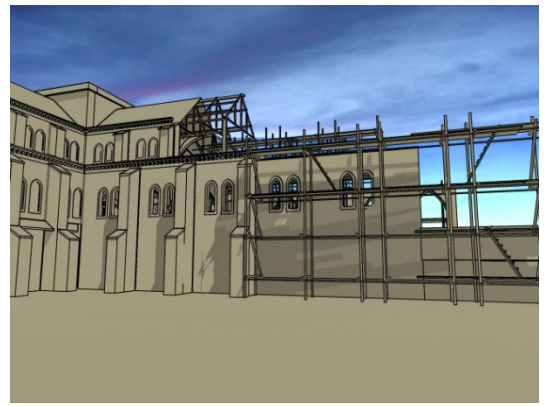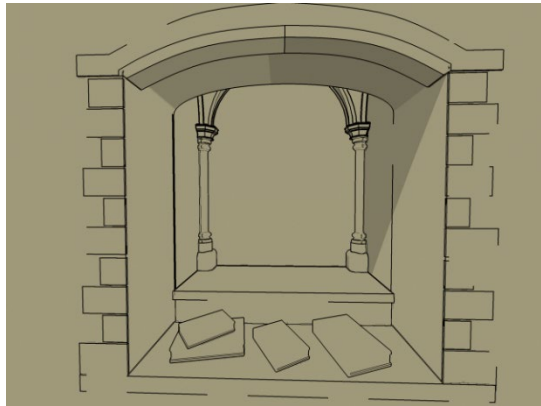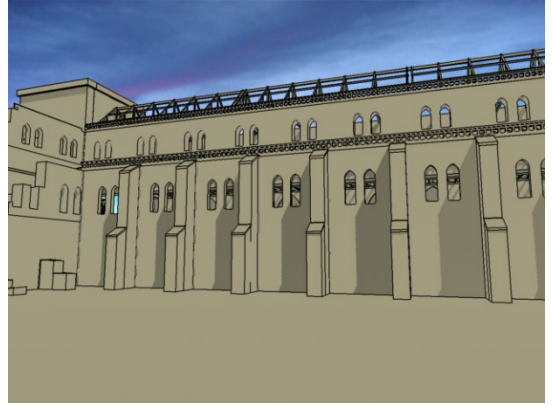
The following renders are of the interior of Beaulieu Abbey using Autodesk 3DS Max:
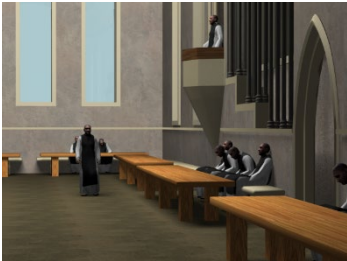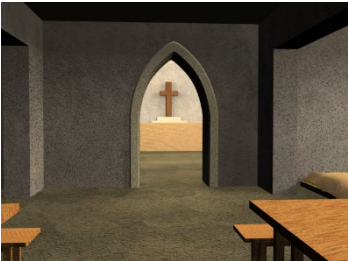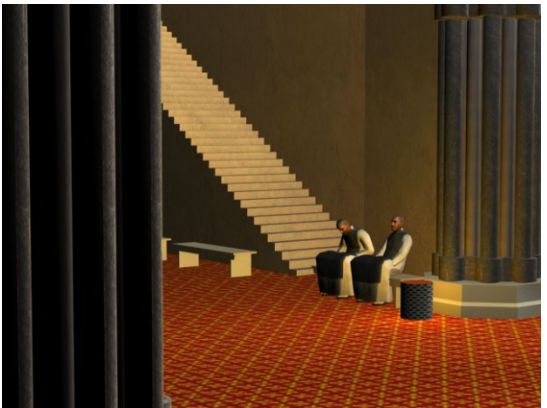
The following renders are of the speculative buildings and interiors for the Abbot and the Master Mason of Beaulieu Abbey using Autodesk 3DS Max:

Speculative concept of the Abbot's house used as Guest accommodation

Speculative concept of the Master Mason 'Durandus' house

The following renders are stills from an animation sequence showing the context of Beaulieu Abbey's position in the south of Hampshire. The contour map was overlaid a detail map sourced from archives and mapping data. The sequence formed the part of the introduction to the tours:
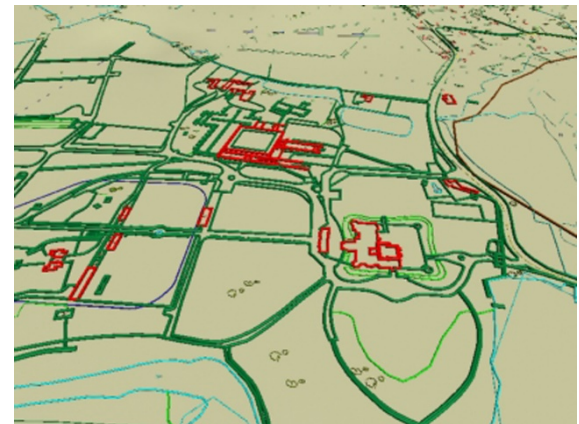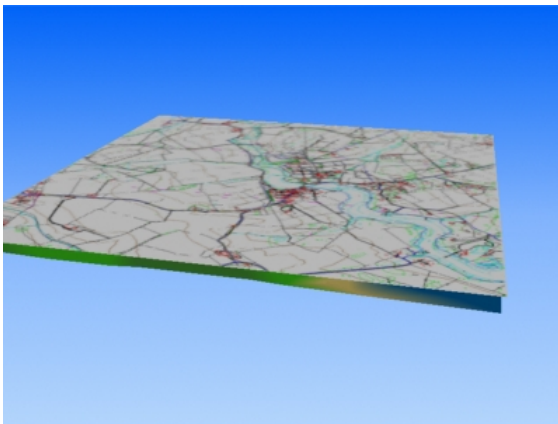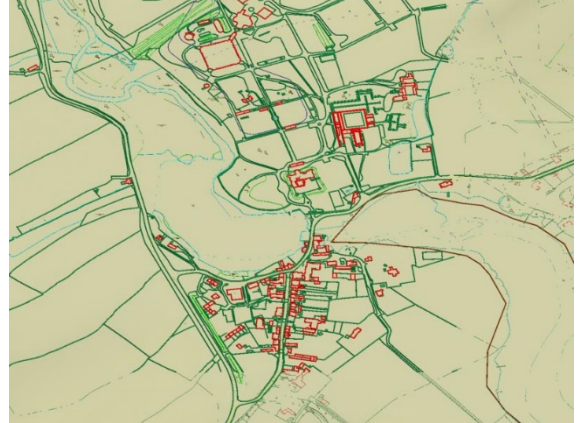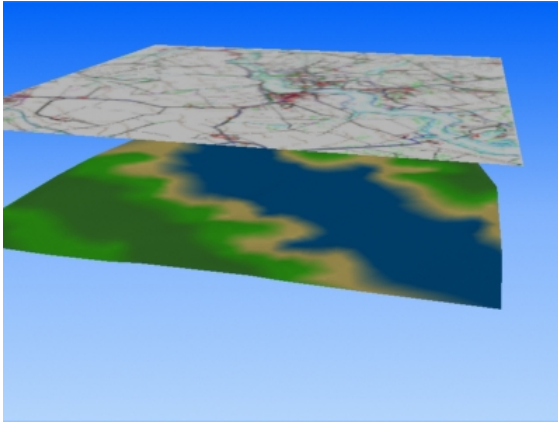
The animation can be viewed on: *https://www.youtube.com/watch?v=XP3px33uS3A*

Characters were a major construct for the kiosk interpretation, there are nine characters in total, five of which are representative of lived characters, the four remaining are fictional representing different cistercian roles.

The five characters are: King John, Queen Eleanor, Abbot Sulbury, Perkin Warbeck and Durandus, the master mason.

The four fictional characters are: Brother Michael, the Scribe, Brother Thomas, the Infirmarian, Peter, the Novice Monk and Simon, the Laybrother.

The following pages include the storystrips for each of the characters and the main character image.

KING JOHN

QUEEN ELEANOR

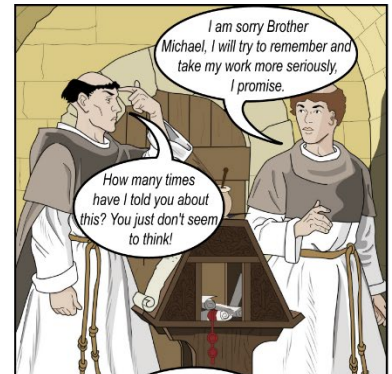ABBOTT SULBURY
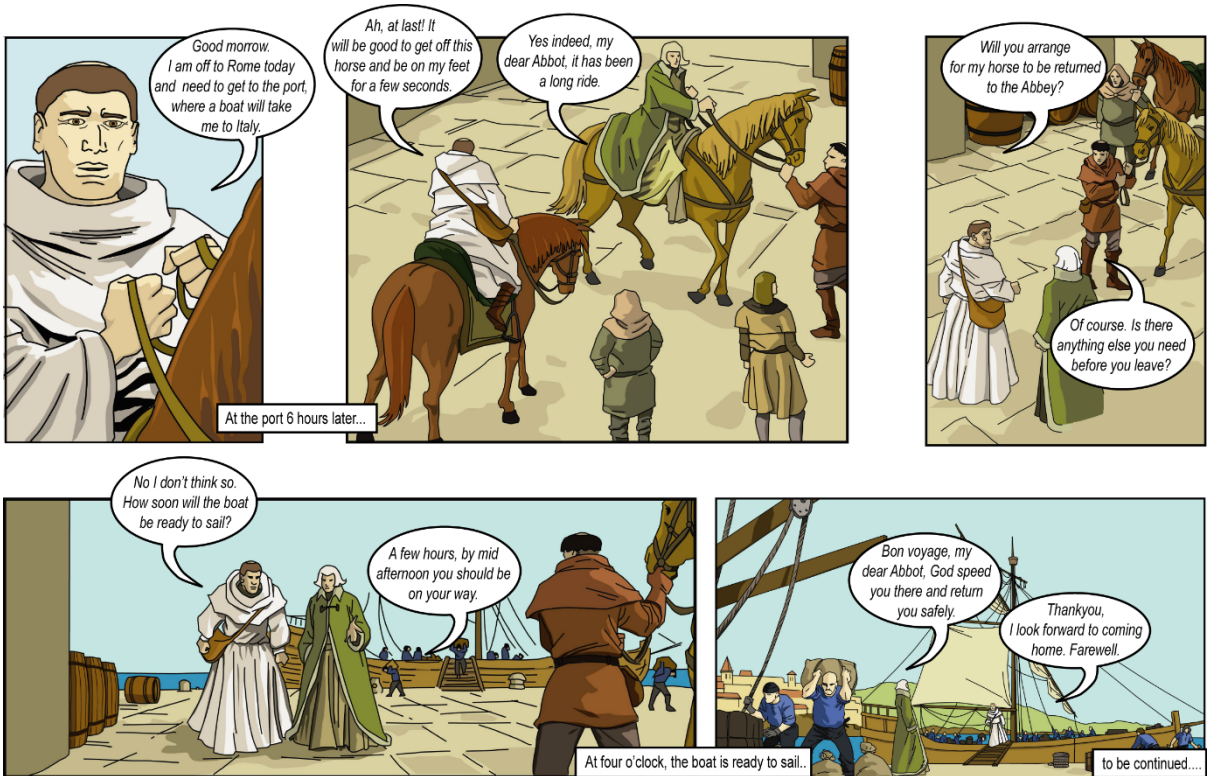
PERKIN WARBECK

DURANDUS

BROTHER THOMAS

BROTHER MICHAEL

NOVICE PETER

I am on my way to the Abbey which will be my new home. My family are all gone so my uncle has arranged for me to become a choir monk.

I wonder what it will be like, and if there will be any other boys there my age.

Hello, my name is Peter. I have been told to ask for Brother Joseph. May I see him please?

No, I do not have any belongings, they were all destroyed in the fire.

Hello young Peter, I hope you will learn to love our wonderful Abbey however strange it seems now.

Pleased to meet you Brother Joseph. It is a huge place and yes, very different to where I lived before.

I hope I will be a good choir monk and learn to do everything correctly.

Peter was asked if he had anything with him.

and then led to meet Brother Joseph...

to be continued....

LAYBROTHER SIMON

The R & D Grant - Micro Project Funding Application Document can be found on this link:
http://thetalkingwalls.co.uk/wordpress/?p=1626

Beaulieu Abbey Tour with King John as your tour guide can be viewed on this link:
https://www.youtube.com/playlist?list=PL43kSQfsT23XlKvJvXvDiGL1pCx7w59HN and on
www.thetalkingwalls.co.uk/Beaulieu website (Adobe Flash Player required).

Beaulieu Abbey development animations can be viewed on this link:
https://www.youtube.com/playlist?list=PL43kSQfsT23U2k44gH9V1K2peYvh99K6R

Beaulieu Abbey reference photos (my photos) can be found on this link:
http://thetalkingwalls.co.uk/wordpress/?page_id=2333

Historical Reference Data: History of Beaulieu Abbey, Abbey and Cistercian Culture, Medieval Architecture, Royal Visitors and Medieval Music Grid produced for the characters:

History of Beaulieu Abbey images from John Fowlers' 1911 book can be found on this link: *http://thetalkingwalls.co.uk/wordpress/?page_id=1140* . A few examples can be viewed below:
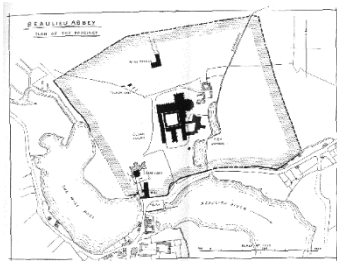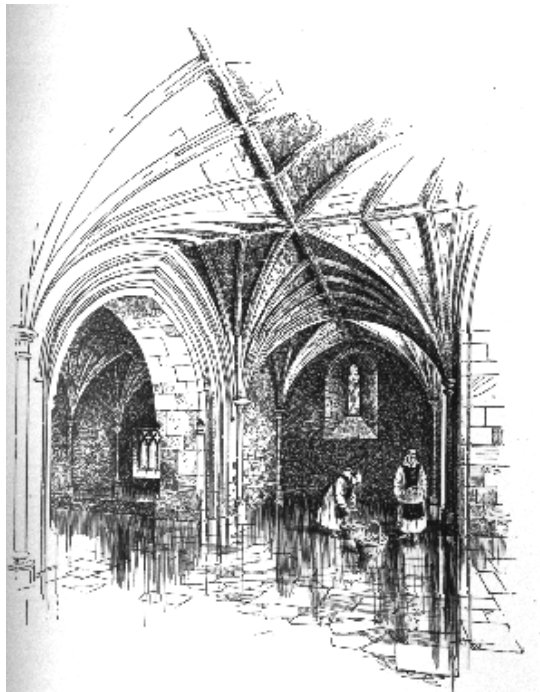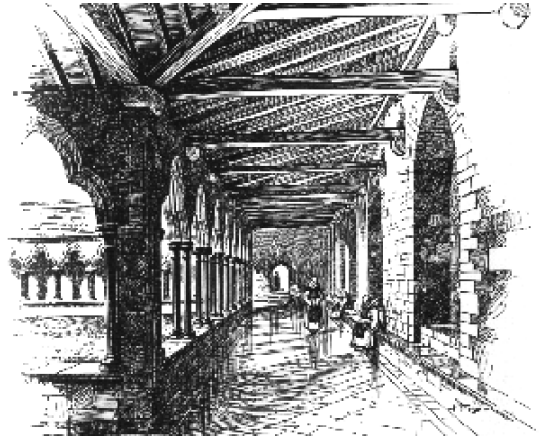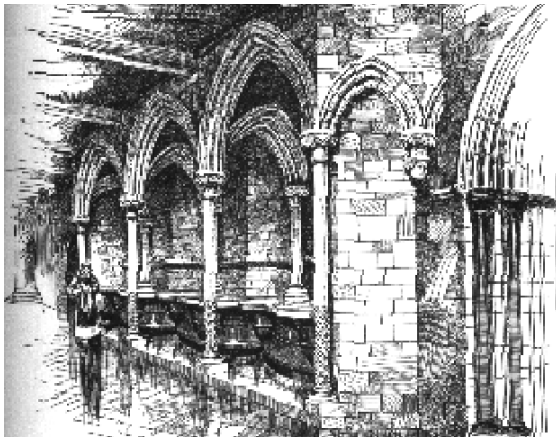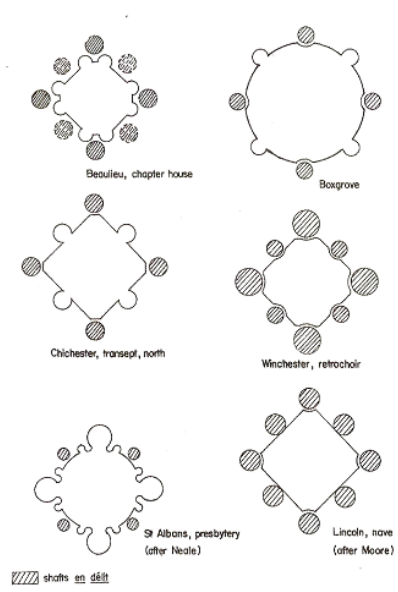
Jansen, Fig. 9 Diagrams of piers related to those at Beaulieu Abbey (George Jansen)
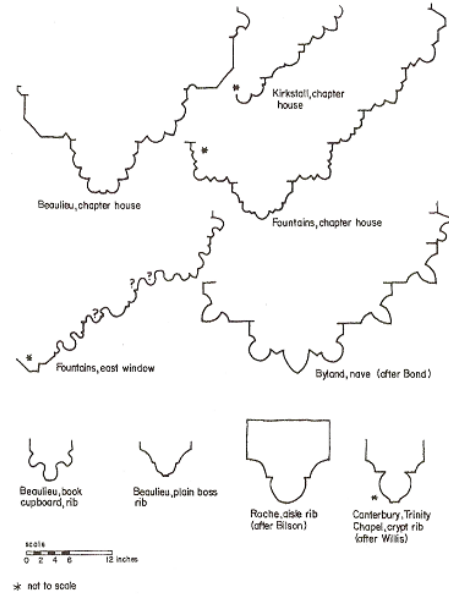
Jansen, Fig. 10 Beaulieu. Moldings of the chapter house, early ribs, and comparative examples at other sites (Virginia Jansen and George Jansen)
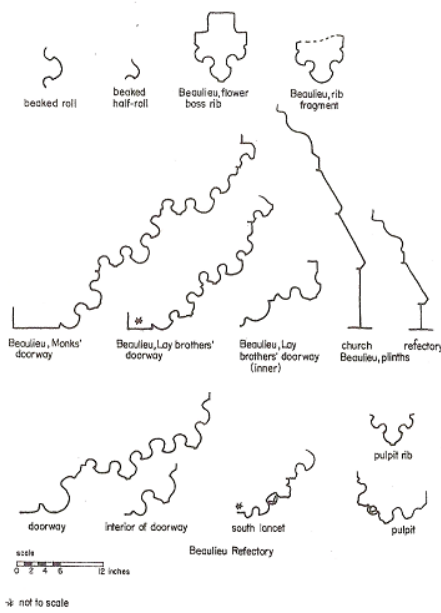
Jansen, Fig. 11 Beaulieu. Moldings with beaked rolls and half-rolls (Virginia Jansen and George Jansen)
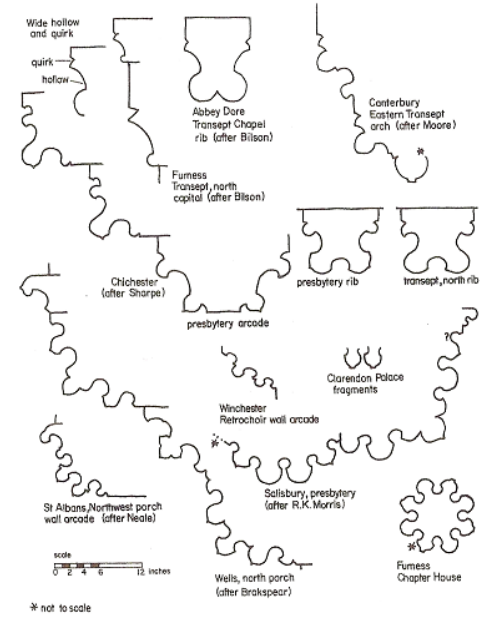
Jansen, Fig. 12 Moldings compared to those of Beaulieu Abbey (Virginia Jansen and George Jansen)
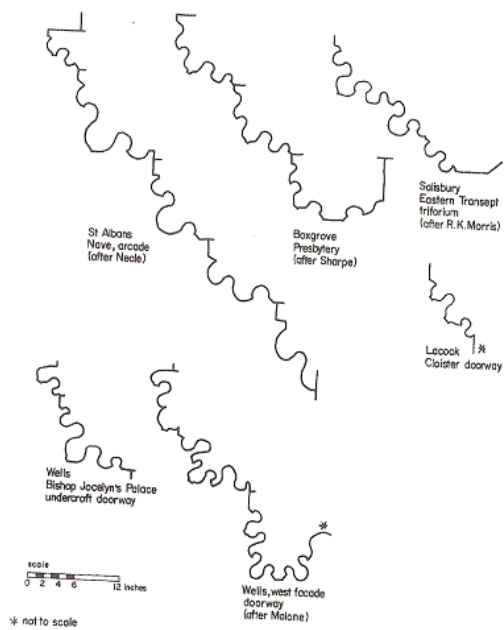
Jansen, Fig. 13 Moldings compared to those of Beaulieu Abbey (Virginia Jansen and George Jansen)
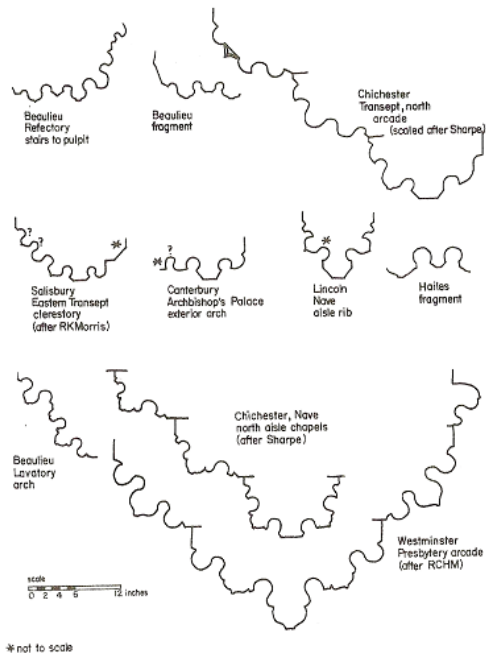
Jansen, Fig. 14 Beaulieu. Refectory and lavatory moldings with comparative examples (Virginia Jansen and George Jansen)
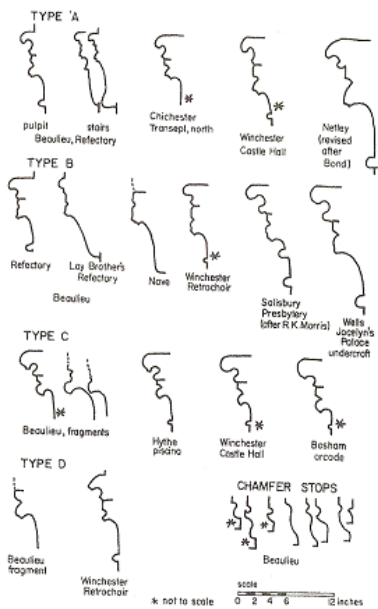
Jansen, Fig. 15 Beaulieu. Capitals, chamfer stops, and comparative examples (Virginia Jansen and George Jansen)
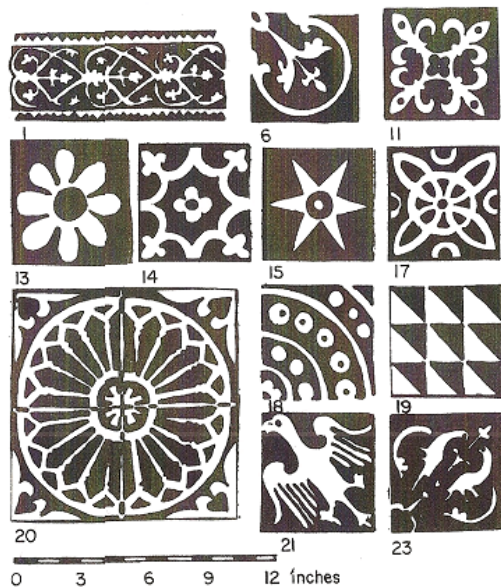
Jansen, Fig. 16 Beaulieu. Some inlaid tile patterns in common with other sites. Numbers refer to patterns listed in Appendix II (Taina Rikala de Noriega)

Jansen, Fig. 31 Beaulieu. Capital
of the refectory pulpit
(Virginia Jansen)
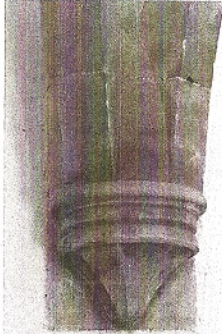
Jansen, Fig. 32 Beaulieu. Corbel of
the lay brothers' refectory
(Virginia Jansen)
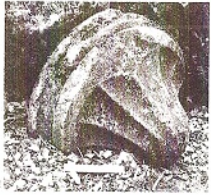
Jansen, Fig. 33 Beaulieu. Corbel fragment
(Virginia Jansen)
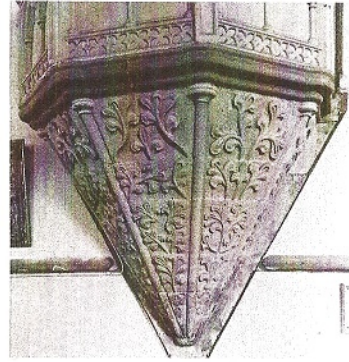
Jansen, Fig. 34 Beaulieu. Pulpit base, left (Virginia Jansen)
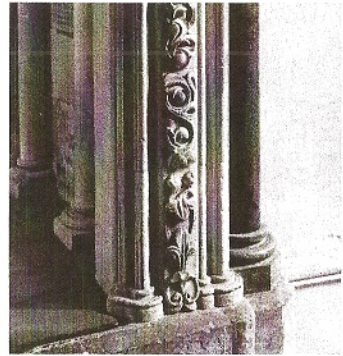
Jansen, Fig. 35 Temple Church, London. Jamb between nave and
choir, right (Virginia Jansen)

hypothetical plan of nave pier
(based on measured remains)

scale
0   5   10   15 inches
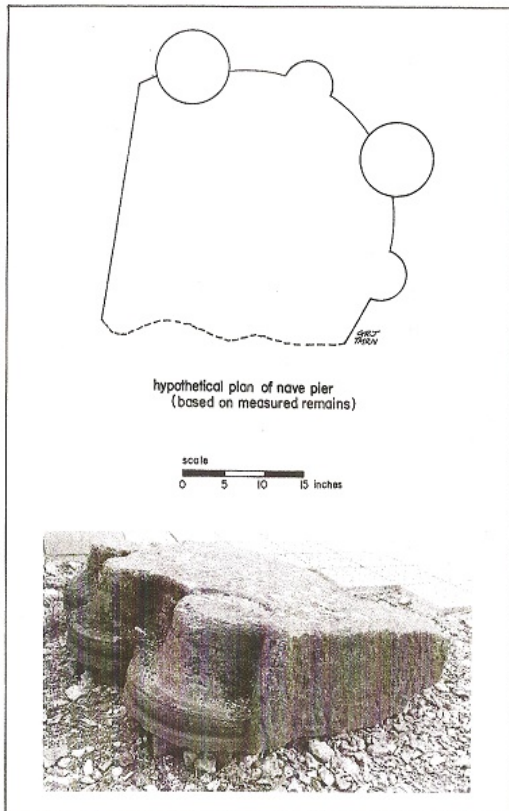
Jansen, Fig. 21 Beaulieu. Capital, probably from nave arcade
(Photo by author and drawing by Taina Rikala
de Noriega and George Jansen)

Jansen, Fig. 22 Beaulieu. Chapter house arches (Virginia Jansen)

Jansen, Fig. 23 Beaulieu. Subdorter capital and base (Virginia
Jansen)

313
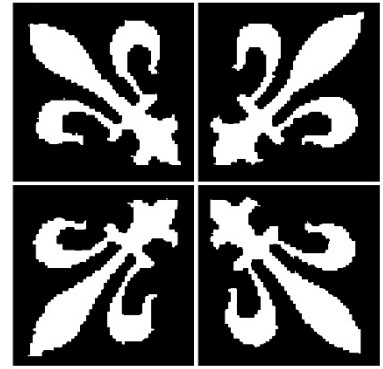
Top left tile reproduced above and coloured to use as a 'material' for the 3D model below.

Top left tile reproduced above and coloured to use as a 'material' for the 3D model below.

key stone

centering frame
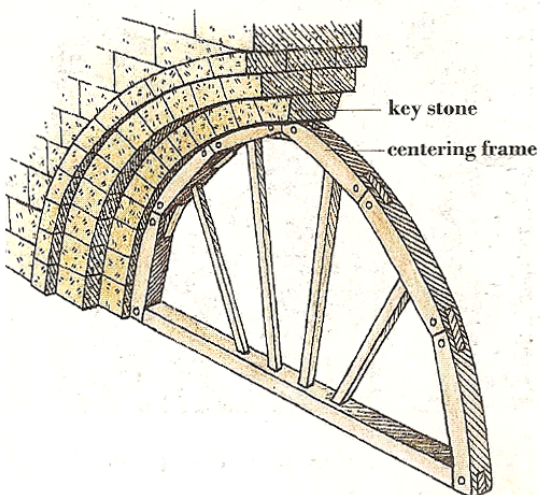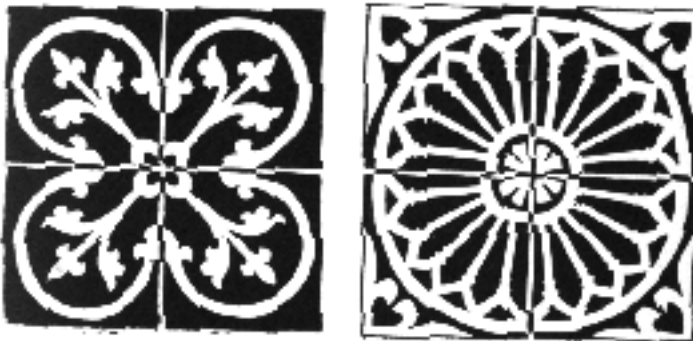
The sketch on the left was translated to a 3D model which was then animated to show how the arch was constructed.

Beaulieu Abbey historical reference from Beaulieu's guide books and archives can be found on the following link:
http://thetalkingwalls.co.uk/wordpress/index.php/nggallery/page/1?page_id=1209

Beaulieu Abbey Medieval References for building the abbey in 3D and for the other buildings created for the kiosk interpretation can be found on the following link:
http://thetalkingwalls.co.uk/wordpress/index.php/nggallery/page/1?page_id=1373

King John and Royal Visitors to Beaulieu Abbey references for the drawn illustrations can be found on this link:
http://thetalkingwalls.co.uk/wordpress/index.php/nggallery/page/2?page_id=1373

Beaulieu Abbey - Cistercian Reference can be found on the following link:
http://thetalkingwalls.co.uk/wordpress/?page_id=2401

By Jörg Breu the Elder - The Yorck Project (2002) 10.000 Meisterwerke der Malerei (DVD-ROM), distributed by DIRECTMEDIA Publishing GmbH. ISBN: 3936122202.

Beaulieu Abbey Character Music Recordings Grid:

Beaulieu Abbey Music Recordings :

Character		Title	Becky	Leah	Aangier	Sophia	Adam	Nic	Will
1. Lay Brother - Folky/ farm life									
1.	1:30	Trotto	Vielle in D	Ric	Gittern				
2.	1:20	5th Estampie	F Alto Recorder	Ric	Frame Drum				
2. Percy Warbeck – Battle Songs, Call to arms									
3.	2:15	7th Estampie	Vielle in G	Frame drum	Gittern			Shawm	
4.	1:30	Falla Con Misura		Ric	Frame Drum			Shawm	Sackbut
3. Queen Eleanor – feminine, regal									
5.	1:35	Verbum Patris Humanatur	Sop & Alto Recorders	Hp/Cym.	Symph./Fr.Drum	Soprano x 3	Bass x 3		
6.	3:16	Amour au trop tard	Vielle			Soprano			
4. Master Mason – secular									
7.	1:30	Danse Real	Vielle in G	Harp/Ric	Lute/F. Drm			Shawm	
8.	1:30	6th Estampie	Flute in D	Bells	Lute				
5. King John - Courtly									
9.	1:20	Alle Psallite Cum Laya	Tenor Rec./Ric	Harp./F Cym.	Symph./F Drm	Soprano	Bass	Shawm	Sackbut
10.	1:05	Miri it is …		Harp		Soprano			
6. Abbott – Sacred/ Compostela									
11.	1:00	Sackbut Fanfare							Sackbut
12.	1:30	Annua Guardia	Frame drm /Voice	Ric/ Voice	Symph./ Voice	Soprano	Bass		Sackbut
7. Infirmary - contemplative									
13.	2:20	Le Depart de l'Ame	Vielle in G	Harp					
14.	1:50	Deus in Adiutorium	Tenor (C) Recorder	Harp					
8. Brother Cedric (Choir Master) – Abbey singing									
15.	2:10	Nostra Phallans	Bass x 2						
16.	1:30	Gregorian Antiphon	Gregorian chant singers from The Church of the Immaculate Conception.						
9. Novice monk– Abbey atmosphere									
17.	2:20	Church Bells X 3							
18.	2:00	Gregorian Kyrie	Gregorian chant singers from The Church of the Immaculate Conception.						
10. Extra			*MORE SUITABLE for ABBOT!*						
19.	1:00	Gregorian Chant					26 = BELLS		Sackbut x 4

Character Signatures	20. Abbott	21. Choir Brother	22. Infirmary Brother	23. King John	24. Lay Brother	25. Master Mason	26. 27 Queen Eleanor	28. 29 Stephen Warbeck

Stage 2 material consists of:

- Launch Preparation: Students' Marketing project, Beaulieu's PR and Marketing, Guest List and Catering

- Launch Event: Speech Transcripts, Kiosk Demo, Attendees and Questionnaire Sheet (see Appendix F for the completed Questionnaires)

- Launch Event Survey: Questionnaire results, Analysis, Emails

LAUNCH PREPARATION:

Southampton Solent University's MA Marketing students Project Proposal can be found on the following link: *http://thetalkingwalls.co.uk/wordpress/?p=1629*

The Talking Walls®

Launch Proposal

Eleni Elliott, Patricia O'Driscoll, Madalina Carastoian, Chantelle Legg
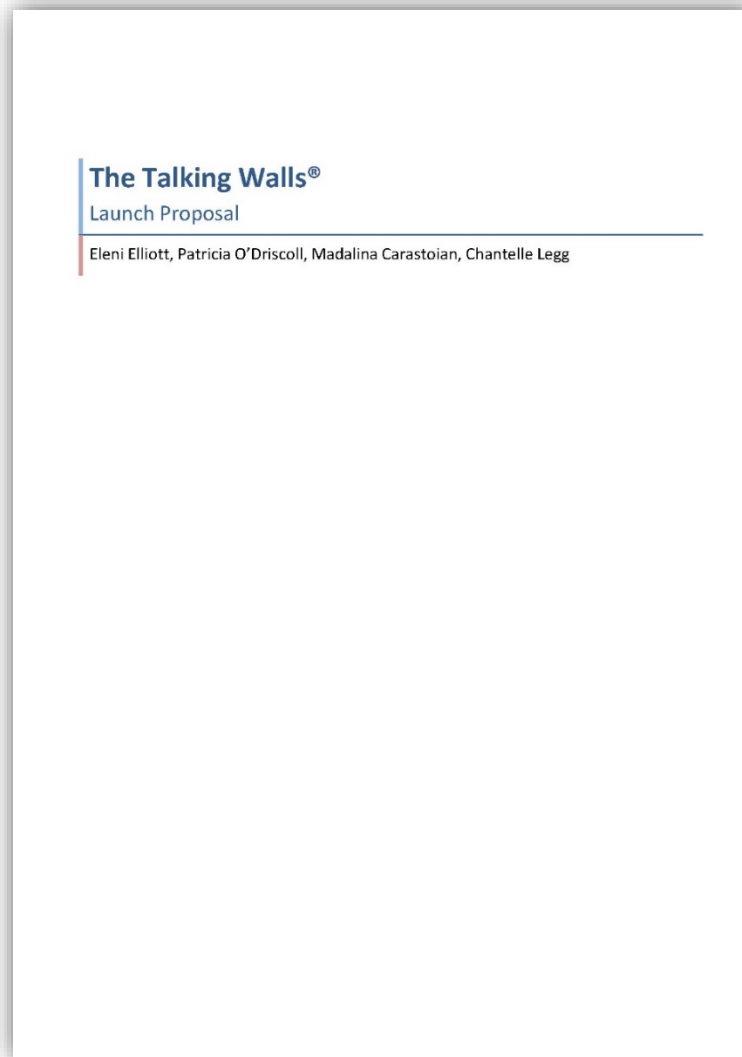
Beaulieu's PR and Marketing can be found on the following links:

Launch Event Planning: *http://thetalkingwalls.co.uk/wordpress/?p=656*

Press Release: *http://thetalkingwalls.co.uk/wordpress/?p=642*

Launch Preparation Guest Lists:

Invited Guest List (MA Marketing students): *http://thetalkingwalls.co.uk/wordpress/?p=1632*

Launch Preparation Catering:

Leiths at Beaulieu Catering communication and menu can be found on the following link: *http://thetalkingwalls.co.uk/wordpress/?p=1640*

LAUNCH EVENT:

Launch Event Speech Transcripts:

Mary Montagu Scott's Speech Transcript can be found on the following link: *http://thetalkingwalls.co.uk/wordpress/?p=1839*

Mary Montagu-Scott's Speech can be viewed on this link: *https://www.youtube.com/watch?v=gS9pyOZJVhU&t=1s&list=PLF07AD82C7BDA3AEA&index=3*

Debs Wilson's Speech Transcript can be found on the following link: *http://thetalkingwalls.co.uk/wordpress/?p=1653*

Debs Wilson's Speech can be viewed on this link: *https://www.youtube.com/watch?v=nIDPVXwv3CQ&t=1s&list=PLF07AD82C7BDA3AEA&index=4*

Launch Event Kiosk Demo can be found on this link: *https://www.youtube.com/watch?v=Rs1ZuGId8K4&index=5&list=PLF07AD82C7BDA3AEA&t=11s*

with Launch Event photos available on the following link:
http://thetalkingwalls.co.uk/wordpress/?page_id=1466

Launch Event List of Attendees can be found on the following link:
http://thetalkingwalls.co.uk/wordpress/?p=646
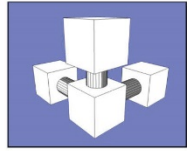
Launch Event Questionnaire Sheet:

THE TALKING WALLS®

The Talking Walls® Experience Survey

Would you please share your experience and help us make The Talking Walls® a success. This short questionnaire should take 5 minutes to complete.

1. Have you seen anything similar to The Talking Walls® interface in other museums, art galleries, heritage sites or historic houses?

   ☐ Yes   Where? _
   ☐ No
   ☐ Cannot remember

2. Briefly describe the best experiences you enjoyed from the use of the application:

   _
   _
   _

3. Briefly describe any disappointing experiences in the use of the application:

   _
   _
   _

4. Would you recommend a friend to try The Talking Walls® application?

   ☐ Yes
   ☐ No

5. Briefly describe how you would improve the application at Beaulieu Abbey:

   _
   _
   _

6. What gender are you?

   ☐ Female
   ☐ Male

7. Which age group do you fit into?

   ☐ 6-11   ☐ 12-19   ☐ 20-34   ☐ 35-49   ☐ 50-64   ☐ 65 +

Thank You

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Launch Event Questionnaire Results

(the completed questionnaire sheets can be viewed in Appendix F and on this link:
http://thetalkingwalls.co.uk/wordpress/?p=1858)

Q1-Have you seen anything similar to The Talking Walls interface in other museums, art galleries, heritage sites or historic houses

■ Yes ■ No
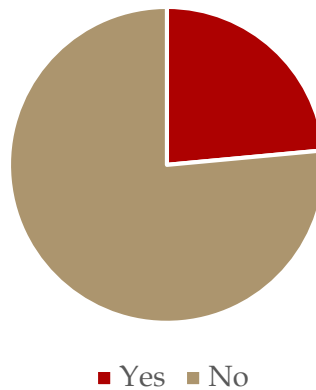
Q2-Briefly describe the best experiences you enjoyed from the use of the application
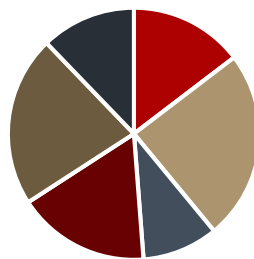
■ Choice ■ Bringing heritage to life
■ Characters' perspectives ■ Different Eras
■ Educational ■ Ease of Use

Q3-Briefly describe any disappointing experiences in the use of the application
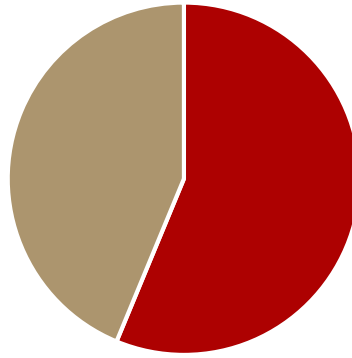
■ Positive   ■ Actions suggested

Q4-Would you recommend a friend to try The Talking Walls application?
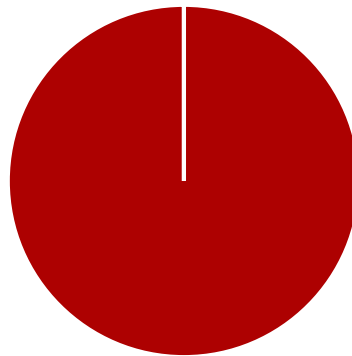
■ Yes   ■ No

Q5-Briefly describe how you would improve the application at Beaulieu Abbey
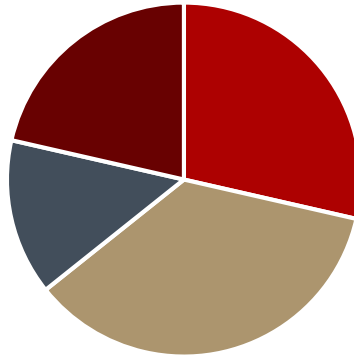
Mobile Handsets   Navigation   Add other levels   More Kiosks

Q6-What gender are you?
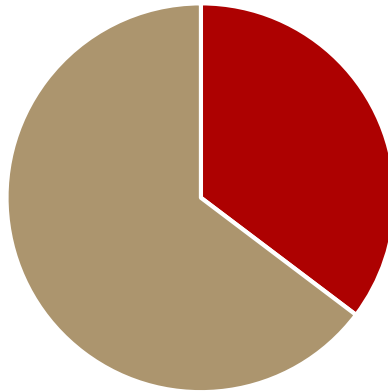
Female   Male

Q7-Which age group do you fit into?
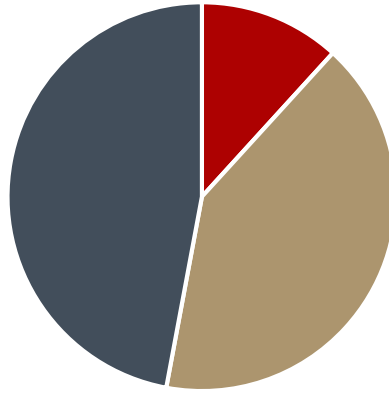
■ 20-34 ■ 35-49 ■ 50-64 ■ 65+

Launch Event Web Application Google Analytics May-June 2010:

Visitors Overview
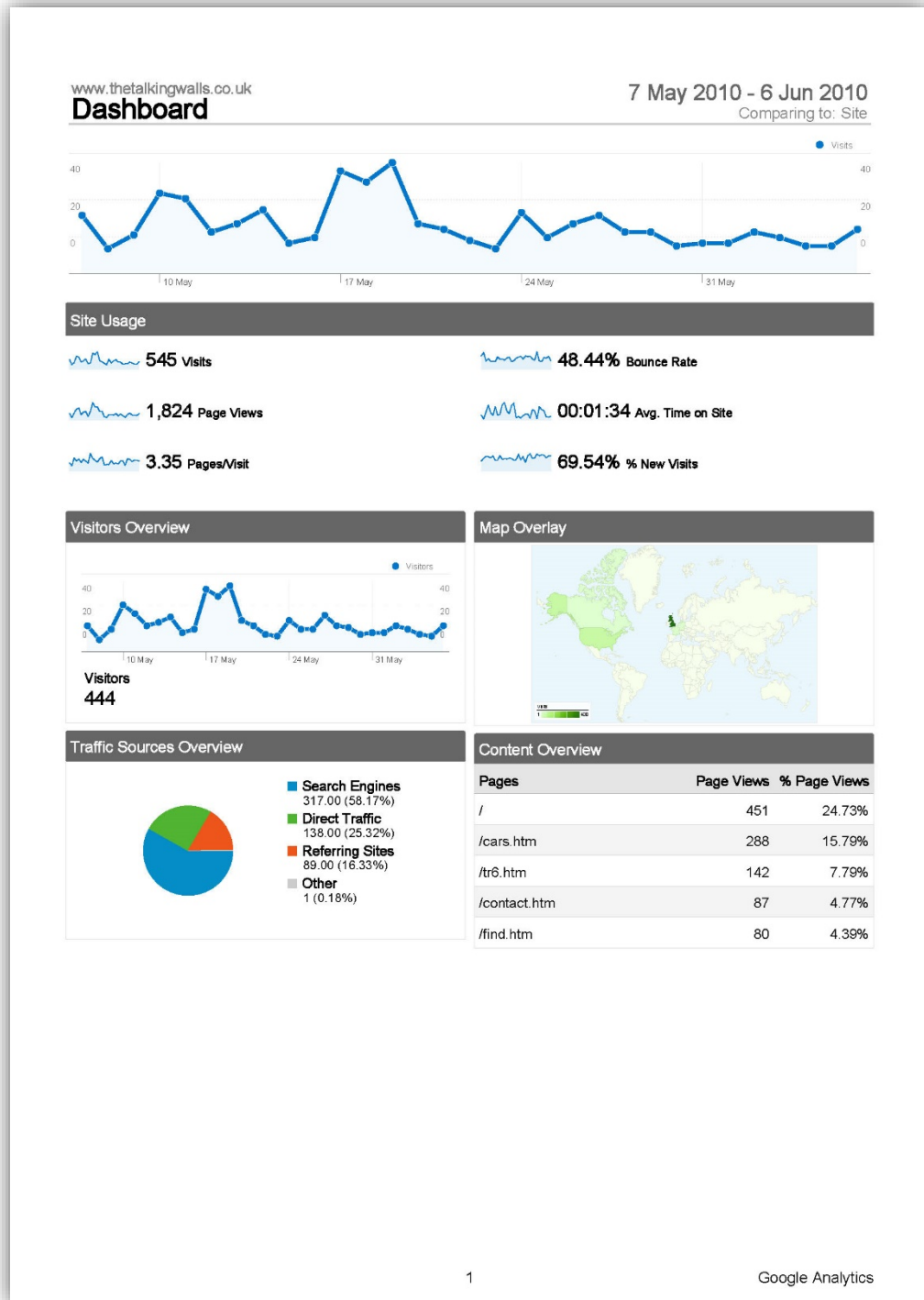
● Visitors

444 people visited this site

∿∿ **545** Visits

∿∿ **444** Absolute Unique Visitors

∿∿ **1,824** Page Views

∿∿ **3.35** Average Page Views

∿∿ **00:01:34** Time on Site

∿∿ **48.44%** Bounce Rate

∿∿ **69.54%** New Visits

Technical Profile

Browser	Visits	% visits	Connection Speed	Visits	% visits
Internet Explorer	340	62.39%	DSL	232	42.57%
Firefox	112	20.55%	Unknown	171	31.38%
Safari	51	9.36%	Cable	71	13.03%
Chrome	30	5.50%	T1	56	10.28%
Mozilla	6	1.10%	Dialup	9	1.65%

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Traffic Sources Overview

● Visits

All traffic sources sent a total of 545 visits

25.32% Direct Traffic

16.33% Referring Sites

58.17% Search Engines

■ Search Engines
317.00 (58.17%)

■ Direct Traffic
138.00 (25.32%)

■ Referring Sites
89.00 (16.33%)

■ Other
1 (0.18%)

Top Traffic Sources

Sources	Visits	% visits
google (organic)	272	49.91%
(direct) ((none))	138	25.32%
tr-register.co.uk (referral)	31	5.69%
bing (organic)	15	2.75%
yahoo (organic)	14	2.57%

Keywords	Visits	% visits
ctm engineering	88	27.76%
talking walls	26	8.20%
the talking walls	18	5.68%
tr6 chassis	6	1.89%
ailsa barry	5	1.58%
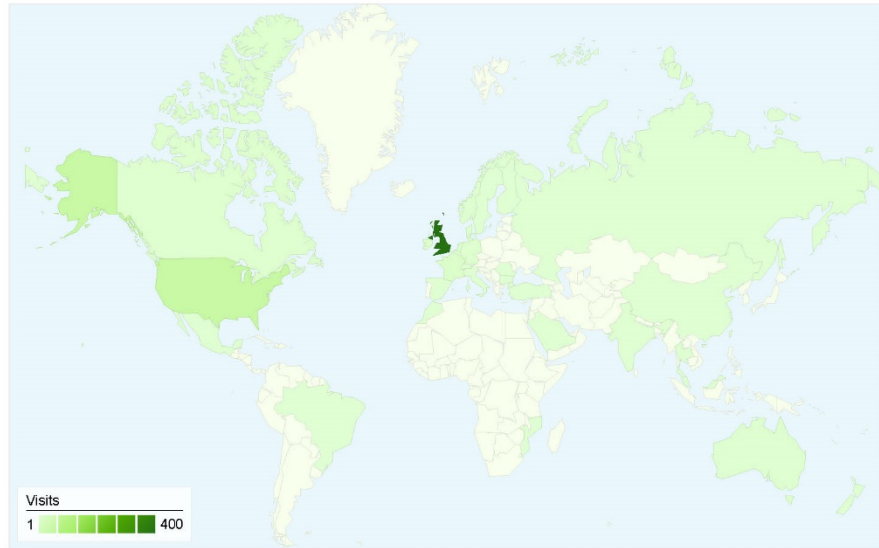
Visits
1 ▢▢▢▢▢ 400

545 visits came from 32 countries/territories

Site Usage				
Visits **545** % of Site Total: **100.00%**	**Pages/Visit** **3.35** Site Avg: **3.35** (0.00%)	**Avg. Time on Site** **00:01:34** Site Avg: **00:01:34** (0.00%)	**% New Visits** **69.54%** Site Avg: **69.54%** (0.00%)	**Bounce Rate** **48.44%** Site Avg: **48.44%** (0.00%)

Country/Territory	Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
United Kingdom	400	3.46	00:01:43	66.00%	47.25%
United States	57	3.02	00:01:39	82.46%	54.39%
France	12	3.83	00:00:22	83.33%	41.67%
Germany	7	4.14	00:00:19	100.00%	42.86%
Canada	7	2.29	00:00:12	85.71%	57.14%
Ireland	7	2.29	00:00:19	85.71%	57.14%
Netherlands	6	3.33	00:00:52	83.33%	50.00%
(not set)	6	2.33	00:00:47	33.33%	66.67%
Australia	6	2.00	00:00:30	66.67%	66.67%
Norway	4	4.00	00:03:10	75.00%	25.00%

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Content Overview

Pages on this site were viewed a total of 1,824 times

1,824 Page Views

1,315 Unique Views

48.44% Bounce Rate

Top Content

Pages	Page Views	% Page Views
/	451	24.73%
/cars.htm	288	15.79%
/tr6.htm	142	7.79%
/contact.htm	87	4.77%
/find.htm	80	4.39%

Stage 3 material consists of:

- Fieldwork Interviews: Beaulieu Team, Designers, Launch Guests, External Curators
- Kiosk Observations: Beaulieu Staff Observations, My observations

FIELDWORK INTERVIEWS:

Beaulieu Team – Mary Montagu Scott, full transcript can be found on the following link: *http://thetalkingwalls.co.uk/wordpress/?p=2427* or by clicking on the front page of the transcript below:

Audio Title: Mary Montagu Scott 1st March 2013
Audio Length: 56

Transcribers note: There was some difficulty transcribing due to background noise and the speed at which the participants spoke. These factors may have an impact on the depth of the transcript.

Mary   Where because we-, that museum also in the case of the abbey isn't a trust and national motor museum again, I'm very much the role, playing a role of all three of those and the Maritime Museum doesn't have a specific curatorial theme, it just has me and Susan-, Susan and myself. So it's marvellous because I have full kind of authority to do anything I like really and I'm also a stakeholder as part of ownership structure. So it makes it very-, a joy to do because we're not constrained by issues of particular ownership or trusteeship or legislation or millions of layers now that you get often, particularly when you have grant application funding for museums where you are so constrained then.

And, with HLF and things like this it makes it all quite a nightmare so it's very nice to be able to work outside of that independently, because you're much freer really to be creative-, to be more creative and particularly in cost terms it's so much more cost-effective not being bound by the obligations of the fund makers, the grant givers which is great. Which is applying on the abbey as well, so with the Maritime Museum I've just shut-, we've shut one section of it this winter, refurbished the visitor space, we've rewired and new carpet and redecorated. Took all the old graphics off, they were last done in 1979/1980 and you know, we're re-writing the story in a more modern way.

Lot more colourful, updating the storylines to bring it up to modern times because it stopped in like well about 1850 I think, so we're now bringing up to 2012 and brought into the storyline lots of new

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Beaulieu Team – Susan Tomkins, full transcript can be found on the following link: *http://thetalkingwalls.co.uk/wordpress/?p=2427* or by clicking on the front page of the transcript below:

Audio Title: SusanTomkins-10thJuly2013
Audio Length: 71:41

Debs	Thank you Susan, anyway, for allowing me to do this.
Susan	Pleasure.
Debs	Yeah it's really good to see you. I have a load of questions for you, but really they're guidance only for me to prompt me in case the discussion doesn't flow. I'm sure it's going to. First of all I'd like to ask you about your background and how you came to be where you are now, if that's okay?
Susan	No that's fine. I've got a history degree and as part of my degree course I did voluntary work in archives and when I was looking towards finishing my degree, I looked at whether I wanted to do teaching or archive work. I decided, in the end, that I quite fancied the challenge of teaching so I did a postgraduate certificate in education.
	As part of that postgraduate certificate and also during some of my holidays I did vacation work in archives again and I did various courses while I was doing my PGC to do with archives and local studies and that sort of thing and I continued to do that when I was teaching and I used archives and local studies collections quite a lot in the teaching as well so I was keeping that interest with it. The teaching jobs that I had were fixed contract ones so I was always looking at the papers and I saw an advert for a job which was called heritage education officer and archivist and I thought, "That sounds very interesting." So I applied, was interviewed and I got the job at Beaulieu.
Debs	Excellent. Well done you.
Susan	And I've been here ever since, yeah.

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Beaulieu Team – Stephen Munn, full transcript can be found on the following link:
http://thetalkingwalls.co.uk/wordpress/?p=2427 or by clicking on the front page of the transcript below:

Audio Title: Stephen Munn – 18 July 2013
Audio Length: 63 minutes

Debs	I will be looking at this occasionally, just in case the battery runs out or it stops recording, but I'm not trying to rush you.
	Okay, so how much you understand about the research study from the information sheet I sent a little while ago?
Stephen	It would be best if you just recap.
Debs	The PhD is about curators, designers and visitors, and the relationships between those in order to get an interpretation project to the visitor. Now, in my experience, and in other people's experience, quite often what's in the initial concept doesn't necessarily end up being the one that the visitor sees.
Stephen	The final version, yeah.
Debs	Now, the research is really about how that is, what's happening, and what's the process? Each one of the people involved have external influences: the stakeholders, time, budget, technology, etc, and also internal influences. So your personal interests, how you're brought up, your cultural background and everything else. So the same project could go through a team and be completely different, depending on who's involved.
Stephen	Yeah, agreed.
Debs	That's good, that's handy! ((laughs)) So I'd like to find out a little bit about your background, and then talk about the visitor interpretation at Beaulieu Abbey, and also, from my understanding, you are Visitor Attraction Chair, Tourism Chair, on various other organisations.
Stephen	Yeah.

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Beaulieu Team – Jon Tee, full transcript can be found on the following link:
http://thetalkingwalls.co.uk/wordpress/?p=2427 or by clicking on the front page of the transcript below:

Debs	I'd like to start about your background because part of the PhD is about curator design and visitors but quite importantly it is about the individuals themselves and how an interpretation gets to be what the visitor wants it to be from start to finish with all the external and internal influences. So, for instance, you might have an interest in cars; so you might bias something towards cars of a particular age because that is your interest, do you see what I mean when you come up with a concept if you were a designer curator? So it is those kind of things that hopefully finding out a little bit about your background will help me with, is that okay?
Jon	Yes, no problem. So is it things I've done workwise before?
Debs	Yes and how you came to be where you are now really?
Jon	Well I started off working at the Historic Ships in Portsmouth as a 16-year old, so that was my summer job and I quite liked it. I started off at university doing a Business degree with IT and concluded that I didn't like that actually and as I was doing a summer job where I was working in the tourism industry I decided to do a Hospitality degree with tourism aspects so I did that. All the time still working at the dockyard and very quickly was made up from the dockyard to being a supervisor and one of the duty managers.

I was all sorts of things really at the dockyards; site service manager for quite some time and then I was the Special Projects Manager. So for two years I looked at the different projects they wanted to come up with, which was interesting but the projects weren't that meaty to be honest with you. So that was from 16 to 26, well 25 really and I thought, 'Well ten years I've been here, I'm probably due to go somewhere else.' The job a Beaulieu came up and I thought it was a |

Designers – Russell Richards, full transcript can be found on the following link:
http://thetalkingwalls.co.uk/wordpress/?p=2427 or by clicking on the front page of the transcript below:

Debs	First of all some background information. The PhD is very much about external influences and internal influences, and so it's how people came to be where they were and how that then might influence things they do in that position.
	So, if I can start a little bit about how you came to be here?
Russell	The back story back into the 80s was that I did a cultural studies degree at Portsmouth University. I was curmudgeonly in the sense that I always wanted to keep a wide view on things. I did my teacher training in London before that in general studies. There were about 500 or 600 of us and virtually everybody else was doing computing. And when they said, "Oh what are you doing?" it was like what computing are you doing. No, I'm doing general studies; my specialism is general studies. And they just couldn't understand why anybody would want to do anything in that way.
	So, I was very fortunate to be able to do cultural studies at Portsmouth. The course ran from I think the late 60s into early 90s, so it didn't run for much longer after I left. But it was an absolutely astonishing course in terms of stretching you out, in terms of understandings across literature, sociology, history, drama, media, the whole lot – but in the sense of trying to separate. You'd study them separately, but there was full integration across them, getting you to understand the principles involved across the different domains and interconnections across these different domains.
	At that time they had assemble editing videos across the course. You'd get these cracked pieces of snow between each edit. The technology just wasn't there. But the point was the principles in terms of analysing stuff.

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Designers – Alex Hoare, full transcript can be found on the following link:
http://thetalkingwalls.co.uk/wordpress/?p=2427 or by clicking on the front page of the transcript below:

Debs	I'll keep an eye on this because the battery might start to run out so I'll keep an eye on it. If you see me looking at it it's not because I'm chasing time.
Alex	No and am I all right, I don't have to lean forward?
Debs	No, you don't, it is quite good, yes. Thank you ever so much for doing this. It is really very good of you to do this. I would like to start by asking you how you came to be where you are?
Alex	How I came to be where I am? Goodness, how long have you got? I started, I've always wanted to be an artist I suppose, so I suspect although I've only just recently picked up on that but she was probably my role model and she was quite different from other Winchester mothers, because I was born and brought up here.

I didn't go to Art College until I was 26 and then I did a Fine Art Textiles degree at Loughborough where I moved away from what I thought I would be doing, which was printing fabric or weaving fabric or something, into creating big, because there were three different print specialisations, print, weave and multi-media and I ended up doing multi-media. That wasn't what multi-media means now; it was what multi-media meant then, which was using lots of media.

I ended up being very influenced by landscape. I've always been – we walked a lot as children and I've always loved landscape and being out in the fresh air. So I created big hangings based a lot on St. Ives because we spent quite a lot of time in St. Ives and we ended up moving down there after I'd graduated. And then I had children so that sort of distracted me for a while and then my marriage broke down and I moved back to Winchester. |

Designers – Rebecca Furse, full transcript can be found on the following link:
http://thetalkingwalls.co.uk/wordpress/?p=2427 or by clicking on the front page of the transcript below:

Audio title: Rebecca Furse – 6th Sept 2013
Audio length: 133:49

Debs	Thank you for agreeing to do this; it's really good. First of all I'd like to start by asking you about your role as a designer, and I've got here environmental psychologist, with DK Architects.
Rebecca	A general overview?
Debs	Yes.
Rebecca	I started with DK six and a half years ago as an architectural assistant. It was my first design job after having completed my design degree. Since then my role has developed; I'm still not what I would call a senior member of staff but I'm not at the bottom anymore. It was on completion of my Masters in environmental psychology last year that I asked for a change in job title to designer and environmental psychologist to reflect that I was never intending to be an architect, and architectural assistant just didn't seem to really fit the bill anymore.
	I suppose when I started it was also before the recession hit so we had lots of big projects, and teams could be up to 11 people, which was like a third of the office would work on a project. So, that was a really comfortable place to start because you could get your bearings and work out how to do stuff, and there were always people around working on the same stuff to ask questions of.
	Then things got a bit quieter, but we still had some big projects and I tended still to be embedded in those, but doing stuff that was more and more specific to what my interests were. So, in the first project I did everything that was required. The second I mainly did room layouts and stills, but still did the odd bit of detailing there needed to be and did that. I made it clear I wasn't that bothered about detailing. And after that I have tended to stick in the room layouts, interior

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Designers – Katya O'Grady, full transcript can be found on the following link:
http://thetalkingwalls.co.uk/wordpress/?p=2427 or by clicking on the front page of the transcript below:

Audio title: Katya O'Grady_8[th]Oct2013
Audio length: 60:24

Debs	Thank you ever so much for coming along and doing this. As I say, it really is nice to see you again. The reason why I wanted you to be part of this interview is because the way you came from a fine art background and then tackled the Riddle Route project and the way that you worked through that and it became a project for the cathedral, so the interpretation of that and the whole process of that. Is that okay?
Katya	Yes.
Debs	So how did you become ((laughter)) a fine artist or designer? How did you get to do what you were doing there?
Katya	To become a fine artist?
Debs	Yes.
Katya	I was never interested in a craft. I needed ((?)) perfectly and it just takes time to learn to do something perfectly, whether it is draw, sew, knit, paint. But in order to be slightly more conceptual and work with different interpretations of things you have to constantly exercise your brain so it's less of working with your fingers and hands, it's more working with your brain and thoughts and research as well, different ideas. So you kind of copy the theorists that are out there and you put it through yourself through your knowledge. So that's why I always kind of liked fine art and the conceptual art in particular.
Debs	So would you say then it's more about solving things?
Katya	Yes, you can say alternative solutions.
Debs	So you're kind of doing work that not just pleases you visually but actually answers a question or solves a problem.
Katya	I would say it states a question.

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Audio title: JohnPemberton-1stOct2013
Audio length: 34:49

Debs	Okay so it looks quite long here and I might have to show you some of the pictures because of some of the questions but it's an interview that is more in-depth so it's a case of asking one or two questions and hoping that the conversation flows. Is that okay?
John Pemberton	Yes.
Debs	Yeah okay. Thank you ever so much for doing this; it's really very good of it, especially now I know how busy you are as well ((laughs)). Because the PhD is looking at your external and internal influences into decision-making and the way you interpret things, I'd like to ask you a little bit about your background and how you came to be where you are now if that's possible.
John Pemberton	Right.
Debs	So I've done some research and you were CEO or owner of a computer software.
John Pemberton	Indeed, for twenty-five years yes.
Debs	So can you explain a little bit about how you came to do that?
John Pemberton	Well I actually originally studied engineering and with a firm I was an industrial apprenticeship, a management trainee thing with a firm called Smith Industries, an industrial firm which still exits and that was over a four year period including six months in university, six months in industry and I was set to do electronics engineering which really intrigued me and I did a six months period in the IT department and at the end of the six month period I was lucky enough, because you weren't guaranteed a job at the end of this process, so I was lucky enough, so the guy said

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Audio title: RupertThompson-25thOct2013
Audio length: 66:03

Debs	Okay thank you ever so much, again I can't thank you enough really because I know how busy you are and I'm aware it is getting late so it is even more crunched. But I would like to ask you about how you came to be the Chairman of Hogs Back Brewery?
Rupert	Right and this is to just kind of provide a bit of background for this?
Debs	Yes, so it's about your sort of internal external influences of how you've become what you are.
Rupert	Okay, well I suppose the, why I went into brewing. I left university and went, having done Modern History, so nothing to do with beer, into – and a bit of Medieval History actually – into a graduate training scheme with Bass who were, at the time, Britain's biggest brewer and one of the biggest companies in the country actually. I did quite a few years with them running plants and then running brands and I enjoyed the brand bit; I enjoyed both actually.

I particularly found the building of brands quite challenging and interesting and I moved from Bass to a regional brewer, Moorland, based in Abingdon and again ran their pub estate and then ran the brewery and enjoyed running the brewery and I developed a little brand, it was very small at the time, called Old Speckled Hen, which became quite a big brand. |
| Debs | Oh yes, very much so. |
| Rupert | And then, partly as a result of that we were taken over by Greene King and so I then set up my own business; I tried a management buy out with a venture capitalist called, God I've forgotten who they were called. One of the well-known ones – it will come back to me in a second, Jon Moulton – anyway, and they, who was it, they, it will |

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Launch Guests – Rev'd James Atwell, full transcript can be found on the following link: *http://thetalkingwalls.co.uk/wordpress/?p=2427* or by clicking on the front page of the transcript below:

Audio title: RevdJamesAtwell-13thNov2013
Audio length: 56 minutes

Debs   So thank you again very much. Because the PhD is about how we came to be and experience-forming knowledge, I wondered if you wouldn't mind telling me about how you came to be where you are now and the roots that it came to be, where you are.

RJA   Gosh! It's interesting. I was a curate in South London where I suppose I thought I would probably be staying for my career. I suppose one tries to be enterprising and I've always been trying to link up with the community. I used to run a carnival and I used to have a children's week for 250 children who wouldn't get a holiday in the summer, and we had lots of volunteers and all that excitement.

And then somehow my bishop had been in Cambridge as Vicar of Great St Mary's, Cambridge and they were advertising for a curate and he said, "I think you should be applying to go to Cambridge."

So I applied for the job and got it and I ended up doing seven years in Cambridge, which was three years as a curate at Great St Mary's and four years as Chaplin at Jesus College.

I found myself moving from trying to relate to a community with a large population of West Indians and reggae music and community work to actually relating to a Cambridge situation, which took me maybe in a more intellectual direction in a way. So I ended writing a thesis on the background in the ancient ((?)) Old Testament, so being taken off into another channel in a way.

And after that, the way the Church of England works, by sheer luck I was made vicar of a place called Towcester in Northamptonshire, which is an historic market town. Again, it was relating to the community in all sorts of ways, but it did have a magnificent medieval

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Launch Guests – Dr John Richardson, full transcript can be found on the following link:
http://thetalkingwalls.co.uk/wordpress/?p=2427 or by clicking on the front page of the transcript below:

Audio title: DrJohnRichardson-14thMay2014
Audio length: 89:26

Debs   Thank you ever so much for doing this, I'm really, really grateful. So as I've just explained we're going to talk a little bit about your background first and how you got to be where you are and the roles that you're doing now and what kind of influenced you in some ways to be doing what you are now.

JR   Okay.

Debs   So what do you do?

JR   I keep trying to define what I do. I seem to spend most of my working career between business and universities and it is this kind of knowledge transfer and exchange role where I like putting the two sides together where they can benefit from each other extracting some thinking, some ideas, some cutting edge research from university type labs, whether they're R&D or knowledge based and bringing that into business who have the route to market, the knowledge of the customer, the passion to get something out, that need to convert thinking into something that's tangible for the benefit of whoever. And when that all works it's a really nice relationship, and the frustration of not doing that, you can see in the kind of discussions we've had of business students coming up with business ideas that are no more sophisticated than a new coffee shop because they have the very polished idea of what business works and what it does and what strategy's all about but they don't have the kernel of a good idea that would make the business sexy.

So your Innocent smoothies, your kind of business model's quite neat but the basic of it, of oh what's that passion, what's the drive. So I guess I've stumbled into this from being an engineer originally and not being in love with the smell of cutting fluid and oil, although it's kind

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External Heritage Professionals – Andy Lane, full transcript can be found on the following link: *http://thetalkingwalls.co.uk/wordpress/?p=2427* or by clicking on the front page of the transcript below:

Debs	Okay, thank you ever so much for doing this.
Andy	Okay, that's all right.
Debs	First of all because of the context of the PhD and the fact that I want to look at the sort of external and internal influences, part of that is your interests and your background and how you came to be here and therefore what that might have by way of influence on the things that you chose. Is that okay? So can we start with your background?
Andy	Background? Yes, okay, without doing a full CV but it's relevant actually, because yes, if you like my first career was as a history teacher. So history's my passion and interest, but being a teacher, if you like, that training and that sort of battle experience, because it was secondary – so, as in the battle! - makes you, I think, gave me a lifelong skill I think of being a communicator. You can always tell teachers, wherever they are, because they're not slow in coming forwards. So in other words that whole communications if you like is a thread through all my career, whatever I've done it's how you communicate and how to think about the audience you're delivering to, which you have to do as a teacher, for survival alone, let alone professional.

So there was that. Then I went to Beaulieu as their first education officer, the National Motor Museum, this was in the '80s when Beaulieu was at its peak. And so yes, I did education services and I did the tours of kids and interpreted the collection, because for primary school children all they saw were old vehicles and you had to bridge the gap between that vehicle and what their perception might be. And that also developed, as education was then in the '80s, into being part of the interpretation process of the intention as opposed to curators write the captions and design exhibits, but in fact education played a major role, |

Audio title: RuthTaylor-22ndJuly2013
Audio length: 46 minutes

Transcriber's Note: The microphone picks up a lot of wind at certain points during the recording and therefore most of the inaudibles are because of this.

Debs	Thank you ever so much for meeting and allowing me to interview you and giving up your time. The PhD is about relationships between the curators, designers and visitors, and external/internal influences put upon them from the initial concept of an interpretation through to the end of it. From my own experience so far things that you want to do can't always get done because of technology, budget or time and so on, so it's really spurred an interest into how we actually get this done. First of all, can I ask you a little bit about your background and how you came to be at the National Trust?
Ruth	I came to be at the National Trust because I applied for the job, I suppose. But I started as the Countryside, Visitor and Information Officer, and I was looking at the interpretation needs of the countryside. But then I moved on because the Houses and the Gardens wanted my work for them when they saw the work that was happening in the Countryside, so I then widened the scope of what I did to include Houses and Gardens. From that I then ended up in the Central Learning Team as an adviser to the properties. So started off doing lots of interpretation but ended up advising and training on interpretation.
Debs	Because I think when I met you, you were actually at the training stage. I think you were training people.
Ruth	Could be, yeah. I did some of that in the region but then more in the centre. Then in the centre we devised a whole overall interpretation philosophy which was led by Simon Murray, one of the Directors. So that was about the point I got to there, yeah.

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Feedback about the kiosk interpretation from Commercial Director Stephen Munn can be viewed below and also on the following link: *http://thetalkingwalls.co.uk/wordpress/wp-content/uploads/2018/04/Feedback-about-the-kiosk-from-Commercial-Director-Stephen-Munn-July-2013.pdf*

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Feedback regarding the kiosk from Commercial Director, Stephen Munn

(Excerpt from Interview held on 18th July 2013)

Stephen	But I think it's an attitude of mind as much as anything, and I heard at a recent ALVA meeting, they had a woman in from, I think it was the V&A, that's where Barry was recently, wasn't it? Yeah. And she was actually saying about the ten-year journey they'd undertaken for cultural change, and as she readily admitted, ten years ago, the Bowie collection wouldn't even have looked at them for it, but because they've moved on and part of that process was keeping the curatorial team clearly involved in the process, but getting them to think differently, that they're able to do the kind of things they did. And that's what it is, at the end of the day, it's educating everyone involved in the process and being willing to compromise, and seeing the bigger picture between what does the visitor really want, and yes we need to try and deliver that, because actually the only way that people will come and see your wonderful collections is if it's actually interesting to them. They don't care if it's interesting to you, it's got to be interesting to them because they're paying money to come in, at the end of the day. But in such a way that clearly it doesn't undermine all those really positive things about curatorial ownership of artefacts, etc, etc.
Debs	Because I spoke – a long time ago now – to Ailsa Barry at the Natural History Museum, and she headed up digital media at the time, and I was asking her about the matrix thing with the different layers, and she said that would be really good, because most of their problems are you've got the professors and the scientists who are saying that, 'Yes but they need to know this information.' 'Yes, but they don't want to know that information.' So by giving the visitors the option to choose what level of information they want, she thought was good, and it's something difficult to do most often. Did you think that with the talking walls? I know we only ever did the one level, but did you think that was a good way?
Stephen	Yeah, and ultimately that kind of device does help you to layer it between, on the one extreme, what I would term the dry and stuffy but factual information, which has got to be put there, and in the context of cars, how many miles to the gallon, when was it built, blah, blah, blah. And some of the other things we've been talking about: why was it black, why was Ford so successful, was this car used by a little old granny? Etc, etc.
Debs	So it allows you to put that information in on those different areas.

Stephen	Yeah, basic information, go to one. If you actually understand a bit about cars and want to know about Alpha Engine 5, go to two. If you're a PhD student and you're a really boring old fart, go to...' ((laughs))
Debs	Thank you! ((laughs))
Stephen	But you give people the options. My wife's uncle is one of those chaps, if you put him a museum, he will read literally every single word, whereas I'm more of a grazer, and if something really catches my mind, my imagination, I will go with it.
Debs	Want to find out more about it, on the phone, Wikipedia!
Stephen	That's it.
Debs	So if you have a website that they can access with that information built into it, then they can go to you and they're constantly getting the Beaulieu brand with them, aren't they?
Stephen	Yeah.
Debs	That's what I thought anyway! Just very quickly, towards the end, the Beaulieu Abbey kiosk, the material in there, I don't know how much you used it or played with it, but did you think there was too much choice? Did you think there was too much? It was built as a website primarily, so there was probably too much information on the kiosk and I didn't expect people to be using or going into it in great depth there. But do you think visitors should have that amount of choice, or do you choose it for them?
Stephen	I think the answer to that is that in an ideal world there is a mound of information which they can get in layers. I wouldn't want to advocate you stick one page up there, so to speak, it needs to be multi-layered. However, having said that, depending on where it is and what it is about, from an operator's point of view, you don't necessarily want all the information, because someone could stay there for an hour and you've got a whole queue behind you of people who also want to access that, so that gives you operational problems. So, as always, it's that fine balance, and I suspect what will happen in the future is we will layer it up to so much, but then it will be, 'There is more information available, please go to X, Y, Z when you get home and it's all there for you.' Or 'Send us your email and we'll give you access to,' or, indeed, because the National Motor Museum Trust doesn't get any core government funding, it may be, 'There's more information and pay us a quid and you can then download it.'
Debs	Yeah, that makes sense.
Stephen	So you can commercialise it.
Debs	'Friends of Beaulieu' kind of membership that you pay for and then you have access to that information and it can be tailored to your personal interests as well.
Stephen	Yeah, but of course it's the huge cost of digitisation of the vast records they've got in the first place, which is the real difficulty for the Trust.

Feedback about the kiosk interpretation from Archivist Susan Tomkins can be viewed below and also on the following link: *http://thetalkingwalls.co.uk/wordpress/wp-content/uploads/2018/04/Feedback-about-the-kiosk-from-Archivist-Susan-Tomkins.pdf*

Feedback from Susan Tomkins, Archivist (excerpt from interview on 10th July 2013)

Debs — Interesting. The talking walls for Beaulieu, it was different to the Dunster Castle one because there wasn't so much architectural history over so many centuries. Although the characters in the Dunster one became very important to the Beaulieu one because they really did help to tell the story I think and then there was the fact sheets and the lifestyles and there was a lot of content basically and my concern was wanting to give too much and there's always been this element of how much choice do you give a visitor and how much time you want them to engage with it and moving them on basically so that other people can take part in that bit as well? So have you got any thoughts on the content and choice?

Susan — I think, from experience, looking at similar things that people have had in ==different areas is that the majority of people will not stand there and go religiously through everything. They will pick something, sometimes at random, just to see what it does or they'll look at it and pick something that's of interest to them and then they will do that bit and then they will move on==.

Most places where I've looked I'm not aware of people standing there and religiously going through absolutely everything that's on there, but I think that some of the things which for some of our visitors, particularly with my education hat on, teachers and people like that, if there is a connection to something that they can then get to at home or at work with the school if it's relevant, they will then go onto it there and use it as a resource, but they will do that externally. They won't get their groups using it while they're necessarily here, but they will use that externally and visitors say with families or people that have their interest, as I said, I think they do a bit and then they move on.

Debs — So kind of like the website, which is how I planned it, for all the information to be there for people to access in that way, i.e. they came on a visit and they got a code to enter the website to then access more information or whatever. That's what I was doing it for rather than a kiosk in the museum, if you see what I mean? So that it needs breaking apart a little doesn't it? It's very much like you've done it at Buckler's Hard so you get bits of information at different points that you can dip into.

Susan — That's right, which we got from the naval museum at Portsmouth. We got the interactive game there for Illustrious where you have to load the thing. I can't remember exactly how long that is, but that's about the right length of time that people will stand.

Debs — And engage with it.

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Susan	And engage with it and that is because they're following something on. So I think they'll stay there slightly longer than they might do if it's what I call an information idea, which is what they perceived it as as being there in the Abbey, "Oh yeah what does that do? Oh that's interesting. Have you seen that? Oh yeah" and then go on and look at something else or I did notice when it was in there a couple of times, because I was down there doing other things, people looked at it, did a bit and then they obviously went out and walked around and they came back again afterwards to look something, to find something on there.
Debs	So they did actually look it up?
Susan	Yeah and went back. That happened on a couple of occasions when I was down there. So they'd obviously seen something somewhere in the site and either wanted to know more or weren't sure and went to see if there was anything on the thing. So that happened a couple of times or I'm guessing that's what they did because they were there and then they moved away and then they came back again having been outside.
Debs	Again, going back to the sheer physical size of the things, all the fact sheets and everything else was really there as a resource for the school children or people in their interest to delve deeper away from here, but the images of the building being built at different stages, of how it was built, the scaffolding and everything, trying to bring the size to life, but it's difficult isn't it in the domas in and out?
Susan	Yeah that's right. That's what I was saying before about you need it to be there, but I did notice that even people didn't use it, because it had the big screen, people would stand and look at the screen without actually using it themselves. If they went in and someone was using it, they would look at it and stand and look at it and then move on. Whether some of them came back, I don't know because when I was down there I wasn't particularly monitoring that. So yeah I did notice the big screen worked.
Debs	Moving. Something moving always attracts doesn't it? Yeah.
Susan	Yeah that's right, it sort of attracted their attention.
Debs	"Oh what's going on there?" Yeah. Okay, yeah. So when you're laying out your interpretation boards and your information bits, how do you choose what's going on there? Obviously it's relevant from all the stuff that we've been talking about, but how do you know how to limit the information, the amount of text, for instance, per image? Do you see what I mean?

Susan	Yes I do. What we try to do is the information that we put on a panel, the opening paragraph is something which, if you take the subject of a panel, we usually try to have one subject per panel or one story per panel and if somebody doesn't have a lot of time, if they only went round the exhibition and read the first paragraph of each panel they would have an idea of the subject.
Debs	So it's almost like an abstract?
Susan	Yeah.
Debs	It gives you an overview crunched.
Susan	And then the rest of the panel is if you've got time and you're interested in that subject you want more information about it, but it doesn't repeat what you've said before because you don't ever have enough words and most people don't want to stand and read for a long time.
	We've probably got more words than we might otherwise have on the panels at Buckler's Hard because a lot of our visitors at Buckler's Hard, they've gone to the maritime museum because they're interested in the subject. So that gives them a lot of information that's there and other visitors who have gone because they happen to be in the area, there's lots of visual images on there with captions and the first paragraph, again, they don't have to stand and read the rest of it, but they're not put off by it. Because we've got lots of illustrations on the panel, they're not quite as put off as they might be if it was lots of text and just one thing and then deciding what, in terms of the number of words, quite often it's not a specific word count. It's what story do I want to tell and what is the minimum number of words I need to be able to tell this story?
	So sometimes it's a really interesting story, but it's just too wordy to get the story across then sometimes it's better not to use it because you can't tell it. You have to give people so much information so that they can understand the story that they won't ever get to the story because they'll have switched off. So although it's a good story maybe telling it on a panel, it's not the most appropriate way of doing it and sometimes you can tell the story by using a series of pictures with captions or a series of drawings with captions like building a ship because that could be so wordy to get every single thing, but if you've got a series of illustrations which show some of the things, you can do it in other ways.
Debs	Picture, thousands of words and all that stuff.
Susan	Definitely.

Debs	There could be too much to choose from to go and see, to engage with, well what do I do? But then it's still making enough information available that's going to be of interest to such a wide number of people that visit.
Susan	That's right, yeah because if you take Buckler's Hard, somebody that goes down there may have a passing interest in ship building, but be really interested in the social side of things. So they can flip through the ship building bit and then spend longer doing social side of it or vice versa or people may go and they're not really sure what they're interested in, but different panels will spark their interest for different reasons and they'll just pick and choose and then you get people who go down and they read everything and they work their way along.
Debs	Yeah just soak it up.
Susan	Yeah they just read everything and look at everything. So I think you try to appeal to as many of your visitors as you can by using a variety of techniques, which is what you do when you teach. People learn in different ways so you provide lots of different ways for them to learn so that you provide something for everyone.

Feedback about the kiosk interpretation from Visitor Services Manager Jon Tee can be viewed below and also on the following link: *http://thetalkingwalls.co.uk/wordpress/wp-content/uploads/2018/04/Feedback-about-the-Kiosk-from-the-Visitor-Services-Manager-Jon-Tee.pdf*

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Feedback about the Kiosk from the Visitor Services Manager Jon Tee

(Excerpt from interview held on July 3rd 2013)

Debs   So what was your, because I know your staff had to turn it on and turn it off of an evening – did you get any feedback when you were doing your walking around with anybody using the kiosk?

Jon   I saw a lot of people using it. I think the information and the way it was portrayed was fine. I think it worked quite well. It was a bit, well we know it wasn't massively robust was it. It couldn't stand up to our sort of French visitors the computer didn't like it at all.

Debs   Well the computer didn't like it much.

Jon   So I think the danger of anything like that is – I mean one of my friends went to the Bovington Tank Museum and the first thing he said to me was, "Well they've got loads of audio visual but half of it didn't work." I think it can look a bit funny if a lot of the things don't work and these things do break down but I think we got over that didn't we and it was okay. So I think as a format it was fine really. I think they understood it, they did understand it, which is important because they don't always understand these things so I think that worked okay. It was just things like the French kids were getting onto the Internet and stuff like that weren't they?

Debs   Yes, we managed to lock that down I think but yeah, you will get children, well they are not children are they, but they will always push how can we break this? We've got students who do that, who say, "How can we make this do something it shouldn't do?"

Jon   Yes, I think we should just discount from our thoughts really because are a bit out there on their own. Watching kids on it, I mean I don't stand there all day watching it but I think the character side of it is good and that side of it appealed to the younger generation certainly.

Debs   It is the story again.

Jon   Yes, definitely, definitely.

Debs   Because you had events going on in there as well didn't you? So upstairs or downstairs?

Jon   Yes, the corporate functions and they kept wanting to move them didn't they? Yeah, but I think we got into a position in the end where it didn't need to be moved.

Debs	No, I wasn't worried about that. I was wondering if anyone, was all the Abbey stuff turned on at that time?
Jon	It would be during the day but it wouldn't be in the evening, it would probably be turned off by then.
Debs	It would be really interesting to see whether that had any impact on other events but probably if it was turned off?
Jon	Probably not for the important functions, no.
Debs	So what would you like to see in there then? If you had your own way what would you like to see in there if money was no option?
Jon	I would probably think the way to go is to have some sort of wireless Internet that they could use on their smart phones with something they can download there an then, some sort of App, that they can download and just look at different bits and bobs. As I think we said, so that they could tap into what was interesting for them for one bit. I'd probably like to make it a bit more interactive in terms of silly things like dressing up clothes and that sort of stuff and maybe a monk talking to people, I think that works quite well for the younger generation.
	They have a simple thing in the motor museum – a pope car and it is constantly rammed with people just literally all you do is sit on the car put an old hat on and take a photograph and it doesn't cost anything, you just get on and do it. The museum put a donation box down and it made like £1,000 a month in donations, it's ridiculous really, but constantly in use.
	So people just like these hands on kinds of things and I think we need to display the information in a way that is going forward so lots of people will be able to get to it. I think we definitely need to make it a bit more interactive with things to do in there, so maybe dressing up boxes and maybe more hands on stuff like -
Debs	Make their own bottle of mead?
Jon	Absolutely or even just having things that you can touch and feel that they would have used – like tools on a chain or something like that. So I think there are certain simple things we could do very quickly to spread it around and make it more interesting for sure. And then I do think that conveying the information would work on the iPhones.

Debs	I think it is becoming so much part of people's lives to have these things; it is a lot more acceptable format. Again I think one of Mary's earliest thoughts were the fact that looking at the screen in bright sunlight and stuff because you are going outside but I think there are, most phones have got over that. I know I've got a Galaxy S3 and sometimes you have to look, to do this, in order to see it properly.
Jon	==But even if its audio, I think, the MP3 description of the Abbey on the website is good, it's interesting and it brings the place to life and tells a story so again that sort of thing is, that you can easily download there and then can't you rather than, because at the moment they would probably have to download it before they came to probably having just a sign saying 'download the MP3 and it will tell you all about it' – that type of thing. So I think it is a collection of all kinds of things that just raises it up.== I don't think we could rebuild the wall. It would be nice if we could but we can't.
	I think certainly landscaping it so that the orientation, this is definitely Mary's idea, something so that if you see the film, you know what you are looking at and go from there.

Feedback about the kiosk interpretation from my observations during June 2010 and May 2011 can be viewed below and also on the following link: *http://thetalkingwalls.co.uk/wordpress/wp-content/uploads/2018/04/Feedback-from-kiosk-observations-at-different-times-during-June-2010.pdf*

Feedback from observations at different times during June 2010 – May 2011 when visiting to check on the kiosk:

1. Able to explore and interact with the interesting content in my own time
2. There's such a lot of stuff there.
3. The interactive site enabled us to "see" what the buildings might once have looked like when the Abbey was newly built
4. Interesting display giving an insight to the monks' lives. It was nice to see the changes across the 3 decades.
5. There is so much choice, I like that you can choose which character to guide you around the abbey
6. Really enjoyed watching my grandson learning more about the abbey. The top screen made it so much easier for my husband and I to watch the different content he went through. Really interesting.
7. Excellent resource, really good to see this, it would be good to access via a handset though, so that you can walk around with it to the different places shown.
8. A little intimidated by the technology but fascinated by what can be accessed
9. A unique concept, can we access this outside the museum ie when we are home?
10. Really good fun using the puzzles and quizzes
11. Loved the music and voices/stories, shame there wasn't more
12. A very good historical reference, really liked the monks' stories and seeing the size the abbey would have been before it was destroyed
13. What started out as a way of keeping dry for a few mins turned into a really engaging time, exploring the life of the monks and seeing the different stages of the abbey.
14. We were very impressed by the historical displays and spent far longer at the museum than we planned.
15. It has a lot of local information packed into it which was interesting & quite a lot of interactive things to do rather than just watch a tour
16. Interesting, explains history of the abbey really well
17. It would have been good to see more of these placed around the site
18. Very good with lots of things for the kids to touch and explore. The information is short and to the point, easy to read.
19. We enjoyed our visit to the museum and the exhibits were really interesting and relevant, the kiosk helped, once we understood what we could access, and quite fun as well as informative
20. A fascinating glimpse of what they were, and what life was like in their day

SPECIAL VISIT SHEET

Visit Date: *Wednesday 19th May 2010*   **Number in Party:** *approx 60*

Organisation Name: *The Talking Walls*   **Contact Name:** *Deborah Wilson*

Beaulieu Contact: *Susan Tomkins/Margaret Rowles*   **Arrival Time:** *From 10.00 am*

Reason for Visit: *Launch Event*   **Departure Time:** *1pm*

Itinerary:

From 10 am   Guests park in visitor car park & enter via Visitor Reception, collecting Badge at Registration Desk.

Guests proceed to Beaulieu Abbey.

11am   Presentation in Cellarer's Hall.

11.30 am   Drinks Reception in the Domus.

Free time for guests to explore the Abbey.

Depart at leisure.

Special Requirements:

Tim:	Please be available to take pictures
Annette:	Please supply a projector, screen and extension cable for the Domus, as booked.
Alison/Gemma:	Catering as arranged. Please have the stair climber available for use.
Dawn:	Please provide name badges and man Reception Desk.
FOH/PH/VR/Rec:	Please be aware of this visit
Ryan:	Signs as below

Signs:

Welcome Board: The Talking Walls   Boiler House: The Talking Walls →

Outside VR: ←The Talking Walls   Entrance to Arena: The Talking Walls→
                ↑Parking

Distribution:

All above: MM-S/JB/ST/RB/DW

Issued:
13.05.2010

QUESTIONNAIRE SHEETS COMPLETED: They can also be viewed on:
http://thetalkingwalls.co.uk/wordpress/?p=1858 :

PARTICIPANT 1

PARTICIPANT 2

PARTICIPANT 3

PARTICIPANT 4

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The Talking Walls® Experience Survey — PARTICIPANT 5

THE TALKING WALLS®

The Talking Walls® Experience Survey

Would you please share your experience and help us make The Talking Walls® a success. This short questionnaire should take 5 minutes to complete.

1. Have you seen anything similar to The Talking Walls® interface in other museums, art galleries, heritage sites or historic houses?

   ☑ Yes   Where? _Winchester Guild Museum (briefly)_
   ☐ No
   ☐ Cannot remember

2. Briefly describe the best experiences you enjoyed from the use of the application:
   Easy and interesting interfaces
   and suitable for all ages

3. Briefly describe any disappointing experiences in the use of the application:
   Navigation was not clear whilst having
   ever buttons

4. Would you recommend a friend to try The Talking Walls® application?
   ☑ Yes
   ☐ No

5. Briefly describe how you would improve the application at Beaulieu Abbey:
   Improve more clarity on grid structure

6. What gender are you?
   ☐ Female
   ☑ Male

7. Which age group do you fit into?
   ☐ 6-11   ☐ 12-19   ☑ 20-34   ☐ 35-49   ☐ 50-64   ☐ 65+

Thank You

PARTICIPANT 5

The Talking Walls® Experience Survey — PARTICIPANT 6

THE TALKING WALLS®

The Talking Walls® Experience Survey

Would you please share your experience and help us make The Talking Walls® a success. This short questionnaire should take 5 minutes to complete.

1. Have you seen anything similar to The Talking Walls® interface in other museums, art galleries, heritage sites or historic houses?

   ☐ Yes   Where? _____
   ☑ No
   ☐ Cannot remember

2. Briefly describe the best experiences you enjoyed from the use of the application:
   Walk throughs and story boards/characters. These
   brought the history to life from several perspectives.

3. Briefly describe any disappointing experiences in the use of the application:
   None!

4. Would you recommend a friend to try The Talking Walls® application?
   ☑ Yes
   ☐ No

5. Briefly describe how you would improve the application at Beaulieu Abbey:
   Further interaction on the lower level diagrams. To
   be able to touch the screen to bring up specific areas of
   the building.

6. What gender are you?
   ☐ Female
   ☑ Male

7. Which age group do you fit into?
   ☐ 6-11   ☐ 12-19   ☐ 20-34   ☑ 35-49   ☐ 50-64   ☐ 65+

Thank You

PARTICIPANT 6

The Talking Walls® Experience Survey — PARTICIPANT 7

THE TALKING WALLS®

The Talking Walls® Experience Survey

Would you please share your experience and help us make The Talking Walls® a success. This short questionnaire should take 5 minutes to complete.

1. Have you seen anything similar to The Talking Walls® interface in other museums, art galleries, heritage sites or historic houses?

   ☐ Yes   Where? _____
   ☑ No
   ☐ Cannot remember

2. Briefly describe the best experiences you enjoyed from the use of the application:
   The different characters/perspectives on history/brings it to life
   I love the walkthroughs tours
   3D renderings of Abbey. It's an incredible 3D resource.

3. Briefly describe any disappointing experiences in the use of the application:
   None. An incredible resource should be like this in many
   locations

4. Would you recommend a friend to try The Talking Walls® application?
   ☑ Yes
   ☐ No

5. Briefly describe how you would improve the application at Beaulieu Abbey:
   _NA_

6. What gender are you?
   ☑ Female
   ☐ Male

7. Which age group do you fit into?
   ☐ 6-11   ☐ 12-19   ☐ 20-34   ☑ 35-49   ☐ 50-64   ☐ 65+

Thank You

PARTICIPANT 7

The Talking Walls® Experience Survey — PARTICIPANT 8

THE TALKING WALLS®

The Talking Walls® Experience Survey

Would you please share your experience and help us make The Talking Walls® a success. This short questionnaire should take 5 minutes to complete.

1. Have you seen anything similar to The Talking Walls® interface in other museums, art galleries, heritage sites or historic houses?

   ☐ Yes   Where? _____
   ☑ No
   ☐ Cannot remember

2. Briefly describe the best experiences you enjoyed from the use of the application:
   Excellent interface easy to
   use and informative

3. Briefly describe any disappointing experiences in the use of the application:
   None

4. Would you recommend a friend to try The Talking Walls® application?
   ☑ Yes
   ☐ No

5. Briefly describe how you would improve the application at Beaulieu Abbey:
   An technology changes

6. What gender are you?
   ☐ Female
   ☑ Male

7. Which age group do you fit into?
   ☐ 6-11   ☐ 12-19   ☐ 20-34   ☐ 35-49   ☑ 50-64   ☐ 65+

Thank You

PARTICIPANT 8

PARTICIPANT 9

PARTICIPANT 10

PARTICIPANT 11

PARTICIPANT 12

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Participant 13

THE TALKING WALLS®

The Talking Walls® Experience Survey

Would you please share your experience and help us make The Talking Walls® a success. This short questionnaire should take 5 minutes to complete.

1. Have you seen anything similar to The Talking Walls® interface in other museums, art galleries, heritage sites or historic houses?

   ☐ Yes   Where? _____
   ☒ No
   ☐ Cannot remember

2. Briefly describe the best experiences you enjoyed from the use of the application:

   Clarity, Ease of use AND ~~they~~ so informative

3. Briefly describe any disappointing experiences in the use of the application:

   Just too brief

4. Would you recommend a friend to try The Talking Walls® application?

   ☒ Yes
   ☐ No

5. Briefly describe how you would improve the application at Beaulieu Abbey:

   Add a second Booth

6. What gender are you?

   ☐ Female
   ☒ Male

7. Which age group do you fit into?

   ☐ 6-11   ☐ 12-19   ☐ 20-34   ☐ 35-49   ☒ 50-64   ☐ 65

Thank You

PARTICIPANT 13

Participant 14

THE TALKING WALLS®

The Talking Walls® Experience Survey

Would you please share your experience and help us make The Talking Walls® a success. This short questionnaire should take 5 minutes to complete.

1. Have you seen anything similar to The Talking Walls® interface in other museums, art galleries, heritage sites or historic houses?

   ☐ Yes   Where? _____
   ☒ No
   ☐ Cannot remember

2. Briefly describe the best experiences you enjoyed from the use of the application:

   Educational "fun" aspects eg post coded
   being able to see rooms as they were

3. Briefly describe any disappointing experiences in the use of the application:

   Have not used it recently so not sure!

4. Would you recommend a friend to try The Talking Walls® application?

   ☒ Yes
   ☐ No

5. Briefly describe how you would improve the application at Beaulieu Abbey:

   Having handheld devices - though I know
   you're working towards them!

6. What gender are you?

   ☒ Female
   ☐ Male

7. Which age group do you fit into?

   ☐ 6-11   ☐ 12-19   ☐ 20-34   ☒ 35-49   ☐ 50-64   ☐ 65+

Thank You

PARTICIPANT 14

Participant 15

THE TALKING WALLS®

The Talking Walls® Experience Survey

Would you please share your experience and help us make The Talking Walls® a success. This short questionnaire should take 5 minutes to complete.

1. Have you seen anything similar to The Talking Walls® interface in other museums, art galleries, heritage sites or historic houses?

   ☒ Yes   Where? Italy - but a very basic version
   ☐ No
   ☐ Cannot remember

2. Briefly describe the best experiences you enjoyed from the use of the application:

   The history of the Abbey

3. Briefly describe any disappointing experiences in the use of the application:

   None

4. Would you recommend a friend to try The Talking Walls® application?

   ☒ Yes
   ☐ No

5. Briefly describe how you would improve the application at Beaulieu Abbey:

   None

6. What gender are you?

   ☒ Female
   ☐ Male

7. Which age group do you fit into?

   ☐ 6-11   ☐ 12-19   ☐ 20-34   ☒ 35-49   ☐ 50-64   ☐ 65+

Thank You

PARTICIPANT 15

Participant 16

THE TALKING WALLS®

The Talking Walls® Experience Survey

Would you please share your experience and help us make The Talking Walls® a success. This short questionnaire should take 5 minutes to complete.

1. Have you seen anything similar to The Talking Walls® interface in other museums, art galleries, heritage sites or historic houses?

   ☐ Yes   Where? Louvre, Tate, National Gallery
   ☐ No
   ☐ Cannot remember

2. Briefly describe the best experiences you enjoyed from the use of the application:

   Meeting "talking" of characters
   Reconstruction of history, buildings

3. Briefly describe any disappointing experiences in the use of the application:

   speed
   slight confusion of how it works -
   once mastered fine but I imagine some people would
   be confused / lose interest

4. Would you recommend a friend to try The Talking Walls® application?

   ☒ Yes
   ☐ No

5. Briefly describe how you would improve the application at Beaulieu Abbey:

   Simplify it a bit

6. What gender are you?

   ☒ Female
   ☐ Male

7. Which age group do you fit into?

   ☐ 6-11   ☐ 12-19   ☐ 20-34   ☒ 35-49   ☐ 50-64   ☐ 65+

Thank You

PARTICIPANT 16

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THE TALKING WALLS®

The Talking Walls® Experience Survey

Would you please share your experience and help us make The Talking Walls® a success. This short questionnaire should take 5 minutes to complete.

1. Have you seen anything similar to The Talking Walls® interface in other museums, art galleries, heritage sites or historic houses?

   ☑ Yes Where? _Various Wallace properties (Balsour Castle)_
   ☐ No _but not to this degree._
   ☐ Cannot remember

2. Briefly describe the best experiences you enjoyed from the use of the application:
   Useful background information gave an insight to property.

3. Briefly describe any disappointing experiences in the use of the application:
   Wanting to use - would also need lots of times to fully appreciate use of application - not good when people are waiting to use, puts pressure on...

4. Would you recommend a friend to try The Talking Walls® application?

   ☑ Yes
   ☐ No

5. Briefly describe how you would improve the application at Beaulieu Abbey:
   Introduce more, & advertise more widely. It can be used at home...

6. What gender are you?

   ☐ Female
   ☑ Male

7. Which age group do you fit into?

   ☐ 6-11   ☐ 12-19   ☐ 20-34   ☑ 35-49   ☐ 50-64   ☐ 65+

Thank You

PARTICIPANT 17

The fieldwork interview sheets which outline the questions to prompt the interview discussion are included for the 14 participants:

Beaulieu Design Team: May Montagu Scott, Stephen Munn, Susan Tomkins, Jon Tee

Designers: Rebecca Furse, Russell Richards, Katya O'Grady, Alex Hoare

Launch Guests: Rev'd James Atwell, John Pemberton, Rupert Thomson, Dr John Richardson

External Professionals/Curators: Ruth Taylor, Andy Lane

Mary Montagu-Scott – Site Owner / Curator
Friday 1st March 2013, 11am, John Montague Building, Beaulieu.

This interview will cover Beaulieu's vision for the Abbey and how they see cultural heritage interpretation as part of this vision.

Questions concerning Beaulieu's perception and knowledge of visitor interaction with cultural heritage and their engagement with heritage artefacts will be asked.

A discussion of the relationship between the stakeholders and the curator will be planned to ascertain the extent of external influences that may exist in the origination of an interpretation project.

Background information:

1. I would like to start by asking you about your position at Beaulieu with respect to the Abbey? (position)
2. What led you to this position? (education / work)
3. Do you have a special personal interest in this type of work / the abbey? (influence)
4. What or who has influenced your involvement in design / curation?
5. Do you feel that there is sometimes a conflict between your different roles? (owner/stakeholder, designer, curator)

The Vision for the Abbey:

1. The abbey is the foundation of Beaulieu, when visitors come to Beaulieu, the focus generally appears to be the motor museum and / or palace house. From our previous meetings regarding The Talking Walls application, you mentioned you would like to see the abbey engage more visitors with its heritage - footfall. Would you mind explaining this a little more for the interview?
2. What would be your vision for the Abbey if there were no limiting factors? (such as money / regulations)
3. And with limiting factors?
4. What are your plans for the abbey?
5. In the case of Beaulieu, what do you think is the most important aspect of the abbey to portray in an interpretation? (building/space, people, lifestyle, community or combination of all?)
6. Can you tell me how / what you are planning to achieve this? (visitor research / feedback, interpretation design research, other site examples)
7. How are you planning for visitors to engage and interact with the Abbey with future interpretations?
8. How will you know if the interpretation is successful?

Process for interpretations:

1. What is the normal sequence of events for creating new interpretations of/for the Abbey?
2. Can you describe what influences the final concept? (i.e. stakeholders input, budget considerations)
3. In your experience from previous interpretations, does the finished interpretation follow the original concept / reason for the interpretation?
4. If not, why do you think this is the case? (budget, time?)
5. If yes, do you feel this could be achieved in a better way / differently for a more successful / engaging interpretation?

Beaulieu Abbey past interpretations:

1. Have there been many interpretations presented to the public regarding the Abbey?
2. Could you describe the focus in past interpretations of the Abbey? i.e. has there been a specific item / area?
3. How successful has this been in engaging the visitor? (or – do you feel this has been successful in engaging the visitor?)
4. What are the processes for gauging the success of an interpretation at the Abbey?

The Talking Walls Beaulieu Abbey kiosk interpretation:

1. I pitched the idea for the TW interpretation to Beaulieu and in the event of gaining funding, we were able to take this forward. Was there a plan for a similar interpretation at the time?
2. And was it from this that we were invited to pitch? i.e. was there a requirement at the time for a multimedia / 3D application?
3. Do you feel the process of me as a designer, working with Susan (curator) worked well from your aspect (as owner/stakeholder/designer/curator)?
4. Were there aspects you would have liked to change in this process?
5. I remember having difficulties with technology, rendering times, and required skillsets to achieve the planned outcome and therefore needing to adapt. Do you remember any influences (external / internal) that may also have changed the initial concept to the final application from the Beaulieu end? i.e. audio tour, stakeholders, budget?
6. Would you mind describing your experience of the final interpretation? i.e. was it an engaging experience?
7. From feedback, discussion and experience, would you consider the interpretation process in this instance, a successful collaboration process between Beaulieu, curator and designer?
8. From feedback and visitor measurements, would you consider the interpretation successful in engaging visitors?

Thank you.

Stephen Munn – Commercial Director
Thursday 18th July 2013 11.30am, John Montague Building, Beaulieu.

The interview will relate to the decision making process in the commercial / marketing aspect of the Abbey.

Questions concerning the processes involved in how a project is decided upon as a commercial attraction / visitor attractor will be asked.

Discussion regarding what is seen as a successful visitor interpretation at Beaulieu will be planned, including discussion on how they capture this information

Background information:

1. I would like to start by asking you about your position at Beaulieu with respect to the Abbey? (position)
2. What led you to this position? (education / work)
3. Do you have a special personal interest in this type of work / the abbey? (influence)
4. What or who has influenced your involvement in visitor attractions / tourism?
5. If you have several roles within your Commercial Director role, do you feel that there is sometimes a conflict between them? (i.e. manager, research, curator)

Visitor Interpretation at Beaulieu Abbey:

1. The abbey is the foundation of Beaulieu, when visitors come to Beaulieu, the focus generally appears to be the motor museum and / or palace house. Would you like to see the abbey engage more visitors with its heritage? Would you mind explaining this a little more for the interview?
2. What would be your vision of the perfect visitor interpretation for the Abbey?
3. And with limiting factors?
4. What do you think is the most important aspect of the abbey to portray in an interpretation for the visitor? (building/space, people, lifestyle, community or combination of all?)
5. How would you plan for visitors to engage and interact with the Abbey with future interpretations?
6. How will you know if the interpretation is successful?

Visitor Research and Measuring the Visitor Experience:

1. Can you explain, for interview purposes, the types of visitors that mostly visit the Beaulieu complex? (i.e. different demographic groups)
2. Can you tell me how you find out what the visitors 'like' when they visit the Beaulieu complex? (visitor research / feedback, interpretation design research, other site examples)
3. Do you track where they visit the most and why they visit?

4. What methods do you use to communicate with your visitors (social media, mail shots)?
5. Which method(s) have you found to be the most successful in engaging a response from your visitors?
6. How do you measure and analyse the visitor experience?
7. Do you feel this could be achieved in a better way / differently for an even more successful / engaging visitor experience?

Beaulieu Abbey and other past interpretations:

1. Have there been many interpretations presented to the public regarding the Abbey?
2. Could you describe the focus in past interpretations of the Abbey? i.e. has there been a specific item / area?
3. How successful has this been in engaging the visitor?
4. What are the processes for gauging the success of an interpretation at the Abbey?
5. How do you decide what attractions / interpretations will draw visitors to Beaulieu?
6. What influences the final decision or final outcome?

The Talking Walls Beaulieu Abbey kiosk interpretation:

1. Would you mind describing your experience of the final interpretation? i.e. did you find it an engaging experience?
2. Did you find it easy to use and explore?
3. Did you consider that there may be too much choice with the content, i.e. holding visitors up in the flow around the site?
4. Did you find – from feedback – that the kiosk was a success or hindrance in aiding visitor experience of the abbey?
5. From feedback, discussion and experience, would you consider the interpretation process in this instance, a successful collaboration process between Beaulieu, curator and designer for relaying information on the history and community of the abbey?
6. From feedback and visitor measurements, would you consider the interpretation successful in engaging visitors?

Thank you.

Susan Tomkins –Curator
Wednesday 10th July 2013, 10am, John Montague Building, Beaulieu.

This interview will cover choice of content and how this is relevant to the initial conceptualisation of an interpretation project for the Abbey.

Questions concerning the interaction of the relationship with the designer(s) (with the TW project and others), and how this affects the interpretation project will be asked.

A discussion regarding the curator's interaction with visitors, the methods used to measure the success of interpretation at the Abbey and how important this is for future interpretation projects will be planned.

Background information:

1. I would like to start by asking you about your position at Beaulieu with respect to the Abbey? (position)
2. What led you to this position? (education / work)
3. Do you have a special personal interest in this type of work / the abbey? (influence)
4. What or who has influenced your involvement in design / curation?
5. Do you feel that there is sometimes a conflict between your different roles? (curator, archivist and educator)

The Vision for the Abbey:

1. The abbey is the foundation of Beaulieu, when visitors come to Beaulieu, the focus generally appears to be the motor museum and / or palace house. From our previous meetings regarding The Talking Walls application, you mentioned you would like to see the abbey engage more visitors with its heritage - footfall. Would you mind explaining this a little more for the interview?
2. What would be your vision for the Abbey if there were no limiting factors? (such as technology / money / regulations)
3. And with limiting factors?
4. There is a re-design of the interpretation in the Domus planned. Would you tell me what is being planned to achieve visitor engagement and interaction with the Abbey and why the chosen interpretation (i.e. Is this in response to visitor feedback or 'Estate' led, i.e. to update existing)?
5. Has this been influenced by visitor research / feedback / focus groups, interpretation design research, other site examples?

Process for interpretations:

1. What is the normal sequence of events for creating new interpretations of/for the Abbey (do you start with a story / object / anniversary event)?
2. From your experience, can you describe what influences the final concept? (i.e. stakeholders input, budget considerations)

3. In your experience from previous interpretations, does the finished interpretation follow the original concept / reason for the interpretation?
4. If not, why do you think this is the case (budget, time)?
5. If yes, do you feel this could be achieved in a better way / differently for a more successful / engaging interpretation?

Content and Choice:

1. Could you describe the focus in past interpretations of the Abbey? i.e. has there been a specific item / area / story?
2. How successful has this been in engaging the visitor? (or – do you feel this has been successful in engaging the visitor?)
3. In the case of Beaulieu, what do you think is the most important aspect of the abbey to portray in an interpretation (building/space, story, people, lifestyle, community or combination of all)?
4. What do you think about the depth of content / type of content that is available to the visitor – should there be multiple choices (and at different levels)?
5. How long do you feel visitors should interact with content / information?
6. As a curator / archivist, would this determine (help to determine) the depth of content / choice?
7. In your experience, how long do visitors in general, interact with content / information?
8. How do they normally interact with the interpretation (listen, read, watch, view)?

The Talking Walls Beaulieu Abbey kiosk interpretation:

1. I pitched the idea for the TW interpretation to Beaulieu and in the event of gaining funding, we were able to take this forward. Was there a plan for a similar interpretation at the time?
2. And was it from this that we were invited to pitch? i.e. was there a requirement at the time for a multimedia / 3D application?
3. Do you feel the process of me as a designer, working with you, worked well from your aspect (as archivist/curator)?
4. Were there aspects you would have liked to change in this process?
5. I remember having difficulties with technology, rendering times, and required skillsets to achieve the planned outcome and therefore needing to adapt. Do you remember any influences (external / internal) that may also have changed the initial concept to the final application from the Beaulieu end? i.e. audio tour, stakeholders, budget?
6. Would you mind describing your experience of the final interpretation? i.e. was it an engaging experience?
7. From feedback, discussion and experience, would you consider the interpretation process in this instance, a successful collaboration process between Beaulieu, curator and designer?
8. From feedback and visitor measurements, would you consider the interpretation successful in engaging visitors?

Visitor Research and Measuring the Visitor Experience:

1. Can you explain the types of visitors that mostly visit the Beaulieu complex? (i.e. different demographic groups)
2. Can you tell me how you find out what the visitors 'like' when they visit the Beaulieu complex? (visitor research / feedback, interpretation design research, other site examples)
3. Do you track where they visit the most and why they visit?
4. What has been the most successful in attracting and engaging the visitor to the Abbey (living history / film / audio tour / quiet space)?
5. How do you measure and analyse the visitor experience?
6. Do you feel this could be achieved in a better way / differently for an even more successful / engaging visitor experience?

Thank you.

Jon Tee – Visitor Services Manager
Wednesday 3rd July 2013 2pm, John Montague Building, Beaulieu.

The interview will relate to how Beaulieu manages to capture data on their visitors' experiences.
Questions concerning the methods and processes used in capturing their visitor data and feedback, how they analyse and feed this back into the Beaulieu interpretations, and how they communicate with their visitors.
Discussion regarding feedback and communication with Beaulieu Abbey's interpretations including the kiosk will be planned.

Background information:

1. I would like to start by asking you about your position at Beaulieu with respect to the Abbey? (position)
2. What led you to this position? (education / work)
3. Do you have a special personal interest in this type of work / the abbey? (influence)
4. What or who has influenced your involvement in visitor services?
5. If you have several roles within your Visitor Services Facilities role, do you feel that there is sometimes a conflict between them? (i.e. manager, curator)

Visitor Interpretation at Beaulieu Abbey:

1. The abbey is the foundation of Beaulieu, when visitors come to Beaulieu, the focus generally appears to be the motor museum and / or palace house. Would you like to see the abbey engage more visitors with its heritage? Would you mind explaining this a little more for the interview?
2. What would be your vision of the perfect visitor interpretation for the Abbey?
3. And with limiting factors?
4. What do you think is the most important aspect of the abbey to portray in an interpretation for the visitor? (building/space, people, lifestyle, community or combination of all?)
5. How would you plan for visitors to engage and interact with the Abbey with future interpretations?
6. How will you know if the interpretation is successful?

Visitor Research and Measuring the Visitor Experience:

1. Can you explain, for interview purposes, the types of visitors that mostly visit the Beaulieu complex? (i.e. different demographic groups)
2. Can you tell me how you find out what the visitors 'like' when they visit the Beaulieu complex? (visitor research / feedback, interpretation design research, other site examples)
3. Do you track where they visit the most and why they visit?
4. What methods do you use to communicate with your visitors (social media, mail shots)?

5. Which method(s) have you found to be the most successful in engaging a response from your visitors?
6. How do you measure and analyse the visitor experience?
7. Do you feel this could be achieved in a better way / differently for an even more successful / engaging visitor experience?

Beaulieu Abbey past interpretations:

1. Have there been many interpretations presented to the public regarding the Abbey?
2. Could you describe the focus in past interpretations of the Abbey? i.e. has there been a specific item / area?
3. How successful has this been in engaging the visitor?
4. What are the processes for gauging the success of an interpretation at the Abbey?

The Talking Walls Beaulieu Abbey kiosk interpretation:

1. Would you mind describing your experience of the final interpretation? i.e. did you find it an engaging experience?
2. Did you find it easy to use and explore?
3. Did you consider that there may be too much choice with the content, i.e. holding visitors up in the flow around the site?
4. Did you find – from feedback – that the kiosk was a success or hindrance in aiding visitor experience of the abbey?
5. From feedback, discussion and experience, would you consider the interpretation process in this instance, a successful collaboration process between Beaulieu, curator and designer for relaying information on the history and community of the abbey?
6. From feedback and visitor measurements, would you consider the interpretation successful in engaging visitors?

Thank you.

Rebecca Furse – Designer, Interior Designer and Environmental Psychologist (architectural based)

Friday 6th September 2013, 11.00am, 19 Lowden Avenue, Chippenham

The interview with Rebecca will relate to her experience in the development / build of the Beaulieu Abbey application and the depth of content available through the application.

Questions relating to the design of the interpretation and how it answered the Beaulieu Abbey brief, how it might have been designed differently if designed by Rebecca, what changes would have been made and why will be asked.

Discussion regarding the effects of cultural influences and external interests affecting interpretation and design of cultural heritage applications, and in her practice as an architectural / interior designer will be planned.

Background information:

1. I would like to start by asking you about your role as a Designer / Environmental Pyschologist with DK Architects.
2. What led you to work with an architectural practice and then choose Environmental Pschology? (education / work)
3. Has your role changed over the time you have been designing? If so, what were the influencing factors?
4. Can you tell me about your design work with DK Architects?
5. What or who has influenced your involvement in design?
6. Do you feel you are a creator through your design work?
7. Which do you feel is the more important role, interior designer, architectural assistant, dementia care strategist? Or are they intertwined?
8. Do you feel that there is sometimes a conflict between your different roles: designer, architectural assistant, environmental psychologist?

Design Assistant – Dunster Castle protoype interpretation project:

1. Taking you back in time to when you were assisting with the Dunster Castle project, would you be able to tell me what you may remember about your initial impression of the Dunster Castle prototype?
2. What experience of visiting cultural heritage sites did you have at the time?
3. With the technology available at the time, your experience of visiting heritage sites and as a design student at the time, do you feel there could have been a different way of presenting the same information?
4. How did the proposed project compare with heritage interpretation previously experienced?

5. Do you think the initial navigation method, as shown here, was fairly standard as a multimedia application?
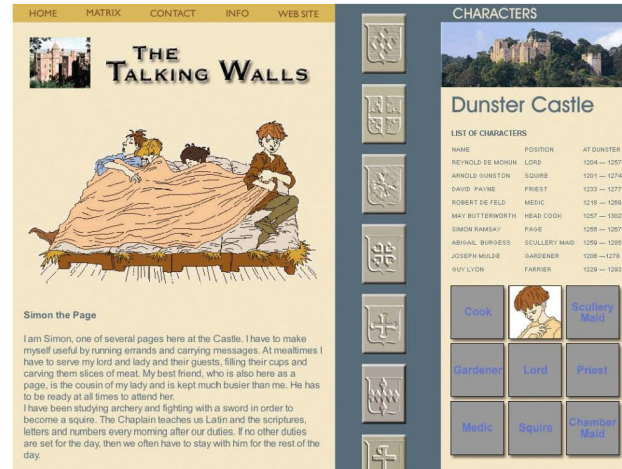
6. The more unique element developed during the Masters was the Matrix, shown below. What did you think of the early Matrix method of showing a mix of material over a timeline, enabling a user to physically navigate a space was a usable and intuitive form of navigation for a heritage interpretation?

7. Do you feel this is now outdated?
8. The navigation was altered considerably for the Beaulieu Abbey app (see below) due to the perceived belief that visitors would not need to use the Matrix as a form of navigation of the physical space, only the content. Do you feel that this has made the Matrix less intuitive?

9. The new Matrix allowed for three levels of information for the Home page Matrix – Children, Adults, Professional (although only a mix of child / adult was developed for Beaulieu). Each cube then held 9 other elements within that category. Do you feel that if all the levels and cubes held information, this would give too much 'choice' for a heritage visitor? (your experience as a designer, and environmental psychologist)

Design Assistant – Designing Beaulieu Abbey interpretation project:

1. During the build of the Beaulieu Abbey app, would you explain the work you were involved with?
2. What were your thoughts / opinions of the project as a whole – i.e. was it something that you felt would be a good addition for visitors to use at a heritage site?
3. What were your thoughts / opinions of the design of the project i.e. was it something that you would like to use at Beaulieu Abbey?
4. What did you think about the design change in navigation and style from the Dunster Castle project? i.e. did you consider it had improved?
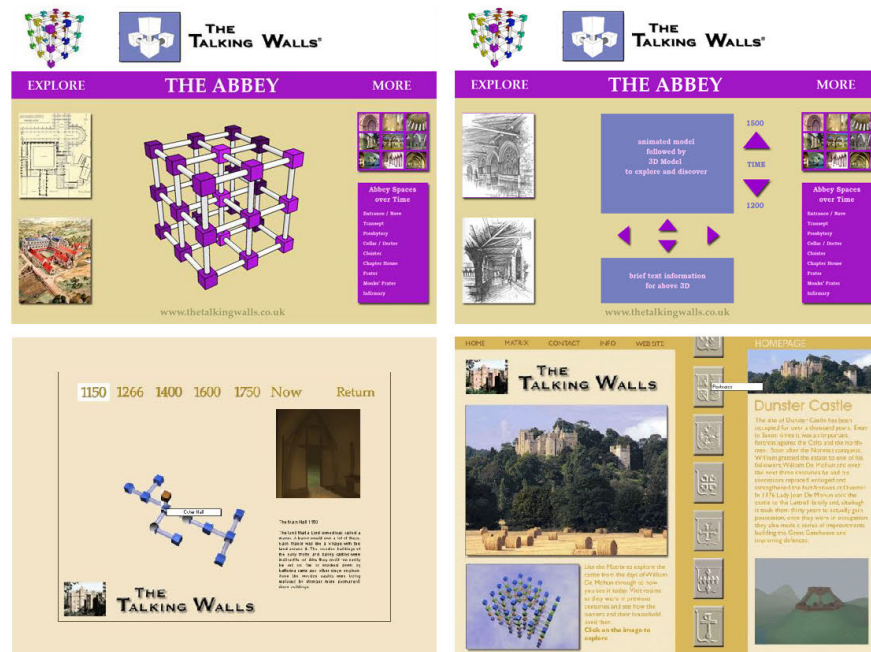
5. Which, in your opinion and experience of navigating information, was the most user friendly for a broad demographic of visitors to heritage sites?
6. What part of the project did you enjoy the most i.e. gave you the most satisfaction / enjoyment?
7. Are there any elements that you would change or would like to see approached differently (i.e. navigation, choice of content, depth of content, platform)?
8. Which element do you consider the most engaging (Time slices, Tours, Quiz'ed, Characters, Lifestyles, Fact Sheets, Write A story, Send a Postcard)?

Design Practice at DK Architects:

1. In your role at DKA, what are your processes for working with clients, services and fellow team members (i.e. regular meetings, focus groups, one to one's)?
2. When you are given a project, is there anything that changes the planned outcome (i.e. change in budget / time, different materials, lack of materials, delays)?
3. Is the client involved / informed of any changes?
4. Do you feel that, as a designer, you need to consider the client first or the company/stakeholders / directors?
5. Working through a design do you consider the user at the beginning, middle or end of a design, or is it a continuous consideration?
6. Does the team meet regularly to discuss changes?
7. Are you able to describe any cases you have worked on where external and/or influences have affected an outcome?
8. How do you feel when your design has been altered due to external / internal influences?
9. Was the client still satisfied?
10. How are you made aware of this, through the company or directly to you?
11. What are the standard processes for gauging the success of a project?
12. If you could choose, which role(s) would you prefer to relinquish (keep) if required?

Thank you.

Russell Richards – Educator / Designer (Southampton Solent University)

Wednesday 3rd July 2013, 10.30am, Sir James Matthews Building, SMY05, Southampton Solent University.

This interview will relate to Russell's experience and educational perspective of the initial prototype designed for Dunster Castle during my Masters at Southampton Solent, where Russell was a senior lecturer. It will also relate to his experience of the Beaulieu Abbey application, the choice of content available through the application and if having choice within the Dunster and Beaulieu prototype, enhanced his experience. His opinion as a designer and programmer of the development of the navigation concept, in the Dunster Castle application to the Beaulieu Abbey application will be discussed i.e. whether the former navigation was more intuitive to a user.

Discussion regarding the educational aspect of cultural heritage applications such as the Beaulieu Abbey kiosk app, how much is too much information, and how educators as well as cultural heritage site visitors may use interpretation to enhance experience to cultural heritage sites will be planned.

Background information:

1. I would like to start by asking you about your position at Southampton Solent with respect to the previous Masters programme (position and involvement with the Dunster project)
2. What led you to teaching? (education / work)
3. Has your role changed over the time you have been at Solent? If so, what were the influencing factors?
4. Can you tell me about your design / programming role with KikiT VisuoSonic?
5. Do you have a special personal interest in this type of visual concept work? (influence)
6. What or who has influenced your involvement in design / programming?
7. Do you feel you are a creator by way of programming or a curator (shaping what the audience views)?
8. Which do you feel is the more important role, curator or creator? Or are they intertwined?
9. Do you feel that there is sometimes a conflict between your different roles: educator, musician, programmer, designer, curator?

Senior Lecturer – Masters Interactive Production & early Dunster prototype:

1. Taking you back in time to when I was one of our students, would you be able to tell me what you may remember about your initial impression of the Dunster Castle prototype when proposed for the MAiP?
2. What experience of visiting cultural heritage sites did you have at the time?
3. With the technology available at the time, and your experience within digital media, do you feel there could have been a different way of presenting the same information?

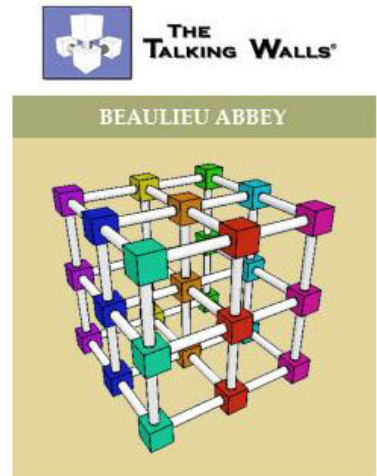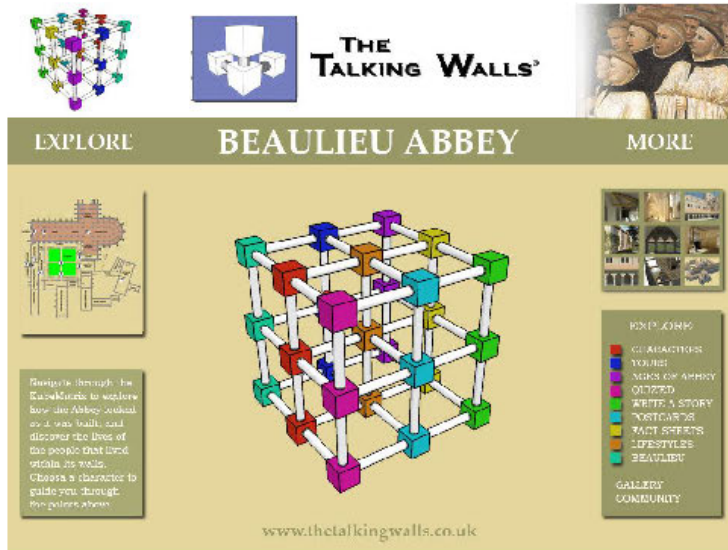4. How did the proposed project compare with heritage interpretation previously experienced?
5. Do you think the initial navigation method, as shown here, was fairly standard as a multimedia application?
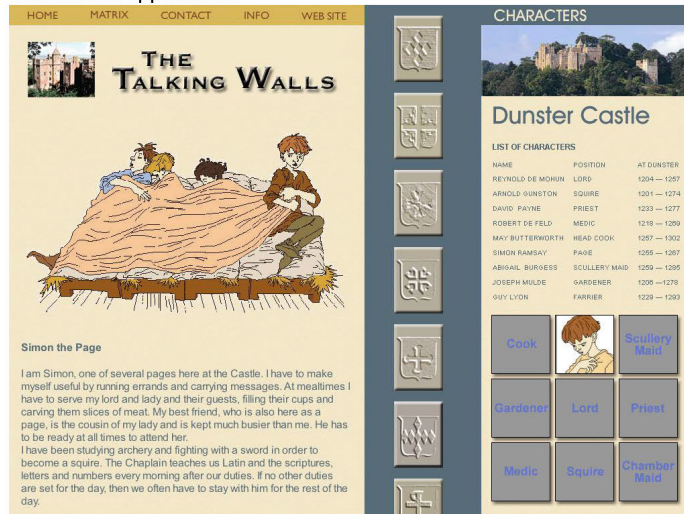
6. The more unique element developed during the Masters was the Matrix, shown below. As an educator and digital designer / programmer, did you think the early Matrix method of showing a mix of material over a timeline and enabling a user to physically navigate a space was a usable and intuitive form of navigation for a heritage interpretation?

7. Do you feel this is now outdated?
8. The navigation was altered considerably for the Beaulieu Abbey app (see below) due to the perceived belief that visitors would not need to use the Matrix as a form of

navigation of the physical space, only the content. Do you feel that this has made the Matrix less intuitive?

9. The new Matrix allowed for three levels of information for the Home page Matrix – Children, Adults, Professional (although only a mix of child / adult was developed for Beaulieu). Each cube then held 9 other elements within that category. Do you feel that if all the levels and cubes held information, this would give too much 'choice' for a heritage visitor? (your experience as a professional academic, adult / parent, and through the eyes of your children?)

Alex Hoare – Glass Designer (and museum installations / exhibitions)

Thursday 18th July 2013, 8.30am, The Light Factory, Worthy Lane, Winchester

The interview will relate to Alex's experience of designing for museum installations and her involvement with curators and stakeholders / funding organisations.

Questions relating to the influence in her designs by external and internal sources will be asked.

Discussion regarding where the visitor sits in the process of designing museum installations will be planned.

Background information:

1. I would like to start by asking you about your role / craft as a Glass Designer / Performer
2. What led you to perform and then design with glass? (education / work)
3. Has your role changed over the time you have been designing? If so, what were the influencing factors?
4. Can you tell me about your design / performance work for museum installations / exhibitions?
5. What or who has influenced your involvement in design?
6. Do you feel you are a creator through your design work, performer, educator or a curator (shaping what the audience views)?
7. Which do you feel is the more important role, performer, educator, curator or creator? Or are they intertwined?
8. Do you feel that there is sometimes a conflict between your different roles: designer, performer, educator, curator?

Xplosive Acts - Process for design / installations / performance curation:

1. You have completed very many installations and performances, would you explain one or two that mean the most to you as a designer (or performer)?
2. Which do you think was the most successful from the venue's perspective?
3. Is there one project that changed considerably from initial concept to final outcome due to mostly external influences?
4. One of your projects, 'Font' 2010 located in Winchester Cathedral, is one that layers in a glass bowl, the names of ancient inhabitants of a long gone abbey with the names of the people living on the site where it once stood. Font also has a soundscape singing the names as they would have been sung in the abbey 900 years ago. This resonates with the project I have recently done for Beaulieu Abbey where characters from a bygone era are brought back to life via illustration, stories of their day to day life with their own signature music composed specifically for them. The Abbey project faltered / altered on occasion due to external conditions such as

available time, budget and technology from its original concept. Was this the same for Font?

5. If yes, what was this and what (if any) impact did it have on the final outcome for the visitor?
6. As an important historical area of Winchester, did you find the research aspect of this project more time consuming than other projects, or were you able to work with an archivist / curator?
7. How big was the team working on this project?
8. Where was your 'role' in the hierarchy of the team?
9. I am interested in the variety of your roles and how they integrate (or perhaps conflict) with each other in creating a performance for visitors / attendees. What is the normal sequence of events for creating new installations / performances?
10. Who initiates the content for a particular performance, i.e. is it a request from the organising venue, or from an idea you or other stakeholders may have, or a mix?
11. Can you describe what is usually the biggest influence in the final concept? (i.e. stakeholders input, budget considerations)
12. In your experience from previous events, does the finished performance follow the original concept / reason?
13. If not, why do you think this is the case? (budget, time?)
14. If yes, do you feel this could be achieved in a better way / differently for a more successful / engaging performance?
15. In developing / designing a performance or installation, is the 'audience' involved in any part of the process?
16. If yes, how and when?
17. What are the processes for gauging the success of a performance / installation?
18. If you could choose, which role(s) would you prefer to relinquish (keep) if required?

Thank you.

Katya O'Grady – Fine Artist / Designer (installations / exhibitions)

Tuesday 8th October 2013, 11am, University of Winchester, Winchester

The interview with Katya will relate to her experience in the development / build of the Riddle Route QR application for Winchester Cathedral and her involvement with the Chronicles of Light.

Questions relating to the design of her interpretation of the original brief and how it then answered the brief, how it might have been designed differently if more time and budget had been available, what changes would have been made and why will be asked.

Discussion regarding the effects of cultural influences and external interests affecting Katya's work will be planned and how the visitor/audience is placed with regards to her art work.

Background information:

1. I would like to start by asking you about your role / craft as a Fine Artist / Designer
2. What led you to study Fine Art and then choose to work on projects such as the Riddle Route (education / work)
3. Has your role changed over the time you have been working with art and design? If so, what were the influencing factors?
4. Can you tell me about your work?
5. What or who has influenced your involvement in art / design?
6. Do you feel you are a creator through your design work or a curator (shaping what the audience views)?
7. Which do you feel is the more important role, artist, designer, exhibition curator? Or are they intertwined?
8. Do you feel that there is sometimes a conflict between your different roles: artist, designer, curator?

Designer – Designing Riddle Route Cathedral project:

1. During the design of the Riddle Route for the Cathedral, would you explain the work you did? (i.e. from a first year project to the educational app)
2. What were your thoughts / opinions of the original project as a whole – i.e. was it something that you felt would be a good addition for visitors/children to use at the Cathedral?
3. I remember that your work to develop the original project was very thorough, reflecting on the way the design worked and how children would work through the riddles. How did working this through match with previous work you have done?
4. The project led to you working with other students and the Cathedral. How did you find working with other students / directing them and curating the build of the project?
5. How did you find working with the Cathedral (i.e. the education team)?
6. Can you remember if the project had to change from your initial concepts due to external influences? (i.e. skills available, budget, technology?)

7. What was the client's response when you presented the final outcome? (i.e. were they happy with the outcome?
8. Were you happy with the outcome?
9. As this was part of your MA, if you had been given this project outside of studying, would it be a project you still would have taken on? (i.e. did it appeal to your own interests?)
10. As an important historical building in Winchester, did you find the research aspect of this project more time consuming than other projects, or were you able to work with an archivist / curator?

Other projects:

1. I am interested in any other projects you have done. Are you able to tell me about some of the other work / projects you have done or been involved with?
2. Have they been for other people / clients / organisations or for yourself?
3. If in teams of others, how big have the teams been and how has this compared with the Riddle Route project where it was just two of you?
4. Do you prefer to work in small teams i.e. is it easier to relate to each other, more or less cohesive? Or do you prefer to work on your own?
5. Have you found there to be many cultural differences in the way you work with others or how you approach your own work? (i.e. styles, influences?)
6. As an artist, do you think your work is / has been driven by your personal interests, or what someone else may be interested in buying?
7. Then as a designer, do you feel that you need to consider the client first or the company/stakeholders / directors?
8. If you could choose, which role(s) would you prefer to relinquish (keep) if required?

Thank you.

Very Rev'd James Atwell – Dean of Winchester Cathedral, School Governor, Member of the Cathedrals' Fabric Commission and Launch Guest
Wednesday 13th November 2013 2.30am, Winchester Cathedral Close.

The interview with the Dean will relate to his experience of the Beaulieu Abbey application, the choice of content available through the application and if having choice enhanced his experience. Questions concerning the mix of visitors to religious heritage sites such as Beaulieu Abbey and whether an interpretation should provide different types of experiences for the different groups that visit will be asked to learn more about the site's history and purpose.
Discussion regarding cultural heritage software's ability to engage and enhance a visitor's experience at a religious cultural heritage site will be planned.

Background information:

1. I would like to start by asking you about your position as Dean of Winchester Cathedral? What does this involve?
2. What led you to this position? (education / work)
3. Did you always have a special personal interest in this type of work? (influence)
4. What led you to move to become a Member of the Cathedrals' Fabric Commission and a School Governor?
5. With the various roles you have now, which do you feel interests you the most?

Religious Cultural Heritage:

1. From my brief research (and your comments), you appear to have a keen interest in the cathedrals themselves, would you mind explaining this in more depth, (i.e. perhaps the importance of buildings such as cathedrals as our architectural heritage or the past ages they evoke, the stories they hold?)

2. How important is educating visitors about a cathedral such as Winchester?

3. From my experience of visiting the cathedral – and working with Cheryl on 'interactive apps' with our Digital Media students (QR Code Riddle Route as an example), the cathedral is very open to all forms of interpretation and educational formats for all ages. How difficult is it to choose the interpretation content for visitors to engage with? (especially with the wealth of history at Winchester)

4. This must be made even more difficult with visitors of all nationalities / cultures as well as religious beliefs? (Cheryl explained about some cultures not understanding our history of kings and queens, the importance)

5. Would you like to see more interpretation, more forms of interpretation or do you feel this may intrude on the ambience and overall experience of the cathedral space?
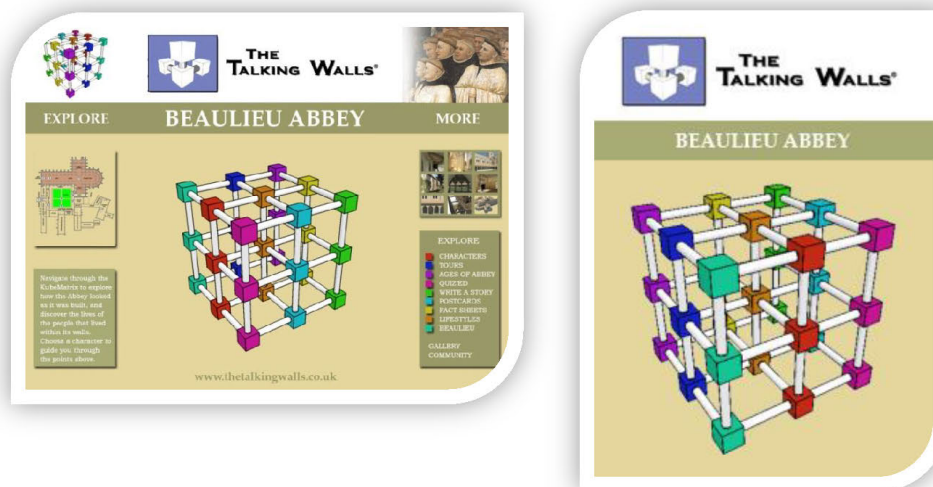
Visitor Interpretation at Beaulieu:

1. The abbey is the foundation of Beaulieu, when visitors come to Beaulieu, the focus generally appears to be the motor museum and / or palace house. Would you normally visit Beaulieu to see the Abbey or its other attractions?
2. If the Abbey, what would be your vision of the perfect visitor interpretation for the Abbey?
3. And with limiting factors?
4. What do you think is the most important aspect of the abbey to portray in an interpretation for visitors? (building/space, people, lifestyle, community or combination of all?)
5. How would you (personally) plan to engage other visitors with this aspect?

Launch event at Beaulieu:

1. Taking you back to when we first met at the Launch, would you be able to tell me what you may remember about your initial impression of the Talking Walls' prototype?
2. What experience of other heritage interpretation at similar sites did you have at the time?
3. How did the proposed project compare with heritage interpretation previously experienced?
4. With the technology available then, and your experience as a heritage visitor, do you feel there could have been a different way of presenting the same information?
5. Do you remember if the demonstration clearly conveyed information on how to use the application and what could be found using the application? i.e. were you able to leave knowing that you would be able to use the application again?
6. Was the launch event useful for understanding the way the kiosk application would be used at the museum i.e. in context with the site etc.?
7. Do you think that the kiosk application was a good addition / facility for visitors to the museum to engage them with the history of the site? (perhaps other platforms may have been better?)
8. Do you think there may have been a better way to launch the kiosk application?

Thank you.

Rupert Thomson – Chairman of Hogs Back Brewery Ltd, Director of New English Drinks Company, Senior Visiting Fellow at Winchester School of Art, University of Southampton & Launch Visitor
**Friday 25th October 2013 11.30am, Hogs Back Brewery Ltd, Guildford.**

The interview with will relate to your experience of the Beaulieu Abbey application, the choice of content available through the application and if having choice enhanced your experience.
Questions relating to the clarity of the application – i.e. was it made clearer via demonstration at the museum, and was the event useful in understanding the way it could develop will be asked.
Discussion regarding the transposition of guide books to digital media, i.e. will digital replace or enhance traditional media, will be planned. Your knowledge of the importance of developing strong brand values and backing them up with powerful advertising and trade marketing programmes will be of value with regards to the launch event and application.

Background information:

1. I would like to start by asking you about your position as chairman of the Hogs Back Brewery? What does this involve?
2. What led you to this position? (education / work)
3. Did you have a special personal interest in this type of work? (influence)
4. What led you to move to become a Senior Visiting Fellow at WSA, University of Southampton?
5. With the various roles you have now, which do you feel interests you the most?

Involvement with Beaulieu & Talking Walls:

1. Taking you back to when we first met through Set Squared, would you be able to tell me what you may remember about your initial impression of the Talking Walls' prototype?

2. What experience of visiting cultural heritage sites did you have at the time?

3. In our discussions at the time, what created your interest in the Talking Walls? (i.e. was it the concept of architectural time slices?

4. With the technology available then, and your experience as a heritage visitor, do you feel there could have been a different way of presenting the same information?

5. How did the proposed project compare with heritage interpretation previously experienced?

6. The navigation was altered considerably for the Beaulieu Abbey app (see below) due to the perceived belief that visitors would not need to use the Matrix as a form of navigation of the physical space, only the content. Do you feel that this has made the Matrix less intuitive?

7. The new Matrix allowed for three levels of information for the Home page Matrix – Children, Adults, Professional (although only a mix of child / adult was developed for Beaulieu). Each cube then held 9 other elements within that category. Do you feel that if all the levels and cubes held information, this would give too much 'choice' for a heritage visitor? (your experience as a professional in advertising and marketing – user/consumer choice?)

8. With your knowledge of building brands through powerful advertising and marketing, how do you feel the launch fared in providing a memorable event for both Beaulieu Abbey and the Talking Walls application

Visitor Interpretation at Beaulieu:

1. The abbey is the foundation of Beaulieu, when visitors come to Beaulieu, the focus generally appears to be the motor museum and / or palace house. Would you normally visit Beaulieu to see the Motor museum, Palace House, Top Gear or the Abbey?
2. If the Abbey, what would be your vision of the perfect visitor interpretation for the Abbey?
3. And with limiting factors?

4. What do you think is the most important aspect of the abbey to portray in an interpretation for visitors? (building/space, people, lifestyle, community or combination of all?)
5. How would you (personally) plan to engage other visitors with this aspect?

Launch event at Beaulieu:

1. As an invited guest at the launch of the Kiosk application, you were already aware of some of the capabilities of the application from our own meetings and discussions prior to the event. Can you remember what your impressions of the final interpretation were?
2. Do you remember if the demonstration clearly conveyed information on how to use the application and what could be found using the application? i.e. were you able to leave knowing that you would be able to use the application again?
3. Was the launch event useful for understanding the way the kiosk application would be used at the museum i.e. in context with the site etc.?
4. Do you think that the kiosk application was a good addition / facility for visitors to the museum? (perhaps other platforms may have been better?)
5. Do you think there may have been a better way to launch the kiosk application?

Thank you.

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John Pemberton – New Forest National Park Secretary of State Appointee, Software Consultant & Launch Visitor
Tuesday 1st October 2013 10am, Ipley Manor.

The interview with John will relate to his experience of the Beaulieu Abbey application, the choice of content available through the application and if having choice enhanced his experience.

Questions will be asked relating to the clarity of the application – i.e. was it made clear via demonstration at the museum, and was the event useful in understanding the way it could be developed.

Discussion regarding the commercialisation of cultural heritage software to enhance a visitor's experience at a cultural heritage site will be planned.

Background information:

1. I would like to start by asking you about your previous position as CEO of a computer software company? What type of software?
2. What led you to this position? (education / work)
3. Did you have a special personal interest in this type of work? (influence)
4. What led you to move to the Forest and become involved with the Park and with Beaulieu?
5. With the different roles you have now, which do you feel interests you the most?

Involvement with Beaulieu & Talking Walls:

1. Taking you back to when we first met, would you be able to tell me what you may remember about your initial impression of the Dunster Castle prototype?
2. What experience of visiting cultural heritage sites did you have at the time?
3. What created your interest in the Talking Walls concept of architectural time slices?
4. With the technology available then, and your experience within the computer software industry, do you feel there could have been a different way of presenting the same information?
5. How did the proposed project compare with heritage interpretation previously experienced?
6. Do you think the initial navigation method, as shown here, was fairly standard as a multimedia application?
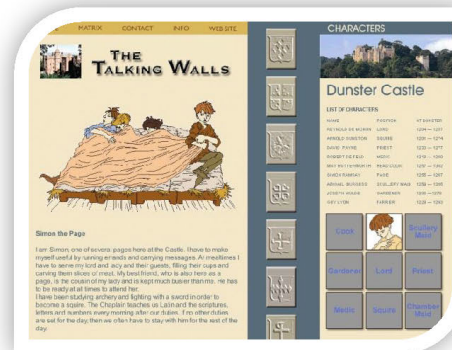
7. The more unique element developed during the Masters was the Matrix, shown below. With your experience, did you think the early Matrix method of showing a mix of material over a timeline and enabling a user to physically navigate a space was a usable and intuitive form of navigation for a heritage interpretation?

8. The navigation was altered considerably for the Beaulieu Abbey app (see below) due to the perceived belief that visitors would not need to use the Matrix as a form of navigation of the physical space, only the content. Do you feel that this has made the Matrix less intuitive?

9. The new Matrix allowed for three levels of information for the Home page Matrix – Children, Adults, Professional (although only a mix of child / adult was developed for Beaulieu). Each cube then held 9 other elements within that category. Do you feel that if all the levels and cubes held information, this would give too much 'choice' for a heritage visitor? (your experience as a professional?)

10. What would you have done differently?

Visitor Interpretation at Beaulieu:

1. The abbey is the foundation of Beaulieu, when visitors come to Beaulieu, the focus generally appears to be the motor museum and / or palace house. Would you like to see the abbey engage more visitors with its heritage?
2. If so, what would be your vision of the perfect visitor interpretation for the Abbey?
3. And with limiting factors?
4. What do you think is the most important aspect of the abbey to portray in an interpretation for visitors? (building/space, people, lifestyle, community or combination of all?)
5. How would you (personally) plan to engage other visitors with this aspect?

Launch event at Beaulieu:

1. As an invited guest at the launch of the Kiosk application, you were already aware of most of the capabilities of the application from our own meetings and discussions prior to the event. Can you remember what your impressions of the final interpretation were?
2. Do you remember if the demonstration clearly conveyed information on how to use the application and what could be found using the application? i.e. were you able to leave knowing that you would be able to use the application again?
3. Was the launch event useful for understanding the way the kiosk application would be used at the museum i.e. in context with the site etc?
4. Do you think that the kiosk application was a good addition / facility for visitors to the museum?
5. Do you think there may have been a better way to launch the kiosk application?

Thank you.

Dr John Richardson – Blue Planet Innovation, Senior Lecturer Innovation Management, University of Winchester and iNet Project Manager
Wednesday 14th May 11.00am, Holiday Inn, INTECH, Winchester.

The interview with John will relate to his experience of the Beaulieu Abbey application, the choice of content available through the application and if having choice enhanced his experience.
Questions relating to the clarity of the application – i.e. was it made clearer via demonstration at the museum, and was the event useful in understanding way it could develop will be asked.
Discussion relating to John's experience working with innovation and small business and how this has helped him to create his own business ideas (i.e. business KIT). It would also be valuable to discuss similar applications John may have experienced and how the Beaulieu application compares.

Background information:

1. I would like to start by asking you about your various roles in innovation and enterprise. What does this involve?
2. What led you to these positions? (education / work)
3. Did you have a special personal interest in this type of work? (influence)
4. What led you to become a Senior Lecturer at the University of Winchester?
5. With the various roles you have now, which do you feel interests you the most?
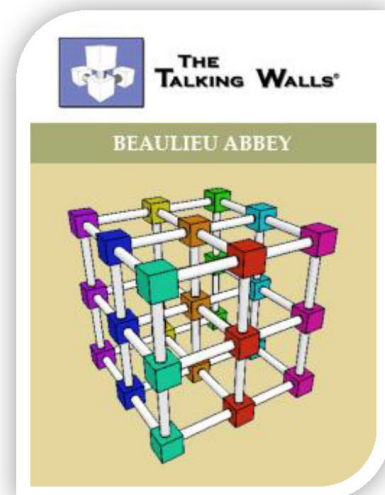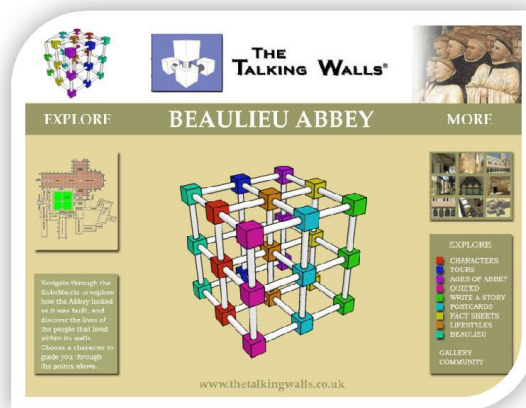
Involvement with the Talking Walls:

1. Taking you back to when we first met, would you be able to tell me what you may remember about your initial impression of the Talking Walls' prototype?

2. What previous experience of visiting cultural heritage sites did you have at the time?

3. In our discussions at the time, what created your interest in the Talking Walls? (i.e. was it the concept of architectural time slices?

4. With the technology available then, and possible experience as a heritage visitor, do you feel there could have been a different way of presenting the same information?

5. How did the proposed project compare with heritage interpretation previously experienced?

6. The navigation was altered considerably for the Beaulieu Abbey app (see below) due to the perceived belief that visitors would not need to use the Matrix as a form of navigation of the physical space, only the content. Do you feel that this has made the Matrix less intuitive?

7. The new Matrix allowed for three levels of information for the Home page Matrix – Children, Adults, Professional (although only a mix of child / adult was developed for Beaulieu). Each cube then held 9 other elements within that category. Do you feel that if all the levels and cubes held information, this would give too much 'choice' for a heritage visitor? (your experience as a professional in innovation and software – user/consumer choice?)

8. With your knowledge of innovation and small businesses, how do you feel the launch fared in providing a memorable event for both Beaulieu Abbey and the Talking Walls application?

Visitor Interpretation at Beaulieu:

1. The abbey is the foundation of Beaulieu, when visitors come to Beaulieu, the focus generally appears to be the motor museum and / or palace house. Would you normally visit Beaulieu to see the Motor museum, Palace House, Top Gear or the Abbey?
2. If the Abbey, what would be your vision of the perfect visitor interpretation for the Abbey?
3. And with limiting factors?
4. What do you think is the most important aspect of the abbey to portray in an interpretation for visitors? (building/space, people, lifestyle, community or combination of all?)
5. How would you (personally) plan to engage other visitors with this aspect?

Launch event at Beaulieu:

1. As an invited guest at the launch of the Kiosk application, you were already aware of some of the capabilities of the application from our own meetings and discussions prior to the event. Can you remember what your impressions of the final interpretation were?
2. Do you remember if the demonstration clearly conveyed information on how to use the application and what could be found using the application? i.e. were you able to leave knowing that you would be able to use the application again?
3. Was the launch event useful for understanding the way the kiosk application would be used at the museum i.e. in context with the site etc.?
4. Do you think that the kiosk application was a good addition / facility for visitors to the museum? (perhaps other platforms may have been better?)
5. Do you think there may have been a better way to launch the kiosk application?

Thank you.

Ruth Taylor – Educator / Heritage Interpretation (National Trust, RHS & Artswork)

Monday 22nd July 2013, 2pm, Costa Coffee, 3 Station Road, West Byfleet

Freelance learning, interpretation and community engagement consultant (National Trust in 2006)

This interview will relate to Ruth's experience of working within a heritage organisation such as the National Trust.

Questions relating to how the process for curating / designing and installing interpretations within a large organisation may be different to smaller private cultural heritage sites will be asked.

Discussion regarding the importance of visitor learning via interpretation will be planned. The conversation may also discuss the educational aspect of cultural heritage applications such as Dunster and the Beaulieu Abbey kiosk app, how much is too much information, and how educators as well as cultural heritage site visitors may use interpretation to enhance experience to cultural heritage sites will be planned.

Background information:

1. I would like to start by asking you about your background and your previous position at the National Trust.
2. What led you to this position? (education / work)
3. Do you have a special personal interest in this type of work? (influence)
4. What led you to move to RHS and then Artswork – both are quite different areas to cultural heritage?
5. With your different roles at the National Trust, RHS, Natural History Museum and Artswork, which do you feel gives you more 'freedom' with your approach to educating at different sites and interpretation?

Learning Advisor at the National Trust:

1. As learning Advisor at the National Trust, can you explain if and how much input you had in the interpretations at the different heritage sites?
2. What was a typical process for putting an interpretation together at the National Trust?
3. Is there a team of curators for all projects or a curator at each site?
4. Does the National Trust have an in house design team, or are projects mostly contracted out to design agencies?
5. How does this compare with the other places you have worked?

Dunster castle and meeting with you in Swindon:

1. Taking you back in time to when I visited you at Swindon, would you be able to tell me what you remember about your initial impression of the Dunster Castle prototype?
2. With your experience of education at cultural heritage sites, are you able to remember what elements stood out the most? (educational, choice, time-slices of architectural history)
3. It is a few years ago, therefore with the technology available at the time, do you feel this was a good 'usable' way of presenting the information?
4. The Beaulieu Matrix allows for three levels of information on the Home page – Children, Adults, Professional (although only a mix of child / adult was developed for Beaulieu). Each cube then held 9 other elements within that category. Do you feel that if all the levels and cubes held information, this would give too much 'choice' for a heritage visitor?
5. In your experience, what do you feel is choice is the most important aspect of a heritage interpretation to present to visitors?
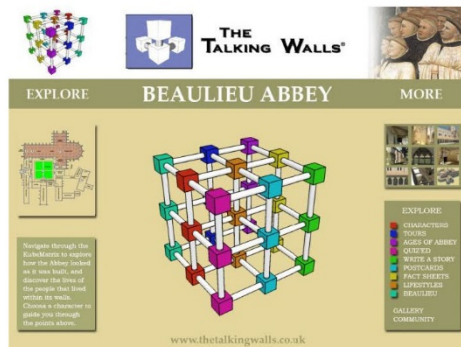
Hampshire and Solent Alliance of Museums, Artswork and your role as chair of the Association for Heritage Interpretation:

1. Can we talk now about your previous as Project manager at Hampshire and Solent Alliance of Museums, your current role as strategic manager for Artswork and your role as chair for the Association for Heritage Interpretation?
   I am interested in the variety of roles here and how they may influence each other in providing interpretation of various types for mostly young people / children. Do you find that each of the roles has helped to benefit the other, and possibly influenced other projects?
2. What were the types of projects with HSAM?
3. And with Artswork?
4. Can you describe what influences the final concept? (i.e. stakeholders input, budget considerations)
5. As a team, is the visitor involved in the initial concept stage (i.e. focus groups)?
6. Do you involve the visitor at other stages of an interpretation / exhibit?
7. In your experience does the finished interpretation follow the original concept / reason for the interpretation / project?
8. If not, why do you think this is the case? (budget, time?)
9. If yes, do you feel this could still be achieved in a better way or differently? (less restrictions / more time etc)
10. Which method(s) have you found to be the most successful in engaging a response from visitors?
11. What are the processes for gauging the success of an interpretation / project?
12. Finally, if you could choose, which role(s) would you prefer to relinquish (keep) or revisit / elevate above the others?

Thank you.

Andy Lane – Marketing Manager, INTECH Science Centre and Planetarium
Monday 8th July 2013 2pm, INTECH.

The interview with Andy will relate to his experience of working at Beaulieu Abbey (and INTECH), how the interpretations were planned from a marketing perspective and the processes they went through before installation.
Questions relating to the involvement of the visitor in the interpretation process will be asked.
Discussion regarding the marketing methods used to attract visitors will be planned.

Background information:

1. I would like to start by asking you about your previous position at Beaulieu (position)
2. What led you to this position? (education / work)
3. Do you have a special personal interest in this type of work? (influence)
4. What led you to move to INTECH – a very different market from cultural heritage?
5. With the different roles at Beaulieu and INTECH, which do you feel gives you more 'freedom' with your approach to marketing and interpretation?

Marketing & Curation:

1. Are you able to explain the process from your marketing perspective for 'putting on' an interpretation?
2. As a marketing manager, do you feel that there is sometimes a 'conflict' between the interpretation and marketing? (i.e. do you feel that to attract the visitor, your marketing ideas are heavily influenced by the interpretation concept or vice versa?
3. Would you like to see more, or less, involvement / collaboration with the curatorial / design team?
4. As a team, do you involve the visitor in the initial concept stage (i.e. focus groups)?
5. Do you involve the visitor at other stages of an interpretation / exhibit?

Visitor Interpretation at Beaulieu:

1. The abbey is the foundation of Beaulieu, when visitors come to Beaulieu, the focus generally appears to be the motor museum and / or palace house. Would you like to have seen the abbey engage more visitors with its heritage even though your priority was for the motor museum?
2. If so, what would be your vision of the perfect visitor interpretation for the Abbey?
3. And with limiting factors?
4. What do you think is the most important aspect of the abbey to portray in an interpretation for the visitor? (building/space, people, lifestyle, community or combination of all?)
5. How would you (personally) plan to engage the visitor with this aspect?

Visitor Research and Measuring the Visitor Experience (Beaulieu and INTECH):

1. Would you explain, for interview purposes, the types of visitors that mostly visit the Beaulieu complex? (i.e. different demographic groups)
2. Can you tell me how you find out what the visitors 'like' when they visit the Beaulieu complex? (visitor research / feedback, interpretation design research, other site examples)
3. Did you track where they visit the most and why they visit?
4. What methods did you use to communicate with your visitors (social media, mail shots)?
5. The methods used at Beaulieu and now at INTECH, do they differ, and if so, in what way?
6. Which method(s) have you found to be the most successful in engaging a response from visitors?
7. How do you measure and analyse the visitor experience?
8. Do you feel this could be achieved in a better way / differently for an even more successful / engaging visitor experience?

Thank you.

ENGLISH HERITAGE – THE FIRST 21 YEARS

Into the Future
Our strategy for 2005–2010

Simon Thurley *Chief Executive*

21 years after its foundation, English Heritage is committed to *Making the Past Part of our Future.*

Like that unlikely heritage hero Baldrick (Tony Robinson), English Heritage can now say with confidence that we 'have a cunning plan'. Indeed a five-year plan to take us into the future. Such plans are commonplace for large organisations, but for English Heritage this presents us with some very real and tough challenges. It will mean that we have to continue to work in new ways relying more on partnership and strategic engagement, speed and flexibility, clarity and consistency of advice, commercial awareness and customer service.

The strategy is called *Making the Past Part of our Future*, which also describes what English Heritage's mission is. Our aim is to create a heritage cycle where an increasing understanding of the historic environment leads to people valuing it more and as a consequence caring for it better. An environment cared for will be enjoyed, and enjoyment normally brings a thirst to learn more, thus completing the cycle.

OUR STRATEGY FOR 2005–2010

English Heritage exists to make the past part of our future. Our strategy is to create a cycle of understanding, valuing, caring and enjoying. For each part of the cycle we have adopted strategic aims. These are underpinned by a further aim – to make the most effective use of the assets in our care.

BY UNDERSTANDING
the historic environment people value it

BY VALUING
it, they will want to care for it

BY CARING
for it they will help people enjoy it

FROM ENJOYING
the historic environment comes a thirst to understand
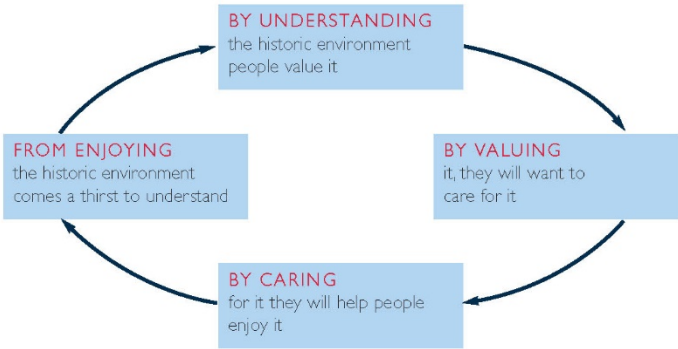
For each of the elements in the cycle we have adopted high-level strategic aims. The first is *to help people develop their understanding of the historic environment.* We regard this as an essential prerequisite to dealing with our built heritage, on the macro level as well as the micro. English Heritage will continue to make its own expert contribution to this, but will increasingly help others to do it for themselves. The second aim is *to get the historic environment onto other people's agendas.* We need to foster the recognition that the historic environment is a cross-cutting issue that affects many areas of policy and activity, not just a small box called heritage. Thirdly we need *to enable and promote sustainable change to England's historic environment.* Too often in the past conservation has been about stopping things from happening. We now see it as a process to enable change to take place that will give all parts of the historic environment a sustainable future. We need to practise this ourselves and help other people to do likewise.

Our fourth aim is *to help local communities to care for their historic environment.* Local authorities have the responsibility and powers to protect and enhance our national heritage. Many do it well; many also need the help and advice of a specialist organisation like English Heritage. We need to make sure our help and advice is available, appropriate and consistent. From the fourth part of the heritage cycle, enjoying, comes our fifth aim: *to stimulate and harness enthusiasm for England's historic environment.* The historic environment is one of the nation's favourite pastimes. We need to harness this enthusiasm for good, and stimulate it where possible amongst those who currently do not have access to it.

We also have a sixth aim, which is *to make the most effective use of the assets in our care.* English Heritage has considerable assets, not only £150m a year of taxpayers' money, but the sites and collections which are entrusted to us, our staff and our reputation for expertise. All these we need to use efficiently and effectively for the public good.

If I were to highlight any parts of the plan in terms of specific programmes there would be three that I would identify as being particularly important. The Heritage Protection Review, which will lead to a White Paper in 2006, will fundamentally change the way protection is managed in this country. The pilot projects we are currently running will inform a new system that will be fairer, faster, more transparent and closer tuned to the needs of today. This system will be complemented by a suite of new conservation principles that English Heritage will adopt later this year and will start to promote and promulgate the year after. These will make it much easier for non-specialists to understand what conservationists are trying to bring about and easier to achieve consistency in recommendations and decisions across the country. Both of these major changes will influence our property development programme, a five-year multimillion-pound investment programme in our sites. The sites will become exemplars of these new ways of looking at heritage and managing it.

Plans and strategies need to be flexible and responsive and over the next five years we will be constantly reviewing progress and updating our strategy to make sure that it is the most effective response to the challenges facing England's historic environment. I am looking forward to working with staff and commissioners and leading English Heritage through the challenge of *Making the Past Part of our Future.*

© English Heritage

The **Vision for Learning** commits the Trust to:

- Becoming an organisation dedicated to learning and to creating opportunities for life-changing experiences for those with whom we engage both internally and externally.
- Ensuring our properties become spaces where visitors can experience inspiration, relaxation, enjoyment and enrichment.
- Enabling visitors and new users to experience and share a sense of discovery by engaging with formal or informal learning experiences at National Trust properties.
- Valuing learning for its own sake and the equality of opportunity it brings in all the work we undertake.

Our aims include:

Meeting the needs of our current core audiences

Learning is seen as a two-way process with importance placed on the National Trust providing ways for people to learn that are appropriate to them. This will be done by:

- Evaluating our work with schools and developing a sharper focus for future formal education programmes.
- Ensuring there is a range of choices at properties to suit the different learning needs of our visitors.
- Improving the formal and informal learning opportunities offered to older audiences.

Reaching out to new audiences

Our strength will be to use our diverse properties as venues and catalysts for learning, enabling new audiences to participate and develop their skills. We will:

- Expand the Trust's work with young people (13-25).
- Enable inclusive and participative access to our properties.
- Actively seek to establish sustained relationships with new or excluded user groups.

Developing a culture of learning for all staff and volunteers

Through examination of both our successes and failures, the Trust will become a learning organisation that encourages experimentation, innovation and observation. We will:

- Encourage an ethos among staff and volunteers that views learning as vital to the Trust's work.
- Offer learning opportunities for staff and volunteers.

DEVELOPING NEW AUDIENCES

Box 2.4 An audience development plan

Before carrying out actions that are designed to attract specific audiences for a heritage activity, museums and heritage organisations need a good understanding of the environment in which they work and the stage they have reached in their own development.

Ask yourself these questions:

- What are we, as a heritage organisation, trying to achieve?
- How does audience development fit in with our corporate or business objectives?
- Are we ready to carry out audience development work?
- Do we have the necessary supporting policies (for example, access, education, equal opportunities, conservation and training)?
- Do we have the necessary skills and resources?
- Who are our audiences now?
- Who do we want our audiences to be in the future?
- How do we reach them?
- What will we offer them?

An *audience development plan* is a framework for answering these questions and for planning the specific activities that will allow you to reach your target audiences and to offer them a high quality experience.

There are four steps to creating an audience development plan. Each step involves both internal and external consultation, and should always take place in the context of the overall objectives and the particular circumstances of your organisation.

The four steps to creating your plan are:

1. assessing where your organisation is now
2. understanding your current audiences and the barriers that prevent people taking part
3. assessing your organisation's potential for audience development and setting objectives
4. setting an action plan for each target audience.

Each of the four steps above should include the four points below:

- the issues you need to consider
- the tools you might use
- the help and resources you might need
- sources of information and advice.

Source: *Audience Development Plans*, Heritage Lottery Fund

Collaborative Heritage Site Interpretation Design (CHSID) Process
Debs Wilson - 2018

Project Definition

Information Gathering
- Strategic context
- Background
- Research
  - Why?
  - Who?
  - What?
- Budget
- Funding
- Timescale

Team Building
- Put relevant team(s) together
  - Experienced
  - Multi-disciplined
  - Multi-skilled
  - Collaborative
  - Consistent
  - Pro-active
  - Communicators
- Build Trust & Experience

Understand
- Research
- Empathy Map
- V. Research:
  - Personas
  - Scenarios
  - Journey Stories
  - Touch Points
- Point of Views
- 'How might we?' questions
- Team Building

Ideate

Ideation (Diverge)
- Collaborative Workshops:
  - Analogies
  - 'How might we?'
  - Mind Maps
  - Affinity Maps
  - Post-It Voting
  - Paper Prototyping
  - Sketching
  - Mood Boards

Refine (Converge)
- Check Ideas Against Strategy
  - Feasibility
  - Functionality
  - Alignment
  - Timing
  - Budget
  - Expectations
- Paper Prototyping
- Mood Boards
- StoryBoards

Define
- Storytelling
- Script
- Storyboard
- Tone of Voice
- Design Brief:
  - Context
    ~What
    ~Why
    ~Who
  - Management
  - Schedule
  - Costing
  - T&Cs

Create Prototypes & Test

Prototypes
- Create relevant prototypes ie panels, app, web portal, guides
- What works?
- What doesn't?
- Compare impact against feasibility
- Navigation of content
- Story flow
- Layers of information

Testing
- Visitor Team Testing & Feedback
- Is there improvement?
- Does the interpretation meet expectations?
- Test further with different groups of visitors.

Refine
- Refine idea & story/visuals and/or wireframes based on feedback received
- Check refinements against feasibility, costs, timings

Iteration(s)

Testing
- Team testing & Feedback
- Any further changes or improvements required?
- Test further with different visitor groups
- Observations & feedback noted

Refine Prototype
- Further refinements made until each group/team have no further amendments to add
- Final prototype created

Evaluate
- Final prototype evaluated against the needs, wants & expectations set out by the Team
- Check against brief re strategy context, costs and schedule
- Reflect on process and feedback

Build & Test

Design - Build
- Deploy build elements to relevant devs, designers and craftsmen
- Project progress meetings
- Content creation
- Copy writing
- Technology provision
- Brand & How to docs

Beta-Testing
- Test full draft
- Feedback
- Improvements needed?
- Amend & check again

Debug/Proof
- Run debug on apps/tech
- Check hosting & platforms if required
- Proof artwork and scripts/copy
- Sign off artwork, panels, digital content
- Print, mount and review

Deliver

Implement
- Marketing
- PR
- Installation
- User Testing
- Dry Run
- Organise Launch Event
- Launch
- Invitations

Evaluate (Feedback)
- Observations
- Feedback (Anecdotal, Social Media, etc)
- Check against Needs, Wants & Expectations
- Has the brief been met?
- Check Processes - what worked, what did not, improvements?

Archive
- Report on Processes
- Report on Feedback/ Evaluation
- Guidelines (Brand, How to's etc)
- All Design and Development Material
- Database of Resources

Black's Interpretative Planning Model (Black, 2005)

Veverka's Interpretative Planning Model (Veverka, 1994)

Beaulieu Abbey 'Project Journey, Processes & Methods Used' Model. (Wilson, 2018)

Design Thinking (adapted from Teo Yu Siang & Interaction Design Foundation, 2016)

User Centred Design Process Remix (adapted from McWeeney, 2016)

LACOCK ABBEY
National Trust

2013 Interpretation to provide an understanding of the Abbey as a nunnery under the leadership of Abbess Ela and the lives of the nuns.

BOLSOVER CASTLE
English Heritage

2011-12 interpretation to provide an understanding of the lifestyle of William Cavendish and his family in the Castle's 17th-century heyday, specifically during a royal visit.

KENSINGTON PALACE
Historic Royal Palaces

2012-13 interpretation to provide an understanding of the different royals who lived in Kensington Palace as a temporary exhibition during major renovation in other areas of the Palace.

Reflection on Practice

Selected Case Study Sites for Heritage Site Interpretation Design Practice Comparison with my interpretation design practice for Beaulieu Abbey.

BEAULIEU ABBEY
Beaulieu

2010-2012 interpretation to increase footfall to the Abbey by creating 3D reconstruction for visitors to understand its size and royal significance.

**LACOCK ABBEY
2013
INTERPRETATION
NATIONAL TRUST**

Overview

To provide an understanding of the Abbey as a nunnery under the leadership of Abbess Ela and the lives of the nuns. The 2013 interpretation outcome was access to the cellar and cloisters in answer to visistors' feedback to learn more about Abbess Ela's nunnery.

Similar to Beaulieu, where the main attraction is the National Motor Museum or Palace House, Lacock's main attraction is the Fox Talbot Museum and village. Lacock's history as a nunnery for 300 yrs would appear to be of lesser importance, yet was the most important for the community that once lived there.

Designers - Ice House

Brand and graphic designers, who also 'create exciting exhibition and museum experiences with engaging interpretation and coherent communications and wayfinding, both internally and externally, that inform, educate and often make you smile!'

National Trust

Opening of the Wine Cellar - The National Trust periodically review their properties and the Trust periodically reviews and re-presents rooms to 'refresh its attractiveness to visitors', *(Land Use Consultants, 2012)*

BOLSOVER CASTLE
2011 - 2012
INTERPRETATION
ENGLISH HERITAGE

Overview

To provide an understanding of the lifestyle of William Cavendish and his family in the Castle's 17th-century heyday, specifically during a royal visit. The new visitor experience interpretation to achieve this was in the form of a digital application.

Bolsover Castle was chosen primarily for the multimedia application as a design comparison to the Beaulieu Abbey kiosk interpretation. The storytelling of the Castle's heyday via the multimedia application, Cavenish's family and the exhibition were elements similar to Beaulieu Abbey's kiosk application.

Designers - ATS Heritage

Contracted to replace the existing audio guide with a multimedia guide and app for the site. They 'are passionate about enhancing experience' and 'always mindful of the end user and hope their experience will be improved.' *(ATS Heritage, 2015, pp.15–16)*

Leach Colour & Bivouac

Leach Colour for a 'dramatic exhibition within the Riding House Range introducing the visitor to the many passions in William Cavendish's life.' *(Leach Color, 2014)* Bivouac for Graphic Interpretation, Management and Creative Direction for the interpretation design.

KENSINGTON PALACE
2012 - 2013
INTERPRETATION
HISTORIC ROYAL PALACES

Overview

To provide an understanding of the different royals who lived in Kensington Palace. The 'Enchanted Palace' and 'Welcome to Kensington Palace' interpretations were creatively produced specifically for the period of renovation work at the Palace.

Kensington Palace was chosen primarily because of the interpretation/renovation project that would transform the Palace to become an 'exciting, engaging and inspirational visitor experience' *(Historic Royal Palaces, 2009)*. The specific similarities are the smaller teams involved and the flexibility/creativeness of the brief.

Designers - Various

The range of artists, designers and exhibition companies involved in the Enchanted Palace and Welcome to Kensington Palace interpretations was extensive: Coney, Wildworks, Chris Levine, Joanna Scotcher, Jane Darke and Stitches in Time.

Enchanted Palace Concept

The Front of House staff felt strongly that visitors want to know more about the people who had lived at the Palace rather than make believe or fairy tale scenarios. The Curators went with their suggestion, and the Enchanted Palace was created *(Humphreys, 2012)*.

OVERVIEW OF THE CASE STUDIES' HERITAGE ORGANISATIONS

BE

Beaulieu Enterprises Ltd

Beaulieu's aim was to increase footfall to the abbey for visitors to understand and recognise the historic significance of the site in addition to Palace House and National Motor Museum. Visitors have been exploring the ruins of Beaulieu Abbey since 1912. In 1952, Edward, Lord Montagu opened Palace House and Gardens to the public for the first time.

NT

National Trust

The National Trust forms a Statement of Significance from discussions with the local community and their research regarding key features and significant inhabitants. A time 'slice' is decided and the property is restored to replicate the events and spaces of that period. Founded in 1895 to 'look after and preserve' property and land for future generations.

The Historic Royal Palaces' charter's main focus is on the preservation of the properties under its care. Its secondary aim is to 'help everyone learn the wider story of how monarchs and people together have shaped society by providing public access' *(HRP, 2014)*. HRP cares for 6 palaces, initially as an Executive Agency (1989), a self-funded charity from 1998.

Historic Royal Palaces

HRP

The statutory role of English Heritage 'seeks to broaden public access to England's cultural heritage, increase people's understanding and appreciation of the past, and conserve and enhance the historic environment' *(Gould, 2013, DCMS, 2013)*. Initially a government body (1913), changing to EH (1983), reformed as Historic England in 2015.

English Heritage

EH

The 10 highest ranking words regarding reference frequency were:

1. **Information (235)**
2. **Museum (234)**
3. **Abbey (211)**
4. **Building (169)**
5. **Interesting (157)**
6. **Experience (149)**
7. **Design (149)**
8. **Story (109)**
9. **Visitor (108)**
10. **Understand (93)**

(colour coded to the initial draft Heritage Interpretation Design Wheel)

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Theming - Second Interation of Data Nodes

Assets (25)
Heritage Site Interpretations (32)
Heritage Site Organisational Structure (15)
Interpretation - Aspirations (11)
Interpretation - Plans (16)
Interpretation - Research (4)
Visitor Expectation (17)
Visitor Guides (12)
Visitor Research (41)
Visitor Types (22)
Artists Approach (36)
Collaboration (14)
Connections (4)
Creative Processes (13)
Design Brief (30)
Design Processes (32)
Design Prototype (4)
Interpretation Design (49)
Interpretation Design Process (47)
Justification (3)
Models (5)
Project Management (2)
Team Work and Production (29)
Engagement (4)
Experiences Forming Memories (9)
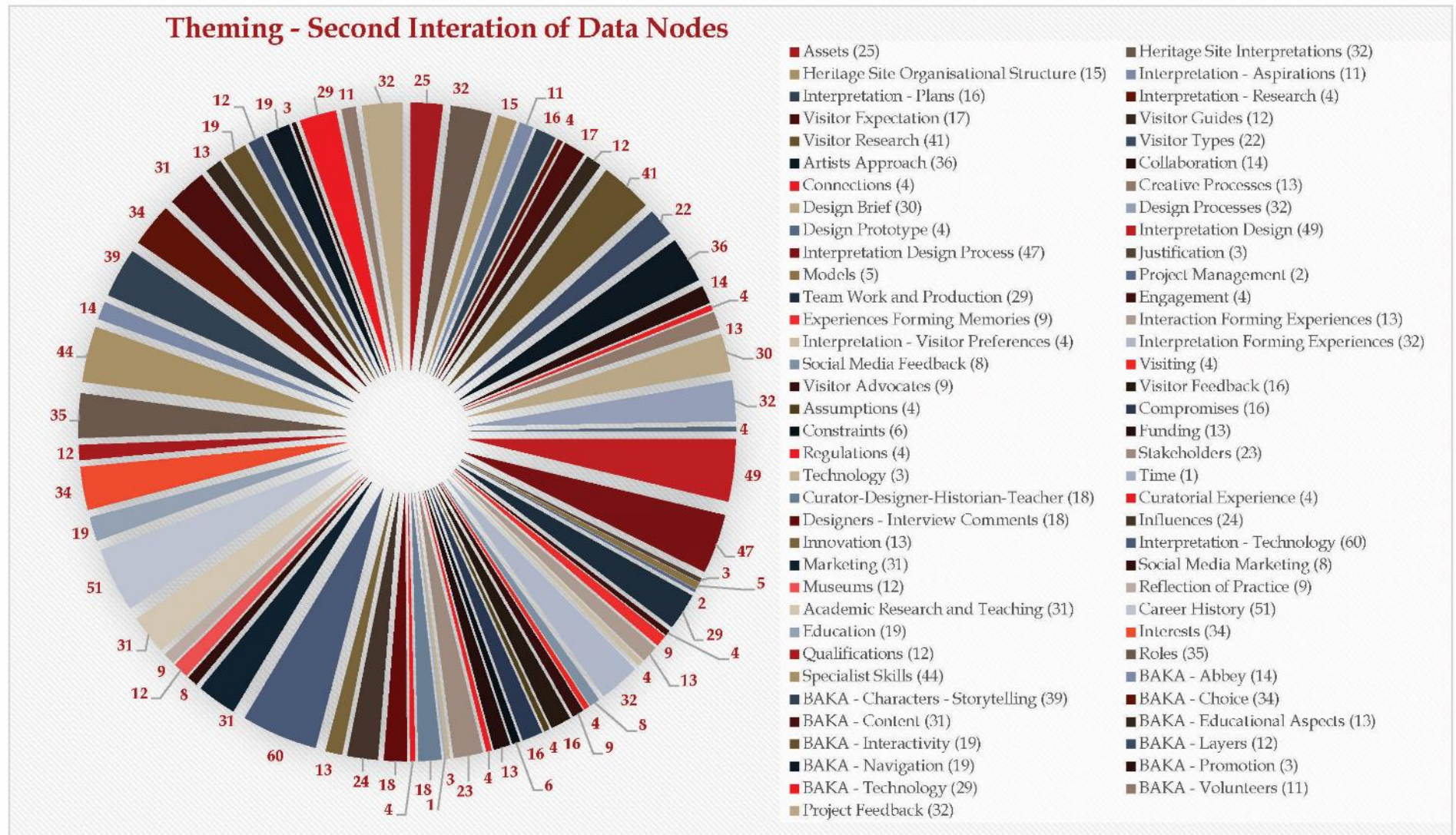Interaction Forming Experiences (13)
Interpretation - Visitor Preferences (4)
Interpretation Forming Experiences (32)
Social Media Feedback (8)
Visiting (4)
Visitor Advocates (9)
Visitor Feedback (16)
Assumptions (4)
Compromises (16)
Constraints (6)
Funding (13)
Regulations (4)
Stakeholders (23)
Technology (3)
Time (1)
Curator-Designer-Historian-Teacher (18)
Curatorial Experience (4)
Designers - Interview Comments (18)
Influences (24)
Innovation (13)
Interpretation - Technology (60)
Marketing (31)
Social Media Marketing (8)
Museums (12)
Reflection of Practice (9)
Academic Research and Teaching (31)
Career History (51)
Education (19)
Interests (34)
Qualifications (12)
Roles (35)
Specialist Skills (44)
BAKA - Abbey (14)
BAKA - Characters - Storytelling (39)
BAKA - Choice (34)
BAKA - Content (31)
BAKA - Educational Aspects (13)
BAKA - Interactivity (19)
BAKA - Layers (12)
BAKA - Navigation (19)
BAKA - Promotion (3)
BAKA - Technology (29)
BAKA - Volunteers (11)
Project Feedback (32)

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