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Understanding Archaeological Open-Air Museums and their Visitors

Roeland Paardekooper

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Submitted by Roeland Pieterszoon Paardekooper to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Archaeology In February 2012

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Published by Sidestone Press, Leiden www.sidestone.com Sidestone registration number: SSP131300001

ISBN 978-90-8890-103-4

Photographs cover: Photograph by Hans Splinter; edited byK. Wentink, Sidestone Press / M.A. Zielinska, Mohini VisionsCover design: K. Wentink, Sidestone PressLay-out: F. Stevens / P.C. van Woerdekom, Sidestone Press

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Acknowledgements

Magdalena Zielińska (Eindhoven, the Netherlands) for all the love and support I could wish for - and more; for helping me visualise what I meant to say, both on paper and in the virtual world, for believing in my strengths; for accepting my work flowing into our private life; for giving me a place I can call home.

Linda Hurcombe (University of Exeter, England) and Bruce Bradley (University of Exeter, England) for guiding me, letting me learn from my own mistakes but seeing to it I would not run off too far; for being strict and flexible but above all: for being honest with me.

Hannah van Buuren (Eindhoven, the Netherlands) for being the very first (and still) to love and encourage me, even though both of us have played some tricks over the years.

Piet Paardekooper (Leiden, the Netherlands) for contaminating me with the Science Virus in my early childhood.

EXARC and its members who taught me to appreciate the good and bad of archaeological open-air museums, for sharing different cultures and approaches.

All 8 *live*ARCH museums and their full staff, especially Gunter Schöbel & Peter Walter (Unteruhldingen, Germany), Geir Are Johansen & Lars-Erik Narmo (Borg, Norway), Björn M. Buttler Jakobsen (Höllviken, Sweden), Nick Dixon (Loch Tay, Scotland), Dorine Prinsen (Eindhoven, the Netherlands), Magdolna Vicze (Százhalombatta, Hungary), Anda Vilka (Cēsis, Latvia), Ilaria Pulini, Alessia Pelillo & Giuseppe Carusso (Modena, Italy).

Barrie Andrian (Loch Tay, Scotland), as the manager of one of my case study museums, has not only helped me collect data about her own museum, but was also helpful in collecting the visitor survey details in all eight museums, and when I thought I was almost ready, four years later, she gave me extensive helpful comments.

Bert van Valburg (Waalre, the Netherlands) for convincing his museum board to stick out their neck for *live*ARCH, and Geir Sør-Reime (Stavanger, Norway) for his important input in writing the project and running it. Without *live*ARCH, this research would have been much more difficult to realise. Thanks to 'Brussels' for accepting the *live*ARCH project at the start and at the end.

Martin Schmidt (Hannover, Germany) for continuous support from the very beginning, for telling me we should found EXARC and for reading my manuscript when I thought it was almost ready and not rewriting it; organising with Marianne Rasmussen (Copenhagen, Denmark) and Martin a session on experimental archaeology at the EAA in Kraków, Poland 2006 sharpened my mind - the cooperation I enjoyed very much.

Tomas Johansson (in memoriam, Östersund, Sweden), for inspiring me with the way he led his unconventional and international life, the fire soul, both as an archaeologist and a person. For helping start EXARC and the on line bibliography on experimental archaeology.

Hans Horreüs de Haas (Zwolle, the Netherlands) for inspiration from my early childhood on.

Ton van Rooijen (in memoriam, Utrecht, the Netherlands) for the adventurous stories of NJBG group travels to Denmark, building Iron Age (re)constructions in Vingsted, Denmark (for which I was too young), leading to the Workgroup Experimental Archaeology (WEA). His systematic archiving of the Denmark Travels were a great example for setting up my own archives which are meant for only one thing: to enable the transfer of the spark of inspiration, even decades later.

Anneke Boonstra (founder of the Historisch OpenluchtMuseum Eindhoven, the Netherlands) for providing me with a perfect playground I enjoyed from its very beginning in 1982 until the present, with both the playground and me developing over the decades.

Lara Comis (Parma, Italy) for helping me getting in contact with the University of Exeter (England) in the first place and for sharing inside information on experimental archaeology and archaeological open-air museums in Northern Italy, and for her support, the discussions and friendship.

Alessia Tomasseli (Modena, Italy) for taking over the work on creating a European list of archaeological open-air museums, turning it into a great guide book and handing the project back again.

Bodil Petersson (Lund, Sweden), for her inspiring PhD and continuing work in public archaeology in general and in the open air area in particular.

Jessica Collins (University of Exeter, England) as a native speaker English and with plenty of experience in archaeology and copy editing for helping me better formulate my thoughts.

J. Kateřina Dvoráková (Sir Gar, Wales) for a great cooperation over the years, for sharpening my editorial work and helping me to get and stay in contact with Czech colleagues.

Margriet Lestraden (Cēsis, Latvia) for sharing much of her long time experience with museums, as a director and a consultant in the Netherlands, in ICOM and in Latvia.

Ulrike Sommer (London, England) for sharing her experiences as a continental archaeologist at a British university, helping me to obtain difficult to come by reference material and letting me work with her students.

Aafke Dohmen (Eindhoven, the Netherlands), for making clear a good neighbour can be better than a far friend, for helping out with SPSS statistics.

Bill Schindler (Chestertown MD, USA) for introducing me into the world of experimental archaeology in the States, for showing that things can be a bit different and very much worthwhile. For keeping the fire burning on both sides of the pond, blowing life into old contacts between the Old and the New World.

All of the people mentioned above and all those whom I have not mentioned, for helping out with finding proper sources, for being great companions on many visits, for camp fire dinners, drinks and all the cosy hours.

Introduction

1.1 The Goal of This Research

Archaeological open-air museums present to their visitors an image of the past directly related to archaeological sources. They are therefore a major presentation tool for archaeology. Distinct from other kinds of museums, they have significant visitor figures. Their numbers began to grow considerably about 25 years ago (See Figure 4.17), and in Europe today there are roughly 300 archaeological open-air museums (www.exarc.net), attracting possibly 6 to 7 million visitors per year. A few large museums exist, with 1/4 million visitors or more per year, but there are many with just 1,500 per year (See Figure 4.18). Of the historical / archaeological museums in Germany alone, 343 of them attracted 16.4 million visitors in 2008 (Staatliche Museen zu Berlin – Preussischer Kulturbesitz, Institut für Museumsforschung 2009, 20). Compared to the figure for Disneyland Resort Paris, which attracted 12.3 million visitors in 2005 (Disney, Eurodisney S.C.A. 2006, 23), 7 million is not much. But visitors to archaeological open-air museums get a very specific view on the past, a very specific story told about the daily life of everyday people. In many cases, these visitors are people who would not usually visit a museum or archaeological site, or read a book. They represent an audience not reached by other means.

Archaeological open-air museums in different countries do not share a common view on what their museums are like, neither are the museums homogenous within a country. They use many different names to refer to themselves; no other heritage organisation defines them with specific characteristics and it is scarcely surprising that a definition of this type of museum has emerged only recently: 'An archaeological open-air museum is a non-profit permanent institution with outdoor true to scale architectural reconstructions primarily based on archaeological sources. It holds collections of intangible heritage resources and provides an interpretation of how people lived and acted in the past; this is accomplished according to sound scientific methods for the purposes of education, study and enjoyment of its visitors.' (www.exarc.net).

Archaeological open-air museums are partly heritage and partly educational establishments: they are located somewhere between archaeological science and the public. These museums offer engagement, involving more of the senses, and as a result have a powerful impact. Archaeology is their most important source of information, the general public their main target group. The key words for these museums are education, presentation and archaeology, with their main objective being the interpretation and presentation of archaeological data. The managers of these museums are faced with a challenge. They are required to include expertise from many different professions, not only from traditional museum management and tourism, but also from commerce and education. The most successful museums are doing really well and are true flagships to the others. But some are struggling, others are pulled in too many directions and some have had to close. These museums have less cushioning and in the eyes of some less justification for their existence, sometimes lacking the solid foundations which characterise other more classic museum types.

Because of the particular issues facing these museums, there is a need to evaluate their current role and to seek ways to improve their future profile and thus their sustainability. The work so far executed in this field is scattered. Nobody has been able to define clearly the role of these museums, and the opportunities and possibilities they represent. The goal of this research is to compare what the museum management thinks is good for the museum with what the visitors think is important. Understanding the priorities of both parties should widen the opportunities for these museums and lead to better quality and financial stability.

There are many people who find these museums so memorable and engaging that they spark a lifelong interest in archaeology and the past. What follows is a structured discussion arising from my long-standing interest in archaeological open-air museums enhanced by privileged and insightful comments from the staff at the museums themselves. Personal experiences have made me realise that these museums can learn from one another. Communication and comparative studies would not, of course, provide a quick fix for the problems faced by any one specific museum, but would enable hard-pressed managers to learn from the experience of others, leading to better museums with more secure futures. This is especially relevant in the present situation when the museum world and leisure industry are entering hard economic times.

I could have chosen to confine my research to the Netherlands, but being Dutch means to be aware of what happens across Europe up to a point. My many travels across the continent have certainly developed this awareness. Many of the issues faced by archaeological open-air museums in Europe arise in other parts of the world too: but to understand and describe so many different contexts would be to expand this research immensely.

Archaeological open-air museums are difficult to compare. To write a *History* and future of a visionary idea, as Rentzhog (2007) did with open-air museums in general, is hard for this specific group. However, their diversity is also a strength, since it increases their ability to adapt, survive and prosper in the near future. It has been noted that as the world around museums changes, so should the museums themselves (Falk & Sheppard 2006, 14).

Personal observations have been gathered from over 300 visits, since 1982, to almost 100 different archaeological open-air museums. These visits have ranged from a one hour stay to a visit lasting over a week (See Appendix E). Where possible, the museums were visited several times; each time there are new details to be discovered or a new perspective to be gained. A visit during a main event, for example, creates a different impression from a visit on a regular day in the shoulder season. In one such a museum (HOME), I was employed for over 4 years. In over 25 years I have attended dozens of conferences where participants were employed by, or affiliated to, archaeological open-air museums.

Since the start of EXARC (See Appendix C) in 2000, data has been collected in a structured way, using surveys and site visits. From 2006 to 2009, within the framework of *live*ARCH, data has been collected intensively and cooperation with other professionals has increased.

In a few cases, the address lists of national or international associations were scanned: EXARC, EXAR, NSLF (Sweden), Historiske Værksteder (Denmark) and VAEE (the Netherlands). No single address list could be copied one to one, since each listing was originally made with another intention in mind.

This research sets out to focus on the character of archaeological open-air museums and to explore their successes and challenges with a view to helping them flourish and survive to inspire others. It is for this reason that this thesis was undertaken. A research survey approach is applied to the museum management, in conjunction with a visitor survey that explores the day to day experience of visitors.

The aims of this study are:

- 1. To characterise the European archaeological open-air museums across their diversity;
- 2. To explore issues related to management and finances, staff, the collections, marketing and interpretation;
- 3. To compare the aims of the museums with regard to their visitor experience with the visitors' actual experiences, to assess where the match is good and where there are gaps;
- 4. To explore ways of decreasing the gaps and to offer ideas for improvement.

These museums are very valuable, but much depends on how they are set up and used. The value of an archaeological open-air museum is in its use.

The History and Development of Archaeological Open-Air Museums

2.1 Introduction

This chapter provides a view on the nature of archaeological open-air museums by means of a definition and a description of their role. The definition contains elements from the International Council of Museums ICOM (See Section 2.2.). It is also important to examine information centres, for example, or traditional ethnographic museums.

In section 2.3., previous overviews of archaeological open-air museums and their development are discussed. This discussion forms the basis for acquiring an understanding of archaeological open-air museums in Europe in 2008. It is impossible to describe all such existing and abandoned museums in full, so only a selection is documented. For more details, Appendix A can be consulted, along with the online presentation at www.exarc.net: the website attracts about 22,500 visits per year.

Archaeological open-air museums can be broadly defined and many can be understood better by looking into their history. When a more detailed investigation is carried out, however, different themes – such as romanticism and experiment – are seen to emerge over time. These are discussed in general terms in section 2.4.

An archaeological open-air museum often borrows characteristics from other types of heritage site. These are listed in section 2.5 and are referred to, as subdivisions, in later chapters.

2.2 Definition

Most authors writing about archaeological open-air museums, or architectural (re)constructions based on archaeological sources, refer to the diversity in presentations and the resulting difficulty of precisely defining these sites. Ahrens, for example, in his key overview, stated: 'so stellt man sehr schnell fest, daß keines einem anderen gleicht, sondern daß fast jedes auf irgendeine Weise etwas Besonderes ist' [one will very soon realise that no one single place resembles another, but each in one way or another is something special] (Ahrens 1990, 33). More recently, López Menchero Bendicho has expressed the view that archaeological sites open to the public, which include archaeological open-air museums (re)constructed in situ: 'can be construed (and consequently

analysed) as a tourist destination, a marketing product, an identity element, a political instrument, a show of erudition, an educational tool, a space for leisure, a source of inspiration...' (López Menchero Bendicho 2011, 423).

Although the differences between archaeological open-air museums are large, even within individual countries, they have more in common than at first sight. Most of these museums are very much on their own, interacting with the local authority they depend on; there is little chance for staff to interact with colleagues - if indeed they regard employees of other open-air museums as colleagues. When referring to each other, these museums more readily note their differences than the attributes they have in common. The Shakespeare Globe Trust (Wood 2003), for example, preferred to be excluded from this study. The faithfully (re)constructed theatre in London, based on research into the original Globe, is presently in use for staging Shakespeare's plays and sees itself as having little in common with archaeological sites or open-air museums (personal communication Shakespeare's Globe Trust, 12 December 2005).

The definition of a museum as given by the International Council of Museums (ICOM) contains elements which are recognisable in archaeological open-air museums (see Appendix A for a cross lingual terminology). Although they use the information made available through the research carried out by traditional museums, many archaeological open-air museums will not necessarily collect, preserve and research by themselves. However this does not mean that such a museum cannot be a place for study, education and entertainment.

The AEOM (Association of European Open Air Museums) is an affiliated organisation of ICOM adhering to the professional and ethical declarations of the United Nations Educational, Scientific and Cultural Organization (UNESCO). Archaeological open-air museums, however, are not a part of their organisation. The AEOM definition of an open-air museum (see Appendix A) has not evolved in as much detail as the ICOM definition of a museum, and many aspects are left out.

ICOM itself mentions open-air museums specifically: 'The title "open-air museum" cannot be denied to a museum of which the buildings, completely or partially, as copies or true to scale reconstructions are rebuilt after original patterns, are properly furnished and open to the public.' These concessions can be made only under the condition that: 'the original buildings of the type portrayed are no longer available (and) the copies or reconstructions are made according to the strictest scientific methods' (ICOM declaration: 9th July 1956/1957 Geneva, section 6, www.icom.museum).

Archaeological open-air museums are not about artefacts with their specific story – such as, for example, the bullet which ended Lincoln's life in 1865 (http://nmhm.washingtondc.museum) - but about presenting a story in a physical setting using fitting (replica) artefacts. The buildings, artefacts, animals and environments are life size models or props, (See Appendix A) which can be used in ways similar to how they would have been used in the past. Reynolds made clear that the term 'reconstruction' implies a 'spurious degree of certainty' (Reynolds 1999b, 159). To use this word in archaeological open-air museums is a misapplication, since in most cases only the ground plan of a building can be known for certain, whilst the rest is conjecture. To emphasise the degree of uncertainty, the phrase (re)construction is used in this thesis. The (re)constructed houses are not unique and can be constructed again, if new insights are gained. This is in contrast to original artefacts which are irreplaceable and therefore cannot be used on a daily basis. It is noticeable that even in ethnographic openair museums, worn down or relocated houses are frequently restored and in some cases even (re)constructed. It is hard to maintain the illusion that these are original houses.

An important conference regarding reconstruction was organised by the Association of European Open Air Museums (AEOM) in 1994 in Detmold, Germany, entitled 'The preservation system of wooden buildings, and replicas of historic buildings in open air museums' (Baumeier & Wassmann 1995).

The discussion in Detmold led to the conclusion that 'der alltägliche museale Umgang mit originalen Materialien sowie die natürliche Vergänglichkeit dieser Materialien zu Rekonstruktionen/Kopien zwingen' [The daily use of original materials in open-air museums combined with the natural perishability of those materials forces these museums to use reconstructions/copies] (Köck 1995, 13). However the danger of constructing something new based on too thin a scientific basis is evident (Köck 1995, 14). In the same volume, Vaessen criticises authenticity in open-air museums, saying that it cannot be perceived (Vaessen 1995, 153): the objects can say almost anything, depending on who is explaining. To present a story in an open-air museum is in itself a kind of reconstruction. Often, the furniture shown is not the original furniture used in that particular house, but has been collected from elsewhere - or reconstructed. Also the gardens and roads around the house are not original. That there is no clear connection between original and (re)construction is described by Czajkowski when he refers to the museum in Olsztynek, Poland. This museum contained 11 replica houses built in Königsberg in the years 1909-1914, which were moved by the Germans in the years 1938-1942 to Olsztynek (Czajkowski 1995, 101). Later, original historical buildings were added. Czajkowski describes several other examples of replicas built in Polish open-air museums.

The sources for these archaeological open-air museums - their settings, activities and themes - are first and foremost archaeological and historical. Generally, the archaeological open-air museum depicts the past of its 'own' region, from a specific era or series of periods. This way, the museum is not promoting a distant generic past, but one with which visitors can identify more easily (Petersson 2003). Thus the definition used here excludes freestanding and freely accessible architectural (re)constructions which are not in use for education or day tourist purposes. In many cases, these architectural (re)constructions are used for a single event per year, but fail to fall within the definition as they are not used on a regular basis.

Originally, for ICOM purposes, archaeological open-air museums were grouped together with site museums in the International Committee of Museums and Collections of Archaeology and History (ICMAH) in a workgroup 'Site museums and museums of archaeological reconstruction'. This workgroup, founded in 1993, was mainly oriented towards the French speaking world and was given up some years later. ICMAH has no definition of a museum of archaeological (re)construction. The task of archaeological open-air museums is to inform people, mainly tourists and school groups. Because of this core activity, they can be included in the field of information centres (See Appendix A). It is not of immense importance whether an archaeological open-air museum is a true type of museum or a real interpretation centre: arguably it is both. Whatever point of view is taken, these organisations play an important and valid role in society. An archaeological open-air museum is public-sector oriented and not for profit, but that does not mean it is not profitable. It generally offers different layers of interpretation and background information. It is characterised by being specific geographically – relevant to a particular location, and chronologically – relevant to particular time period, as well as by its links with archaeology.

The niche filled by archaeological open-air museums is a mixture of experiencing, being outdoors and educational entertainment. This combined cultural and environmental approach follows a general trend of consumers being interested in both aspects (Kelm & Kobbe 2007).

The definition of archaeological open-air museums as used in this volume was evolved by EXARC during 2007-2008. EXARC is the international ICOM Affiliated Organisation of archaeological open-air museums and experimental archaeology (www.exarc.net). The author of this research is one of the founders of EXARC and jointly oversaw the process of defining archaeological open-air museums, and the wording of the definition. It is the most up-to-date definition and embraces the diversity of these museums in a comprehensive manner. The definition is as follows:

'An archaeological open-air museum is a non-profit permanent institution with outdoor true to scale architectural reconstructions primarily based on archaeological sources. It holds collections of intangible heritage resources and provides an interpretation of how people lived and acted in the past; this is accomplished according to sound scientific methods for the purposes of education, study and enjoyment of its visitors.' (www.exarc.net).

The EXARC definition can be broken down into six parts.

 "A museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment." (ICOM Statutes, approved in Vienna (Austria) – August 24, 2007. Art. 3, Section 1 www.icom.museum).

"Non Profit refers to a legally established body- corporate or unincorporated whose income (including any surplus or profit) is used solely for the benefit of that body and its operation. The term "not-for-profit" has the same meaning." (ICOM Code of ethics for museums, ICOM 2006: www.icom.museum/ ethics.html).

- 2. Archaeological data are the primary source of information for what is (re)constructed and interpreted at archaeological open-air museums.
- 3. Archaeological open-air museums deal with outdoor true to scale (re)constructed buildings. These can be constructed and interpreted only under the condition that: "the original buildings of the type portrayed are no

longer available (and) the copies or reconstructions are made according to the strictest scientific methods" (ICOM declaration: 9th July 1956/1957 Geneva, section 6).

"The authenticity of materials and techniques used should be clearly accounted for through written and accessible records, quoting the sources of information on which the reconstructions are based. An honest assessment of each (re)construction should be feasible." (www.exarc.net).

- 4. The ICOM requirement (Lohr 1999, 63) on documenting and conserving one's own collections describes collections as sets of stories: intangible cultural heritage resources which provide an interpretation of how people lived and acted in a specific context of time and place. In its definition of intangible cultural heritage, UNESCO mentions social practices and traditional craftsmanship and states that this intangible heritage *"is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history."* (http://www.unesco.org/culture/ich/).
- 5. "The connection between scientific research and any specific archaeological open-air museum is provided by the active role of a trained archaeologist among the staff or an archaeological counsellor belonging to an affiliated organisation" (www.exarc.net).
- 6. Interpretation in archaeological open-air museums is often executed more by guide persons and less by means of guide books or audioguides. Such interpretation can be in the form of guided tours, demonstrations of old crafts, living history activities or otherwise.

2.3 Deconstructing the Literature Sources

It is hard to find references to archaeological open-air museums. In most cases literature is not in English and circulates only among visitors.

Most of the reflections on archaeological open-air museums are written by people who are not looking at the museums from the inside, but either from a visitor perspective or as an archaeologist using the museums as data sets for academic studies. No larger studies, using such strategies to put the museums in a tourist or education perspective, are known. Although there are some overviews describing the state of the museums, literature which places archaeological openair museums and free standing archaeological (re)constructions in a diachronic perspective is scarce. The major publications are in German and most often only involve open-air museums in that territory, sometimes with a glance across major parts of Europe (c.f. Schöbel 2008). There is hardly any overview available from before the 1990s, although guides exist with seemingly random choices of examples across a wider area – such as the 20 examples in *Revoir notre passé* (Agache & Bréart 1982) which accompanied a travelling exhibition, or Bader (2008) who presented 41 examples of Iron Age (re)constructions in a European overview but omitted at least another 100.

An American overview, seen from the living history side, is presented by Anderson (1984). He is interested not so much in the buildings and scenery, but in the activities portrayed, which he divides into three groups: mediation, science and play & game. Where most other authors have a similar division between education and science, his category of play & game is new and is here described using the term living history.

A simple but valuable overview of Danish archaeological open-air museums was published three times. The authors were the museum directors themselves. The first edition, published in 1987, contained 13 descriptions of archaeological open-air museums; two years later there were 22 and by 1995 this had risen to 40 (Ipsen et al. 1995). In 2009 a website was launched, with 48 sites in 2011 (www.historiskevaerksteder.dk). The list of addresses of the informal network behind the website counts over 80 archaeological open-air museums and archaeological education centres. Ipsen et al. refer both to 'tourist' open-air museums and those available only to school groups. They take a broad view and even include museums themed on the 20th century. Original historical environments are included, albeit moved to a traditional open-air museum setting (Ipsen et al. 1995, 6-11). The majority of authors, however, prefer to refrain from including settings with original buildings and limit their overviews to museums or (re)constructions themed with the period up to the time of the Industrial Revolution (like Petersson 2003, Keefer 2006).

The first Europe-wide overview, putting about 100 examples of both existing and abandoned archaeological open-air museums into a larger perspective, is *Wiederaufgebaute Vorzeit* (Ahrens 1990). The author was an archaeologist and museum director of the ethnographic open-air museum Kiekeberg near Hamburg which had no archaeological open-air (re)constructions itself. Ahrens describes the history of (re)constructing on archaeological grounds and the multifaceted image presented across Europe at the end of the 1980s. His conclusions on the sense and nonsense of (re)constructions (Ahrens 1990, 177-184) are still valid today, even if he did not witness the boom of new archaeological openair museums that has taken place since 1990. His listing of about 100 sites with (re)constructions was the first of its kind. He also included several free standing architectural (re)constructions, like Orvelte in the Netherlands (1990, 102-103, 185-195) (See Figure 2.01). Since Ahrens' work of 1990, no similar study has been as wide reaching or has discussed in such depth the character of these museums.

In more recent years edited volumes emerging from conference sessions have proved important sources. One such conference, themed on archaeological open-air museums, was held in 1993 in Aubechies, Belgium (See Figure 2.02). The published proceedings contain just 100 pages, with a total of 20 short articles on past, present and planned archaeological open-air museums across both the English, German, Scandinavian and French speaking area in Europe (Barrois & Demarez 1995). Twelve papers are in French, but with a very short abstract in Dutch and English. The contributions to these proceedings are stand alone for most of the part: although an attempt is made to set the papers in a larger framework, these conclusions are only one page long and in French only - surprising as this is possibly the most important part of the book.

The Aubechies discussion meeting was set in a larger framework by colleagues preparing a session at the World Archaeology Conference (WAC) 1994, in New Delhi. Obviously, not all people involved in the Aubechies round were also in



Figure 2.01: The Iron Age type farm at Orvelte, the Netherlands.

New Delhi. The WAC session proceedings were published in 1999 covering 20 papers with in-depth analyses under the title *The constructed past, experimental archaeology, education and the public* (Stone & Planel 1999).

These proceedings are more useful than the Aubechies proceedings because the articles are longer and are well introduced by the editors. This is the first attempt to set archaeological (re)construction in a global perspective, and includes papers about the US National Park Service, and examples from Japan, Russia and South Africa. Unfortunately, there was no follow-up after this book was published.

An overview of German archaeological open-air museums and architectural constructions was published by H. Schmidt, architect and archaeologist (H. Schmidt 2000, 8, 142-144). The list includes over 110 examples, most of them in Southern Germany. He limits his overview to those which are open to day visitors and are chronologically limited between the Stone Age and the end of the Ottonian Dynasty in 1024 AD (Leyser 1981). H. Schmidt also lists free standing architectural (re)constructions which are not in use, except for maybe at occasional celebrations.

Limited to the open-air museums, the examples of H. Schmidt would probably have numbered less than 50 at the time of publication. H. Schmidt sorts the museums by period (prehistory, Roman Era, Early and Late Middle Ages) but also tries to characterise the museums according to their 'raison d'être': construction of worlds to experience, conservation of monuments and experimental archaeology. He stays away from describing the museums and monuments as tourist attractions or as places for living history. H. Schmidt pays



more attention to Roman (re)construction than Ahrens did a decade earlier, and ends his inventory with the Ottonian Era, leaving out representations of the late Middle Ages and after.

Occasionally, articles are published by authors who are conscious of and have experience of a larger number of archaeological open-air museums. An example is the article by Banghard (2002), a critique of the developments in archaeological open-air museums across Europe which concerns mainly the thoughtless copying of existing concepts and the lack of serious academic involvement in general.

In 2002, a short overview was published by EXARC, with a description of 19 archaeological open-air museums (Schöbel et al. 2002). Eleven of them were EXARC members; another eight were included as they were 'important institutions concerned with experimental archaeology and education, which should be encouraged to carry our (EXARCs) quality standards with us' (Schöbel, 2002, 6). A list of 188 archaeological open-air museums across Europe was attached based on our own research (Schöbel et al. 2002, 47-55). The goal of this booklet was to place these museums in a wider perspective, legitimising both their individual existence and that of EXARC itself.

Petersson (2003) published her thesis at Lund University on the Scandinavian world of archaeology and (re)construction. She describes the histories of (re)construction, the role of politics and the dimensions of knowledge. Her Figure 2.02: Gallo Roman temple built at Archeosite d'Aubechies, Belgium.


Figure 2.03: Some of the stone walled houses at Eketorps Borg in Sweden. thesis is a summary of the experience she gathered from visiting free standing archaeological (re)constructions, (re)constructed ships, historically themed events and archaeological open-air museums across Scandinavia. Despite casting a wide net, she is able to draw valid conclusions, some of which are referred to later in this research. While her book is a good source of information it is written from a visitor's perspective: some of the issues she describes could have been commented upon by the management. Otherwise, the description of the history and politics of these sites in Scandinavia is most useful. Some parts of the history deserve a study on their own, like the history of Eketorps Borg in Sweden (See Figure 2.03).

In 2004, a travel guide was published with 38 articles on just as many archaeological open-air museums and other archaeological presentations across Germany (Pomper et al. 2004). This was clearly meant as a teaser for the prospective tourist visitor. Most of the articles were written by the managers of the museums and therefore combine information with advertising. The book was obviously not meant as a scientific expose but aimed to demonstrate the attractiveness of these German sites.

The director of the Pfahlbaumuseum in Southern Germany Schöbel (2008) published an article on archaeological open-air museums in Germany. It can be read after the book by H. Schmidt (2000) but includes more sites and covers a larger area. A total of 106 museums across the German speaking area of Europe

are examined, including closed museums (Schöbel 2008). The author tries not only to give a diachronic perspective but also to settle for a definition of these museums which would fit with ICOM. These efforts were synchronous with EXARCs work in this field, of which Schöbel is part.

The list as published in 2002 (Schöbel et al.) was expanded and when there was a chance to publish the new list, the overview was shared by the present author with Parco Montale of the *live*ARCH project. Pelillo has collected additional data in order to make the listing per museum complete. This resulted in a volume counting 200 pages, presenting 220 archaeological openair museums in a descriptive way and showing the great variety of sites existing at the time (Pelillo et al. 2009).

Expansion of the listing has continued, and it is now presented and maintained online at www.exarc.net. In November 2011 it included a total of 276 entries, of which 247 are archaeological open-air museums.

The literature used for this study has been brought up to date until November 2011. At present, case studies dominate the literature, such as Carpathian Troy in Poland (Gancarski 2009), The Archeopark near Všestary, Czech Republic (Tichý et al. 2009), the Museum of Ledro in Italy (Vannini & Scandolari 2010), about Sagnlandet Lejre (Jepsen 2011), Butser (Page 2011), La Draga (Buch et al. 2011) and Centro Algaba (Terroba Valadez et al. 2011).

2.4 Themes

For a good understanding of archaeological open-air museums it is not enough simply to visit many of them and see where they are standing now. One needs also to learn about the origins and developments of this type of museum. Many themes which played a leading role a long time ago are still important: the past never ends. Romanticism and nationalism can be recognised today if one has seen examples from the past, and science, education and tourism are still quintessential. Appendix G gives a short list of recommended literature about the history of archaeological open-air museums. Some of it, like Izquerdo et al. 2005 or Rentzhog 2007 is not about this specific type of museums, but is vital for a good understanding.

Different objectives have led to the (re)construction of archaeological remains through time. Every (re)construction is a documentation of the state of knowledge of that time, and of the message intended by the planners. More than any other type, Roman (re)constructions of stone or masonry buildings show the fashionable ideas of the period when they were built. This is due to the fact that wooden constructions in archaeological open-air museums often do not survive more than a couple of decades and, in contrast to so-called medieval (re)constructions, the Roman Era was popular in archaeological open-air museums much earlier on. The buildings at Saalburg, for example, were built in 1907 (Baatz 2004) and are recognisable as old (re)constructions. The name Römerkastell Saalburg [Roman Castle Saalborough] alone refers to an image of a castle with merlons - generally associated with the Middle Ages but already in use in the Roman Era (See Figure 2.04). The embrasures also bring up a medieval image. The walls of the fort are not plastered even though this originally might have been the case (Baatz 1976, 22).



Figure 2.04: The entrance gate, with merlons, of Saalburg in Germany. Other examples are the more recent (re)constructions of Roman watchtowers along the limes border in Germany. They serve many goals and many different types of people are included in their planning, construction and use (H. Schmidt 2000, 98-110). In many cases, the choice of construction materials is not authentic; the right type of wood often is too expensive or not available. Doors on ground floor level were added where there were not originally any, and in some cases the masonry work is faked.

All of the 16 Roman Era archaeological open-air museums are situated at original archaeological sites. Here, multi-period museums which include the Roman Era are excluded. The Roman site itself dictates the character of the museum; it is a site museum, with added architectural (re)constructions based on Roman archaeology. Such Roman museums were founded earlier than other types of archaeological open-air museums: 50% of them date to before 1990. Many of the archaeological open-air museums depicting the Roman Era are also site museums. They have more indoor exhibitions than other archaeological open-air museums.

2.4.1 Romanticism

Re-enactment of events as a theatre play goes back a long way. The earliest examples were about battles. For example, in the year AD 80, the Roman Emperor Titus organised a large event to celebrate the inauguration of the Flavian Amphitheatre, including re-enactment: 'the third day saw a naval battle, from which a land-engagement ensued (Dio, LXVI.25.4). Titus re-enacted Athens' historically disastrous attack on Syracuse in 414 BC' (Coleman 1993, 67). Shakespeare's (1564-1616) histories, as well as some of his tragedies, can be seen in this light. The playing company Shakespeare was part of was at first sponsored by the Lord Chamberlain and later (1603) by King James I (Wood 2003).

In the 17th century, Swedish kings arranged knight's tournaments in medieval style to focus on their close relationship to the power of the past. A good example is the coronation of Gustav II Adolf in 1617 in Uppsala (Petersson 2003, 42).

The emergence of Romanticism in the 18th century was influenced by the French Revolution and the Industrial Revolution (Claudon 1980). It was a movement both in art and in politics and philosophy, and countered the rationalistic approach of the Enlightenment. Emphasis was put on the importance of emotion and intuition, and of nature as a ruling agent, in the pursuit of an idealistic, complete and untouched world (Rousseau 2007). A nostalgic view of the past is an important element of Romanticism. Its main influence was in the 18th century and up to the end of the 19th century. The early days of the development of archaeological open-air museums during Romanticism can be recognised in the construction of stages, loosely inspired by a view on the past. With the tangible accessories at hand, people tended to believe what was presented to them - both in artefacts and in narratives: that is why this method was so successful in Nazi Germany (Ahrens 1990, 178). Staged settings were used for purposes of transferring a political message or an image of an idealised past, in order to legitimise the position of an elite, or to confirm myths or any kind of ideology. To some extent this is still true for present day archaeological open-air museums.

Already in the 18th century, parks were planned with so called historical features, be it original, renovated, (re)constructed or fabricated. After discoveries in 1806, excavations of Roman remnants were executed near Erbach, Germany, by Count Franz I von Erbach. On completion of the excavations, the stones were brought to the park of the Jagdschloss [Hunting Castle] and put together again. What was missing was (re)constructed. In addition, other nearby Roman remains were moved to the park of the castle and turned into a (re)construction, depicting the 18th century knowledge of Roman defence (H. Schmidt 2000, 13). There are early (re)constructions of ships known too, like the 1860s French construction of a trireme under Napoleon III (Lehmann 1982), built for political reasons.

In 1874, to honour the German emperor Wilhelm I, who was a regular visitor of the baths in Bad Ems, and in recognition of the recently won war with France and the founding of the German Empire, local inhabitants raised the first Roman watchtower overseeing the limes. In 1897, the Emperor decreed that the limes fortress Saalburg should be built up again, following the original Roman example and on top of the original site (Schallmayer 1997, 6).

In 1875, archaeologist Martins Sarmento excavated part of a hill fort in northwest Portugal, the Citânia de Briteiros at Guimarães. Shortly after the excavations, he (re)constructed two stone roundhouses on their original foundations (Ayán Vila 2001, 65-66); this was the first - and for a long time the only - archaeological in situ (re)construction in Portugal. The houses were constructed just before a site visit of the participants of the IX International Conference of Prehistoric Anthropology and Archaeology, and sparked off great interest in the Castreña Culture. Sarmento realised himself that having the height of the houses equalling the diameter must be wrong and, probably, the two structures should be interpreted as a house with a patio, and not as two separate houses. The houses exist to the present day as freestanding life size (re)constructions without much purpose.

In 1888 the Swiss shoe manufacturer C.F. Bally, a Nouveau Riche, redesigned a landscape park in Schönenwerd, Aargau (Ahrens 1988, 20-21). The Bally Park is made in the style of the English landscape gardens (Prest 2006) where individual pieces of architecture support the focus on modelled nature. Instead of using Italian architecture, Bally used lake dwellings to influence the mood of the beholder. They are an expression of the Romantic influenced awareness of history, besides giving some image of the way of life of people in the Stone and Bronze Age in their landscape.

Figure 2.05: Overview over Julianehøj at Jægerspris in Denmark.



Jægerspris in Denmark is a landscape park, containing original remains dating to the Stone Age and the Bronze Age. It was owned by the Danish royal family (Petersson 2003, 45-50). In 1776, the Julianehøj [Juliana Hill], probably a Stone Age grave, was excavated in this park as an initiative of a member of the royal family (See Figure 2.05). In the 18th century in Denmark, most excavations were especially executed by the nobility, such as King Frederic I and Christian IV of Denmark, who used them to justify their place in history (Hedeager & Kristiansen 1985, 84, 107-108). After excavation, Juliana Hill was remodelled in Romantic fashion with terraces and a marble entrance to the room inside. This remodelling of Jægerspris is usually seen in the light of legitimising royal power, producing roots and ancient ancestry.

In similar cases across Scandinavia, non-prehistoric megalithic sites were constructed or restored, like for example at Kivik, Sweden (Petersson 2003, 93-95), with the addition of runic inscriptions referring to the nobleman or other authority who had commissioned them (Petersson 2003, 50-54; see Petersson 2010, 71-87 for modern day rune carvers and their trade). This appropriated and merged old Viking traditions in the manufacturing of Romantic settings.

At present, royalty in Denmark and Norway are still expressing their interest in archaeology and are protectors of different archaeological openair museums, like Queen Margrethe II of Denmark with Sagnlandet Lejre (www.sagnlandet.dk): this museum is part of an area which is perceived as being strongly connected to the origin of the Danish national state.

2.4.2 Nationalism

From 1784, Romanticism began to evolve into Nationalism (Riasanovsky 1992, Furst 1969). An important inspirer of this movement was von Herder (Barnard 1965). In contrast to older ideas, that a state was conceptualised by law and politics, he formulated the idea of an organic folk nation, complete with a Volksgeist [national spirit], emphasising people's own folklore, language and identity.

In 1932 at Gotland in Sweden, Lojsta Hall was built. In an attempt to highlight the grandeur of the past the constructors referred to the 'high culture' of the original Iron Age site (Boëthius & Nihlén 1932, Ahrens 1990, 17, 132), to strengthen modern Swedish nationalism at a period when many were leaving the country to look for a better future in America. The Hembygds- or homestead movement was designed to counter the same trend, and still exists.

In the early 1980s on the original archaeological site at Castell Henllys, Wales, an Iron Age archaeological open-air museum was erected, as a private enterprise by Hugh Foster. He intended to found a tourist attraction, themed around the glorious Welsh past, to contrast with the several periods of domination - by Romans, Normans and English (Mytum 2004, 92). The Celtic spirit, or the Welsh Golden Age, was to be the crowd puller. Even after the death of Foster in 1991, and the subsequent taking over of the site by Dyfed County Council and management by Pembrokeshire Coast National Park, these Romantic and nationalistic leads, 'mystical and military,' are still clearly discernible (Mytum 2004, 96). 'The desire to define an intrinsically Celtic (and proto-Welsh) identity can be found in the National Welsh Curriculum (Mytum 2000, 165, Department for Children, Education, Lifelong Learning and Skills 2008, 12). The education programmes at Castell Henllys are tailored to meet the requirements of the National Welsh Curriculum, for instance by echoing stereotype figures like 'the fierce warrior males' and 'the placid domesticated woman' (Mytum 2000, 170). Meeting requirements of the national curriculum is the best thing to do when planning education programmes.

2.4.3 Germany in the 20th Century

The situation of archaeological open-air museums in Germany in the 20th century exemplifies processes which have played and still play a role elsewhere, although not in such a clearly identifiable way. This is partly because the German example of the 20th century is of an extreme nature as far as the 1930s are concerned. During the Nazi regime in Germany, archaeology, including the building of (re)constructions, was put to use in professional popularisation and massive ideological exploitation in attempts to justify the Third Reich's view on the world (Arnold 1990). Prehistorians were easily convinced, as the National Socialist movement was the first to support them: until then, they had led an unimportant existence in the shadow of classical archaeology and the archaeology of the Near East (Eggers, 1986, Arnold 1990, 467).

Although many were rooted in the tradition of Romanticism, German museums changed much during the 1930s (M. Schmidt 1994, 18). In 1922, in Unteruhldingen at the Bodensee, first steps were made to start an archaeological open-air museum, based on Neolithic and Bronze Age lake dwelling finds of the previous decades (See Figure 2.06). From 1933 onwards the emphasis changed to presenting this not as some Romantic past, but as the German people's own past. From this moment on the museum was turned into a 'heimatliches Kulturdenkmal deutscher Vorzeit' [patriotic cultural monument of German prehistory] (Schöbel 2001, 31). The history as presented changed: the area was no longer inhabited by lake dwelling people, but by lake dwelling soldiers. This presentation of Stone Age villages which could defend themselves well helped to foster the 'heroic thought' and the 'Führer thought' (Schöbel 2001, 60). The idea was further strengthened by presenting architectural (re)constructions of houses not in a museum like fashion but instead equipping them with furniture - based on eclectic samples from the relevant period, or if necessary on samples from another era or region, or on ethnographic examples or fantasies (Müller 2005, 26). An example is the construction at the workshop of the Pfahlbaumuseum of a scale model of the Norwegian Viking Age Oseberg ship excavation for the 1939 exhibition 'Woman and mother, source of life for the people' (Schöbel 2001, 63).

Archaeological propaganda was all around. This can be seen, for example, in the words of Hans Reinerth, who played an important role at the Pfahlbaumuseum (he was its founder and director till he died in 1990). Describing an excavation at Federsee he said: 'we have found the courage once more to admit to the deeds of our ancestors. Their honour is our honour! The millennia separate us no longer. The eternal stream of blood binds us across the ages (...)' (Reinerth 1936, 5, quoted in Arnold 1990, 468).



The 1936 Berlin hands-on exhibition *Lebendige Vorzeit* [Living Prehistory] (Benecke 1937) was a powerful tool for the National Socialist party and formed part of their doctrine to eliminate all other forms of influence. This strategy is known by the word 'Gleichschaltung', a totalitarian control over the individual and tight coordination of all aspects of society and commerce (Koonz, 2003). Propaganda required a presentation through which people would believe in the so called high culture of their forefathers, and do so on scientific if controversial grounds (for example Rosenberg 1930, Maier 1936a and Maier 1936b and Mirtschin 1940). At other locations, propaganda (re)constructions were built;

- 1936-1946 in Oerlinghausen (Germanensiedlung, Iron Age) (Ströbel 1936, M. Schmidt 1999b, 2001a, 2001b),
- 1936-1945 in Lübeck (Freilichtmuseum auf dem Stadtwall, Neolithic and Iron Age) (Hülle 1936, Keefer 2006, 16-17, Ahrens 1990, 20-21)
- 1938-1954 in Radolfzell-Mettnau (Freilichtmuseum für Deutsche Vorgeschichte, Mesolithic and Neolithic) (Benecke 1938, Ahrens 1990, 18-20).

The Pfahlbaumuseum was the only one which actually remained operational, although it changed drastically after 1945 (Schöbel 2001, 90). The open-air museums were used to propagate the 'Kulturkreis', the ethnocentric identification of geographical regions with specific ethnic groups (Arnold 1990, 464).

Figure 2.06: The oldest (re)constructed houses at the Pfahlbaumuseum, Germany, dating to 1922.



Figure 2.07: The central gate and long wooden barracks of Biskupin, Poland.

When Nazi Germany conquered Poland, excavations at Biskupin had already been on the way for a few years (Zajączkowski 2006, 25). The site had already become a national Polish icon before the German occupation and was referred to as a Slavic occupation site, therefore legitimising Poland's claim on this territory. The Germans continued the excavation, and unsurprisingly used the excavation results to legitimise their own (Germanic) claim on Poland (See Figure 2.07).

In the first decades after WWII, not many new archaeological open-air museums were conceived across Europe. Presentation techniques used in the war - even though some went back to the 1920s - were rejected. The past was preferably seen in a museum context, not as a living museum or (re)constructed area. The adventure was over: the years of collecting, sorting and keeping had begun (Keefer 2006, 17-18).

In the 1980s, in the then German Democratic Republic (DDR, 1949-1990) two archaeological open-air museums were founded, both of which had nationalistic connotations. Groß Raden was more or less a private initiative of Professor Dr Schuldt and opened its doors in 1987. The location, near the town of Mecklenburg, and the time frame depicted, the early Middle Ages, both clearly referred to the Obotrite dynasty who ruled over a confederation of west-Slavic tribes in that period in Mecklenburg and Holstein (Keiling 1989, 8-9). By emphasising the high cultures of this area, the established position of the excavator, Schuldt - of and the umbrella museum in Schwerin - the Groß Raden archaeological open-air museum contributed to creating a sense of a common past for the DDR. 'This focus on Slavonic Archaeology was politically motivated (a resurgence of pan-Slavic Ideals under Stalin, the idea of "Slavonic brotherhood" in the Warsaw Pact countries)' (Sommer 1999, 160).

In more recent publications emphasis is more on the crafts and daily life of the people who inhabited these regions and less on the Slavonic character of the site. Whilst Keiling shows maps of the area entitled, for example, 'the Slavonic sites of Neubrandenburg' (Keiling 1989, 67), Jöns' museum guide of 15 years later shows hardly any such maps at all (one instance at Jöns 2004, 8), but is illustrated instead with dozens of pictures of living history actors. Archaeologist Voss (1993) presented an honest study of what had been (re)constructed wrongly and how this could be repaired (Voss 1993, 50). One example is that in the original planning, parts from different construction phases were built, something which the public did not understand, thinking it all was contemporary. The concrete foundations of some of the (re)constructed houses presented another problem.

There was no reason for Ahrens (1990, 172-176) to be happier about Tilleda, also in the DDR, than about Groß Raden (Voss 1993, 47). Tilleda too was initiated in the German Democratic Republic (DDR) at a location full of historical connotations (Dapper 2004). Excavations were carried out here in the years 1935-1939 and then again from 1958 onwards. The area near Kyffhäuser is legendarily seen as the heartland of the Ottonian Empire, and this is where Tilleda is situated, the royal seat of at least seven kings. The site has ties to the 12th century Emperor Barbarossa (Pomper et al. 2004, 148-149). With the construction of the open-air museum at Tilleda in 1987, the Central Institute for Old History and Archaeology aimed to point out the importance of this historical royal seat for the development of a socialist consciousness among the population. Presented as having a significant place in the history of feudalism in the DDR, Tilleda as an educational site 'ist daher in besonderen Masse geeignet, zur Vermittlung eines wissenschaftlich begründeten Geschichtsbildes über ökonomische, soziale und politische Strukturen der Feudalgesellschaft und deren Entwicklungsgeschichte beizutragen' [is therefore especially well equipped to help transfer a scientifically based image of history about economic, social and political structures of the feudal society and its direction of development] (Hinkel, 1978, 204).

Both Groß Raden and Tilleda are examples how the DDR attempted to influence the image of their own country in the past, and thus help to legitimise the state's ideology.

2.4.4 Science and Experiment

One of the most important themes in archaeological open-air museums, now and for the future, is the link with science and experiment. Appendix G gives a short list of recommended literature on science and experiment in archaeological open-air museums. Whilst, for example, Coles (1979) presents a very good overview of developments until the late 1970s, Hansen (1986) explores the usefulness of a permanent experimental centre, and Comis (2010) describes the future for archaeological open-air museums if they team up with experimental archaeologists in a structural manner.

Antiquarians became involved early in experiments with the creation of (re)constructions. One such example is the work of the Danish landowner and nobleman N.F.B. Sehested between 1878 and 1881. Sehested collected original archaeological flint implements, hafted them and began actually to use them as tools. By means of these original artefacts he constructed a log cabin in 1879, proving that flint axes were in fact useful tools (Johnston 1988, Petersson, 2003, 65). This log cabin still exists and after being moved several times has now returned to the Broholm estate where it was originally built (Thomsen 2003).

'Archaeological open-air museums are the main sites in which "experimental archaeology" activities are, if not directly carried out, made visible to the public' (Comis 2010, 11). However, although these museums are of high importance to experimental archaeology, this is not their main focus or reason for existence (for a definition of experimental archaeology, see Appendix A). To carry out experiments for an open-air museum is doing more than advancing science. An experiment gains much in value if results are recorded and if it also gets published (Outram 2005), but only a few archaeological open-air museums go through this procedure.

Most of the museums that run experiments do so only occasionally and not on a semi-permanent base such as would be required for recording crop yields or monitoring decay of wooden constructions. It is remarkable to note that although the phrase experimental archaeology as stereotype is often used in archaeological open-air museums, relatively few museums actually execute experiments as did Butser and Sagnlandet Lejre, for example, in the old days. The phrase archaeology itself stands much stronger, however, doubtless due to the attention spectacular archaeologist characters get in films and on TV (for example Holtorf 2005).

In many cases experiment is used for education and craft activities (for example, Cardarelli 2004, fig. 149 and 150, Stone & Planel 1999, 11-12, Rasmussen & Grønnow 1999, 142-143). An employee helps children to make a pouch, cut a spoon or sail a canoe (Ahrens 1990, 178). Obviously, these are not experiments, but by using this phrase, open-air museums aim to get the message across that their activities are not just entertainment (M. Schmidt 2000, M. Schmidt & Wunderli 2008). They are using science and experiment as a link to promote their museum experience. By referring to science, the museums try to gain credibility.

Generally, the activity is not the focal point; it is rather a means to transfer the message told in an archaeological open-air museum. The lesson learnt about the past needs to reflect on the present as well because visitors seek relevance and a comparison with their own life.

The museums form a bridge, with visitors on one side, science on the other. A museum that possesses an active link with science is a true living museum. As Pétrequin explains: 'when the archaeologists left the site the architectural reconstructions became lifeless; they became a decorated façade, poorly lit by inadequate presentation, where no attempt was made to reconcile the provisional and rapidly shifting image of advanced research and the successive slowly evolving clichés which underpin social perception' (Pétrequin 1999, 225). The 1960s and 1970s were characterised by a 'laboratory approach' to experiment and (re)construction. Archaeometry and other experimental work, founded on natural physical science, played the leading part. Some sites were built as (re)constructions in the course of an experiment, but as soon as they were ready and the scientific goals attained, the (re)constructions were often used as means for education or simply left, as at Lake Chalain, France (Pétrequin, 1991).

Experimental archaeology has little overlap with education, as M. Schmidt made clear several times – for example with an article entitled *Museumspädagogik ist keine experimentelle Archäologie* [museum education is no experimental archaeology] (M. Schmidt 2000, but see also Andraschko & M. Schmidt 1991, M. Schmidt 1993 & 1999a and M. Schmidt & Wunderli 2008). At universities, experimental archaeology gained support in the 1970s. This led to involvement in setting up new open-air museums, like Butser Ancient Farm in England (Reynolds 1975), Asparn an der Zaya in Austria (Lauermann 2006), the Archäologischer Park Regionalmuseum Xanten in Germany (Müller & Schalles 2004) and the Okresní Muzeum Louny in the Czech Republic (Pleinerová 1986). The arrival of this new wave of open-air museums using experimental archaeology can partly be explained by the post WWII generation no longer being impeded by the effects of the Nazi approach to (re)constructions (Goldmann 2001, 177).

Among the archaeological open-air museums in place in 2007, Butser was the most productive as far as publications were concerned (See Figure 2.08). Of the 1,012 known publications on archaeological open-air museums, about 125 refer to Butser Ancient Farm and an equal amount to the Sagnlandet Lejre in Denmark (www.exarc.net). Butser's aspirations have been clearly manifested especially in respect to Iron Age agriculture. At Lejre, publications by many different authors have covered a large variety of themes (for example Bjørn 1969, Nørbach 1997, Rasmussen et al. 1995, Rasmussen 2007). At Butser Ancient Farm, the majority of work was published by Reynolds (for example 1975, 1976, 1999a).

In the 1980s, two large conferences on experimental archaeological house (re)constructions were organised. The first was held in October 1980 under the auspices of the Department of External Studies at the University of Oxford (Drury 1982). Among the themes were interpreting excavated timber buildings and what they called replication.

In 1987 a workshop by the European Science Foundation (ESF) was organised in Århus, Denmark, themed *The reconstruction of wooden buildings from the prehistoric and early historic period*. This workshop is only partly published so far (Coles 2006, Reynolds 2006, H. Schmidt 2007, Komber 2007). These workshops are clear examples of archaeologists involving physical (re)construction in their work when discussing house constructions.

An important impetus to experimental archaeology and archaeological openair museums in Germany was the travelling exhibition and the accompanying yearly conference and proceedings on experimental archaeology, nowadays formalised in the association EXAR. The exhibition was first shown in 1990, and in 2004 was viewed by a total of over 500,000 visitors in 30 cities (Der



Figure 2.08: The Longbridge Deverel House at Butser Ancient Farm, England, built in 1992 and based on an excavation at Cowdown, in Wiltshire. Vorstand 2005, 7, Steinert 2000). The yearly conference has continued (Keefer 2006, 26). Most activities presented at the conference and in the proceedings are executed at archaeological open-air museums, one example being the long-time monitoring of the construction, use and destruction of the Hornstaad house at the Pfahlbaumuseum (Schöbel 2011b). However, although many archaeology students use archaeological open-air museums, experimental archaeology is not a daily activity at these museums. There is, for example, not a single full-time, paid experimental archaeologist in Germany (personal communication M. Schmidt, 1 November 2011).

By definition archaeology plays a role in archaeological open-air museums. Many of them, like Hjemsted in Denmark (Hardt & Thygesen 2000), present a staged excavation sand box, where children can excavate. This is an aid in explaining the process of archaeology, but has a second agenda to it as well: by stating that archaeology provides facts, and that these facts are the foundations of the museums' presentation, the museums themselves emphasise they are presenting a valid interpretation of the past.

To sum up, science and experiment are important to many archaeological open-air museums for many reasons. They link these museums to the academic world, and offer new insights into the period or periods the museums work with. Science and experiment are also fundamental to the way archaeological open-air museums relate both to archaeologists and to the public.

2.4.5 Education and Learning

Education and learning represent a very important reason for the existence of archaeological open-air museums (for example M. Schmidt & Wunderli 2008, 31-39). The wish to teach visitors about the past in a very hands-on manner is deeply rooted in these museums. Appendix G gives a short list of recommended literature about education in archaeological open-air museums.

Research into this theme would be a PhD in its own right. There are centres, constructed like archaeological open-air museums, open only to school and other education groups. In many cases, existing archaeological open-air museums function similarly as archaeological educational centres, for examples on days when there are fewer tourists, or in an area of the museum sealed off from tourist visitors.

Archaeological educational centres (see definition in Appendix A) offer students a combination of manual and mental skills training, and historical consciousness (Bay 2004). The groups receive the information in programmes where they themselves need to be active. This hands-on approach is a way of non-formal education which may thus be defined as: 'any organised educational activity outside the established formal system - whether operating separately or as an important feature of some broader activity - that is intended to serve identifiable learning clienteles and learning objectives.' (Coombs et al. 1973). The non-formal character is made explicit when children dress up or are introduced to role play, forming families or tribes (for example Kahl et al. 1995). It enhances the empathy the children have for the environment they are in and the activity they are engaged in. Experiences need to challenge and stimulate the visitors, turning thoughtless hands-on activities into minds-on challenges (G. Hein 1998, 30-31).

Education in archaeological open-air museums serves first and foremost the mediation of knowledge. However, missions also concern the 'Anregungen zu kreativem Tun, passive ästhetischem Genuss, Entspannung, Vergnügen und Spiel' [development of creativity, passive aesthetic enjoyment, relaxation, fun and game] (Krogh Loser 1996, 14) (See Figure 2.09). Besides the more obvious skills, open-air museums are often enhancing social abilities as well as dexterity. In contrast to experimental archaeology, which is mainly concerned with technological issues and underlying social questions, education in open-air museums is much more focussed on the position of people themselves in the past, not of their artefacts.

A clear danger emanates when neither the teachers of a school group nor the education officers of an open-air museum are ambitious enough, and remain at the level of simply entertaining children without a lesson, a theory to be taught (W. Hein 2000, 61).

Early examples of archaeological education centres are found in Denmark and the Netherlands, among other places; old and still successful examples also exist, such as Biskupin, Poland (Grossman & Piotrowski 2011). One of the first people with a concept of outdoor education in prehistory in all its forms was Hansen (1964), who also founded what is nowadays known by the name Sagnlandet Lejre (See Figure 2.09). Hansen did not restrict the role of archaeological open-air museums in Denmark to an educational one only, but



Figure 2.09: The wool dyeing corner at Sagnlandet Lejre.

education has been an important reason for the existence of dozens of sites across that country (Hansen 2010). The name the Danish use is historical workshops. These are mainly educational, focussing on children in primary school (source: second survey). They 'interpret cultural-historical knowledge by letting the (pupils) do things like they are supposed to have done in the past' (Bay 2004, 131). In contrast to working in schools, where the only tools were characterised by academic and verbal skills, a historic workshop offers three other tools: manual skills, mental skills and historical consciousness.

The manual skills relate to the respective period and place of the historical workshop, and can include, for example, fire making, ploughing or making textiles (Bay 2004). The interactive demonstration of these skills is not enough. Mental skills are those skills one needs to pay attention to the mental life of the past – not just focussing on the object itself but to ponder upon its use by humans in the past, and to attempt to relate to those people. In historical workshops, this often involves the use of drama. Historical consciousness is defined as the interaction between the interpretation of the past, understanding of the present and expectation of the future. It goes further than producing historical knowledge. In going beyond a mere technical or technological approach to artefacts and their use, the historical workshop activities are becoming on the

one hand more relevant to the national curriculum, and on the other hand significant in achieving goals other than that of simply teaching children about archaeology, and the past as we understand it by means of archaeology.

In 1976, biology teacher Roelof Horreüs de Haas, with the help of a group of colleagues, ran an experiment on how to survive as if in the Stone Age, a project which got a lot of attention from the Dutch media as well as from archaeologists internationally (Horreüs de Haas et al. 1999, 163-165). His work created a large impact in the Netherlands, and more archaeological projects soon began to emerge, almost all with an environmental approach: four in the 1970s, three in the 1980s. (Horreüs de Haas et al. 1999, 176). All these projects have a common purpose: education. Only HOME later changed its priorities; it increased its number of tourist visitors, although the number of school children remained substantial, forming half of visitor numbers over a long period (compare Boonstra & Callebert 1991, 2; with Boonstra 2004, 2-3, for the numbers, Boonstra 1988-1997, Botden 2001-2003, van Valburg 2004-2007, Prinsen 2009-2010).

Most archaeological open-air museums function as archaeological educational centres at given times. It is a good way of attracting extra public through the gates. As these groups attend around the school holidays, they are a good way of strengthening the frequency in the shoulder season. Another advantage is that these groups plan their visit ahead of time, as opposed to being a last moment decision, inspired by the weather forecast. A disadvantage is that such groups occupy part of the museum in a way that makes it hard to share the same area with tourist visitors during the same hours.

There are many archaeological open-air education centres which are only available for formal education groups. Some of them might organise an occasional yearly event, leading to them being open more often for tourist visitors as well (for example the Ancient Technology Centre at Cranborne, the United Kingdom, www.ancienttechnologycentre.co.uk and School in Bos, the Netherlands, www.wilhelminaoord.com) (See Figure 2.10). A large number of sites originally developed for education purposes have thus developed into archaeological open-air museums.

It would have required another set of priorities and experience to look at the value of archaeological open-air museums as sites of formal education, rather than assessing their value for tourist visitors. Although formal and informal education offered at these sites are often in symbiosis, it proved too complicated to look at both, and therefore the choice was made to focus only on the tourism aspects.

Besides children's' education, adult learning in museums has great potential, but is underdeveloped (Hooper-Greenhill 1995, 61). There are many different approaches to adult learning and learning styles, as for example summarised by Jones (Jones 1995). EXARC, through their Lifelong Learning Partnerships Didarchtik and Zeitgeist (2010-2012), is carrying out research into how exactly adult visitors to these museums learn.



Figure 2.10: Education material at a typical archaeological education centre at School in Bos, Wilhelminaoord, the Netherlands.

2.4.6 Tourism, Leisure and Events

Some suggested reading about tourism in archaeological open-air museums is given in Appendix G. This field is very much in development, with links to further tourism studies covering such themes as sustainable culture tourism. 'Tourism is a demand-driven activity that is difficult to control' (McKercher & du Cross 2002, 27). It is influenced by market forces and cannot be predicted in detail. Tourism develops constantly: visitors become more demanding, for example, but their interests also follow trends, sometimes caused by global changes (Keller & Bieger 2010, 1-8). An example of these changes is Lapland. Visiting Christmas in Lapland changed between 1984 and 2007 from 'a oneday exclusive trip via Concorde to a week's holiday for the mass tourist market' (Komppula et al., 2010, 89).

Archaeological open-air museums must switch gear to conform to modern standards. Amateur concepts which did well in the 1970s need to be approached more professionally now, due to other expectations from cultural heritage management as well as the public: 'heritage attractions must continuously upgrade and improve quality in order to cope with changes in the marketplace' (Johns 2004, 127). In the past 'heritage interpretation existed to educate, primarily with a view to imparting an understanding of the need to conserve and preserve' (Tilden 1957); it now covers a much wider range of goals (Bennett 2009, 84). 'A still greater challenge consists in new leisure time habits and the trend towards ever more exciting experiences' (Rentzhog 2007, 323) and it is here where archaeological open-air museums, with their hands-on approach, show their strength: they are no longer about activities being demonstrated behind a rope where touching and tasting is not allowed.

Archaeological open-air museums are heavily dependent on the income they generate by themselves. Governmental funding - as granted to traditional museums - or commercial sponsorship rarely account for a large part of the income, even if a museum is part of the governmental structure (Paardekooper 2008). In many cases, money can be found to start up a museum, to construct the true scale models or to provide a modern building (for example Archeon, see IJzereef 1999), but not for running a museum or maintaining it.

Many archaeological open-air museums organise yearly recurring events. Usually, their concept has hardly changed over the years, and comparable events can be seen all across Europe. To turn an event into a success however - besides a reliance on good weather and good communication - innovative extras need to be developed year after year. Target groups change and so do their demands (Lucke 2004). Toilets built to 1970s standards, even if kept in order, do not fulfil 2008 requirements and needs. At events like the festival in Biskupin, Poland, the theme changes every year, but what is offered usually is 80% the same as the previous year.

Archaeologically themed events are a low-threshold attractive approach to popular themes of the past. They grew from open days at excavations or archaeological open-air museums to so-called medieval markets, Viking markets and such. For example at HOME in the 1980s, open days were the most frequented event. In the 1990s the most popular event of the year was the Viking market (see for example Boonstra 1988-1997). Events are sometimes based on sound archaeological information, sometimes merely inspired by the past (Banghard 2002, 213-215).

From the 1990s on, culture and history aspects are gaining importance in tourism across Europe (Brown 2002, 1-4). A successful way of dealing with tourism involves multistructural approaches with complex influences from the a variety of different partners, requiring a lot of flexibility from the museums (Lucke 2004, 148). Visitors do not come by themselves: a museum needs to cooperate with other cultural-touristic players in the region as well as ensuring good communication through tourism channels.

At a talk in Newfoundland in 2009, King described creative tourism as a type of cultural tourism (www.lord.ca/Media/Creative_Tourism_BK_paper.doc). A definition stems from 2006 (Richards & Wilson 2006, 1215) with participation as the key word as opposed to the passive consumption of experience. Such tourists focus on the character of the place they visit and interact with the people making up the living culture.

Travel has become an extension of daily life where people seek personal and professional development and not just old-fashioned relaxation. The lines between business and pleasure, between learning and entertainment, blur. Opportunities for personal growth and development become increasingly important.

King (2009) suggests three trends in tourism:

- 1. Higher quality, greater choice and greater competition: a museum will need blockbusters or at least some quality and distinctiveness in their activities;
- Personal choice and participation: not only does a tourist like to choose bits and leave out other bits of what is offered, they also expect to be able to participate. Engaging the visitor means one should include a menu of options and not a unilinear experience with a start, middle and end;
- 3. Something for everybody: not everybody can be treated similarly; the market gets much more segmented in special interest groups.

Culture tourism is no longer the domain of an elite: museums need to prepare for a non-museum going group of tourists who usually do not visit cultural or heritage places like museums, but will do so if these museums adapt to them instead of vice versa.

Demographic trends suggest much is going to change. American research gives away trends possibly also relevant to Europe. The baby boom generation, born between 1945 and 1964 is in 2011 between 47 and 66 years old. The generations following after the baby boomers have different expectations, priorities and motivations. They are the first who grew up with computers and gadgets. Those younger than 47, especially those younger than 25, are multitaskers and absorb information differently from the ways in which their parents did. They are much more used to mobile phones and the online world. They feel more individual and often have stronger bonds with friends than with their family; they believe in transparency and do not accept authority just because they are told to (www.arts.state.tx.us/toolkit/leadershiptransitions/ trendwatch.asp). Tension between generations has always existed but the baby boomers' heavy influence is definitely decreasing.

An important trend is that tourism is not only a money generating tool, but also a way to catalyse social transformation. King's example is the City of Melbourne where the theory was successfully applied that if residents could be attracted downtown, tourists would follow (www.lord.ca/Media/Creative_ Tourism_BK_paper.doc). Cultural tourism attractions will be used increasingly to change society or to empower people to change society. The economic impact and social relevance of archaeological open-air museums to their local society is important. Relevant studies exist but are not made comparable to one another as yet.

2.5 Typifying the Museums - what is their Role?

Many open-air museums across Europe are the initiative of a single individual, not a product of long term policy of companies, museums or governments (Schöbel 2008). Good examples are Unteruhldingen in Germany, Groß Raden in the then DDR - crowning a 15 year long excavation campaign, and Biskupin in Poland. In most cases, after the founder of a specific open-air museum stepped down, his or her position was taken over by others or the museum was given up. In many of the still existing archaeological open-air museums, lack of money is a problem, but what is lacking even more is 'die Unterstützung der großen Verbände und Museumsorganisationen, die dieses inzwischen erwachsenen Kind ihrer Museumslandschaft noch nicht überall gleich angenommen haben' [the support of the larger museum associations who have not accepted this now grown up baby into the museum landscape equally well] (Schöbel 2011a, 29).

In the British Isles, archaeological open-air museums are rarely characterised as museums, but rather as centres, heritage visitor centres, farms, parks or villages (See Figure 2.11 for examples). An archaeological open-air museum, however, fits the international ICOM definition of a museum (See Appendix A) even if this international museum definition is ahead of many national museum definitions. The tasks, roles and some of the responsibilities of an archaeological open-air museum mirror those of other categories of museums.

The archaeological open-air museums in the Netherlands refer to themselves in many ways. A uniform description was attempted in the 1980s, but failed (van der Vliet & Paardekooper 2005). Today, the museums go by characterisations like outdoor centre, medieval yard, Iron Age farm or prehistoric camp, referring to their educational role. The only two exceptions not referring to education in their name are Archeon (theme park) and HOME (open-air museum). As a small sample, I attempted to write a historical overview of the different types of (re)constructed sites in the Netherlands (Paardekooper 2012).

Figure 2.12 shows that even when trying to group the sites into five categories, the picture is still very mixed. The diagram had to take account of a gradual fading out of one kind of set up and also sometimes multiple setups. Even though five motives or origins for archaeological (re)constructed sites are discernible, these are not always that clearly separated - as at Dongen, for example, where archaeology is a theme, but so is the fact that it is a volunteer project, run by an association. In other cases a clear cut can be recognised, for example at Archeon, where early archaeological influences and those of the family de Haas were replaced by tourism as the main focus, with little other influences.

In Germany, the most widely known descriptive phrases are either 'museum' or 'park'. Fantasy names are not used much. In the French speaking area, archaeological open-air museums are generally catalogued together with site museums and ruins. Therefore, characterisations are used like prehistosites, parcs archéologiques or archéosites. This fits well with ICOM terminology, ICOM being originally French speaking.

Centre	Farm	Park	Village
the Ancient Technology Centre	Butser Ancient Farm	the Irish National Heritage Park	Dark Age Village
the Peat Moors Centre (ended 2009)	Bullace Hill Farm	Murton Park	lceni Village
the International Shakespeare Globe Centre	Trewortha Bronze Age Farm		Cosmeston Medieval Village
the Scottish Crannog Centre			West Stow Country Park and Anglo-Saxon Village

Figure 2.11: Designations of a range of archaeological openair museums in the British Isles with examples.



Figure 2.12: Schematic overview of the different (re)constructed sites in the Netherlands grouped by influence showing how these have changed over time. When a colour fades into another, this marks a gradual change while a white space boundary marks a sharp change. A historisk værksted [historic workshop], is the name the Danish openair museums use, a place for developing history in the making (Bay 2004, Paardekooper 2006, 94). It stands separate from a scientific approach and is focussed on education and the development of a variety of skills.

In Sweden archaeological open-air museums were called forntidsbyar [prehistoric villages] or more recently arkeologiske friluftsmuseer [archaeological open-air museums] (personal communication B. M. Buttler Jakobsen, 8 May 2011).

There are associations of archaeological open-air museums, and in some cases these associations also group together individuals interested in experiment or education. The grouping together of archaeological open-air museums with living history groups in one association has not been encountered so far. National associations of archaeological open-air museums are known:

- from Denmark (since about 1989, mainly concerned with education),
- the Netherlands (from 1991, combined with experimental archaeology),
- Lithuania (from 2002)

In some other countries, associations focussed on experimental archaeology exist, but without a clear link with archaeological open-air museums. Examples are:

EXAR, from 2002, mainly the German speaking area of Europe

- Experimenta, from 1996, Switzerland
- Experimenta, from 2005, Spain

International organisations active in Europe are known:

- NOOAM, covering Sweden and Norway, from 2007, with a predecessor from 1999;
- EXARC, covering worldwide although mainly in Europe, from 2001, combined with experimental archaeology.

The previous parts of this chapter inform the reviewer about a broad range of archaeological open-air museums in Europe. These museums can have a combination of modules or roles besides their characteristics as archaeological open-air museums. The listing below is used throughout this book. An archaeological open-air museum can be characterised by a combination of the following roles or modules:

- Traditional showcase museum / exhibition on site or elsewhere (See paragraph 2.5.1)
- Archaeological or historical site / site museum (See paragraph 2.5.2)
- Traditional (ethnographic) open-air museum / historic house (See paragraph 2.5.3)
- Natural park or cultural landscape (See paragraph 2.5.4)
- (Re)constructed boat / ship (See paragraph 2.5.5)
- Living history museum (See paragraph 2.5.6)
- Animal farm (See paragraph 2.5.7)
- Theme park (See paragraph 2.5.8)

2.5.1 Traditional Showcase Museum / Exhibition on Site or elsewhere

Archaeological open-air museums are not museums in the traditional sense. The differences between an archaeological open-air museum and a showcase museum are apparent. The Archeopark Schnalstal, Italy is an example of a combination of both (See Figure 2.13). A museum - even in modern commercial exhibitions - tends to be artefact-based and static, while archaeological open-air museums are activity based and, at best, highly interactive (Paardekooper 2010a, 62). One of the most important characteristics of an archaeological open-air museum is that it usually does not own any original artefacts. Their houses, decoration and tools are there to be used (That is what is referred to by their mottos like 'hands-on archaeology' or 'Archäologie zum Anfassen' [archaeology to grip]): if the objects or tools break, they can be constructed anew according to the latest insights in archaeology. Their message is based on research and experiment.

The atmosphere in the showcase museums is usually more aesthetical and 'sacred', compared to the archaeological open-air museums. A museum in the traditional sense of the word has as its tasks collecting, preserving and presenting. An archaeological open-air museum takes a different approach. The five key words are: education, presentation, experiment, commerce and living history. Thankfully, there are more and more crossovers: a combination of indoor and outdoor. Also if they are not in some way authentic or based on scientific research (which in many archaeological open-air museums is an issue), then they become a theme park.



Figure 2.13: Indoor exhibition at the Archeopark Schnalstal, Italy.

There is a reason why archaeological open-air museums want to be seen as a museum. They need recognition and acceptance. Traditional museums carry the legitimisation of the National State; they have a kind of universal character of necessity, and the State protects them. Active professional support and funding will be more and more restricted to the more established showcase museums.

2.5.2 Archaeological or Historical Site / Site Museum

In many cases, visitors to archaeological open-air museums think that what they see is the exact way it was. The image of such an Iron Age house is so impressive that people take it for real, even exactly as it is, mistaking it for original on occasion. Though we can tell them again and again that what they see is just one of the possibilities of how life might have been back then, this makes no difference, neither does the sight of obvious modern implements like fire escape lights waken them from their illusion. Archaeological open-air museums do not usually display original artefacts; they are appreciated for their (re)constructed houses.

How could such an archaeological open-air museum's approach be compared to an open day presentation at an archaeological excavation? At the archaeological site you will have guided tours, a presentation by the archaeologist in person. In an archaeological open-air museum, the employees (usually not archaeologists) build scenery and set out a trail, but it is unclear if the public picks up the right



information. The story about the past in an archaeological open-air museum can be presented in various ways while at an open day presentation usually a snapshot image is presented.

In many cases, archaeological open-air museums are constructed following excavation of an archaeological site, and in several situations are built on the original site, like at Calafell, Catalonia (See Figure 2.14).

2.5.3 Traditional (Ethnographic) Open-Air Museum / Historic House

With the earliest ethnographic open-air museums dating to the 1890s in Scandinavia, the vision has passed on to hundreds of others, mainly located elsewhere in Europe and in North America (Rentzhog 2007). A fine example is Skansen in Stockholm, Sweden (See Figure 2.15). It is one of the first of its kind and served as example to many others. Although these museums are about people in the past, their biggest hallmark is the original buildings which are usually relocated from other sites. It must be said, however, that although the sense of authenticity is significant much of the building materials, their surroundings and interior is not as original as when the buildings were still used. Just like at archaeological open-air museums, it is the stories which are important. Figure 2.14: The Ciutadella Iberica at Calafell, Catalonia is built on top of the original archaeological site. At the ethnographic open-air museums, phases similar to those in the history of archaeological open-air museums can be identified. After the phase of national identity lasting until the 1970s, Zipsane recognises a phase, focussing on tourism (Zipsane 2006, 4). Rentzhog (2007, 236-287) describes a next phase called living history.

Young (2006) describes the development of traditional open-air museums in Australia. She took nine case studies with each consisting of more than 25 buildings. 'Although "authentic" buildings constituted the initial rationale, the villages that are still in active development now tend, for a variety of reasons, to build re-creations' (Young, 2006, 326).

The problems she sees for the near future are the following (Young 2006, 334-335):

- 1. Moving old houses to a museum was nice in the 1970s, but nowadays the maintenance and insurance of these houses is a heavy load (see for example Baumeier & Wassmann 1995).
- 2. The museums lose volunteers a power they heavily depend upon for maintenance, interpretation and activation. The founders of these museums have usually failed to pass the torch to the next generations. Also, population around the museums has decreased due to urbanisation and prospective volunteers nowadays spend their volunteer time in another way.



Figure 2.15: The entrance area of Skansen in Stockholm, Sweden; the best known ethnographic museum in the world.

- 3. To gain government support, these villages must switch gear to conform to modern standards like applying new measures of public risk management. The museums' need to stimulate local economy has increased as well - a real chicken-egg situation: if the value for local economy grows, the local government is willing to support.
- 4. Amateur concepts which did well in the 1970s need to become more professional now, due to other expectations from the field of cultural heritage management as well as from the public. For example, public toilets and museum shops need to be of higher standard now than in the past in order to satisfy the visitors. Also, simply moving an old farm into the museum (or building a (re)construction), fixing it up with modern techniques is not good enough any more. The approach to heritage practice in these museums has developed to the extent that it 'needs academic training to implement' (Young 2006, 335).

Many of these problems are also emerging in archaeological open-air museums and are discussed later.

2.5.4 Natural Park or Cultural Landscape

Some of the early archaeological open-air museums were set in a landscape park, albeit in a Romanticist style. Setting the buildings in an environment which presents aspects of daily life from ancient periods such as the Neolithic is nowadays a trend, undertaken for example at Albersdorf in Germany (Kelm 2011, www.aoeza.de) (See Figure 2.16), although keeping the natural environment in prehistoric shape is usually very expensive (see for example H. Schmidt 2000, 174-175). This landscaping can lead to crossovers between archaeological openair museums and ecomuseums. The ecomuseum concept dates to the 1960s-70s. It is about maintaining 'buildings in original locations and community

Figure 2.16: The Archaeological-Ecological Centre at Albersdorf, Germany combines the natural and cultural landscape in an instructive way.



contexts, fulfilling continuing uses while open for the public' (Davis 1999, 58-61). Usually, the buildings have lost their original function and have become redundant in modern life, and are being presented now as a tourism spectacle. The museum sells experiences and is no longer producing artefacts. In the original setting, these museums were about the local rural community, with their active support (Howard 2002, 69). Where tourism has become more important than farming or local industrial activity these ecomuseums tend to develop mainly towards the benefit of tourists. Locals do not visit the ecomuseums any more that much, the museum having become alien to its region. Possibly the picture these museums represent is no longer relevant to the region and its population. Supporting regional economic growth often has become the main priority of these museums, rather than the presentation of a (recent) past in the landscape and community it belonged to.

For some museums green spaces and the landscape are important; for others however the land is just a space to put the buildings and to accommodate the flow of visitors. There are archaeological open-air museums, like Lofotr in Norway (www.lofotr.no), where the museum is embedded in a cultural landscape shaped over the centuries: it is not 'brought back' to depict one specific period, but reflects the long history of occupation, from the Stone Age to present times. A similar attempt is made at the Pfahlbaumuseum in Germany where around the museum, several 'time paths' are made with information about what happened when at that specific location. Setting the museum in its landscape, therefore, can take many shapes, from depicting the local area the way it could have been in the past at a specific time, to embedding the museum within its present day cultural landscape. Marketing wise, this is a smart move: increasingly, places are marketed for their entire network of attractions (Howard 2002, 64). Within this context both the natural and cultural landscape belong.

2.5.5 (Re)constructed Boat / Ship

In the same decade that Sagnlandet Lejre started (the 1960s), the famous Roskilde Fjord Viking ships were excavated in Denmark, attracting much attention and eventually leading to the construction of true scale models, not only for scientific reasons but also to bring people together (Crumlin-Pedersen, 1999). These activities have been pursued until the present day, exemplified by the sailing from Roskilde to Dublin of a replica boat, the Havhingsten, in 2007 (www.havhingsten.dk).

Several archaeological open-air museums also have (re)constructed boats or ships. These are usually not part of the standard presentation and are not always shown to or used by the public. They certainly are not part of the definition. When the Lofoten excavations revealed the largest building (83 metres) from the sixth century AD in Scandinavia (Stamso Munch 2003), the local municipality was interested in (re)constructing it. At first the crew built a (re)construction of a Viking ship, both to test the organisation and to see how much interest could be raised. At the Middelaldercentret in Denmark, several smaller boats / ships are (re)constructed and can be viewed in the medieval (re)constructed harbour. All in all it is an unlikely set of boats, but each of them is a valuable (re)construction, in terms both of money and of craftsmanship. Fotevikens Museum in Sweden



started with a group of underwater archaeologists excavating ships, then (re)constructing them and later moving on towards making an archaeological open-air museum. Some of these ships were on display at the Malmö Kogg Museum (See Figure 2.17). In most cases, the boats themselves are hard to replace and just as important as some of the (re)constructed houses. The world of (re)constructed wooden boats / ships is a world of its own, probably counting near to one thousand boats / ships, each of them with a crew of professionals / enthusiasts. This could be a study of its own and introductions are provided by Crumlin-Pedersen & Vinner (1986) and more recently by Bennett (2009), curiously enough both called 'Sailing into the Past'.

2.5.6 Living History Museum

Living history actors are a central element for many archaeological open-air museums. They demonstrate a view on the past, as at the Bachritterburg in Kanzach, Germany (See Figure 2.18). Demonstrations of any kind provide the connection between text books and reality, between knowledge learned by heart and knowledge gained by experience (Colomer 2002, van Noort 1998, Godal 2000). Kagel calls living history in open-air museums a 'didactic concept between interpretation and experiment' (Kagel 2011, 263).

Figure 2.17: A (re)constructed medieval cog like boat / ship at the Malmö Kogg Museum, Sweden.



Figure 2.18: Living history at the Bachritterbrug Kanzach in Germany.

The museums cannot easily use text plates, or recordings or high tech mobile transmitters. The information carriers must remain 'in tune' with the rest of the museum, so they need to use people. The so called living history actors are becoming more and more professional. The personal interactions with visitors are an undoubted attraction.

The public has a great influence on what is successful. It is not the most authentic items which sell best, or the most authentic crafts or activities which are rewarded most. Activities and products are not rewarded for their authenticity, but for the way they succeed in attracting the interest of the majority of the modern public and the image they had before arrival, 'der Schein der Geschichte oder der anderen Kultur ist für die Stämme der Maßstab, nicht die Authentizität' 'Klisschees haben Vorrang' [the appearance of history or the other culture is the level of measurement of the tribes, not authenticity][clichés have priority] (Faber 2008, 117). It all happens in the present and is inspired by the past. The past is not a touch stone, merely the major source of inspiration. The more people like something, the greater the chance that it will be presented over and over again.

An important impetus to life experiments and living history activities took place in Sweden in the 1920s with journalist Ernst Klein's intention to show primitive and Stone Age life to his readers and viewers. On the estate Rockelstad, two men were given a plot of land and the mission to live 'a Stone Age life' for a period of time, constructing huts, rafts, pottery and such in a seemingly idyllic and simple environment. Klein, with support from among others former national antiquarian O. Montelius, reported the project in the newspaper Aftontidningen, compiled a book (Klein 1920) and created a movie on the subject (http://video.historiska.se).

In the 1950s, living history and re-enactment were seen as new methods to interpret heritage (Tilden 1957, 3). There are, however, examples from the 1890s of the use of employees at the Skansen museum in Stockholm, dressing in (re)constructed period costume and presenting in either a first person or third person role (van Mil 1988). In the Stockholm case, the remains of a disappearing way of life were being presented; in the living history scenes of the 1950s and onwards, it was a reinvented past that was depicted and acted out (Petersson 2003, 241-246). The living history scene in European museums from the 1950s onwards was heavily inspired by examples from the United States (Kagel 2008, 13). Whilst archaeological open-air museums are most often about the Stone Age until the end of the European Middle Ages, living history actors mostly focus on the last five centuries, thus giving themselves the opportunity to rely more on historical sources: hence the name living history, rather than living archaeology or living past.

Living History has its limitations. An important sentiment many archaeologists supported was uttered by Ahrens when he said: 'die Rekonstruktion vergangenen Lebens erweist sich insofern als gefährlich, als sie nahezu zwangsläufig zur Verfälschung der Vergangenheit führt' [the reconstruction of past lives is dangerous in such that it almost inevitably leads to faking the past] (Ahrens 1991, 50).

Developments in the living history world move fast. Due to its informal character, there is no reliable estimate available on how many people are involved in living history groups across Europe. The scene started to emerge in the 1980s, exploded in the 1990s and is still growing rapidly. It has links to the Fantasy World, to Live Action Role Play (LARP) but also to serious groups of history or archaeology enthusiasts and professionals Andraschko 2008, 37). 'Living history is an extremely fluid and ephemeral phenomenon' (Goodacre & Baldwin 2002, 200). Several colleagues suggest that living history in museums should not be executed by hobby volunteers, but preferably by professionals (for example Sturm & Beyer 2008, 157).

Live interpretation, as supported by the International Museum Theatre Alliance (www.imtal-europe.org), is a step forward to professionalism in living history museum presentations. An important detail is about the different types of roles or interpretation an actor can perform. There is so called first person interpretation and third person interpretation (Tilden 1957, www.imtaleurope.org). If a person acts in first person interpretation, he or she will pretend to impersonate a character of the past, not knowing modern utensils like, for example, a phone. He or she will say I am...' instead of 'in the Viking Age, people would'. An actor can also step out of his or her character and use third person interpretation, stating 'they did...' instead of 'we do'. In archaeological open-air museums, actors are often in period type costume and use third person interpretation, or a combination of first and third person interpretation.



Figure 2.19: At the Museumsdorf Düppel in Berlin, Germany they have long experience in breeding a medieval type of pig, the Düppeler Weideschwein.

Using living history actors is a successful approach but the people remain actors. Some of them are very well informed about 'their' past, others are not. For an uninformed outsider, like the majority of the public, it is impossible to distinguish the difference. Both the actors and the archaeological open-air museums carry a responsibility in these public encounters. One of the major problems of living history is that it is hard to make clear that although a past is being presented, it is not the exact past as it has been (Sturm 2011, 49). Living history can work well if the following three ideas are taken into account (Meiners 2008, 172-173):

- 1. Using competent people;
- 2. Using education programmes which encourage questioning of what is historical truth;
- Verification of role plays which help to value the collected and decontextualised world of objects and do not merely use it as a room of props or illustrational backdrop.

Living history actors play interactively with the public. This offers a lot of freedom for the actors and gives them responsibility. If they were to perform a theatre play instead, following a carefully checked static script, there would more control, but less interaction with the public.

2.5.7 Animal Farm

Archaeological open-air museums are not just about the position of people in ancient periods within their environment. The term 'life' is important, whether you talk about living plants, crops and trees, animals or even 'living history'. A good example is Museumsdorf Düppel in Berlin (www.dueppel.de). For many children these places are attractive as they have so much life and so much variety. Using this is a way to get in contact with your visitors, to help transfer the story behind the product.



The relationship between animals and people in the past is lost to a modern city dweller. Animals are part of the archaeological open-air museum experience and serve as a petting zoo-like attraction. When well-handled they become an effective way of encouraging the visitor to see this human-animal interaction: daily care routines, for example, or where the animals are kept at different times of year, or hunting and trapping strategies for wild animals. Visitors first see a goat or a sheep, but when they leave, they might see it as a prehistoric kind of animal instead of just a pet, like, for example, at the Museumsdorf Düppel (See Figure 2.19).

Figure 2.20: A past which never was, fairy-tale building at Theme Park Efteling in the Netherlands.

2.5.8 Theme Park

Some people group archaeological open-air museums with theme parks. These latter are commercial enterprises which attempt to create an atmosphere of another place and time (Kemperman 2000, 14). They are 'extreme examples of capital intensive, highly developed, user-oriented, man-modified, recreational environments' (Pearce 1988, 60) which have little to do with archaeological open-air museums. However, as archaeological open-air museums earn most of their own income, and are in no way protected for 'bad years', commerce was introduced (See Section 4.8). In some cases, the restaurant department or the facilities for a party in the (re)constructed buildings have become so essential, that the respective museums cannot survive without them.

Carnivals, circuses and fairs developed into amusement parks which, in their turn, developed into theme parks like, for example, the Efteling in the Netherlands (See Figure 2.20). Characteristically, theme parks offer a mixture of entertainment, rides, games and tests of skills, combined with an outdoor garden for drinking (Pearce 1988). More recently, some theme parks have added a source of historical or cultural content to their attractions, such as the presentation about Greece in Europapark Rust in Germany, with over 4 million visitors in 2008 (http://presse.europapark.de/standardseiten/aktuelle-nachricht/ datum/2011/04/07/der-europa-park-in-stichworten-1/). In the Europapark, 13 European countries are represented in a popular setting using what visitors may perceive as characteristic or authentic details of each country. The Greek presentation, built in 2000, offers among others a wild water tour 'Poseidon' going through the façade of a Greek temple (Ohnemus 2009). A wooden roller coaster themed with Iceland is planned to open in 2012. 'Unlike exhibits in an open-air museum the historical objects presented in Europapark are lacking in context. As decontextualised bits and pieces they are deprived of their sociocultural and historical framework and serve instead as markers of authenticity adding to the atmosphere' (Schlehe & Uike-Bromann 2010, 61).

Another example of adding some historical content is the Viking presentation at Puy du Fou in France (See D'Arvor 2008, 96-99). This way, these theme parks approach more closely towards archaeological open-air museums. However, the latter usually have a clearer connection with the local past and are less linked to generalised images of the Vikings, the Romans or similar broad notions. The line between the imagined past in an archaeological open-air museum and the past presented in a theme park is very clear at the extreme ends of the scale, but can become blurred. It can be an interesting debate to see how something which started as a scientific project later turned into a theme park, or vice versa, but this is not the place for that. The agenda shifts through time. Museum or theme park, a site benefits most from an honest representation.

2.6 Conclusions

We have seen in this chapter what archaeological open-air museums are and how they are rooted in history. Different themes were significant in different eras but did not disappear later. For example, the sense of Nationalism which developed from Romanticism continues to play a role up to a point, for example at Castel Henllys in Wales. Education, science and experiment and tourism are often important in many present day archaeological open-air museums. These museums frequently borrow elements from other heritage interpretation centres and similar institutions, but still maintain their own character.

An archaeological open-air museum is defined as a non-profit permanent institution with outdoor true to scale architectural reconstructions based primarily on archaeological sources. It holds collections of intangible heritage resources and provides an interpretation of how people lived and acted in the past; this is accomplished according to sound scientific methods for the purposes of education, study and enjoyment of its visitors (www.exarc.net).

Methods and Sources

3.1 Introduction

This chapter discusses the research methodology. First, the hypothesis is detailed, followed by specific research questions (See Section 3.2. to 3.4.). Issues in data collection and broad scale observations are described in section 3.5 and 3.6. The approach to the case studies, their management and visitors are discussed in section 3.7 to 3.9. The chapter ends with a debate on the gaps in quality, a concept used to detect weaker areas in the museums. All the museums are doing many things well, or they would not still be in business. As with their strengths, it is possible to identify weaker areas.

Quality is subjective and a fluid concept. The intention was to combine the management perspective with the visitor's notion of quality. There are different perceptions possible, but these two crucial ones were selected. It might be that many of the issues derived from the management perspective are not experienced directly by the visitor, but are indeed important for creating a good visitor experience. Striving for quality in museums depends on who does it and what goals need to be achieved. Educative and scientific goals require a different approach from one which aims to satisfy tourist visitors.

3.2 Deriving Precise Questions

In his introduction on quality at heritage visitor attractions in general, Johns (2004, 131) distinguishes quality provided by planners, managers and front-line staff as a separate entity from quality experienced by visitors. These two notions of quality are the keystones to this research. The relational hypothesis of this research is: there are gaps between the quality visitors perceive in archaeological open-air museums and the quality the museum management offers. These gaps are described in section 3.11. The quality of an archaeological open-air museum is in the eye of the beholder. It can be seen as inward, organisational quality, and outward quality towards the interested parties (Manneby et al. 2002). These approaches are described in chapters Five to Seven.

What message do the museum managers consider important to transfer to the public, and what do they consciously exclude? An archaeological open-air museum is a holistic entity, a mix of:

- explicit aims, clearly stated in plans and reports, for example (re)construction science and education (described by for example Ahrens 1990 and Anderson 1984)
- implicit motives picked up from the daily routine when running a museum, for example (re)construction as cultural identity, as a wish to play or as commercial interest (Petersson 1999, 142-143).

During the short period in which field data were gathered (2008-2011), it proved impossible to monitor the museums other than by comparing the collected data with the information from the literature study. Therefore it was impossible to see a difference in success between the long and short term. The museums did not have any data available for previous years, at least none comparable to their own situation, or to that of others in the group. The only exception for the eight case studies was an article about visitor survey details from the Pfahlbaumuseum of a decade before.

The number of case studies was too small to compare successful museums in different stages of their existence. It would have been interesting to compare starting up museums with those already active for a while and those in the declining phase. One of the issues making this complicated is that it is very hard to find archaeological open-air museums in these phases across Europe similar enough in other ways to be comparable.

3.3 Critical Incident Analysis

One method to find out more about how well an archaeological open-air museum functions is by looking into incidents. One can use guest books or compliment cards to collect incident descriptions. Although many incident reports will describe negative experiences, this does not mean more people are extremely dissatisfied than satisfied. Some so called satisfiers like for example hygiene, will not trigger a response, although people will be satisfied. It will first trigger a reaction when things are not in order.

The biggest issue is the role of museum staff in collecting and analysing incident reports. A simple matrix for analysing critic incidents was made by Lockwood involving the placing of incidents in one of four boxes (1994, 78) (See Figure 3.01). In this self-reflective system, the glass can be half full or half empty, depending on who analyses the incidents. It is more of anecdotal value than it is statistically valid. If one can place these responses into a representative context, Critical Incident Analysis can offer a very easy and straightforward method of improving (Johns 2004, 131). It is easy to tip the scales either way. Staff are often unwilling to share details or conclusions, not even within their own organisation.

	Potential for compliments		
Potential for complaints	Neutral	Satisfiers	
	Dissatisfiers	Critical factors	

Figure 3.01: Matrix for analysing critical incidents Lockwood (1994, 78).
3.4 Setting Research Parameters

The population under research in this study are archaeological open-air museums in Europe, having been in existence between 2008 and 2011 or a part of this period. The term Europe is defined in this study as the countries recognised as such by the United Nations in 2007 and geographically part of the European continent. Areas of countries only partly in the European continent are excluded, like the Asian part of Russia and the overseas areas of France and the Netherlands. Those countries are: Albania; Andorra; Armenia; Austria; Azerbaijan; Belarus; Belgium; Bosnia and Herzegovina; Bulgaria; Croatia; Cyprus; Czech Republic; Denmark; Estonia; Finland; France; Georgia; Germany; Greece; Hungary; Iceland; Ireland; Italy; Kazakhstan; Latvia; Liechtenstein; Lithuania; Luxembourg; Republic of Macedonia; Malta; Moldova; Monaco; Montenegro; the Netherlands; Norway; Poland; Portugal; Romania; Russia; San Marino; Serbia; Slovakia; Slovenia; Spain; Sweden; Switzerland; Turkey; Ukraine; United Kingdom and Vatican City. Cyprus is entirely in West Asia, but considered European for cultural, political and historical reasons.

Europe is home to many archaeological open-air museums. Looking worldwide would bring in a lot more challenges. For example, the question as to whose past is presented would bring up entirely different sentiments in North America than it would in Europe (see for example Olmert et al. 1998, 106 on presenting Native Americans and colonists at Colonial Williamsburg). Reducing the area to Northern Europe and the British Isles would have left out too many other museums in countries like Germany and France (See Figure 4.09).

3.5 Data Collection

3.5.1 Parameters and Practicalities

A database of archaeological open-air museums was set up as early as 2001, as a foundation for an online presentation of many of the European archaeological open-air museums (www.exarc.net). In 2007 it was made fit for the purpose of this study, and was expanded in a more structured manner. As seen in the literature overview in Chapter Two, the sources of information on archaeological open-air museums are very diverse. The most important kinds of collectable sources in this study are irregular publications, internet websites and so called grey literature, whose circulation is often limited in time and geographic spread.

3.5.2 Language and Definitions

Archaeological open-air museums are not part of a well-defined category (See Chapter Two) and therefore cannot be listed that easily. The museums often use only their own language. This is to be expected, since most of them only serve visitors in their own language area. Important languages like English, German, Dutch and Danish were mastered up to a sufficient level, with moderate knowledge of French and Polish existent. When knowing what words to aim for, internet and literature searches become much more successful, and one often led to another. Also, many colleagues helped by sending in references, links and hear-say which were then followed up. The language issues led to the structuring of a terminology which is presented in Appendix A.

3.5.3 Publications

In 1994, a bibliography on experimental archaeology was published (Devermann & Fansa 1994) with 2,078 entries. In 2000 this was turned by the present author into an online database, which by 2011 had extended to include more than 9,800 titles (www.exarc.net). This bibliography, the main source of references at the start of the present research, holds 1,012 bibliographical entries on archaeological open-air museums of which 31% are in German and 27% in English. Other languages are represented by less than 10%. Of all this, 73% are articles, published scattered in journals or edited volumes; 25% are books, usually museum guide books. There are hardly any monographs. Only a few archaeological open-air museum employees write articles; most are published by (outsider) archaeologists. When employees publish, they often satisfy more general reader groups by means of newspaper articles or a good and colourfully designed museum guide book, as opposed to an article in, for example, the *Journal of Archaeological Science*. Not every audience of these museums is best approached through conventional literature.

3.5.4 The Internet

Internet search engines, especially Google, were a rich source of information. Other useful sources were archaeological portal sites like www.archaeologie-online.de and www.archaeoforum.de for Germany, or www.archaeogate.org for Italy. Also, sites like www.youtube.com, www.twitter.com and www.facebook.com were searched.

However, internet penetration differs heavily across Europe. The percentage of the population having internet access in Sweden in 2011 is for example 92.9% (www.internetworldstats.com), whilst in Greece only 46.9% of all people have internet access. This relates to the need for visibility on the internet for archaeological open-air museums, and the importance they themselves place on this means of communication as addressed in section 7.4.

In the present research, many references to websites are included as much of this information is not presented in any other way. Obviously websites can change and information might be partly irretrievable in years to come. A list of all websites referred to is given in the bibliography, including the date when information was retrieved.

3.5.5 Grey Literature

Important sources of information in these studies are the grey literature. This include leaflets, postcards, brochures, popular articles in magazines, newspaper articles, workshop material, written material for use with school groups, themed leaflets on the use of specific techniques and e-mail newsletters. The collection counted 1,921 pieces by November 2011. Not only does grey literature, by its

existence, witness that certain archaeological open-air museums exist, making it again easier to trace them, it also shows the characteristics of these museums and how they address their target groups.

Leaflets and brochures are either produced in a small circulation (for a specialised interest group) or at a very large scale but circulated within a small region near the museums. Their reach is therefore limited. Although they form part of the marketing toolbox, brochures generate little return in visits. In the United Kingdom, for example, brochures result in a 90% wastage rate (Hodgson 1993).

3.6 Broad Scale Observations

Following the basic data collection and literature search, blank spots were identified in the information; it was important to collect information broadly to cover the large variety between the museums. The best way to solve the blank spots was to request information straight from the museums themselves. This was the start of the broad scale observations. Although not secret at all, a lot of information is not in the public domain and some museums are more open than others with information such as visitor totals, for example. Besides that, many museums only publish information in their own language, making it less accessible for foreign research.

A simple survey was designed and when this was successful, it was followed up by a second and longer survey. The data collection took several years.

The idea of sending out the first survey in winter time was based on the assumption that even if staff numbers are very limited off season, people would respond better than they would during the high season. This happened to be a wrong estimation; archaeological open-air museums have a larger staff in summer time and a smaller one in winter time, but the general consensus is that they are permanently understaffed. Experience showed that a combination of different approaches gave the best result. For example, in some cases the months just before and after the summer holidays are very busy because many school groups have their yearly outings then, so by that time staff are much too busy to answer surveys and one should instead try during the summer holidays themselves. However, museums which are heavily dependent on tourists will have no time at all during the summer holiday season, and more time just before or after.

The analysis of the simple series of fifteen questions in Chapter Four, together with the literature overview presented in Chapter Two, gives a detailed overview on what these museums are like. In the analysis a comparison is made between subjects like the founding date of the museums, their location in Europe and the periods they display. Visitor numbers are compared, as well as types of governance, the role of the EU, and archaeology. The simple fifteen questions lead to a good overview of archaeological open-air museums, a starting point for looking in more depth at a smaller group.

3.7 Focussing to a Smaller Scale: Case Studies

As it was impossible to collect a lot of details from 50, 100 or all archaeological open-air museums in Europe, it was decided to concentrate the research at a smaller scale, with a number of detailed case studies. These high resolution snapshots of a small series of museums would then be presented against the background of the previously collected information.

In order to get a better understanding of archaeological open-air museums the idea emerged to look at the case studies from the perspective of the management on the one hand, and that of the visitors on the other. Archaeological open-air museums are successful if they please their visitors as well as fulfilling their aims. It is not just about being popular, but about a sense of purpose as well.

3.7.1 Selection of the Sample Museums, Structure & Size of the Sample

What was needed was a selection of museums fitting the definition of an archaeological open-air museum but - knowing how diversified that population is - they should not be too similar.

Over 2007, a list of variables for selecting the case studies was designed (See Figure 3.02), many of these are described in detail in Chapters Five to Eight. It was difficult to estimate what number of museums would be sufficient, but six to ten was considered to be on the safe side and fifteen way too many with no chance to focus on details. With six to ten museums, there would be no problem if insufficient data would be available here and there. This indeed was the case with the tourist survey (See Chapter Seven).

Some of the apparently significant variables are:	Insignificant variables seemed to be if the site also consisted of (See Chapter Two):
Sponsorship	A site museum
Location of the site: accessibility to residents or holiday makers; town or countryside	A traditional (indoor, showcase) museum
Theme: (pre)historic period, archaeology and history et cetera	A traditional (ethnographic) open-air museum (Skansen)
Focus of the interpretation, geographic framework: region, country et cetera	
Nature of the public	
Size of the visitor area of the museum	
Interpretative elements: the presence of an indoor exhibition, audio guide, staff and such. It needs to be stressed that not all visitors use all of these facilities	
Staff, their role and availability: selling tickets, being in the shop or restaurant, giving factual information for example through an interpretive role	

Figure 3.02: Variables for selecting the eight case studies as listed in 2007.

The museums were required to fit some extra criteria, apart from the definition in Chapter Two. They should have (as selected from Underwood 2002):

 A clear purpose and a planned approach to management. This is usually demonstrated in a forward plan or at least by the existence of a statement of purpose and key aims.

- Public services appropriate to the nature, scale and location of the museum.
- An acceptable financial basis and compliance with all relevant legal, planning and safety requirements.

More criteria (as selected from Gómez Ryan 2002) are that they should, by the time of selection in 2008:

- Have been open to the public for at least 2 years;
- Be substantially open to the public (at least 1,000 hours a year) (Parco Montale was open less, see Figure 6.05);
- Have an appropriate annual operating budget of at least EUR 20,000.

When the criteria were set by the end of 2007, a project by the name of *live*ARCH, funded under the EU CULTURE programme, was well on its way (www.projects.exarc.net/eu-projects/livearch-culture-2000). The selection of participants and the project application were supervised by the author of this research who also took part in the coordination.

In Figure 3.03 several selection descriptives are summarised. The museums themselves defined whether they were in a tourist area or not, as well as whether they were in a city or countryside. For example, the Matrica Museum is considered to be part of the Budapest region, but economically and touristically, they are completely dependent on the local municipality and have hardly any ties with the capital. As regarding the size of the museum, this refers to the number of visitors and not to the area museum visitors can use. The smaller museums have less than 30,000 visitors per year, the larger ones in the list over 125,000. Regarding age, the older ones date to before 1985; the one considered young opened its doors in 2004. References to north, east et cetera refer to the area in Europe, while government or private refers to the organisational structure of each museum.

All museums were visited within the two years prior to *live*ARCH, except for Lofotr which was visited three times in 2008. These visits were made to provide the context of the actual research. *Live*ARCH ran from 2006 until 2009 (Paardekooper 2010b) and included work on themes important to archaeological open-air museums, like the dialogue with visitors, the dialogue with skills and improving museum management. The total budget was 1.4 million Euro. All in

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum
More Tourist (T) / More Education (E) Visits	Т	Т	Т	Т	E	E	E	E
Foreign tourists (Yes / No)	Y	Y	Y	Y	Ν	Ν	Ν	Y
Tourist area (Yes / No)	Ν	Y	Y	Y	Ν	Ν	Ν	Ν
City (C) / Countryside (S)	S	С	С	S	S	S	С	С
Small (S) / Medium (M) / Large (L)	S	М	L	М	S	S	S	М
Old (O) / Medium (M) / Young (Y)	м	0	0	М	Y	м	М	М
North (N) / East (E) / South (S) / West (W) / Middle (M)	W	W	М	Ν	S	Е	Е	Ν
Government (G) / Private (P)	Р	Ρ	Р	G	G	Р	G	Р
English speaking manager and staff (Yes / No)	Y	Y	Y	Y	Y	Y	Y	Y

Figure 3.03: Selection descriptives for the eight case studies. all, the eight partners of *live*ARCH prove to be a good selection of case studies, fitting well with the variables for selection: the most practical consideration of all was that they were willing to cooperate.

The *live*ARCH group consisted of the following museums (See Chapter Five):

- The Scottish Crannog Centre, Scotland, here referred to as the Scottish Crannog Centre
- Historisch OpenluchtMuseum Eindhoven, The Netherlands, Since 2012 Eindhoven Museum, here referred to as HOME
- Pfahlbaumuseum Unteruhldingen, Germany, here referred to as the Pfahlbaumuseum
- Lofotr Vikingmuseet, Norway, here referred to as Lofotr
- Parco Archeologico e Museo all'aperto della Terramara di Montale, Italy, here referred to as Parco Montale
- Āraišu Ezerpils Fonds, Latvia, here referred to as Araisi
- Matrica Múzeum and Régészeti Park, Hungary, here referred to as the Matrica Museum
- Fotevikens Museum, Sweden, here referred to as Fotevikens Museum

3.7.2 Collection of Data from Aims and as experienced

The aims of a museum are one thing, but one of the questions to be answered was whether these written aims are put into practice? That is why this was not just a desk study collecting data from the management of the case studies, but also investigating the visitors and their opinions. All case study museums were visited during the high season in 2008, the same season during which visitor data and management data were collected. This way, the theoretical aims could be put into perspective. A particular tool for looking into the discrepancy between management and visitors' objectives is described in section 3.8., when the gaps in quality are discussed.

3.7.3 Measurement of the Quality provided by the Museum Management for the Case Studies

3.7.3.1 Parameters and Practicalities

An assessment was developed for use in the archaeological open-air museums, with the help of which information was collected in a very structured manner. The performance of each of the eight museums was compared with that of similar museums. SWOT is a simple but old tool for internal analysis, but there are alternatives which were applied here (Augustine 1998, 175-177). The quality provided is subjective and hard to measure. What can however be measured are products and processes. The following step - problem analysis and planning improvements - goes beyond the scope of this work.

The assessment was planned so that the management of the archaeological open-air museum would be able to execute it by themselves. The estimated time input depended highly on their degree of organisation. In one case it took a single morning to answer all questions by interview; in another case it took the manager and her staff several days. This reflected the style of management in each museum. The assessment is just a snapshot image of the organisation. The assessment was made using a scheme, based on other accreditation strategy reports for museums, like for example the one designed by the International Committee for Regional Museums (ICR), a subcommittee of ICOM (Manneby et al. 2002). This characterisation is based upon the system of museum assessment by the American Association of Museums with 11 sections (AAM) (Hart & Merrit 2005, Gómez Ryan 2002) as well as the systems of museum registration in the UK (Underwood 2002) and the Netherlands (Lestraden 2002). Manneby et al. uses a system of six categories:

- 1. Museum Management
- 2. Collections
- 3. Presentation
- 4. Education / Communication
- 5. Visitor Service
- 6. Evaluation, PR and Marketing

It is focussed on evaluation and improvement of the quality of performance. The characterisation of the museums is not meant to be used as a way to create an elite (to determine who is in and who is out). Setting a threshold would be a kind of accreditation, when what is intended here is a mere assessment (Lestraden 2002). After going through the strategies by ICOM and the AAM, other key literature was used in order to create a strategy best fitting the situation of the museums under research (for example Andrian 2007, Izquierda et al. 2005, Kimmel & Schwarzmann 2006a and b).

Another source of inspiration as regards quality assessment of archaeological open-air museums was the Danish system called DTA Danske Turist Attraktioner (www.turistattraktion.dk). This system existed during the years 2004-2011, and was meant for Danish tourist attractions, benchmarking them by using measurable values. It is very well designed, and the value for the public is very high (Wistoft 2006, 4-5). An example is given in Figure 3.04.

The characterisation of archaeological open-air museums gives a good picture of the individual museums, with an analysis of strong and weak points. Making the museums comparable was the goal; standardisation would have been impossible. For reasons of easier comparison, the Management Survey was in English only.

Parameter F9 - keeping	g the site clean
Fits all types of attracti Base for judgement: ok More detailed judgeme	ons. Question to answer: do the facilities appear to be kept clean? oservation (including visitor surveys if such results are available for this theme) ent: relation with the number of guests, weather and time of year.
5 points level	All facilities appear to be very clean and regularly cleaned throughout the day. Cleaning is done as needed throughout the day. A very high user satisfaction with the facilities can be documented.
4 points level	All facilities appear to be well maintained, clean and cleaned throughout the day. Cleaning is done as needed throughout the day. A high user satisfaction with the facilities might be documented.
3 points level	The cleanliness is generally excellent, but the cleaning is done only once a day and in some places there may be variable in quality over the day.
2 points level	The sanitation is a little volatile. There are several examples of lack of cleanliness.
1 point level	The cleanliness is very volatile. There are many examples of failure of cleaning.
0 points level	Poor sanitation and inadequate cleaning.

Figure 3.04: Example of listing of points for Danish Tourist Attractions (Danske Turist Attraktioner 2007, 34).

3.7.3.2 Management and Finances

The Management Survey started with an introductory administrative approach. This basic information was needed as an introduction. Knowing the organisation infrastructure, for example, makes it easier to understand why certain departments in a museum function the way they do. Data collected included the official address, a summary description of the museum, its history and any significant issues of the past five years, and a description of the museum along with a basic bibliography.

Another paragraph was about the visitor profile from the manager's point of view; this asked, for example, about the number of visitors on a peak day or the geographical area of influence.

Although very open, the museum management was less willing to discuss finances. Even if in many cases this information is not top secret, as the respective museums are part of the government, the management was reluctant to make such information available at first request. Questions therefore had to remain general, or only indirectly about money, like for example: 'does the museum draw up accounts and yearly budgets' instead of the more revealing question: 'could you please give me your latest account?' A standard overview of income was given, based on a three-way division (See Figure 6.10):

- 1. to obtain public money (source 1)
- 2. activities to generate income (source 2)
- 3. other income sources (source 3).

When the management listed their financial priorities they gave a particularly good insight into their organisation.

An attempt was made to find out if the museums had business plans followed by action plans fit for daily use. Questions were asked on planning strategies for short or long term objectives. Information on the quantity of staff compared to the number of visitors was expected to highlight many differences between the eight museums (See Figure 6.11).

3.7.3.3 Staff

According to Lohr (1999, 65), the quality of a museum can be improved by supporting professional work and by training of museum staff. Therefore, one of the markers of a quality archaeological open-air museum is to what extent professional work is supported by umbrella organisations, and to what extent staff have actually recently received training. Chapters Two and Three of the Management Survey are about Management and Finances. In the survey section 2.1., on staff management, questions are asked about how management recruits new staff as well as how they train them.

3.7.3.4 Collections

Chapter Four of the Management Survey contained all points relating to the museum collections. In most museums, the collections are the heart of the museum. In matters of collection, archaeological open-air museums differ from traditional ones. Therefore, questions regarding the collections were mainly about the kind of information derived from the (re)constructions and copies of artefacts, along with the accessibility and documentation of this information,

and what policies existed for expanding the information through research and such. This point is being stressed by EXARC, as this so called intangible heritage is one of the decisive marks of an archaeological open-air museum, and fits with the international ICOM museum definition.

The collection of intangible heritage takes the shape of structured stories told at the archaeological open-air museums, providing an 'interpretation of how people lived and acted with reference to a specific context of time and place' (www.exarc.net). This way of looking at collections builds directly on ideas intangible cultural heritage (www.unesco.org/culture/ich/) (See Section 2.2). The eight museums under research, although mostly in favour of this new approach, chose to describe their collections as the technical (reconstructed) equipment they possessed, the logistics, library, archive et cetera. Questions were asked about the collections registration, as well as for what practical purposes they kept documentation (See Figures 6.14).

Buildings in an archaeological open-air museum can be divided by function, into public facilities and non-public facilities. The public access buildings are usually made in the style of the period they depict. Questions regarding the buildings had to do with authenticity, their documentation and who actually had planned and built them (See Figure 6.13). Although in popular phrasing, experimental archaeology is often mentioned, between colleagues this is less the case. One specific question was: 'what are your houses based on?' - followed by a chart with the options listed (See Figure 3.05). This, and further questions about the (re)constructions were asked in order to estimate the potential scientific value of the houses, as well as to access the knowledge of the management. Other questions regarding the buildings were about what kinds of plans were available: a maintenance plan, an accessibility plan, a security plan. Other questions again addressed health and safety measures. One specific question asked whether the period houses were furnished or not. At this point it was expected that with the eight museums under research, a diverse collection of responses would be obtained (See Figure 6.16). This subject is further discussed in section 6.3.4. which describes the Collections.

All questions about the collections were actually designed to determine the link between the museums and science; in this respect it was equally important to see how active museum staff themselves were in the scientific arena, for example by publishing (See Figures 6.17).

3.7.3.5 Marketing

PR and marketing are communication and publicity tools for the museum, to make their existence known and to provide sufficient information so that their visitors expect a positive experience. An important issue for some museums is that they might organise a good event for some years, but not enough visitors find their way to it. This is where PR steps in. PR tools are for example flyers

What are your houses / structures based on?

	Archagological ouidance form a single site for overy single structure
-	Archaeological evidence form a single site for every single structure
-	Archaeological evidence from several sites, even for a single structure
-	Archaeological 'type of structure' / archaeological 'tradition'
_	Historical information

Figure 3.05: Sample question in section 4.3.2. of the Management Survey, about the (re)constructed houses and structures. and leaflets, but the museums' own websites as well. Questions about using social media like Twitter (existing since 2006) and Facebook (since 2004) were not included.

In the EU project *live*ARCH, to which all eight museums belonged, the Norwegian museum Lofotr had designed a marketing plan format for use in all eight museums. Thanks to this approach, simple but comparable marketing plans about 2008 were available for the present research (See Section 6.3.5.).

During the visit in 2008, each museum's marketing material for that specific year was collected. This could be compared with their previous material, as far as it was available, as well as with that of other museums. Visitors' remarks about this material could be more easily understood when having the material at hand.

3.7.3.6 Interpretation

'The main goal of museums has always been to explore, understand and learn' (Žmuc 2002, 95). Within the field of education and communication, questions were asked as to the balance between mission statement and the museum's setting, as well as about the tools used for both communication and education. For this research however, these questions were hardly processed, as the research focussed on tourist visitors rather than on formal education groups; they could however be usefully developed as part of further research.

Presentation and Interpretation, theme of Chapter Six in the Management Survey, are very broad concepts usually explained very differently. However, a museum not presenting its collections and its stories has little value. Therefore, this theme was given much attention in this research. No attention was paid as to what was presented because it would not be possible to claim either right or wrong, given the different contexts of authenticity in different countries, and the present state of research et cetera. Instead, research was focussed on how exactly things were presented: to look at how is more easily comparable than to look at what.

The questions on interpretation were divided into content, exhibition design, logistics, interpretation (general), tools, live interpretation and interpretation training. An important feature was expected to be if and how the eight museums relate the story they bring to their visitors to the original archaeological artefacts (See Figure 6.19).

One question was about what types of living history the museum would apply:

- Battle
- Lifestyle / crafts (including cookery)
- Music / dance / drama
- As background (living in the museum)
- Or other

How often a museum used a particular method was also asked. By teasing out how far each museum applied these very different types of living history, and how often, it would be possible to discern how much they depend on each type for their presentation. Although the methods of museum interpretation as brought to the public might differ a lot, the basic activities or demonstrations were expected to be manifold but roughly the same (See Figure 6.20); see for example at Banghard: 'keiner war gezwungen, besonders viel Phantasie aufzubringen, die Besucher strömen auch beim ewig gleichen Speerschleudern und Brotbacken' [nobody was forced to bring up much fantasy, visitors pour in even with the eternally similar throwing spears and baking bread] (Banghard 2002, 213).

The question was asked whether the museums use, along with their own staff, any other specialists, students or volunteers; but deeper research into this - especially into the use of volunteers and living history groups - could bring new perspectives to these sites.

There is a change in how donors and volunteers become involved, and stay involved, in museums. Donors want to see for themselves where the money goes, and not simply 'write a check and call it a day' (www.arts.state.tx.us/toolkit/ leadershiptransitions/trendwatch.asp). The new generation of volunteers are harder to retain. Volunteer work has become increasingly a calculated choice; besides the benefits for the museum, they want to know what they can get out of it: develop a skill, get some experience, meet people et cetera. Also, the percentage of volunteers among teenagers is much higher than among adults (www.arts.state.tx.us/toolkit/leadershiptransitions/trendwatch.asp).

3.7.3.7 Visitor Service

Visitor Service is nothing unique for archaeological open-air museums. It concerns aspects such as whether people have been able to find the museum easily, whether there are enough toilets et cetera. The public has become more demanding in these matters. Because visitor service is an issue also for restaurants, hotels and such, advice is widely available. If the services are good, visitors will be able to digest the information and experience in a museum much better. The ICR guide book offered a very good structure on how to investigate this subject in the eight museums (Prasch 2002, 100-106, 119-121).

The visitor service chapter of the Management Survey was one list with 34 questions. These were arranged in the same chronological order as a visit. Beginning with before the visit (signs, advertising material, website), the questions continued with what would happen during the stay (guiding system, routing, playgrounds, toilets) and finish with leaving the museum (shop, alternative and additional offerings).

It was expected that the eight museums would do well in bringing the museum to people's minds and helping them to find the way to the museum, as far as this was in the hands of the museum management itself (See Figure 3.06).

Questions regarding the visitor service during the visit focussed on whether or not information was clear, if facilities were easy to find and use, if there were enough places to relax and recreate and of what quality these places were; finally questions were asked about the multilingualism of the staff and of written information. 7.1.1. Bringing to peoples mind
Do you cooperate regularly with tourist information centres, schools, shops, restaurants, hotels and travel agencies?
Do you post your special events in public places?
7.1.2. Helping to find the way to the museum
Is your museum shown and marked in city or area maps?
Do you have parking places nearby? How large a percentage of visitors arrives by car / coach?
Is your museum on walking distance from public transport (bus stop, train station, subway)?
Is it easy to find the museum from the bus stop / station?
7.1.3. Giving the visitors the feeling of being welcome

Is your staff trained to be friendly and communicative? Are you offering a welcome gift (nice leaflet or magazine for example)? Do you give an overview on all existing facilities at first sight (clear logistics)? Figure 3.06: The questions of the Management Survey about the visitor service from the section 'before the visit'.

Visitors like to take something home, as a memento of their experience. For this purpose, questions were asked about the museum shop. It was also relevant to see how the museums under research tried to learn about their visitors. Discussion on what museums in this sense offer is described in paragraph 6.3.7.3., what the visitors think of it at paragraph 7.6.1.7.

3.7.3.8 The Final Part of the Assessment

The final part of the assessment started with a section on evaluation. This comprised an inner evaluation, an outer evaluation and finally a comparative evaluation. One question was, for example: 'is there a procedure for customer feedback:

- Where you can deliver a complaint (or praise)
- How to handle these
- Can and do you get back to customers about it?'

Example literature about this subject is by Birnkraut, unfortunately only available in German but very to the point; inner and outer evaluation in cultural circles is explained, with examples from four different European countries (Birnkraut 2011).

The SWOT was, on purpose, kept general in perspective and not adjusted to archaeological open-air museums as this would bias the results.

At the very end, the staff of the museum could share their pieces of advice with others, their recommendations and pitfalls. This option was hardly used, as most comments had already been mentioned earlier.

3.7.4 Measurement of the Quality experienced by Museum Visitors for the Case Studies

3.7.4.1 Parameters and Practicalities

Besides defining the quality as provided by archaeological open-air museum management, research was undertaken into the quality as experienced by the visitors. The results can only be described in subjective terms, as for example the expectations with which visitors arrive are different from person to person, and are based on perceptions, not merely on facts (Johns & Tyas 1997). For devising the research into visitor experience, examples were taken, both in content and strategy, from preceding research into visitor museums in general (for example Andrian 2007, Countryside Commission 1978, Masriera i Esquerra 2007). The

research took the shape of general tourist surveys as described, for example, in Reussners strategies for public research in museums (Reussner 2010). A prerequisite was that the eight museums were able to use the visitor survey designed for this research as part of, or instead of, their own 2008 visitor survey. Therefore, many of the questions were derived from their standard survey, which some of them had been running in the previous years. A new element was questions where visitors could rate elements of their visit. Filling out the survey typically took no longer than 10 minutes.

The idea was to have the survey on line, accessible in the eight museums through computers with an internet connection, but this proved to be too difficult to realise. It would have saved the painstaking effort of data entry. Not only did not all the museums have a broadband connection which could easily be relayed to the visitor area of the museum, but in some cases there simply was no space. Also, servicing such a computer system which would be used by hundreds of visitors in such an archaeological open-air museum is difficult. A possible way for the future would be the use of simple tablet computers.

Within the population of visitors to archaeological open-air museums, different categories can be recognised (for example the public at large and educational groups). Only the tourist visitors will be part of the scope of this research, as expanding into other kinds of visitors would stretch beyond limits of time, organisation and money. In the museums with less tourist visitors in comparison to education visitors (for example Parco Montale, but especially the Matrica Museum), this proved difficult.

3.7.4.2 Objectives of the Visitor Survey

The focus of this study of the visitors to archaeological open-air museums was to assess the addition which the visitor experience of the museums made to the relevant knowledge of the visitors, as well as their satisfaction with their visit. Four roughly measurable factors, relevant for the survey are (Countryside Commission 1978):

- 1. The visitors' past experience and interest in the periods the respective museum is themed with;
- 2. The increase of the visitors' short term knowledge as a variable and as a proxy for understanding;
- 3. The level of enjoyment which the visitor has experienced in and from the museum;
- 4. The level of on-going interest which the experience has aroused as a proxy for motivation.

It was too complicated to find out more about the increase of the visitors' short term knowledge as well as about the level of enjoyment (at least not in detail). These are recommended subjects for future research. Falk & Dierking described well how visitor experience can turn into learning from a museum, and how to document that, which would be a study in itself (Falk & Dierking 2000, 149-176).

It was decided not to intensively monitor and question a small number of visitors, but rather to sample a larger number of visitors less intensively, concentrating on the effect of the museums during the short time span of their actual visit. The expectation was that even asking a small number of seemingly superficial questions would lead to enough data to get an image of the visitors and their stay in the museums. For the future, interviewing a number of visitors would be a good extension of the present research, but it was too much to also include such an approach in this study.

The responses to open questions by visitors could be biased. The relation between emotional responses and their expression in words is complex, especially as in this research different languages played a role at the visitors' level. Such a qualitative answer therefore cannot always be turned into a precise score. The closed questions offered a quantitative approach. There is no reason to suppose that the answers were incorrect, whether intentionally or otherwise.

It would need different, qualitative approaches to measure the depth of the visitor reaction, for example with detailed observing of many visitors as well as interviewing them (Countryside Commission 1978). In this research, this approach was not chosen due to its intensive character.

Information gathered in the initial visits when selecting the museums, as well as information derived from the assessment, was used to secure the basis for those parts of the tourist surveys – the parts relating to the visitor's comprehension of material covered by particular exhibits - which were necessarily variable between the museums. The surveys were used to gain stated impressions from the visitors, and their response to factual questions was used to gauge their comprehension.

3.7.4.3 Tourist Visitor Characteristics

It was expected that the majority of tourist visitors to the eight museums under research would be families with small children, and that the most difficult group to reach would be older children and young adults (See Figure 7.06). This has a great impact on the programmes offered at these museums. Whether there were many repeat visits was superficially investigated: this would be an alley for more research, especially because of the potentials of developing a special approach for this group.

A great effort was undertaken to find out more about the visitors, like where they came from and how far they had travelled to see the museum in question. A great variety of answers between the eight museums was expected.

The question as to how long visitors stay in the area was asked to find out more about the tourist potential of the local area in general. It was anticipated that not only would the eight museums be very different, but that their regions would be difficult to compare.

3.7.4.4 The Decision to Visit

The museum management in several of the eight museums were eager to find out why people actually visit their site. That is why this question was added to the survey. This has clear links with the marketing efforts of the museums and could demonstrate their effectiveness (See Section 6.3.5.). The methods of finding out about a museum are changing rapidly, but finding out is important because (Wicks & Schuett 1991, 302):

- a trip is a high risk purchase;
- the consumer is unable to actually observe the potential purchase;

holiday makers tend to visit new and relatively unfamiliar destinations.

The options 'interested in the past' as well as 'interested in the local region' had been added to the visitor survey - probably these were such straightforward reasons that nobody had ever wondered to even investigate. Due to the educational character of many of the museums and the type of visitors (primarily families with young children), it was anticipated that education purposes would be important in the decision to visit.

Finally, it was decided to check whether foreign visitors, albeit a minority in most cases, had reasons for visiting archaeological open-air museums different from those of local and national visitors. The type of events and type of information for this target group could be adjusted if this was the case (See Figure 7.26).

3.7.4.5 Length of Stay at the Museum

The length of stay of a visitor at one of the eight museums is informative as to the experienced value of such a visit. If the museum is no good, visitors will soon leave and find an alternative. The size of the museum, the nature of activities on offer and what there is to see all play a role, and in these aspects the museums are very different from one another. Also, visiting one of them on the day of a main event or just a few days later makes a huge difference. It is important to see if dissatisfied people stay a shorter period of time or not (See Figure 7.31). Differences exist in the expectation of visitors, or in the standards of service and quality they expect. In Germany, for example, expectations are higher and people tend to be less easily satisfied in comparison to Latvia when the general standards might be lower. It also needs to be emphasised that in one country, people will more easily show satisfaction than in other countries, as a sign of politeness.

3.7.4.6 Visit Evaluation

Originally, the museum management of the eight museums wanted the visitors to rate a high number of items. It was attempted to bring this back to about ten points, but this did not work. In the end, nine of them had received enough answers to be statistically valid and comparable between most of the eight museums. The information from this part of the visitor survey would become more interesting if the same questions were to be asked in years to come, or at other archaeological open-air museums. On a small scale, EXARC endeavours to do so (for example EXARC 2011, Newsletter EXARC, February 2011).

Important items for the visit evaluation were believed to be the (re)constructions, the tour guides and the shop and restaurant. Equally important was the overall evaluation and how that would compare to the original expectation (See Figure 7.35). Seasonality probably plays a role in visitor satisfaction, but as the number of visitor surveys for the shoulder and off season were relatively low, the results for these periods were less relevant.

Visitor satisfaction was also compared to how people had found out about the museum (See Figure 7.32), which again was important for the marketing efforts of each of the museums.

Finally the visitors were asked if they thought the entrance fees fitted with the experience they had received. The message was expected to not be uniform all across Europe, since the museums and their visitors are so different (See Figure 7.38).

An attempt was made to define association between variables as well as, by defining intermediate variables to define causality (See Figure 7.43).

3.7.5 Conclusions

The eight case study museums were chosen for their convenience and diversity. Each of the eight partners was located a different country. The group represented governmental organisations as well as private foundations. In visitor numbers per year (in the year of selection, 2005), the eight partners were very different: starting at 24,000 to about 267,000 for the largest. More differences between the eight museums are discussed in Chapter Five onwards.

3.8 The Gaps in Quality

Research into quality is geared mainly towards the management of archaeological open-air museums, rather than their visitors (Johns 2004, 130). Brogowicz et al. outline a theory describing the gaps in a service-provision cycle and a service-consumption cycle (See Figure 3.07) (Brogowicz et al. 1990). This has a clear relation to provided quality and experienced quality. Therefore this approach will be used when evaluating the combined data of survey and assessment.

Gap One, the positioning gap, is between what the management think that the visitor expects and what the visitor actually expects. This gap can be narrowed if enough visitor feedback is registered and taken into account. The right questions should be asked. A so called profile accumulation technique (PAT) could be used (Johns & Lee-Ross 1996). This is a simple exercise whereby visitors are asked to write down the best and worst aspects of their experience, together with the reasons. Although these are not closed questions, the answers still can be coded using key words and therefore quantified.

Gap Two is the specification gap, between the management's view of what the visitor expects and the actual attraction quality that is specified. Critical incident analysis can give insight in this gap and what needs to be done to adjust the attraction quality to visitor expectations.

The delivery gap, Gap Three, is the gap between what is specified and what is actually delivered. This is an issue between the designers or planners of a service and the ones who deliver it - the front-line staff. For example, a coordinator may invent an event about witchcraft and collect information, but because the front-line staff do not have the same accumulated knowledge they will present another kind of witch than the one envisaged.

Gap Four is again between the service provision cycle and the service consumption cycle and is called the communication gap. This is the gap between what is communicated to visitors and what is delivered. Archaeological openair museums tend to present a nice image in their public relations. If the front office staff is not able to deliver what is promised, the communication gap takes its toll in dissatisfied visitors. It is for example hard to communicate that what is delivered at an event is completely absent if visitors turn up a day later. Finally, Gap Five is the gap between the quality visitors expect and the quality they feel they receive. This gap is the easiest of all to identify but the hardest to narrow down as it requires narrowing all other gaps mentioned before. When trying to narrow these gaps, managers will face issues which are hard to solve: if once something has gone wrong, word of mouth will continue to have negative effects. For example, when at Archeon in the Netherlands in early summer 1995 two Neolithic type houses burned down accidentally (Flamman 1997, 3) this was on the evening news. Even years later people thought that Archeon as a whole had burned down and that it was no longer a possible excursion target (personal communication J. Flamman, 2 October 2002).

3.9 Conclusions

If all museums followed exactly the same concept, there would be less to compare. However minimum standards do not necessarily mean all archaeological open-air museums become standardised, presenting more of the same (Banghard 2002). During processing of the data, at every stage of research, different organisations under scrutiny were discarded as they did not fit the definition. This was the case, for example, with (re)constructions no longer in use, or theme parks found to be too distant from the definition of an archaeological open-air museum for these studies.



Figure 3.07: Two-cycle model, Source: Brogowicz et al. (1990). The eight archaeological open-air museums showcase themselves as unique enterprises and each of them is, with its own mix of museum characteristics and local archaeology. A scheme to uphold standards could get more support for these museums and raise their quality, but the amount of additional paperwork which a standards scheme might involve could be enormous (Legget 2002). Setting a minimum level of standards could work well, but it will be hard to do: not only are the museums diverse, but Europe is too.

Because of the very nature of the research, no implications could be made about the long term effect of a visit to an archaeological open-air museum. The visitors' study does not throw light on the real understanding which visitors may be gaining from the museums' interpretation.

In the following chapters, archaeological open-air museums are first regarded in general terms (Chapter Four). The eight museums under analysis are then described (Chapter Five). The history of each is introduced, followed by a quality analysis of the museum from both a management and a visitor perspective. Each of the descriptions ends with a list of the museums' key strengths and challenges. In Chapter Six the museum management aspects of all eight museums together are looked at in detail, while in chapter Seven the visitor aspects are discussed.

Following on from this discussion, key factors are defined in Chapter Eight. This chapter refers again to all archaeological open-air museums in Europe and offers some recommendations, ideas and strategies for the future. Not only is this interesting for those who want to start an archaeological open-air museum, there is useful information in it for all existing ones as well, experienced or not.

In Chapter Nine, possibilities for future research are described.

Chapter 4

Broad Scale Observations

4.1 Introduction

With the start of this research into archaeological open-air museums a simple, unstructured literature collection on this subject existed which needed updating. Using these sources and the internet a database was structured using a basic example (Lund 1988) (See Figure 4.02). By November 2011 the list held 426 entries; 250 of these are archaeological open-air museums. It is estimated that another 50 exist, but these were unknown at the time of this research. Per entry, about 40 different specifics are registered. Besides archaeological open-air museums, there might be up to 200 archaeological education centres, which are not open for the tourist public. These centres hardly have a public profile and are therefore more difficult to find. It was neither effective nor necessary to retrieve these data for this research.

4.2 Surveys

4.2.1 First Survey

In December 2005, a first survey was circulated with four simple questions (See Figure 4.01). It was kept simple in order to get as many responses as possible, knowing the limited staff these museums have.

The first two questions were obvious: they are needed to identify single museums which sometimes in popular phrasing are known by several names. The Federseemuseum in Southern Germany for example is sometimes simply referred to as Bad Buchau which is the village where it is situated. HOME is locally known as the Prehistorisch Dorp [Prehistoric Village]. The mission statement was requested in order to see whether there were differences between countries or differences between older and newer archaeological open-air museums. The outcomes of the first survey are presented together with those of the second survey.

4. Official Goal of your organisation, what is your mission statement (in English)?

Figure 4.01: The first survey among archaeological open-air museums, December 2005.

^{1.} Official name of the organisation (in own language, and translated to English).

^{2.} Kind of organisation (association, foundation, company, monument, museum, government).

^{3.} Age of the organisation.

4.2.2 Second Survey

With the research moving on in May 2006, more detailed questions regarding relevant matters were asked of the same museums (See Figure 4.03). With too few answers coming in, it was decided in January 2008 to have this second survey translated by a native speaker into German and French, and by a professional translator into Danish, and to send them by traditional mail instead of by email only. By November 2011, 250 museums had been approached out of which 182 museums had answered on the surveys. Some publicly available data of those not having replied was collected, but could only be applied anecdotally. Not all managers answered all questions, leading to fluctuating totals for different questions.

4.2.3 Survey Design

The initial questions were taken from the 2005 first survey, with the addition of the question on their postal address. To this, 11 questions were added in 4 sections.

		Year of		Scientific cooperation			Older	Younger	
Nr	Name	construction	Governing body	partner	Neolithic	Bronze Age	Iron Age	Iron Age	Viking Age
1	Historisk-Arkæologisk Forsøgscenter, Lejre	1964	Ind. body	Museum / University	'village'		village		
2	Jernalderen Bagsværd	1969	School / Leisure Association	?			1 longhouse		
3	Jernalderlandsbyen Næsby / Odense	1973	Cultural / Leisure Association	Museum			2 longhouse 5 small houses	1 pit-house	
4	Fyns Stiftsmuseum Hollufgård	1983	Museum	Museum / University		1 longhouse			1 hall 1 pit-house
5	Vingsted historiske værksted	1976	Amt / Kommune (gov. bodies)	Museum / University			1 farmstead	4 pit-house 1 longhouse	
6	Jernalderlandsbyen Guldager / Esbjerg	1971	School Mgt	Museum			1 farmstead	2 pit-house	
7	Historisk værksted V. Vedsted / Ribe	1967	Ind. body	Museum			1 longhouse		
8	Sønderborg historiske værksted	1976	School Mgt	?			1 longhouse		
9	Rævebakken Aalborg	1982	School Mgt	Museum				3 pit-houses	
10	Hjerl Hedes Frilandsmuseum Formidlingen	1981/82	Museum	Museum	1 longhouse	1 longhouse	1 longhouse (span house)		
11	Rekonstruktions-afdelingen Moesgård / Aarhus Univ.	1969	Museum / University	Museum / University	1 cult house		1 longhouse		2 city house 1 pit-house
12	Trelleborg-hallen	1942	The National Museum	Museum					1 hall
13	Fyrkat-hallen	1984/85	Ind. body	Museum					1 hall

Figure 4.02: Overview of sites with (re)constructed prehistoric houses in Denmark, adapted from Lund (1988, 48). Ind. stands for Independent; Mgt for Management; Gov. for Governmental.

Questions for archaeological open-air museums and similar institutes

At Exeter University, I am doing a PhD research into archaeological open-air museums and similar institutes. I am collecting data from about 200 institutes across Europe. The answers will be used for my PhD research at Exeter University and will be shared among those which provide answers themselves. If you are interested in intermediate results of my research, please let me know. I am happy to tell you more, but understand well, I should not tire everybody with all details.

Thank you very much.

Roeland Paardekooper [Address removed]

Initial Questions

- 1. What is the official name of the organisation (in own language, and translated to English)?
- 2. What kind of organisation are you (association, foundation, company, monument, museum, government)?
- 3. What is the age of the organisation?
- 4. What is the official Goal of your organisation, what is your mission statement (in English)?
- 5. Can you state your official address and if your visiting address is different, could you mention that one as well?

A

- Can you send me your latest year report if it is public? I would gladly cover the costs. Just add a bill with the correct bank information (like IBAN and BIC for banks in the Euro zone).
- Approximately how many visitors did you have in 2005, divided over educational groups and the rest? Is this much more or much less then about 5 years ago?
- 3. Do you have a list of recent publications of the institute?

В

- 1. What is the basis for the reconstruction: general information or a specific site?
- How (financially and organisationally seen) did you start? Was it a governmental initiative, were there sponsors, ..? Who started it and why?
- 3. Are you nowadays independent (financially and organisationally) from the government? How large part of your year budget, in percentage, do you earn by yourselves?

С

- 1. Were archaeologists involved in the start of the museum?
- 2. Are archaeologists still involved and how (as researcher, tour guide, director, ...)?
- 3. Are experiments executed in your museum and if so, by whom and how often? Are these long term experiments (like growing crops and compare their yields over the years), themed programmes (like a 5 year programme on iron smelting), or other. Do you have some examples?
- D
- 1. In your opinion, what is the purpose of your establishment?
- Please state the importance of the following aspects (as a percentage from 0-100). The individual aspects **must** add up to 100%. If your idea does not fit in into these keywords, please state so.

Tourism	
Education	
Research	
Regional identity	
Living history, living tableau	
Experiment	
Regional development	
Natural environment	
Total	100%

Section A

The question about visitor number totals was answered well. About the year 2005, 132 answers were collected as well as 683 totals regarding other years.

The question about museum literature yielded good and honest answers although it was sometimes understood as a request for scientific literature only.

Section B

Although not often presented as such (like Comis describes about Northern Italy: 2003, 51), the research process and sources leading to the house (re)constructions often are documented, albeit not always to academic standards. Section B looked into this. The history and origin of the museum itself were also point of attention. An archaeological open-air museum is usually the initiative of one or several persons; for example the archaeologists having excavated the site the museum refers to (like for example at l'Esquerda, Catalonia or Aşikli Höyük, Turkey). In some other cases, things started small, with open days at the excavation, leading to the idea that more was possible on a permanent basis (Klio, Russia, Museo delle Palafitte del lago di Ledro, Italy). Start-up funding usually came from the local government / EU funding (CEDARC, Belgium, Karpacka Troja, Poland), combined with local sponsoring (Malagne, Belgium). Some quotes as examples can be found in Figure 4.04. The financial questions were generally not well answered; with some offering great detail in their answers, many others remained vague, even if they were governmental bodies.

Section C

This part was about the involvement of archaeologists and the use of experimental archaeology.

Although an archaeological open-air museum is not a purely archaeological venture, it includes archaeology and therefore in many cases it includes archaeologists albeit in many roles. Traditionally, experimental archaeology is seen as a marker for this type of museum, and for this reason this question was included.

Section D

Section D included more general questions on the goal and approach of the museums. Here the design was flawed. The question to the purpose of the museum overlapped too much with a previously asked question to the goal of the museum. Also, the answers in section D were hard to analyse. A keyword approach is shown in Figure 4.05. Several quotes reflecting these keywords can be found in Figure 4.06.

Several museums used a one-liner in their marketing. A few examples are given in Figure 4.07.

The development of archaeological open-air museums can be seen by the change of one-liners. At Archeon, for example, the phrase in the early years was: 'Bij Archeon komt het verleden wel héél dichtbij' [at Archeon, the past is really coming very close] (1994). This later developed into 'themapark voor levende

'Main reason (frequently used for publicity) coming from idea, that hill fort castle Netolice was political and power centre of the South Bohemia. It is ideologically in correlation with current ideology of regional policy' (Archeopark Netolice, Czech Republic).

'Our association excavated the old village, and then decided and designed the reconstruction. The local government and some sponsors financed this idea' (Csiki Pihenökert, Hungary).

'Born out economic need and also a real desire to protect and maintain the castle for future generations' (Shannon Heritage Ltd, Ireland).

'I started the project because it was my childhood dream'

(Uldevens, Latvia).

'In 2000 the open-air museum was accomplished with financial support of the town and an EU-local group' (Federseemuseum, Germany).

'Initiated as a project sponsored by the Council of British Archaeology, British Academy and other minor sponsors. Funding only lasted a few years' (Butser, Great Britain).

'We started as an initiative of our local government with two summer services in a little trailer for staff' (Vikingelandsbyen Albertslund, Denmark).

'The initiative came from science; archaeologists have also moderated the project during the construction phase. It was cofinanced with public money' (Freilichtmuseum Germanisches Gehöft Elsarn, Austria).

Figure 4.04: Several quotes of archaeological open-air museums' managers referring to how their museum had started. Source: the second survey.

Keyword	Example	Museums mentioning this keyword					
Frequently mentioned:	Frequently mentioned:						
Education	To educate and inspire especially children and youth to learn.	(Gallische Hoeve, Belgium), (ESAMP, Great Britain), (Ekehagen, Sweden), (Swifterkamp, the Netherlands)					
Experimental archaeology	Getting new knowledge through experi- mental archaeology, research project.	(Bajuwarenhof Kirchheim, Germany), (Sagnlandet Lejre, Denmark), (Lemba Experimental Village, Cyprus)					
Popularisation of science	To bring archaeological science to the people, protection and presentation of archaeological remains.	(Federseemuseum, Germany), (Asparn, Austria), (Liptovska Mara-Havránok, Slowakia)					
Social goals	Social / society goals: supporting those underprivileged who have difficulty in being involved in society, being a project for unemployed persons.	(Steinzeitdorf Kussow, Germany), (ESAMP, United Kingdom), (Ribe Vikingecenter, Denmark)					
Showing everyday life of the past	To interpret the everyday life in the past for the benefit of the general public, academia and the educational sector.	(Malagne, Belgium), (Archaeolink, Scotland), (Ale Vikingegård, Sweden)					
Strengthening identity	Allowing people approach or find their roots, promotion of identity.	(Malagne, Belgium), (Uldevens, Latvia), (Avaldsnes, Norway)					
Stimulating cultural tourism	Be a place to relax with a high intensity of experiences, providing cultural activities and stimulating cultural tourism.	(Augusta Raurica, Switzerland), (Choirokoitia, Cyprus), (Middelaldercenter Bornholm, Denmark)					
Less frequently mention	ied:						
Natural environment	Discussing the relation between people and their natural environment.	(Peat Moors Centre, Great Britain), (Skjern Egvad Museum, Denmark), (De Schothorst, the Netherlands)					
Ancient technology	Trying out historical techniques, showing ancient technology and doing research into it.	(Wothanburg, Czech Republic), (Malagne, Belgium), (Middelaldercentret Nykøbing, Denmark)					
Living history	To build a scenery for living history and use it.	(Wothanburg, Czech Republic), (Bullace Hill, Great Britain), (Musée de Marle, France)					
Earn money	To earn money.	(Kierikki, Finland), (Krzemionki, Poland), (Salzwelten Hallein, Austria)					

Figure 4.05: Keyword approach with seven frequently used keywords and four less often mentioned ones. Source: the second survey. 'Our goal is research, although it has now also developed as a tourist attraction as well' (Lemba Experimental Village, Cyprus).

'Araisi Lake Fortress is a popular leisure and educational destination, the quality of which is defined by original archaeological finds that explain ancient history of Latvia, scientifically based reconstructions of historic environment, the beautiful culture historic landscape and developed infrastructure that meets the needs of various audiences' (Araisi, Latvia).

'So that Avaldsnes can secure its rightful place as a focal pointing in national context' (Avaldsnes, Norway).

'Mission: to make the silent display archaeology speak to tourists in the language that they can understand' (Karpacka Troja, Poland).

'To make the museums (Schloss Gottorf and Wikinger Museum Haithabu) more interesting, profound and prominent' (Wikinger Museum Haithabu, Germany).

To create and sustain a world-class visitor attraction which will entertain and educate a wide audience through high quality research, interpretation and promotion of the Roman and subsequent heritage of the site and its surrounding region' (Segedunum, Great Britain).

'We are trying to prove that we can learn from the past; that our ancestors had spirit and it would be a huge mistake to lose it. The construction of an archaeological museum comes from the will of local people to protect and claim their heritage.' (Ethni'Cité, France).

'We give equal importance to hand work and mind work' (Vikingelandsbyen Albertslund, Denmark).

'Awaken the primitive in you'	(Préhistosite de Ramioul, Belgium)
'Be amazed, understand, participate'	(Bachritterburg Kanzach, Germany)
'Be surprised, amazed and enchanted'	(Guédelon, France)
'Experience archaeology instead of mouse click athleticism'	(Mammutheum, Germany)
'Archaeological excellence for all to see and enjoy	(Flag Fen, Great Britain)
'I hear and I forget, I see and I remember, I do and I understand'	(Yorkshire Museum of Farming, Great Britain) (Sagnlandet Lejre, Denmark)
'Use the past in the future'	(Vikingelandsbyen Albertslund, Denmark)
'Another time, another speed'	(Hvolris Jernalderlandsby, Denmark)

Figure 4.06: Several quotes of archaeological open-air museums' managers referring to their mission and goal. Source: the second survey.

Figure 4.07: One-liner examples from 2008 of several archaeological open-air museums. Source: the second survey.

geschiedenis' [theme park for living history] (2004), and then into 'een dag vol vertier en vermaak' [a day filled with amusement and entertainment] (2011). It must be said that the latter one-liner uses words which in Dutch have an old-fashioned connotation. The change from more serious to more entertaining in the one-liners is evident here.

Another example is Sagnlandet Lejre in Denmark which is officially translated as Lejre Land of Legends (possibly better called Lejre Land of Stories). When in 2005 the one-liner still was 'en fortid i en nutid med en fremtid' [a future and a present with a past] (source: first survey), after the change of name in 2009 this turned to 'Lejre, landet Du må udforske' [Lejre, the country you may/should discover], by means of which the visitor experience had become much more centre of attention instead of what Sagnlandet Lejre wanted to teach.

4.3 Types of Museum Display

The archaeological open-air museums are recorded by type as shown in Figure 4.08 (multiple entries per organisation are possible).

Some museum categories mentioned in section 2.5 were left out from the surveys, since this listing did not emerge until the research was more advanced. They have however been used in the case studies (See Figure 6.12). The omitted ones are: natural park / cultural landscape, (re)constructed boat / ship, living history museum, animal farm and theme park.



Some new categories were mentioned but not included in this research because there were too few answers:



display. Source: the second survey.

C	Archaeological	Archaeological	Carling	Tarak
Country	open-air museums	education centres	Combination	Iotai
Austria	4		11	15
Belgium	1		4	5
Catalonia	1	1	2	4
Czech Republic	5		9	14
Denmark	2	9	15	26
England	8	6	8	22
Finland	3		2	5
France	6	4	16	26
Germany	22	7	27	56
Hungary	1		3	4
Italy	1	2	11	14
Norway		1	8	9
Poland	2	1	10	13
Spain	2		2	4
Sweden	6	12	15	33
the Netherlands	1	5	5	11
Wales			4	4

Figure 4.09: Totals of archaeological open-air museums, archaeological education centres and the combination thereof per country. Only countries with four sites or more are shown.

> Developments in these matters go fast. More than in the past, archaeological open-air museums try now to include an indoor showcase museum. Archeon in the Netherlands, for example, opened such a presentation in August 2011; at Lofotr in Norway a new building for the exhibition is on its way. Having this facility makes the museum more favourable in the shoulder season when there is a greater likelihood of bad weather.

Name	Country
Avaldsnes, Norway's oldest throne	Norway
Buitenmuseum, Zuiderzeemuseum Enkhuizen	the Netherlands
Chiltern Open Air Museum	England
Fränkisches Freilandmuseum Bad Windsheim	Germany
Hjerl Hede Frilandsmuseum	Denmark
lceni Village	England
Kaliski Gród Piastów	Poland
Kuralan Kylämäki (Kurala Village Hill)	Finland
Okresní muzeum Louny - Skansen Brezno	Czech Republic
Prehistoparc	France
Ryedale Folk Museum	England
St Fagans National History Museum	Wales
Stiklestad Nasjonale Kultursenter	Norway
Toulcův-dvůr	Czech Republic
Vindolanda Roman Army Museum	England
Veenkoloniaal Museum Veendam	the Netherlands

Figure 4.10: Examples of ethnographic open-air museums in Europe which also have archaeological (re)constructions.

When comparing the number of archaeological open-air museums in a country with the number of archaeological education centres (See Figure 4.09), Sweden, Denmark and the Netherlands stand out with a relatively large number of education centres, whilst countries like the Czech Republic and Germany have relatively more archaeological open-air museums. However, as stated earlier, the educational centres are harder to find except in countries like the Netherlands and Denmark, where most of them are members of a national association. It could be, therefore, that there are national trends leading to a biased view; but the very fact that there are national associations in some countries shows a difference in provision that is likely to be real.

While traditional open-air museums have a great deal of experience in the maintenance of their usually antique buildings, some of them have gone further and have built (re)constructed houses, based on archaeology. A small series of sixteen examples of traditional open-air museums which also have archaeological (re)constructions are presented in Figure 4.10; there are many more (see for example Baumeier & Wassmann 1995). With most of the houses in traditional open-air museums being relocated, and therefore partly (re)constructed, and keeping in mind the fact that they need constant repair and are therefore loosing ever more of their original substance, probably the division between this type of museum and archaeological open-air museums becomes thinner. Rentzhog (2007, 236-287) claims a large role for living history in ethnographic open-air museums, showing that even the methods used in the two types of museum are becoming more the same.

4.4 Age

Founding dates of 225 archaeological open-air museums were registered. Most of them date to the period after 1980. This might partly be due to the increase in leisure time and the increase in tourist attractions in general since 1980



Figure 4.11: Founding dates of the oldest architectural (re)constructions of current archaeological open-air museums. Dates are known for 225 museums.

(McKercher & du Cross 2002, 1). By then, the tourism industry had started to cooperate with the heritage sector (to which archaeological open-air museums belong) as part of the 'hands-on' educational / experience tourism approach (Smith 1979, 2-5). Of the museums still existing, the known years of first (re)constructions are summarised in Figure 4.11. If data were added relating to museums which have already closed, the general trend would presumably remain the same: a pioneer period until the end of the 1970s and a large increase thereafter. The very early museums which are now gone, and the latest new museums, are not well represented on the list. The older museums might teach us about the success rate of such museums, and what is necessary to survive over a prolonged period. The younger museums however might show some interesting new ways of dealing with the issues an archaeological open-air museum faces, and some of them might be more innovative than the ones with 20 years or more experience.

A changing museum - not necessarily the buildings, but changes in the stories told - is a successful one. 'Museums that have been able to adapt see greater possibilities than ever' (Rentzhog 2007, 325). While a museum needs managers to keep the complex organisation running, it requires leadership to cope with change (Janes 2009, 66). Museums which could not adapt to change have not survived. Examples are the Archéodrome Bourgogne in France (Frére-Sautot 2006) and several of the German Third Reich open-air museums. Archaeolink in Scotland, having secured funding for its construction, had visitor numbers of over 30,000 for the first five years; however these numbers circled around 20,000 in the next five years, and during the last three years did not rise above 16,500. The management was not able to turn the tide and when recently the crisis hit hard, the last public funding was given up and Archaeolink closed (www.bbc.co.uk/news/uk-scotland-north-east-orkney-shetland-12503980).



Quite a few of the older museums have changed their strategy several times in their lifetime in order to cater for changed demands from society. A good example is the Pfahlbaumuseum in Unteruhldingen and its change in approach to its own presentations (See Figure 4.12).

4.5 Geography

When looking at the growth of the number of archaeological open-air museums (See Figure 4.14), one can see that until the 1980s, Northern Europe, the British Isles and Germany, Austria and Switzerland are well represented, with hardly any trace elsewhere. A definition of each region is given in Figure 4.13. In recent times, the largest development is in Germany, Austria and Switzerland as well as in Eastern Europe, with a slowdown in Northern Europe and the British Isles.

This slowdown might be explained by a combination of factors. With Scandinavia having a long history in the development of these museums, as well as in archaeological open-air education centres, they have possibly reached a stage when there are no more places for any more, unless the concept is changed of course (see for example the number of archaeological open-air museum per 100,000 inhabitants in Denmark and Sweden in Figure 4.15). For the British Isles, there might be several reasons for the slow growth of new archaeological open-air museums since the early 1980s. In the UK, EU funding is much less frequently considered than on the continent. Raising enough funds to start up an archaeological open-air museum was particularly difficult in the 1980s, when the country was in crisis (personal communication D. Freeman, 25 August 2011). The sites that seem to keep going are privately run, where spending decisions are not politically motivated, like for example at Butser Ancient Farm.

It has to be noted that the existence of several archaeological open-air sites in Poland (Malinowska-Sypek et al. 2010) and in Spain (Lopéz Menchero Bendicho 2011) remained unknown until it was too late to add them to this database and analysis. However, the presence in these countries of even more recent archaeological open-air (re)constructions than previously known is in line with the picture shown in Figure 4.14.

Eastern European countries became part of the European Union only relatively late. This meant only from that time onward did they have full access to EU funding. This, combined with the rapid development of areas in Eastern Figure 4.12: (Re)construction of house 16 of the Wasserburg Buchau at the Pfahlbaumuseum and its description in the museum guide books (1st print 1931: 'the leader's house', 3rd print 1938: 'the Führer's house', 9th print 1951: 'the house of the village chief') (source: Schöbel 2001, 55).

Region	Country
Benelux	Belgium, Luxemburg, The Netherlands
British Isles	England, Ireland, Northern Ireland, Scotland, Wales
Eastern Europe	Bulgaria, Czech Republic, Hungary, Lithuania, Macedonia, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Ukraine
Germany, Austria and Switzerland	Austria, Germany, Switzerland
Northern Europe	Denmark, Finland, Greenland, Iceland, Norway, Sweden
Southern Europe	Catalonia, Cyprus, France, Greece, Italy, Portugal, Spain, Turkey

Figure 4.13: The division of Europe in six regions.

Figure 4.14: Age of current archaeological open-air museums, divided by European regions. In dark grey the highest numbers per region, in light grey the second highest numbers. Only numbers above nine are marked.

Founding year	Northern Europe	British Isles	Germany, Austria and Switzerland	Benelux	Southern Europe	Eastern Europe	Total
1900-1979	7	5	9	0	0	1	22
1980-1989	7	6	10	5	8	3	39
1990-1999	26	7	18	3	18	10	82
2000-2010	12	6	29	3	13	19	82
Total	52	24	66	11	39	33	225

Europe into tourist destinations, has led to a boom in new archaeological openair museums there. In Southern Europe, both these reasons came into play decade earlier, explaining why the boom in new museums in those countries is earlier than in Eastern Europe. More reasons for a boom in Eastern Europe are the change of type of government (from centrally led to layered democracies), a higher standard of living and a wider perspective of what is happening in the rest of Europe. Theme parks and other visitor attractions were virtually nonexistent before the Iron Curtain dropped. In Poland there was no competition for places like Biskupin during communist times, because the government decided that one complex was enough for the state's needs, although there was no strict ban on other open-air museums and reserves (personal communication W. Piotrowski, 22 November 2011).

In the Czech Republic many of the archaeological open-air museums were founded by enthusiasts but have had an unstable life since, if they even still exist. There is hardly any governmental support (Tichý & Tichovský 2003, 204) and it is far easier to start such a museum than to keeping it running.

Those archaeological open-air museums predating 1992 all had science as their top priority, but the example of Biskupin shows the shift in this towards a focus on the public. Since 1985, Biskupin has had an Archaeological Festival, a nine days' celebration with numerous living history actors and demonstrations of crafts (Piotrowski 1997). Recently the festival has become more spectacular but still the number of visitors is dropping due to high competition - this did not exist in the 1980s (personal communication W. Piotrowski, 24 August 2011).

In general, Scandinavia, Austria and the Czech Republic score high, especially when looking at the density of such museums compared to the number of inhabitants and the surface of the country (See Figure 4.15). In Scandinavia, the concept of archaeological open-air museums and education centres fits well - not surprising as it was partly developed here. In Austria, most archaeological open-air museums (10 of the 14, See Figure 4.20) are in government hands and date to the recent past. There are hardly any archaeological education centres, open for school groups only. VIAS, a Vienna based institute and part of the university, has been coordinating the construction of most of these. In the 1970s and early 1980s, there had been contact between Austrian archaeologists Hampel and Windl and foreign experimental archaeologists Coles, Hansen, Reynolds and Pleiner which led Windl to start a course in (re)construction and experimental archaeology in 1982 at the Vienna University. Students from this course were often well trained in crafts. Together with the founding of a workgroup in experimental archaeology at the ÖGUF (Austrian Society for Prehistory and Early History) this led to a generation of young archaeologists with interest and experience in experimental (re)construction (Windl 2001, 5-6).

The boom in archaeological open-air museums in Austria is a result of the federal structure of Austria combined with the number of able archaeotechnicians available to actually construct these museums, often a team of the Vienna Institute of Archaeological Science (VIAS) under guidance of Wolfgang Lobisser (personal communication W. Lobisser, 9 September 2011).

Country	number of archaeological open-air museums	number of inhabitants (source Eurostat)	number of archaeological open-air museums per 100,000 inhabitants	surface of country in square kilometres (source: Eurostat)	of archaeological open-air museums per 1,000 square kilometres
Austria	15	8,210,281	0.18	83,858	0.18
Belgium	5	10,839,905	0.05	30,528	0.16
Catalonia	3	7,512,381	0.04	32,113	0.09
Czech Republic	14	10,211,904	0.14	78,866	0.18
Denmark	17	5,500,510	0.31	43,094	0.39
England	16	51,000,000	0.03	130,395	0.12
Finland	5	5,250,275	0.10	338,145	0.01
France	22	62,150,775	0.04	551,500	0.04
Germany	49	82,329,758	0.06	357,022	0.14
Hungary	4	9,905,596	0.04	93,032	0.04
Italy	12	58,126,212	0.02	301,318	0.04
Norway	8	4,660,539	0.17	385,155	0.02
Poland	12	38,482,919	0.03	312,685	0.04
Portugal	3	10,707,924	0.03	91,982	0.03
Russia	3	140,041,247	0.00	17,098,242	0.00
Scotland	3	5,062,011	0.06	78,772	0.04
Spain, excl. Catalonia	4	46,661,950	0.01	9,905,596	0.00
Sweden	21	9,059,651	0.23	449,964	0.05
Switzerland	3	7,604,467	0.04	41,284	0.07
the Netherlands	6	16,669,112	0.04	41,528	0.14
Wales	4	2,921,100	0.14	20,761	0.19
Total	229	592,908,517	0.04	30,465,840	0.01

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Figure 4.15; Number of current archaeological open-air museums per country. Countries with 2 or less museums are omitted. The 5 highest scores in each column are in grey. Source: EuroStat and own research.

In the Benelux in general, there are not many new archaeological open-air museums coming up (See Figure 4.14). Belgium has few archaeological openair museums (See Figure 4.15), most of them situated in Wallonia; Flanders only has one, mainly due to the conservative attitude of municipalities who do not permit such structures and projects (personal communication D. Willaert, 30 August 2011).

When the big example Archeon went bankrupt in the Netherlands in 1995 and reopened in 1996 in a much smaller style, this failure left large scars in Dutch archaeology. There were no new archaeological open-air museums conceived in the Netherlands until 2004 (Paardekooper 2012). Even when new initiatives saw the light, these were small, like Dongen, Kaardebol and Moerveld.

Time depth is an issue in many archaeological open-air museums. If different periods of time are shown in a single museum, visitors often do not perceive this difference: 'to the normal visitor there is almost no difference between a Neolithic or Bronze Age or even an Early Medieval house' (M. Schmidt 1994, 17). Even if only one window in time is shown, sometimes time-alien artefacts or ideas slip in, like Late Medieval items in Viking Age settings or 'keltische Latène-Fibeln (kombiniert) mit bronzezeitlichem Golddrahtschmuck' [Celtic Latène brooch (combined) with Bronze Age gold wire jewellery] Sturm & Bayer 2008, 152). Such concessions are sometimes made consciously, due to lack of money, or simply because it is easier, or because museum staff think 'das macht doch nichts, wenn die Ausstattung falsch ist, die Besucher können das sowieso nicht erkennen' [who cares the equipment is wrong, the visitors cannot recognise that anyway] Sturm & Bayer 2008, 151). This leads to knock-on effects like self-perpetuating cliché images of the past instead of making the visitors wonder what it might have been like.

It is striking to see what archaeological periods are depicted in different areas of Europe. Whenever an archaeological period like the Iron Age or Mesolithic is mentioned here, for sake of compareability, it is in a broad sense referring to broad time ranges. It needs to be emphasised that the Iron Age especially has a different time span, in terms of absolute dating, in different areas in Europe. In

	Northern Europe	British Isles	Germany, Austria and Switzerland	Benelux	Southern Europe	Eastern Europe	Total
Palaeolithic	1	0	5	2	6	1	15
Mesolithic	3	1	4	3	3	1	15
Neolithic	3	1	13	5	22	4	48
Chalcolithic	1	1	5	1	7	4	19
Bronze Age	5	3	9	3	12	8	40
Iron Age	14	15	27	7	21	12	96
Roman Era	3	7	14	2	6	4	36
Early Middle Ages	30	6	16	3	7	16	78
Late Middle Ages	13	4	7	3	6	7	40
Post Middle Ages	2	4	0	0	0	0	6
Total	75	42	100	29	90	57	393

Figure 4.16 (right. Number of times an archaeological period is depicted in an archaeological open-air museum, divided over European regions. In grey the highest numbers per period. Denmark, it lasts for example from 500 BC up until 1050-1100 AD (Hedeager & Kristiansen 1985, 141), while in the Netherlands, 'Iron Age' refers to a dating of 800-12 BC (van den Broeke 2005, 482).

Some periods are popular anywhere. In the British Isles however, you will find relatively frequently depictions of the Iron Age, many of which refer to the Celts. The question remains as to whether what the present day visitors call Celts and Celtic has many similarities to what was called such in the Iron Age. It is important to national identity in for example Wales (Mytum 2004) and Scotland (Andrian & Dixon 2007). The same Celtic connotations of nationalism probably also account for the popularity of the Iron Age in German-speaking Europe, especially Austria. There are, however, relatively many Mesolithic and Palaeolithic scenes (re)constructed in this area, compared to elsewhere in Europe.

In Southern Europe, emphasis is on the Neolithic Period up to the Iron Age. Of the later periods, there is still plenty original material to see, both as ruins and as structures still standing and much of that can be explained without vivid (re)construction. This is in contrast with prehistoric sites which often need quite a bit of imagination and (re)construction for them to be understood (Lopéz-Menchero Bendicho, 2011, 31)

Medieval presentations are most likely to be found in Scandinavia - these include Viking Age scenes. Clearly this period is most popular in Scandinavia as it is seen as the 'epic' period people are most proud of. It is the period in the past which is most often referred to in nationalistic terms in Scandinavia, part of the identity building in these countries. In Iceland, there is not a single archaeological open-air museum depicting a period other than the Viking Age, even though enough archaeological sites are known from the medieval or early modern era.

In general across Europe, the Iron Age (96 times) and the Early Middle Ages (78 times) are presented the most often (See Figure 4.16).

An overview over which period is depicted in which museum, sorted by founding date, shows a declining interest in the Neolithic and the Iron Age, while the Bronze Age is in a 'revival' and the Early Middle Ages are booming. The following can be noticed (See Figure 4.17):

- 1900-1979: Start of many of the Mesolithic (re)constructions as well as Roman and post medieval presentations;
- 1980-1989: New museums are often covering the Chalcolithic, Bronze Age and Iron Age;
- 1990-1999: The Neolithic, the Iron Age and the late Middle Ages are popular;
- 2000-2009: A very big boom in early medieval archaeological open-air museums (including the Viking Age). Most of the Palaeolithic (re)construction sites are new.

The Viking Age has become a very strong brand over the years, appealing to many and branding all kinds of activities and products. The brand is still gaining popularity and therefore gets used ever more, mainly in Scandinavia. Although national sentiments play an important role in what archaeological period is shown, the number of museums is too small to discern trends per decade.

	1900-1979	1980-1989	1990-1999	2000-2009	Total
Palaeolithic	2	2	4	6	14
Mesolithic	3	1	6	5	15
Neolithic	5	9	17	13	44
Chalcolithic	2	7	5	4	18
Bronze Age	5	12	9	13	39
Iron Age	9	23	34	25	91
Roman Era	6	7	12	8	33
Early Middle Ages	7	12	25	33	77
Late Middle Ages	5	8	15	12	40
Post Middle Ages	2	3	1	0	6
Total depicted periods	46	84	128	119	377
Number of Museums	22	40	82	81	225

Figure 4.17: Age of current archaeological open-air museums, divided into broad groups based on the periods depicted. Note that many museums depict different periods at the same time. The highest number of each archaeological period depicted in grey.

It has to be added to Figure 4.17, that per museum, only the dates of their first (re)constructions are recorded. This leaves out new developments in existing museums, like HOME which started in 1982 with the Iron Age, but extended in 2002-3 with a medieval setting.

The Late Middle Ages have not played a large role in archaeological openair museums until quite recently (See Figure 4.17) and then quite a bit in Scandinavia (See Figure 4.16). From the end of the 1980s, several people got actively involved in medieval presentations and (re)construction. In 1989, in Nykøbing Falster, Denmark, a trebuchet was built which had such a huge effect on the public that it was soon followed up with an archaeological open-air museum. A connection was made with the British late medieval type of reenactment which was at a high level (personal communication P. Vemming Hansen, 25 August 2011). A decade later, the more traditional museums held a medieval year, which led to a surge in interest from both the public and historians into this period in Scandinavia. Suddenly, the Middle Ages had become in fashion. This is linked with the medieval boom of the 1980s with authors like Jacques le Goff up to Umberto Eco (Groebner 2008, 14). In the last third of the last century, academic attention for the Middle Ages has risen higher than ever before. 'Noch nie zuvor sind so viele wissenschaftliche Arbeiten über das Mittelalter erschienen wie heute, in Deutschland ebenso wie im übrigen Europa' [never before so many scientific works were published as nowadays in Germany and similarly in the rest of Europe] (Groebner 2008, 161).

4.6 Visitor Numbers

There are marked differences in visitor number averages between the museums from before 1980 and the later generation (See Figure 4.18). The older ones receive on average more visitors, even if you leave out the crowd pullers (attracting over 200,000 visitors in 2005). Besides that, they focus on different subjects than younger museums do. This picture might mean that the larger museums survived, the smaller ones disappeared. This requires further research.

Period	The number of museums of which data was retrieved	Total number of museums	With crowd pullers	Without crowd pullers	Crowd pullers
Museums from 1900-1979	22	37	69.803	33.625	Biskupin, Pfahlbaumuseum, APX Xanten
Museums from 1980-1999	55	110	28.557	20.304	Archeon, Guédelon
Museums from 2000-2008	26	52	22.498	22.498	
Total	103	199	35.837	17.500	

Figure 4.18. Visitor average in 2005 over archaeological openair museums, divided into categories of age. Totals are given including and excluding crowd pullers.

It must be stressed that only still existing archaeological open-air museums are taken into account, not the closed ones. In the overview, crowd pullers like St Fagans in Wales (mainly a ethnographic open-air museum with some (re)constructions) and Salzwelten near Salzburg in Austria (mainly a theme park with some (re)constructions) were left out.

4.7 Keywords

The managers had to give scores to a series of eight keywords, keeping their museum in mind (See Figure 4.19). Several keywords were consciously left out, like 'authenticity', '(re)construction', 'archaeology' and 'science'.

Education was mentioned more often than tourism, although the majority of visitors to such museums are tourists. Obviously, archaeological open-air museums earn much more income with tourist visitors, but many of them have education as one of their main aims. Data does not show that older museums put more weight on education and newer more on tourism.

The second lists of keywords, ranged by popularity, are living history, research and experimental archaeology. They only score between 20 and 40 percent.

In a lot of cases where experimental archaeology was used, this was more of a kind of way to present activities to the public instead of the rigid academic definition of it. Without having presented the museums with a definition, the answers are hard to interpret. With research, in most cases, one did not mean academic research per se. In many cases a kind of applied research was meant, such as that needed before constructing, or in order to make items or activities more authentic so to speak. By asking the museums to pinpoint both research and experimental archaeology, a differentiation was expected between a more popular experimental archaeology (in many cases demonstrations, not necessarily based on the museum's own research) and a more labour intensive research. This however was not the case. Neither experiment nor research is out of fashion. When specifically asked: 'are experiments executed in the museum', or when the question was 'Do you have a list of recent publications', often the answers were: 'not yet' or 'regrettably not'. The phrasing clearly suggests these were aspirations.

Living history is a more modern method when compared to experimental archaeology, although in general it is not either one or the other: of the 57 museums using either living history or experiment, 39 museums use living history, 24 use experiment, and 7 use both.

Keyword	Amount
Education	102
Tourism	88
Living history	39
Research	33
Experiment	24
Regional identity	15
Regional development	15
Environment	12
Total mentions	328
Total museums	129

The sample taken might be too small to draw conclusions as to whether experimental archaeology is facing a defeat in favour of living history - a confrontation of methods which is seen by some colleagues as a confrontation between science and commerce. This would need more research. In Germany for example, many museums planned or executed by the end of the 1990s were still advertised as having grown from experimental archaeology, but seemed to have had little to do with it since the time of their founding (Goldmann 2001, 179). This development is also dubbed 'prehistory light' (Banghard 2000, 213) as it seems that little attention is paid to scientific backing in these cases.

In the presently existing archaeological open-air museums, living history is used more widely in Scandinavia, the British Isles and in the Netherlands, much less so in Eastern or Southern Europe. The latter regions house only relatively few archaeological open-air museums, so the validity of such conclusions is limited.

4.8 Governance

When looking at the organisation structure of archaeological open-air museums, it becomes evident that Germany counts many private associations running such a museum, 25 in all (See Figure 4.20). An association in Germany can be a way of running a museum with the government being responsible for the foundation. 'It is very often not possible (because of financial reasons of the public budget) that a community or the state will establish new museums et cetera. So the private engagement is wanted - and so of course we have a lot of private societies (which have also advantages as charities because of tax reasons).' (personal communication R. Kelm, 11 May 2006).

In France too, it is hard to discern between governmental and private museums. Museums can be governmental, run by departments or municipalities. Some others are non-profit making associations or private societies. The third group of museums are under a Société d'Economie Mixte [mixed management]. This means that the site belongs to a public body but the equipment is managed and animated by associations or private societies under control of these public bodies (personal communication C. Daval, 2 May 2007).

Figure 4.19: Frequency of keywords as recorded from the archaeological open-air museums. Source: second survey.

Country	Government	Association	Company	Museum	Foundation	Other	Total
Austria	10	2	2	0			14
Belgium		4		1			5
Catalonia	3						3
Cyprus	1						1
Czech Republic	3	7		1			11
Denmark	9		1	3	1	2	16
England	6		4	4	1		15
Finland	2	1	1				4
France	8	9	2				19
Germany	18	25		5			48
Greece	1						1
Greenland				1			1
Hungary	2	1	1				4
Iceland	2						2
Ireland	1		1				2
Italy	3	3	2	3			11
Latvia	1		1				2
Macedonia	2						2
Norway	3	1	3				7
Poland	6	5	1				12
Portugal	3						3
Russia	1	2					3
Scotland		1				2	3
Slovenia	1						1
Slovakia	1						1
Spain	1	1				1	3
Sweden	6	5	3	1	3		18
Switzerland	2				1		3
the Netherlands	1	1	1		3		6
Turkey	1						1
Ukraine		1					1
Wales	3						3
Total number	101	69	23	19	9	5	226
Total percentage	45%	31%	10%	8%	4%	2%	100%

Figure 4.20: Archaeological open-air museums, grouped by country by governance category. In grey numbers referred to in the text.

Percentage of the budget self-earned	Number of museums
81% - 100%	35
51% - 80%	22
0% - 50%	97
Total	154

Figure 4.21: The financial independency from third parties for archaeological open-air museums.
Due to the different forms governmental support can take in the different countries across Europe, it can only be estimated how many museums are actually independent or not. Probably, 60% of all archaeological open-air museums under research are part of the local governmental structures, or are to a large extent supported by them.

Ascertaining the legal dependency of a museum (private or non-private) was hard, but it was even harder to put a finger on the financial dependency (See Figure 4.21). Many archaeological open-air museums are organisation-wise dependent of the government, but need to earn a large part of their income by themselves. What the present research shows, is that an own income share of over 50% is normal for 37% of the museums. With many traditional museums an own income percentage of less than 20% is usual. The national archaeological museum in the Netherlands for example received in 2006 80% of its budget as funding from the government (Rijksmuseum van Oudheden 2006). Results of the survey highlight how governance has created opportunities in some countries, like in Eastern Europe and Austria, while in other countries like Germany and France, different solutions were designed with the aim of setting up an organisation structure for archaeological open-air museums.

4.9 Funding Issues, the EU

Through time, different levels of governments or ruling elites have all a role in archaeological open-air museums, be it with different agendas. In some cases the goals were economic, like promoting tourism in rural areas. Other goals could be to foster a common heritage or identity. While in the old days it was the ruling elite which stood behind many open-air museums, at present still most open-air museums are in hands of governments or are accommodated by them. The European Union is like an elite institution sponsoring museums.

Several archaeological open-air museums reported that their main source for funding when they were starting up was the European Union or its predecessor, the EEC (See Figure 4.22). Thirty three museums mentioned this; 79% of them had such funding for the period 2000-2010. Some others also referred to having used EU funding for large physical expansions. This would be a suggestion for future research, as EU funding partly depends on how the applying organisation is embedded in present political and organisational structures, as well as to what degree the applying organisation can be regarded by Brussels as trustworthy and how European targets are met.

The EU Lisbon Strategy was an action and development plan for the economy of the European Union between 2000 and 2010, superseded by EU 2020 for the period 2010-2020. The goal of the Lisbon Strategy was to 'make

	Period	EU / EEC funding	no EU / EEC funding
	1900-1979	1	27
Figure 4.22: Number of	1980-1989	1	42
archaeological open-air mu-	1990-1999	5	79
seums with and without EU	2000-2010	26	58
period of founding.	Total	33	206

Europe, by 2010, the most competitive and the most dynamic knowledgebased economy in the world' (European Council, 2000). It was very much an economic approach, based on innovation as the motor for economic change, the learning economy and social and environmental renewal. The main fields were economic, social, and environmental renewal and sustainability. In this light, cultural projects or projects themed with heritage tourism get little attention compared with other lines of funding: the Culture Programme has 400 Million Euro budget for seven years, which is for example 0.8% of what is available for the 7th Framework Programme (51 billion Euro) (Paardekooper 2011, unpublished). In the Culture Programme priorities are not to fund Culture per se; goals are in cultural diversity and intercultural dialogue; culture as a catalyst for creativity; and culture as a key component in international relations (http://ec.europa.eu/culture/our-policy-development/european-agenda-forculture_en.htm). Integration is one of the most important goals of the Culture Project - it often is hard for archaeological open-air museums to fit into these priorities, therefore, applications for funding often are submitted in other programmes. EU funding for archaeological open-air museums go through programmes like INTERREG, the Lifelong Learning Programme, LEADER+ and CULTURE. Projects carry names like Destination Viking, Zeitgeist, liveARCH and OpenArch (www.destinationviking.com, www.exarc.net). There are many options and often archaeological open-air museums are successful in getting their projects funded, as long as they listen carefully to the priorities EU sets.

Since the beginning of the 1980s, many archaeological open-air museums have either been started by European funding are have been expanded with it (Goldmann 2001, 178). Examples are Swifterkamp in the Netherlands which could move site and start again with a Neolithic type series of buildings in 1997, HOME in the Netherlands, which doubled its surface area when adding a medieval area to its facilities in 2001, and the Musee des Temps Barbares in Marle, France with an early medieval series of over 10 houses in 2004 (http://cam.daval.free.fr).

At first, the EU projects were about countering long term unemployment; later the focus changed to the development of rural areas, for example by promoting sustainable tourism (European Commission 2003). A good example of the latter is Bachritterburg Kanzach in Southern Germany. It is not their motto which is new ('Staunen - Begreifen - Mitmachen' [be surprised - understand experience]), nor their approach to using living history groups. What makes this project special is that the Bachritterburg is constructed almost solely with European and other governmental funding. However, as there are no funds to keep them running, museums like the Bachritterburg have a very limited number of own staff and are heavily dependent on living history group volunteers to populate the museum during events. In 2005, the museum received over 25,000 visitors, but large visitor numbers or not, there is not enough income for staff (personal communication R. Obert, 8 April 2011). If there is project funding available for setting up archaeological open-air museums, or for making large infrastructural investments, there usually is no such funding for maintaining or running such a museum.

4.10 Archaeology

In 84% of 154 cases, every single (re)construction goes back to a specific excavation. In many of these cases extra information was selected from other excavations. In the other 16% of cases, the (re)constructions were inspired by various excavations or general information.

In 19% of the cases, there was no archaeologist involved when starting an archaeological open-air museum. The percentage of archaeological open-air museums referring to general information as their source, rather than specific sites, is larger when there were no archaeologists involved at the start. In 90% of the 130 archaeological open-air museums an archaeologist was involved at the beginning and 68% still have an archaeologist in their staff. In 23%, the museums have an archaeologist as consultant. In 5% of the museums, there was no archaeologist involved ever. A total of 53% of the 129 archaeological open-air museums has literature available written about the museum or about specific activities at the museum. The other half might have a museum guide, but that is all.

So called professional involvement of archaeologists in archaeological openair museums can be defined in different ways and it remains open how it affects the museum's quality. Petersson (1999, 136, 139) argues using the example of the Krampmacken ship project that even if archaeologists are involved in a project, this does not automatically ensure quality. M. Schmidt also states clearly that 'das Vorhandensein eines Wissenschaftlers in derartigen Projekten ist noch lange keine Garantie für Qualität' [the presence of a scientists at such projects is by no means a guarantee for quality] (M. Schmidt 2000, 169). Archaeologist Nortmann was involved in the construction of the archaeological open-air museum of the Altburg at Bundenbach. Although he calls the museum a success, he clearly describes the points for improvement, where archaeologists were not able to offer a single solution only, or where the constructors deviated from the archaeological points of view (Nortmann 1987).

At Castell Henllys in Wales, in the 1980s an archaeological open-air museum was built under ownership of Mr Foster, an entrepreneur. With clear emphasis on a presumed Welsh identity, it was linking back to a sort of glorious Iron Age heyday. Most internal details could not be confirmed by archaeology (Mytum 2004, 93). Even though the archaeologist Mytum was involved since the beginning - the archaeological site was excavated by him and he remained involved in the construction and use of the open-air museum built on site - he makes clear that the site owner was in charge, and Mytum's own influence was limited: 'here, Foster's interpretation took over and the sort of past he wished to create became more obvious' (Mytum 2004, 93). Even after Foster's death, the site is 'creating its own subcultures, working within or beyond the strict control of archaeologists, park site management or planning authorities' (Mytum 2004, 99).

In most cases, the aims and motivations are mixed, and one cannot speak of a purely scientific or purely educational project. Professional involvement can take many shapes but it boils down to what it consists of in practice. An advisory committee can look well on paper. But the reality is there may be just one symbolic meeting a year; alternatively the local archaeologist may visit the archaeological open-air museum weekly, even if there is no such advisory board, and influence staff to prevent nonsense and fantasy from taking over. It takes more than just looking at a yearly report or a book publication to determine whether there is some kind of archaeological / historical professional involvement, and to what extent. The word archaeological in archaeological open-air museums must have some content: in the definition it says 'primarily based on archaeological sources' - meaning there must be a dialogue between the museum and science which does not stop when the museum is built (www.exarc.net).

4.11 Conclusions

The data collected from these broad scale observations provided a good start for going into more depth with the eight museums of the detailed studies. The case studies are described from chapter Five onward.

There are about 300 archaeological open-air museums in Europe (see for example Pelillo et al. 2009). Hundreds of details were collected from books, brochures, internet and site visits. Following on these publicly available resources, the museums were approached with several surveys, to which many responded. In addition to the survey evidence, many anecdotal answers needed to be analysed and compared.

Most museums combine the role of archaeological open-air museum with that of an archaeological education centre. One third combines with an original archaeological site. There are a smaller number who combine it with an indoor showcase exhibition, although this number is growing rapidly and such an exhibition is seen as one of the keys to a museum's success.

One will find most archaeological open-air museums in Germany, Sweden and France and Denmark. The vast majority dates to the most recent 30 years, although examples exist which are 100 years old. In Northern Europe and the British Isles, the boom is slowing down, while in Eastern Europe and the German speaking countries we might not have seen the real peak yet. The relative density of such museums is highest in Denmark, Wales, Austria, the Czech Republic and Belgium.

Some archaeological periods are presented more often than others in one region, with other periods being dominant elsewhere. The implication is that different periods have varying connotations and relevance depending on the country. Overall, the Iron Age is the most preferred, followed by the Viking Age and the Neolithic. The Viking Age has been a very strong brand and continues to increase in popularity.

On average, an archaeological open-air museum attracts about 17,500 visitors annually, although several attract as many as 200,000 or more. Older and more established archaeological open-air museums attract a higher number of visitors.

Education is a more important keyword than tourism. This is unsurprising for a museum where education is approached in both formal and informal ways. However it is impossible to state that living history is becoming more popular, and experimental archaeology's role is declining. A good archaeological open-air museum is well able to combine both. Almost half the museums are run by the local or regional government. Only 10% are private companies. Associations are often used by governments to spread the risk of running a museum, although one third of these museums earn half or more of their budget themselves. Funding is often available for planning and building a museum but not for running it, even though maintenance costs start kicking in after a few years and staff costs are frequently not met by the museum's income (See Section 6.3.2.)

Involvement of archaeologists does not guarantee quality; neither does their absence guarantee failure. The aims and motivations of these museums are often very diverse. With archaeology as a source of inspiration, the dialogue between museum and science should continue during the entire lifespan of the museum.

Chapter 5

Eight Archaeological Open-Air Museum Case Studies

5.1 Introduction

In this chapter, the eight museums under research (See Figure 5.01) are presented. It is mainly a descriptive presentation, but this is a prerequisite for the rest of this research. Although data are obtained from a range of sources and a personal visit, the information has been distilled and harmonised into a standardised presentation. Typically there are some literature sources and websites for each but personal observations were crucial.

Information was collected from the management, the visitors, my own observations as well as publicly available sources. The origins of each museum are explained, followed by a description of their education programmes.

The employees and managers of the eight case study museums have gone to great length to help collect the data for this research. They are thanked here for the courage to share this much information in this detail.

The case studies are different enough from each other to compare: too much of the same would not give enough insight in the sector as whole, although local performance of franchise museums could give very interesting information about visitors. While one museum dates to the 1920s, others are between ten and fifteen years old and still in hands of their founders. Each of the eight museums is in a different country. The museums' governance and basic information is shown in a one-page overview for each museum. The goals of the museums are very diverse. Some of the museums have just a handful of employees, others up to 40 or 50, even though many of them only work in summertime. The Scottish Crannog Centre has only one (re)constructed house as the focus of its museum, whereas Fotevikens Museum has 22 and is still expanding.

Most of this key chapter, however, concerns detailed results of the eight case studies. Each of them is compared with the others in regard to management & finances, the collections, interpretation and the visitor service. To understand the visitors of each museum, visitor characteristics are described alongside their decision to visit and finally how they appreciate several different aspects of their visit. Each museum presentation is illustrated with several photos made in 2008 to reflect the situation at the time of this research.

While this study identifies similar characteristics within the group of eight museums under research, the greater number of differences reflects the diversity of archaeological open-air museums in general.



In March 2011, the then managers of the eight archaeological open-air museums were asked to answer some questions, in retrospect to the period 2008-2010. These answers were added to the conclusions per museum drawn from the data collected in 2008.

Figure 5.01: Europe, showing the position of the 8 partners in the liveARCH group.

5.2 The Scottish Crannog Centre

The Seotash claimog centre			
Address:	Kenmore, Loch Tay Perthshire PH15 2HY	Eras and area presented; number of (re)constructed larger houses:	
Scotland, United Kingdor		One Iron Age roundhouse,	
Phone:	(+44) 1887830583	based on a single excavation	
Website:	www.crannog.co.uk	Goal:	
E-mail:	info@crannog.co.uk	 to inform, educate and inspire in an entertaining manner without compromising the authenticity on 	
Extra information:		which the centre is based;	
Kind of organisation:	Non-profit and has a parent private non-profit organisation.	 to continue underwater research and experimental archaeology to further training and the presentation of new information to the public; and to lead by example with best practice in visitor engagement and environmental management. 	
Manager 2008:	Barrie Andrian		
Founding year:	1997		
Number of employees: 6.5 FTE		We bring history and archaeology to life from discoveries underwater. We aim to be the foremost centre for	
Number of visitors 2001-2008:			
29,000		crannog research in the UK, and a leader in cultural tourism. The mission	
27,000		the lifestyle of their inhabitants to the	
25,000		widest possible audience. (personal communication B. Andrian, 26 August	
23,000		2008).	
		Key Literature:	
		Andrian & Dixon 2007 Dixon 2004	
2001 2002 2003	2007 2008 2007 2008	Dixon & Andrian 1996	

The Scottish Crannog Centre

Figure 5.02: The Scottish Crannog Centre at a glance.

5.2.1 Introduction to the Scottish Crannog Centre

The Scottish Crannog Centre is an archaeological open-air museum based on ancient Scottish lake (or loch) dwellings known as crannogs, located in the very heart of Scotland in Loch Tay, Perthshire where the remains of 18 ancient loch dwellings are preserved in situ (Andrian & Dixon 2007) (See Figure 5.02). The crannog (re)construction which forms the focal part of the Scottish Crannog Centre was built by the Scottish Trust for Underwater Archaeology, or STUA. This registered charity was formed to promote the research, recording, and preservation of Scotland's underwater heritage. 'The superb preservation of one archaeological site, Oakbank Crannog inspired the construction of a full size crannog based on the archaeological evidence from the site' (Andrian & Dixon, 2007, 36) (See Figure 5.03). 'The building of the reconstructed crannog aimed to address specific issues raised during the excavations at Oakbank Crannog, to rediscover ancient technology and to serve as an educational resource and plat-





Figure 5.03: The Crannog at the Scottish Crannog Centre.

Figure 5.04: The entrance area of the Scottish Crannog Centre.



Figure 5.05: Showcase at the exhibition of the Scottish Crannog Centre.

form for public archaeology as the focal point of the Scottish Crannog Centre' (Andrian & Dixon, 2007, 36).

The main feature of the Centre is a (re)construction of an early Iron Age crannog based directly on the results of underwater excavations in the loch. Facilities include an exhibition hall featuring artefacts, videos and interpretive panels, guided tours inside the (re)constructed crannog, and demonstrations and hands-on participation in ancient technology and craft skills. Costumed guides and regular events bring the past to life for visitors of all ages.

The entrance area of the centre is not large, but all modern buildings are painted Swedish red and therefore easy to recognise (See Figure 5.04). One can clearly discern between what is meant as (re)construction and what is modern. About 50% of the experience is indoors: the exhibition, the roundhouse, and half of the activity area.

5.2.2 Education

Schools get a normal visit plus extra time in the indoor exhibition (See Figure 5.05). They have an option to do more and stay longer than tourist visitors do. There used to be a teachers' education pack but not in 2008; a new one is needed. The children are offered a textbook and some other material, although not enough. A DVD is planned.

5.2.3 Map

Figure 5.06, an aerial view over the Scottish Crannog Centre, is depicted on the next page.



Figure 5.06: Aerial view over the Scottish Crannog Centre. Source: The Scottish Crannog Centre.

5.2.4 Management and Finances

The Scottish Crannog Centre had both a business plan and an action plan. The management, which is unchanged since the start in 1997, follows their own experience and with a small number of staff, there is not much which needs to be explicitly formalised in writing although a staff training manual exists. It is clear that staff are multi skilled: working at the front desk in the shop, giving guided tours or craft demonstrations, doing repairs and running education groups as well as doing part of the administration. Certain individuals were allocated specific tasks besides the generic tasks of guiding, cleaning, selling tickets et cetera. The down side is that every staff member, including the management is running from job to job, responding to what is coming up, rather than having the time to set their own priorities. Many things are shared responsibilities due to the financial need to keep staff numbers to a minimum and to the short seasonal employment.

Staff, although the most valuable asset are hard to retain when they can only be employed for the season. There simply is no money to keep staff all year round and even in the season, staff numbers need to be kept to a minimum. This means, most staff do not return for the new season, a common problem with all Scottish tourism businesses and many others around the world.

The Scottish Crannog Centre has a reasonable number of affiliations with universities, business networks et cetera (See Figure 6.07) but works especially well with tourism networks. The influence of the Scottish Crannog Centre is impressive, given its modest size in surface area, staff and visitor numbers. It has become a national Scottish icon; in many Scottish tourist brochures, you will find an image of the crannog. In this sense, the Scottish Crannog Centre fits well with the much larger Pfahlbaumuseum and Lofotr. There was not the same level of detail in the financial information available from the Scottish Crannog Centre as from some of the other case studies. The Scottish Crannog Centre is making a large effort to attain and maintain the highest grading from Visit Scotland's quality assurance (www.visitscotland. com/quality-assurance/), and they have a gold award from the Green Tourism Business Scheme and the other awards. These are not only important marketing tools to attract visitors; they also give business credibility and are good moral boosters for the staff. The knock-on effect is that this helps them gain funding and business support from the public sector.

5.2.5 Collections

The lack of space on site is a key factor here: this is the tiniest of all eight museums (See Figure 6.01). It means there are no possibilities for larger events. In 2008 documentation about the (re)constructed crannog, its contents and the equipment used in activities was in place. STUA does a lot of underwater archaeological surveying besides running the Scottish Crannog Centre. Their collections of archaeological artefacts are documented to assist research, not to be made publicly accessible.

The Crannog is primarily based on the Oakbank Crannog site (Dixon 2004). Several people involved in the excavation have also worked on the (re)construction of the Crannog which did not involve a modern contractor. With good documentation in place, the construction of the roundhouse may be regarded as an experiment.

The crannog house itself is like a traditional open-air museum setting everything is there, but the items are as good as unused. An idea would be to introduce smell boxes. The furnishing is only done partly, but visitors do not seem to mind that obvious elements like beds and ladders are not in place (See Figure 6.16 and 5.07).

Half of what the museum staff publishes is directly connected with the museum. They publish archaeological research, which serves as background information for the museum.



Figure 5.07: The interior of the crannog at the Scottish Crannog Centre.



Figure 5.08: The demonstration area of the Scottish Crannog Centre.

5.2.6 Interpretation

The Scottish Crannog Centre's staff who deal with public are all recognisable. There is no visit to the Scottish Crannog Centre possible without being guided by staff or volunteers. Most of their activities regard third person interpretation, only seldom do they use first person interpretation (Tilden 1957). They do not offer activities which require much space, like making and firing ceramics or iron smelting. Metal working in general, if it requires fire, is mostly absent except for the occasional bronze casting. If living history is employed, this is in active demonstrations of crafts or for example music. The site is too small to be populated by some background living history actors and a fight show requires more space than is available.

5.2.7 Visitor Service

The Scottish Crannog Centre is signposted well in the nearby area. They post their special events in public places and regularly cooperate with tourist information, hotels et cetera. On entry, all information is clearly depicted and the whole site is barrier-free.

Visitors usually first see the exhibition (15 minutes), then get a guided tour through the crannog (30 minutes) followed by 15-20 minutes of demonstrations in the activity area (See Figure 5.08), then they are invited to try the activities themselves. For adult groups, like for example seniors, there are no customised programmes available. Although not generally available in the UK, at the Scottish Crannog Centre programmes can also be booked in several foreign languages. This was, however, not advertised because by 2008 this could not be guaranteed all the time. By 2011, it is certain that three languages are available.

5.2.8 Understanding the Visitors to the Scottish Crannog Centre

5.2.8.1 Tourist Visitor Characteristics

With 57 visitors per day on average (See Figure 6.05), the Scottish Crannog Centre is not visited much, similar to Araisi and the Matrica Museum. However, with their low number of staff, they have relatively many visitors per paid employee (See Figure 6.11).

The local population density near the Scottish Crannog Centre is much lower than for example at HOME. Therefore, it is even more remarkable that the local impact at the Scottish Crannog Centre is over twice as high (See Figure 7.11) as compared to HOME.

The tourist visitor characteristics at the Scottish Crannog Centre are the most detailed of all, thanks to the enormous amount of returned visitor surveys: 2,322 (See Figure 7.01). However, in order to compare with other museums with fewer surveys, only a more general picture is needed. The Scottish Crannog Centre could do well in repeating the survey and compare newer results in more detail with the previous ones.

At the Scottish Crannog Centre, it is hard to draw a sharp line between the high season and the shoulder season (See Figure 7.03). In other words, they are doing well in keeping the museum alive and busy in the shoulder season. Actually, there are more people coming in the shoulder season (55% in 5 months) than in the high season (38% in 2 months). More chances could be sought when compared with general tourism trends in Scotland using for example school holiday visits in the shoulder season. The Scottish Crannog Centre is at capacity in the high season and parts of the shoulder season. Real development could focus on low season with for example some events or by targeting repeat (local) visiting. The management cannot easily do more on a site this physically limited.

The division of visitors between local, national and international at the Scottish Crannog Centre is close to the average of the eight museums. One reason, obviously, is that this museum alone is responsible for over 50% of the surveys.

The museum is family friendly but did not advertise as such as this warned off older folks who had perceptions of being inundated by young children.

The museum's website is the smallest of all when counting the number of files and with the United Kingdom with 80% in the top three of countries with the most internet connections in the group of eight, it remains questionable whether the Scottish Crannog Centre website is serving its goal well enough. Only 4.0% of the respondents have seen the museum's website prior to their visit (See Figure 7.19). By 2011, the Scottish Crannog Centre is getting better internet feedback, but they still do not yet have a budget to revamp the website.



Figure 5.09: A tour guide at the Scottish Crannog Centre.

5.2.8.2 The Decision to visit

For four of the eight museums under research, brochures are an important but expensive tool. A good distribution network is part of the investment. The Scottish Crannog Centre is the most successful in using flyers and brochures (34.7%) as opposed to using the internet (See Figure 7.19).

Together with the Matrica Museum (40.5%) and Lofotr (38.4%), the Scottish Crannog Centre's visitors (39.5%) are significantly more interested in the past than visitors to the other five museums (See Figure 7.24 and 7.25). For repeat visitors, these numbers are a bit lower, but still, the top three consist of the same museums. The weather plays a much smaller role than elsewhere in the group of eight except at the Matrica Museum. Most visitors in Scotland might be reconciled with the unpredictable character of the local weather. For repeat visitors, family friendliness is more important than for first visitors. This is partly because the museum is not advertised as such. Due to the small size of the museum, visitors stay a short time (See Figure 7.28), although they are very satisfied with their visit. If only the Scottish Crannog Centre could expand, they might be able to keep their visitors for a longer time. This would also require an investment in service facilities.

5.2.8.3 Rating the Facilities, Services and Experience

In the categories 'rate the tour guide' (See Figure 5.09), 'rate the craft', 'rate the hands-on activities' and 'rate the gift shop', the visitors of the Scottish Crannog Centre were generally more satisfied than anywhere else. The (re)construction was rated 97.3%, just slightly less than at Parco Montale (See Figure 7.32), the exhibits were rated 90.9% which was just slightly under the score at the Matrica Museum of 91.2%.



Figure 5.10: A 3D puzzle of a crannog roundhouse in the exhibition at the Scottish Crannog Centre.

In the indoor exhibition, several scale models are used, in different formats. They serve different groups, for example children and those visitors with special needs. In the group of eight museums, only the Pfahlbaumuseum also uses scale models, be it not in such an interactive way: a 3D puzzle of a roundhouse, a simple interactive installation (See Figure 5.10).

The hands-on activities at the Scottish Crannog Centre are a hit: the tour guide demonstrates the techniques and as this is the end of the tour, visitors get the chance to try things out themselves, from simple things like grinding grain up to the more sophisticated fire drilling. Hands-on activities like the ones at the Scottish Crannog Centre are much better appreciated than craft demonstrations behind a rope.

The relatively best appreciated gift shop is at the Scottish Crannog Centre (See Figure 5.11). They offer many books, post cards, small and large gifts (eco-friendly or locally produced). Their assortment is both deep and wide.

Almost all items have a direct link with the museum or its themes; only a few are simply general Scottish items. Visitors see the shop on arrival and need to pass through on their way out. There is no clear routing, but for that, the shop is too small.

Coffee and tea is available at a simple desk - this would be something to improve. The Scottish Crannog Centre, responsible for over 50% of all returned surveys, had removed the question about rating the cafe from the tourist survey because they already knew their coffee and tea serving needed improvement. Asking the question about the restaurant facilities would leave a bad impression and they did not want to let the visitor leave on a potentially negative note. It was not made clear until 2011 the Scottish Crannog Centre is actually not allowed to operate a cafe as stipulated in the terms of their lease. They can only sell themed drinks and biscuits, but they can (and now do) provide picnic facilities which they are beginning to advertise as well. They pay a peppercorn



Figure 5.11: The gift shop at the Scottish Crannog Centre.

rent in return for sending their visitors to the landlord's cafe. It is just that they have not operated a cafe for several years. They did in 2010-11 and satisfaction rates had gone up accordingly.

In general, the percentage of visitors whose experience has exceeded expectations at the Scottish Crannog Centre is significantly higher than anywhere else (See Figure 7.35). The satisfaction is higher in the shoulder season, possibly because the museum is less crowded.

5.2.9 Key Strengths and Challenges for the Scottish Crannog Centre

Having described the Scottish Crannog Centre, its management and visitors, some key strengths and challenges emerge (See Figure 5.12). At the final stages of this research, in 2011, the Scottish Crannog Centre management looked back on the period since 2008 and came up with some recommendations for their future development. These are detailed in Figure 5.13.

About the Museum

Management and Finances:

- Does not receive regular or core funding from the government or other agency.
- Survives on ticket entry, shop and coffee sales, donations and grants.

Staff:

- Staff rely on their own experience and in-house training, rather than on anything else.
- Staff are multi-tasking and respond to what is coming up instead of planning ahead.

Collections:

- The site of the Scottish Crannog Centre is very small, limiting the type of activities. Visitors in the shoulder season are more satisfied, probably because they have more space.
- The construction process of the roundhouse is well documented, appropriate for a proper experiment.
- The roundhouse is nicely decorated, and although the skins and bracken are appreciated, it feels somehow unused maybe smell could be introduced for an immersive experience.
- Although the gift shop is the best appreciated of all the eight museums, their coffee shop needs improvement options are limited by lease with the landlord.

Marketing:

- The Scottish Crannog Centre has very good PR, making it iconic to Scotland. It is clearly shown
 and marked on maps and in the nearby area. Cooperation with the tourist office is given much
 attention. Surprisingly, the website is relatively small due to financial constraints.
- The top awards from Visit Scotland are an important marketing tool.

About the Visitors

- The immersive experience takes shape following the guided tour, when techniques are demonstrated which visitors can try out themselves there is interaction between the guide and the visitors.
- The Scottish Crannog Centre has many visitors per paid employee and a high percentage of returning visitors.
- The Scottish Crannog Centre has many visitors in the shoulder season; this could be further improved by organising more events in (school) holidays.
- The family friendliness is not well advertised but many people return exactly because of this.
- Visitors are in general more satisfied at the Scottish Crannog Centre than anywhere else.

Looking back in 2011

The most important change or happening/event between 2008 and 2011 for the Scottish Crannog Centre was the dramatic drop in visitor numbers in 2008 and again in 2010 as well as an urgent need to renovate the Crannog (re)construction. Visitor numbers decreased due to external factors; the Crannog renovation was necessary mainly because of internal factors (it was not possible to keep up with maintenance required).

The Scottish Crannog Centre has changed what they offer their tourist visitors in the sense that there are now new events and out of season opening; there are log boats for hire, period clothing for visitors, extended snack bar facilities and craft demonstration area.

The visitors to the Scottish Crannog Centre have not changed; it is still pretty much the same visitor profile; a few more European and North American visitors.

For the near future the Scottish Crannog Centre management expects a good period with an excellent team committed to the development and sustainability of the Centre.

The last recommendation of the Scottish Crannog Centre management is to evaluate constantly. More research into experimental work and marketing is required.

Figure 5.12: Key strengths and challenges for the Scottish Crannog Centre.

the Scottish Crannog Centre management when looking back in 2011.

Figure 5.13: Comment from

5.3 HOME

Address:	Boutenslaan 161B 5644 TV Eindhoven	Eras and area presented; number of (re)constructed larger houses:	
Phone:	(+31) 402522281	Three Iron Age houses from the Southern Netherlands Four Medieval houses from the	
Website:	www.eindhovenmuseum.nl	municipality Eindhoven	
E-mail:	info@homeindhoven.nl	Goal:	
Extra information:		To offer its visitors a culture-historical	
Kind of organisation:	Private foundation	a better perspective on the life of our	
Manager 2008:	Dorine Prinsen	ancestors in prehistory (Iron Age) and Middle Ages (Prinsen 2009, 8).	
Founding year:	1982	Key Literature:	
Number of employees: Summer: Winter:	23 FTE (43 pp.) 40 (est.) 30 (est.)	Boonstra 2004 Boonstra & Callebert 1991 Boonstra et al. 1997 Boonstra & Paardekooper 2001	

Number of visitors 2001-2008:



Figure 5.14: (above) HOME at a glance.



Figure 5.15: (Re)constructed Iron Age farm at HOME.

5.3.1 Introduction to HOME

In the 1970s, at several places in the Netherlands, outdoor centres were founded, based on a combination of education about the natural environment with education about the relation of man with his / her environment in prehistory (See Figure 5.14). Having seen examples abroad like Sagnlandet Lejre and with experience in helping with constructing a Bronze Age farm at the Floriade Expo in Amsterdam, a group of teachers of the Eindhoven Pedagogische Academie voor het Basisonderwijs (PABO), a school, teaching their students to the Bachelor of Education, joined efforts. In 1982, they founded the SPHE, *Stichting Prehistorisch Huis Eindhoven* [Foundation Prehistoric House Eindhoven], now-adays known as Historisch OpenluchtMuseum Eindhoven (HOME) (Boonstra 1991b). This site turned to be the first archaeological open-air museum of the Netherlands, later followed by Archeon and others.

Construction works started in 1982; the museum opened the same year with the construction of a shed, followed by the first farmhouse (See Figure 5.15). It was not until about 1987, an entrance fee was charged. In the early 2000s a medieval style part was added to the museum (See Figures 5.16 and 5.17).

5.3.2 Education

The added educational value is what HOME calls School Excursion Plus, an extension of the lessons at school with a high experience factor. 2008 HOME had an education coordinator, one product developer and eight education officers who run the programmes. The museum had 13 different standard school programmes.

HOME staff do their own research when developing new programmes, which is then checked by external specialists. The programmes are mostly aimed at rather young children and at an experience rather than at specific knowledge and the latest insights.



Figure 5.16: (left) Exterior of the Craftsmen house at HOME.

Figure 5.17: (right) Interior of the Craftsmen house at HOME. The Iron Age programmes are mostly based on presumed daily activities. The medieval programmes are mostly based around a theme. HOME customises programmes if groups for example want to stay longer, if they are younger than usual, if there is a large group (for example 250 children at the same time) or if they are a special needs groups.

The available recent education publications and non-print media the museum produced are a teachers education pack, a textbook and DVDs. There are four different education packs, besides that there are three themed posters (iron working, wool, flax processing). The museum also has two themed websites.

Not much has changed in the education programmes over the years. There are more requests for two-hour programmes instead of three-hour programmes, therefore those are better developed. Medieval programmes date to 2002 (opening of medieval part) and were updated a bit in 2007 and 2008. Prehistoric programmes have not been updated for a long time, because they are fine, even though mainstream teaching goals, the curriculum, have changed. Besides the curriculum, when developing education programmes, museum staff need to take the possibilities and impossibilities in the museum into account. Besides that, even when the curriculum changes, old methods of teaching based on previous versions of the curriculum are used for a very long time before new books are bought. You will find the new teaching goals in the programmes, but some of them are only introduced indirectly (personal communication N. Schoeren, 15 November 2010).

5.3.3 Map

The map of HOME as used in 2008 is shown in Figure 5.18. It was presented to the visitors in the Museum Guide (Boonstra 2004) with the numbering explained in Dutch, English, French and German. Figure 5.18 shows the unaltered map and English descriptions of the different houses and other items of interest.

5.3.4 Management and Finances

Of all eight museums under research HOME scores highest regarding the (in) stability factors (See Figure 6.02). Many things are changing here, but the museum remains without competition, given the situation that the region Northeast Brabant is not a tourist area (www.5-sterrenregio.nl/toerisme.htm). Five different directors have been in place in the past 10 years. Besides that, the museum doubled its surface area in 2002, a fire hit the museum in 2006 and an internal restructuring was started in 2008. Internal communication is a recurring issue due to two factors. Partly this is because most staff work part time, partly because of the large amount of staff members sharing responsibilities.

Archaeologists from Leiden University advised the museum at its start only. Archaeologists have never been employed in the museum management, making the role of archaeology here the most limited of all sites. Where necessary (in graphic design, making their own marketing plan, or archaeological consultancy for example) the museum hires external expertise. The museum established a



Figure 5.18: Map for visitors of HOME (Boonstra 2004).

board of advisers but has not made use of this since 2006. In 2008, HOME uses an authenticity committee consisting of own employees doing their own research on request.

For this study, this is the museum with the highest number of staff: 40 people covering 23 full time equivalent (FTE). With 1,607 tourist visitors per FTE, HOME seems less than profitable (2,000 or more seems better, see Section 6.3.3. and Figure 6.11), but the museum must be seen as a social workshop as



well. The museum takes a role in a government scheme offering jobs for people who normally would not get or keep a job. At events, thanks to the many volunteers, the museum can handle up to 2,500 visitors in one day. Surprising is that, despite its social workshop function, links with the local community are more limited than with other museums under research. HOME could do better in involving itself in the cultural heritage or the natural parks in the nearby region.

HOME has the highest percentage of staff costs of all eight museums (See Figure 6.09). The PR costs are, however, quite low compared the other eight (personal communication R. Sandnes, 5 March 2008).

HOME was the leader of the *live*ARCH project to which all eight museums belonged and thanks to that EU exposure they have been able to get some help from the local government (See Figure 6.10). Although the museum obtains a large part of their income from their own sources and public money, they could work more on getting third party funding. The management of HOME is very much aware of setting financial priorities, more than any other of the group.

5.3.5 Collections

The museum represents daily life in the Iron Age (See Figure 5.20) and the Middle Ages (See Figure 5.19) in the region of Eindhoven/Kempen. The different Iron Age and medieval buildings partly belong to different time piods within their era. Probably visitors do not experience it as such. In the 13^{th} century house for example, there is a 16^{th} century bed. The distance between the 13^{th} century house and the next 16^{th} century one is two metres. For both the

Figure 5.19: (left) Living history at HOME: a volunteer.

Figure 5.20: (right) Living history at HOME: an employee. tourism and the education programmes, having different presentations within one single era poses problems. That is why other differences are emphasised, like between the rural 10th century farm and the 15th century city. Similar issues exist in Araisi.

HOME is specialised on being an archaeological open-air museum with education facilities, where other similar museums have more on offer, spreading the risks. There is no nearby archaeological site they connect with and they do not incorporate indoor museum collections either (See Figure 6.12). HOME is the only museum not showing original artefacts in any context within the museum. They did have outdoor showcases until about 2005, but these contained (re)constructed items only. In 2005-2006, about 20 archaeological objects from local excavations were shown in these which they had on loan. In 2011, HOME merged with the municipal museum Kempenland which until then was known for hardly ever presenting local archaeological objects.

The houses in Eindhoven are not constructed as an experiment or documented for those purposes (See Figure 6.13). Plans exist to describe the excavations, the construction process and the use of the houses (personal communication N. Arts, 20 May 2006).

Regarding collections registration (See Figure 6.14) it seems that most museums do well, except for HOME. They were in 2008 in the process of starting up the collections registration process. It was reasoned that by registering the collections of reproduced artefacts, they would be able to register the stories that go with them, as well as the context of each artefact and story. HOME staff states that the way information is gathered about their collections is not structured enough to call it research (See Figure 6.14). HOME has many articles out about their own museum activities, but relatively few publications by staff, not related to the open-air museum itself (See Figure 6.17).

The most important sources of information are excavations and publications of the Eindhoven Archaeological Service. The inventory of the museum is divided in several categories and each category consists of a lot of items; the collections are both deep and wide. The gaps in the presentation are religion and social classes.

HOME makes its own period costumes. In 2009 the textile department counted about 5,000 items (Prinsen 2010, 26). Inspiration is found all across Europe. The costumes can be divided into several qualities, depending on their use:

- daily use by regular staff,
- occasional use by birthday party groups,
- replica costumes of reasonably good quality for showing off.

Although HOME is in the middle of a city, there is not much vandalism. This is probably due to the 24/7 guarding, with the night watch living on site.

5.3.6 Interpretation

HOME deploys a variety of interpretation techniques, depending on the situation and the person responsible for interpretation. A wide variety of activities are offered as demonstrations throughout the year, only at Lofotr there are more. They do not offer lectures of any kind (See Figure 6.20). Living history is becoming an increasingly more important method in HOME besides the emerging museum theatre (personal communication B. van Lingen, 15 July 2008) (See Figure 5.19 and 5.20). In both techniques, it is a combination of their own staff and volunteers who are involved. Activities, mostly involving children are an important tool of the museum too. Interaction with adults has not been tried out yet much. HOME offers its grounds for regular living history fighting training and by showing this type of living history they are comparable to Lofotr and Fotevikens Museum. Living history is solidly based at HOME this way, not just being used at the odd event, but available on a regular base.

For tourists, there is a wide variety of activities. There are events and in school holidays there are activities catered for the many children visiting. In general, most activities are targeted at children and through them, at their (grand)parents. Learning goes together naturally with museum activities, aiming at conveying knowledge to visitors. A lot of information is available, but it is unclear whether people learn from it.

For adult groups (so-called business-to-business as well as parties) there are custom made informal programmes, mainly focussing on entertaining and, to some extent, with a learning component. The medieval restaurant can be booked for parties (See Figure 5.21).

Figure 5.21: The restaurant at HOME.



5.3.7 Visitor Service

HOME cannot be easily found when travelling by public transport. Also, signposting of the museum for those coming by car is poor. Parking during events is a problem. The nearby unofficial parking can hold 175 cars and although the official one can hold much more, it is rarely used because it is 20 minutes walking away.

The entrance fee corresponds with what is being offered, leading in some cases to different fees at different times. Special needs visitors could get more attention - the toilet for them for example is not in the restaurant like the others, but in the entrance building. Unusually among the case studies, HOME has a full service restaurant. They do not have a separate playground (See Figure 6.22) but in a sense the whole museum is that much focussed on children that it can be regarded as a two hectare playground.

At events, a host will welcome the visitors shortly after they have entered, explaining the rules of the day and the (historic) setting. This is a bit similar to the Pfahlbaumuseum were a host will see to the people who are waiting in line to get into the museum.

5.3.8 Understanding the Visitors to HOME

5.3.8.1 Tourist Visitor Characteristics

The museum typically is visited by couples, often visiting with (young) children, 78.5% all together. The museum has the highest percentage of individuals visiting: 7.3%. Just like with many of the other museums, the group of parents with older children as well as young adults are almost completely missing.

At HOME, over 95% of the tourist visitors are Dutch speaking (personal communication J. Schuitert, 14 December 2011). The percentage of repeat visits at 32.8% is very high (See Figure 7.07), similar to the Pfahlbaumuseum. The museum is one of the few attractions in a non-tourist area. HOME has more local visitors and fewer national and international visitors than expected, making it a local tourist attraction only (See Figure 7.10). This could be an important growth market for them.

HOME has the highest percentage of visitors off season and the second highest in the shoulder season, using the spring, autumn and Christmas holidays (See Figure 7.03 and 7.04).

They take advantage of free publicity in newspapers and magazines more than average.

For the museum, the internet is a more important way of reaching possible visitors than for any other museum in this group, mainly when websites other than their own one are taken into account (See Figure 7.19). This is free publicity and shows the museum is rooted into this internet infrastructure.

5.3.8.2 The Decision to Visit

From 2001 onward, HOME worked in strong cooperation with Genneper Parken. This is a municipal institution which has different attractions, like a swimming pool, an indoor sport centre and a skate rink. HOME happens to be nearby, but otherwise they would not have been part of the Genneper Parken



Figure 5.22: Street entrance of HOME.

strategy. Unlike the others in this municipal institution, HOME is a non-governmental cultural organisation. Where the branding of theirs is focussed at the local population interested in sports and leisure, the museum should rather be reaching non local tourists interested in culture. The Genneper Parken branding does not fit the museum's purpose.

When asked how people got to know HOME, the visitor survey 2006 shows for 9% this was through brochures, while 18% knew the museum's website and 22% knew the museum through friends or colleagues (personal communication, L. Staals, 8 December 2007).

Although the most important reason for first visits usually is the interest in the past, at HOME this is less than anywhere: 25.8%, except at Parco Montale: 20.9% (See Figure 7.24). This might be because the museum is in a non-tourist area. At HOME, educational value stands out as motivation - this was the original focus of the museum.

For some reason, the entrance to the museum is not at the street, but hidden, a hundred meters deeper into Genneper Parken along a mud road (See Figure 5.22). Also, usually one of the two heavy gate doors remains closed, leaving the impression of a half open museum. Visitors remain uncertain if they have reached the museum without proper signposting. The museum has few visitors having decided to visit on impulse. At HOME, the weather is more important to both first and repeat visits than anywhere else.

5.3.8.3 Rating the Facilities, Services and Experience

Although visitors of archaeological open-air museums traditionally are satisfied with the (re)constructed houses, at HOME this is less the case than anywhere else. This probably depends more on the presentation as on the quality of the (re)constructed houses as they are not always staffed and are mainly designed



Figure 5.23: The gift shop at HOME.

and furnished for education purposes and not for tourism, even though the museum staff state that they furnish some of their houses 'because we want to show daily life' (See Figure 6.16). Tourist visitors have to make up their own story if they do not read the leaflet they have received on entry.

The most appreciated items at HOME are the tour guides. The crafts (11.1%), the restaurant (10.9%) and the gift shop (10.4%) (See Figure 5.23) are the items people are most dissatisfied with at HOME. While the crafts are not always present, the full service restaurant is open when the museum is open, as is the gift shop. With the latter two being responsible for important extra income, these could be taken more advantage of.

The signs, brochures and guide books are considered the poorest of all eight museums (See Figure 7.32 and Figure 5.24), even though staff try to maintain a corporate identity. The expectations of the visitors to HOME are in general met (62.0%) - which is surprising in the sense that on average in the eight museums, 69.4% of the visitors had an experience exceeding their expectation. This means, HOME is not presenting as an outstanding result like many other museums do (See Figure 7.35). On the other hand, more people than anywhere else in the eight museums stay three hours or longer (40.8% against an average of 7.3%) (See Figure 7.28). Visitors might simply know what to expect and are happy they get it. It could be a sign of good marketing. Another reason might be the restaurant which is situated in the middle of the museum, and not near the exit. Finally, the longer stay can be because of the high number of smaller and larger events organised here in 2008 (See Figure 5.25).





5.3.9 Key Strengths and Challenges for HOME

Having described HOME, its management and visitors, some key strengths and challenges emerge (See Figure 5.26). At the final stages of this research, in 2011, the (new) HOME management looked back on the period since 2008 and came up with some recommendations,, shown in Figure 5.27.

The present author has been involved in this museum since its inception in 1982 and was employed here from 2002 to 2006, being at present one of their consultants. HOME is therefore more familiar than any of the other museums in this research. An attempt was made to set previous judgment aside and not let inside information influence the present research too much.

Figure 5.24: (left) Signs at HOME.

Figure 5.25: (right) Active participation in the 2008 event called Knights and Ladies at HOME.

About the Museum

Management and Finances:

- The museum was in 2008 the most unstable of all under research.
- The role of archaeology is less prominent than anywhere else.
- HOME is mainly an archaeological open-air museum with an important education department. There is no archaeological site nearby and no indoor museum or other museum modules.
- The museum has very little third party funding.

Staff:

- Most staff work part time, making internal communication hard. This is the museum with the highest number of individuals employed.
- The museum has many volunteers but links to the local community are limited.
- Staff publish very little.

Collections:

- The medieval presentation which includes 11th, 13th and 15th / 16th century presentations is simply perceived without time depth.
- The registration of the museum collections was, in 2008, in its infancy.
- HOME has many period costumes and uses these well.
- The museum is not well signposted; parking during events is a problem and the main entrance is hidden and not very appealing.
- The full service restaurant (one of only a few in the group of eight museums) could be better developed into a treat for the visitors, leading to higher satisfaction.

Marketing:

- There is no competition from other tourist attractions because the museum is situated in a nontourist area of the country: attracting more national and international tourists is a challenge.
- The PR investments are quite low and these are partly spent through a local branding called Genneper Parken, which is not at all fit for purpose. The internet is very important to the museum, as is free publicity (newspapers et cetera).

About the Visitors

- The museum focuses mainly on children and accompanying adults, and runs the risk of being perceived as childish. The visitors to the museum are less interested in the past than average.
- Visitors stay long, but the satisfaction is not as outstanding as elsewhere.
- The museum is good at attracting visitors in school holidays in the shoulder season.

Looking back in 2011

The most important change or happening/event since 2008 has been a reorganisation in 2011, which involved a reduction in staff and a restructuring of the museum to make it more businesslike. These changes were initiated by an external impulse: local funding was reduced unexpectedly in the autumn of 2010.

The museum has changed what it offers tourist visitors by developing an extensive programme of exhibitions, with a greater emphasis on local history and more living history activities at the weekends.

The museum now distinguishes between tourism programmes and school programmes. During the weekends, there is an intensive "DO" formula with a higher entrance fee while on weekdays a low profile "WATCH" formula is offered for a lower entrance fee. During the weekdays, most of the visitors in the museum are attending school programmes. This way of pricing is not about who is visiting, but about the timing of the visit. The total number of visitors remains equal but the advantage is that the weekday tourist visitors, with a new lower entrance fee, no longer complain about the presence of school groups.

The visitor profile changed slightly as there are now less school group visits and many more tourists.

The expectations for the near future are a better profiling, at a national and professional level, as a local museum.

Figure 5.26: Key strengths and challenges for HOME.

Figure 5.27: Comment from the HOME management when looking back in 2011.

1

5.4 The Pfahlbaumuseum

Pfahlbaumuseum Unteruhldingen

	-		
Address:	Strandpromenade 6 88690 Uhldingen-	Eras and area presented; number of (re)constructed larger houses:	
	Muhlhofen Baden-Württemberg Germany	10 Stone Age houses from the Alpine region 13 Bronze Age houses from the Alpine	
Phone:	(+49) 75568543	region	
Website:	www.pfahlbauten.de	Goal:	
E-mail: mail@pfahlbauten.de		The purpose of the association is the support of the scientific exploration of	
Extra information:		of the prehistoric lake-dwellings and	
Kind of organisation:	non-profit organisation	settlements on the foothills of the Alps, the public education as well as the	
Manager 2008:	Gunter Schöbel	spread of prehistoric knowledge.	
Founding year:	1922	Key Literature:	
Number of employees:	55 FTE	Reinerth 1973	
Summer:	55 (est.)	Schöbel 2004a, 2005	
Winter:	17 (est.)	Schöbel & Walter 2001	
Number of visitors 200	1-2008:		
320,000			
300,000			
280,000			
260,000			
240,000		Figure 5.28: The	
220,000	2004 2005 2006 2007 2008	Pfahlbaumuseum at a glance.	

5.4.1 Introduction to the Pfahlbaumuseum

Near the Alps, around Lake Constance, in the period 1854-1940, much attention was paid to remains of prehistoric lake dwellings (Schöbel 2001, 4, Keefer 2006, 10-17). Excavations of these made a wealth of information available about the people living on the coasts of these lakes in the Neolithic and the Bronze Age (See Figure 5.28).

In Unteruhldingen, on the German side of Lake Constance, the first prehistoric type lake dwelling houses were built in 1922. Their construction, a fictional village (Keefer 2006, 13), was based upon archaeological theories, valid for that time. They became very popular, both for archaeological interested nobility and as part of the booming tourism industry in the area (See Figure 5.29).



Figure 5.29: (above) Series of (re)constructed Bronze Age houses at the Pfahlbaumuseum.

Figure 5.30: An employee of the Scottish Crannog Centre interacting with the public during the H8 event at the Pfahlbaumuseum, 2009.





Figure 5.31: One of the houses of the TV series Steinzeit das Experiment relocated.

5.4.2 Education

Unteruhldingen has an education officer, museum staff and teachers covering this field (Kinsky & Schöbel 2005). The teaching relates 100% to the themes of the museum. The education programmes are not restricted to pupils in school groups but also include more informal methods of learning for any other target group. In order to ensure using the latest insights in the specialism they work with the museum staff. The museum has close relations to archaeological services, teachers, schools and state school administrations. Most of the education programmes take place in a designated area of the museum; these are two (re)constructed houses and, from 2009 onward, a new Stone Age workshop area. They are well shielded off from the tourist visits. This is also the location of public activities like for example H8, an event in the framework of liveARCH (See Figure 5.30). The activities offered are rather daily activities as performed in the past (or inspired by such) instead of special themed programmes. Customised programmes are possible when there are specific needs or wishes. Only seldom do staff do education outside the museum, at schools for example. In some parts of the season, there is no education possible due to the high number of tourist visitors. The available recent education publications and non-print media the museum produced are a textbook and a DVD with the SWR film documentation of Steinzeit das Experiment [Stone Age the Experiment] (See Figure 5.31).

5.4.3 Map

Figure 5.32 shows the map of the Pfahlbaumuseum. It describes the six samples of villages presented in the museum, following the guided tour. All but one (SWR) are named after the archaeological sites they refer to:



Figure 5.32: Map of the Pfahlbaumuseum. Source: Pfahlbaumuseum.

- 1. The Stone Age houses Arbon- and Hornstaad;
- 2. The SWR Stone Age Village;
- 3. The Stone Age village Sipplingen;
- 4. The Bronze Age village Unteruhldingen;
- 5. The Bronze Age village Bad Buchau;
- 6. The Stone Age houses Riedsachen.

On the mainland, three buildings are mentioned: the old and the new museum and the wood workshop.

5.4.4 Management and Finances

Just like at the Scottish Crannog Centre, the Pfahlbaumuseum has an action plan, but no business plan (See Figure 6.03). Much of the planning is short term planning, as often in archaeological open-air museums. It is remarkable to see how small the core back office staff is. In 2008, the Pfahlbaumuseum had many affiliations with professional organisations, but not any with universities (See Figure 6.07). There was a plan to contact universities in order to open up



Figure 5.33: One of the many restaurants on the boulevard next to the Pfahlbaumuseum.

new sources of archaeological relevance which then would be used for new presentations (personal communication G. Schöbel, 6 August 2008). By 2011, this has been followed up.

The Pfahlbaumuseum is widely known with a large part of the German population and plays a role in national consciousness. However, the competition on this level is large. Other international examples are Biskupin in Poland, Sagnlandet Lejre in Denmark and the Scottish Crannog Centre in Scotland. The Pfahlbaumuseum is one of the earliest and best visited archaeological open-air museums in Germany. They played a role in 111 archaeological sites in the Alpine region getting joint UNESCO World Heritage status in 2011 (http://whc.unesco.org/en/list/1363).

Being the main attraction in the lakeside village Unteruhldingen the museum promotes tourism in the region heavily. On busy days, museum staff guides the tourists to the parking spots on the large parking space at the edge of the village. At the pier, where the ferries land, there is a bronze statue of a Bronze Age Pfahlbau person [lake dwelling character], a cast of one of the figures by Embleton, dating to about 2005. On strategic points in the village, large banners point to the museum. In high season, the nearby restaurants have a special offer for Euro 9.80, clearly inspired by the museum (www.pfahlbau-specials.de) (See Figure 5.33). Two young students dressed like Ötzi, travel the nearby ferries and busses to lure people to the museum.


Figure 5.34: Indoor exhibition at the Pfahlbaumuseum.

5.4.5 Collections

Basically the story told in Pfahlbaumuseum is the state of the art concerning the Stone and Bronze Age lake dwellings. About 130,000 objects are stored with a focus on the Stone and Bronze Age of the Bodensee region. On their time-path which connects the museum with the local region, they also explain the development of the landscape since the end of the Ice Age.

The collections were built up since the end of the 19th century and are regarded as of general importance. The collections are wide in the sense that many different categories are covered regarding styles, techniques and use of materials. It is also deep, meaning it contains more items in each single category. The different elements per category are in context with each other (geographical, time wise) and support the theme. There are single items present which have a unique character of their own.

The full collections are larger than the limits of the museum's theme, but it is complete in the sense that there are no large gaps in the story presented. The quality of artefacts, both in physical quality and the information provided with them, is assured by scientific research, publication, restoration and presentation in exhibitions. The uniqueness of the collections are assured by the strategic purchase of existing collections. The museum has regular exhibitions (See Figure 5.34).

One of the strong points is the presentation like a traditional open-air museum of the open air collections, although they cannot (re)construct the landscapes and because of proximity of the different groups of houses, time depth consciousness is hard to reach with the visitors. Living history is as good as absent.



Figure 5.35: The entrance to the Pfahlbaumuseum.

The Pfahlbaumuseum staff publishes much, not only in their own journal *Plattform* or in the *Bilanz* books of the society EXAR, whose chair is the director of the Pfahlbaumuseum, but also elsewhere (See Figure 6.17). Staff are often presenting at conferences in the German language area, followed by published papers. There is a special interest in the history of the Pfahlbaumuseum of the 1920s-1950s (Schöbel 2001).

5.4.6 Interpretation

The Pfahlbaumuseum does not have a written interpretation plan (See Figure 6.18). They are one of the few using multimedia in their exhibits and allowing teacher-guided tours. Audio guides are not in use here yet, probably because of the way the visits are organised in guided tours, leading to a controlled way of limiting the maximum number of visitors on the premises. Staff wears a kind of uniform, and are clearly recognisable as such. Only rarely does an interpreter wear a period costume. Living history is hardly used and interpretation is in third person.

Space is a restrictive factor here, but still the number of visitors is high. Branding has not yet been standardised throughout the entire museum. Different styles of signs are present here and there, partly for different parts of history of the museum, but also because these signs were made ad hoc but used longer than expected. By 2011, this has been solved.

5.4.7 Visitor Service

The entry facade is not appealing as one cannot see what is actually inside; the lake dwelling characteristics are not repeated that clearly (See Figure 5.35).

Usually, the museum is so busy, that all visitors go on a guided tour. Just like at the Scottish Crannog Centre, on arrival they are sent to the modern indoor exhibition and once there are enough to form a group, they go on a guided tour



Figure 5.36: Interior presentation behind bars at the Pfahlbaumuseum.

past presentations in the (re)constructed houses (See Figure 5.20 for the Scottish Crannog Centre and Figure 5.36 for the Pfahlbaumuseum). The one hour tour ends near the entrance and exit building where there is an offer of temporary exhibitions, like the one by SWR or about mobility. They also organise events, like the ArcheX-Days and holiday programmes which prolong the time visitors stay in the museum. Given the small space compared to other archaeological open-air museums, visitors stay relatively long (Compare Figure 6.01 and 7.28). A museum visit to the Pfahlbaumuseum takes about two-three hours, the total visit to the village Unteruhldingen is a day trip including eating or relaxing near the beach. The museum is open more days than any of the other seven museums (356) and counts the highest number of visitors per day: 521 (See Figure 6.05). They also have the most visitors per Full Time Equivalent (FTE) staff member.

The route through the museum is clearly signposted and is a one way street only. The museum is one of the few where visitors cannot leave remarks in a comment box. This is not a general habit in Germany as opposed to for example the United Kingdom. In recent years the museum's infrastructure was adapted to the needs of handicapped people. There are only a few problems with vandalism or other visitor-related problems, mostly dirt, waste and sometimes damages to buildings or installations.

At the Pfahlbaumuseum, a special situation exists. None of the other seven museums has a similar parking issue like they do. Like at all museums, most people arrive by car or coach. However, except for local inhabitants, nobody is allowed to drive into the village, having to park at the edge of the village and walk into town. The museum is at the very farthest end, 600 metres away, about eight minutes walking. On busy days, especially at the high season (two weeks in May, three weeks in August) the parking site is overcrowded, leading to people trying their luck elsewhere. The public car parks are owned by the city but parking provision is not such a financial imperative for the city. Coaches (usually with groups of retired people) cannot enter the village so there is no easy drop off near the museum, meaning that they do not come. They are especially welcome as these groups usually come at times of the year when there is spare capacity and they show up regardless of the weather. If the local municipality could be less restrictive about coaches dropping off people to the museum off season, this could be an extra money maker for both the museum and the nearby shops and restaurants at a time of year when this is welcomed.

5.4.8 Understanding the Visitors to the Pfahlbaumuseum

5.4.8.1 Tourist Visitor Characteristics

In 1997, the museum had conducted a visitor survey, with some questions comparable to the present research (Baumhauer 1998, 92-96). However, the number of respondents was, with 2,821 persons, much higher than the 400 of 2008. Another difference is that the 2008 answers are from the high season only whereas the 1997 answers are distributed over a period of five months. 64% of the visitors in 1997 were holiday makers in the Lake Constance region. Most visitors live in a region with a diameter of about 350 kilometres, between Frankfurt and Lake Constance. Very few visitors came from abroad, but if so they mainly came from the German speaking neighbour countries. To reach the museum, most visitors had travelled 10 kilometres or more, meaning they had not been staying in nearby hotels. 60% arrived by car. The problems with parking as explained elsewhere existed already in 1997. However, the signs in the area pointing to the museum were appreciated a lot.

Of the visitors, 44% had decided to visit after contact with friends or family, meaning they did not rely on leaflets, newspaper articles or websites that much. In many cases, advertising is the second impulse for people, after they have more or less already made up their mind to visit. Of all visitors who were asked in 1997, 2% was not satisfied (Baumhauer 1998, 92-96). Other places visitors would go to would be the nearby Zeppelinmuseum, Mainau and Meersburg (a nearby island and city). Other archaeological museums are hardly mentioned.

Two out of three visitors would have liked to buy a souvenir, but that is hardly possible in this museum. It has become clear 'daß der Besucher des Pfahlbaumuseum kein klassischer Museumsbesucher ist. Er hat weniger Interesse an der Archäologie und betrachtet die Pfahlbauten eher als Erlebnisort mit hohem Freizeitwert, an dem ihm historische Sachverhalten ganzheitlich und verständlich vermittelt werden' [that the visitor of the Pfahlbaumuseum is no classic museum visitor. He is less interested in archaeology and sees the Pfahlbauten more as place for experience with a high leisure time value where historical facts are explained to him in a complete and comprehensible way] (Baumhauer 1998, 95).

In the Pfahlbaumuseum, there are not many activities or visitors in the autumn, winter or spring holidays (See Figure 7.03). The Pfahlbaumuseum is not active in business-to-business programmes, especially catered for companies. Adult visitors in general are considered an issue in the museum (See Figure 7.06). The percentage of repeat visitors is quite high: 31.2% (See Figure 7.07),

much higher than the average 25% for tourist attractions. This is probably due to the iconic character of the place. In 1997 this percentage was 26% (Baumhauer 1998).

A high percentage of visitors (26.4%) travel over 100 km to visit the museum that day. At Lofotr and Araisi, these percentages are even higher, but imagine that the Pfahlbaumuseum is in a densely populated, heavily touristic area, and especially at Araisi, this is not the case. At the Lofoten area, many visitors are hiking, staying two to three days in the area, while around Lake Constance, a higher percentage of tourists than anywhere else stay a week or longer (See Figure 7.16).

Competition for the Pfahlbaumuseum stretches all along the Lake Constance. With the Bodensee Erlebniskarte, you can get discounted entry to about 180 attractions on short distance of the Pfahlbaumuseum (www.bodensee.eu/#/ Navigation.aspx?itemid=72437). Some of the competitors are less serious, like the Pafhlbausauna [lake dwelling sauna], which states on their website that they have 'three lake dwelling saunas after historical example, embedded in a beautifully designed sauna garden with the "path of senses" and a grand view on the Lake Constance and the Swiss Alps' (www.meersburg-therme.de).

5.4.8.2 The Decision to visit

The Pfahlbaumuseum scored well on TV, partly because the series *Steinzeit das Experiment* brought much publicity for the museum. This was broadcast for the first time in May-June 2007 by ARD (the largest public broadcaster worldwide) (ARD 2005) with about 12.84 million viewers up until 2010 (www.martinbuchholz.com). The houses were relocated to the museum (See Figure 5.31).

They use 5.0% of their budget for PR (See Figure 6.09) which is a good average (personal communication R. Sandnes, 5 March 2008). The Pfahlbaumuseum spends a large part of it on local advertising, although only 15.0% of its visitors are local (See Figure 7.10) because tourists only first pick up information when nearby.

For many people, the museum was simply already known from the past, either having visited already or having heard about it one way or the other a while ago. The internet seems not to be very important. Visitors to the museum are convinced, more than in other museums in the group, by the entrance fees. Also the link with the environment is regarded important (See Figure 7.24 and 7.25). More than anywhere else, special events are an attraction to the visitors.

5.4.8.3 Rating the Facilities, Services and Experience

Data show the tourists to the Pfahlbaumuseum are not very much motivated by the possible educational value for their visit (See Figure 7.32). This might partly be due to the context of the museum: it is situated in a densely used tourist area with over 300 tourist attractions within a short distance. Maybe that is also why the entrance fees are an important factor here. Repeat visitors at the Pfahlbaumuseum are more interested for the region than repeat visitors of the other museums.



Almost all season through, all visitors go on a guided tour - it is the only way to experience the museum. This does not mean that people are happier with guided tours when they are forced this way: at the Pfahlbaumuseum, tour guides score a meagre 84.8%, that is low compared to the others.

In general, in most subjects where visitors could give a rating, the Pfahlbaumuseum scores are average. The hands-on activities are seldom available so they score low. The Pfahlbaumuseum could benefit more than any other of the case study museums from engaging visitors in their hands-on activities, but with a quarter of a million visitors a year, that proves hard to accomplish. It is however the most feasible change the museum could offer (See Figure 5.37).

Due to its non-profit character, the Pfahlbaumuseum does not have any in house restaurant facilities to get for example a simple cup of coffee. For that, one needs to leave the museum.

Possibly, the reason why the restaurants near the museum score so low:

- These tourists are looking for a lunch and not a dinner: the only nearby lunches are fast food (beach bar and ice bar with pizza) all others are fit for dinners only.
- These tourists have not used the restaurants yet and formed an opinion on what they saw near the museum: not the hotel/restaurants, but the 2 bars mentioned before.

The shop in the Pfahlbaumuseum is small and judged as insufficient; with 68.4% it has the lowest score of all eight museums, (See Figure 7.32). However, this is again due to the non-profit character of the museum; if they would have a successful shop, they would lose this status and would need to

Figure 5.37: (left) Crafts demonstration at the Pfahlbaumuseum.

Figure 5.38: (right) Automatic vending machine with post cards and guide books at the Pfahlbaumuseum. pay VAT. It is not an option either to re-invest profit made in the shop into improvements or research support. Complementary neighbourhood facilities would be worth exploring to exploring to see if this gap could be filled in a symbiotic partnership. Surprisingly, there is not a good souvenir shop either near the museum. Probably this is due to the fact that the Pfahlbaumuseum has copyright on their brand and on the word Pfahlbauten [lake dwellings] (personal communication G. Schöbel, 10 September 2008). If they would allow anybody using this, this would mean again a commercial income.

The Pfahlbaumuseum deserves a special mention with their automatic vending machines with postcards and the museum guide (See Figure 5.38). Some visitors (45.2%) think the museum is expensive, the highest percentage between the eight museums.

5.4.9 Key Strengths and Challenges for the Pfahlbaumuseum

Having described the Pfahlbaumuseum its management and visitors, some key strengths and challenges emerge (See Figure 5.39). At the final stages of this research, in 2011, Pfahlbaumuseum management looked back on the period since 2008 and came up with some recommendations, shown in Figure 5.40.

	About the Museum
	Management and Finances:
	- Much of the planning is short term.
	Staff:
	- The core back office staff is very small.
	- Museum staff publish frequently and take an active part in scientific discourse.
	Collections:
	- Parking is a problem.
	- The collections are complete and unique.
	- The museum entrance is not appealing and does not convey what the museum is about.
	- There is no in house restaurant. The symbiosis with the nearby restaurants is good, but people
	leave the museum earlier than they would otherwise for coffee and such. There is no option to return for a second visit the same day.
	- There is no good shop inside or next to the museum - a symbiosis in this field would be of added value to the visitors.
	Marketing:
	- The museum is widely known in the country.
	- Competition for tourists is very heavy.
	- The Pfahlbaumuseum presents itself much in a way a traditional ethnographic open-air museum does.
	- Much of the advertising is local.
	About the Visitors
	- Space is very limited but the visitor numbers are high, the highest per day and per staff member of all eight museums.
re 5 39 · Key strenoths	- The number of repeat visitors is the highest of all eight museums.
and challenges for the	- Visitors are not much interested in the possible educational value of the museum.
Dfallla anna anna	- The tour guides score relatively low, although many people use them.

Figu Pfahlbaumuseum.

Looking back in 2011

The most important change or happening/event between 2008 and 2011 for the Pfahlbaumuseum was the cooperation with EXAR, an international association on experimental archaeology. The director of the Pfahlbaumuseum chairs the association.

The museum has changed what it offers tourist visitors by developing new education programmes for school groups, making new exhibitions and by getting the status of UNESCO World Heritage for an important series of original lake dwellings.

The visitor profile for the Pfahlbaumuseum has not changed.

For the near future the museum expects to build more exhibitions and to keep working within its UNESCO World Heritage status as a lake dwelling sites.

The last aim of the Pfahlbaumuseum management is to take care of its stakeholders and realise a strong anchorage within the local and regional social processes.

Figure 5.40: Comment from the Pfahlbaumuseum management when looking back in 2011.

5.5 Lofotr

Pfahlbaumuseum Unteruhldingen				
Address:	Prestegårdsveien 59 8360 Bøstad	Eras and area presented; number of (re)constructed larger houses:		
	Norway	Three Viking Age houses (chieftains'		
Phone:	(+47) 76084900			
Website:	www.lofotr.no	Goal:		
E-mail:	vikingmuseet@lofotr.no	Lofotr must be a national museum for research and presentation of the		
Extra information:		viking Age. The museum must become of Norway's most interesting and		
Kind of organisation:	Non-profit government owned company (ltd)	special museums, one of the 20 best visited attractions of the country. Lofotr must be a cultural meeting place of		
Manager 2008:	Geir Are Johansen	high quality and information value,		
Founding year:	1994	safety (Hammer 2009).		
Number of employees:	18.5 FTE	Key Literature:		
		Hammer 2009		
Number of visitors 2001-2008:		Johansen 2009		
66,000				
64,000				
62,000				
60,000	trr.t			
58,000				
56,000 2001 2002 2003	2004 2005 2006 2007 2008			

Figure 5.41: Lofotr at a glance.

5.5.1 Introduction to Lofotr

In the Iron Age in Northern Norway, there were about 10-15 chiefdoms, connecting most of the coastal Nordland and the Troms Counties. One of them was at the Lofoten Islands, between 500 AD and 1000 AD. Excavations started in the 1980s. When those were finished, scientists, locals and the local government came together with the idea to make a (re)construction. The Borg municipality turned this idea into a specific plan because of cultural and touristic perspectives. At first, in 1991 a Viking ship was constructed (See Figure 5.42), followed by the chieftain's house in 1994. The museum opened in June 1995 (See Figure 5.41).

The site's own history is the main focus, with relations to many themes: general Viking history, trade and contacts, power and religion, daily life and regional resource management. The link to the region is that of a chieftain's farm which is naturally linked to the hinterland because of the chief's regional power, and with the neighbouring chiefdoms (See Figure 5.43, for the interior, See Figure 5.44).



Figure 5.42: (left) One of the Viking ships at Lofotr.

Figure 5.43: (below) The (re)constructed chieftain's farm at Lofotr.





Figure 5.44: Interior of the (re)constructed chieftain's farm at Lofotr.

5.5.2 Education

Compared to the other seven museums, Lofotr is visited by very few school groups: this part of Norway is almost empty with six persons per square kilometre. Most of the Lofotr teaching takes place in the museum itself. There are education boxes which schools can order as well as on line material and a DVD. There is no education officer employed as such. Education activities are based on their own and other people's research. The programme offered to educational parties resembles the tourist offer including a guided introductory tour, but it is much more extensive and requires participation at another level. Programmes are both about daily activities (cooking for example) and about special happenings. The school camp children are usually 12 years old, but the museum covers all ages. The camps are coordinated by the local Viking Camp School. In some cases a custom made programme is required, like for blind children. School visits are almost solely in the shoulder season (Spring and Autumn).

5.5.3 Map

Lofotr presented a plan of its vast surroundings to their visitors in a leaflet as presented in Figure 5.45. The map shows the archaeological remains and (re)constructions in the landscape. The most visible houses and the Viking ship are presented separately at the bottom. The museum is conveniently situated next to the main highway of the island. As the site is quite large, the amount of time visitors need to count for walking between the different sites is mentioned clearly, a total of two hours.



5.5.4 Management and Finances

In recent years Lofotr had an increase in competition. They also experienced a major organisational restructuring and were on the way to planning a new museum building. There was quite a high number of instability factors present in 2008 (See Figure 6.02). That is one of the reasons why they have a detailed business plan, action plan and other plans (among others Hammer 2009). Lofotr has a strong regional impact but has the ambition to be more important on a national level. This would be an important asset, but hard to accomplish in an ever more competitive world - there are many who claim the phrase Viking. Lofotr is investing most of its turnover in local suppliers, estimating the value equalling 20 full time jobs in addition to those people working directly for the museum (personal communication G. Johansen, 2 February 2010).

5.5.5 Collections

Lofotr, besides being an archaeological open-air museum, also has an archaeological site, a historical site, a cultural landscape et cetera. It is hard to give all these modules the attention they need, but they offer great future opportunities. Figure 5.45: The map for visitors of the area belonging to Lofotr. Source: Lofotr flyer.



The site itself has a chieftains dwelling with surrounding structures like a court site, boathouses and grave mounds. Some artefacts show similarities with other aristocratic places in Norway of the period, others are comparable to those from Viking towns for trading like Kaupang, Ribe or sites in Great Britain (See Figure 5.46).

The collections of (re)constructions are unique for now, because they are related to their geographical location, and the way people lived under arctic conditions. There is no other Viking museum in the area. The intangible collections of knowledge about the past life in these areas are collected in different ways. Cultural historical monuments and information about them is collected with the use of archaeological records and GIS systems. Other intangible archaeological and cultural historical resources are kept in the museum's own library and archives. The collections portray the location and context of the site - the Vikings of the far north, and as such is unique.

There have been many factors influenced by health & safety, and other related issues to make the (re)constructions work in relation to the audience - especially for winter use. Some examples are the electrical floor heating in the longhouse, the sprinkler system, the emergency light system, a steel wire construction in the roof and the concrete flooring to prevent damage to people and electrical systems. Publications by museum staff usually relate to the museum itself and not to any other (scientific) activities (See Figure 6.17).

5.5.6 Interpretation

In contrast to all others, at Lofotr, the overall concept and themes seem to be not 100% consistent with each other (See Figure 6.18). Some parts of the interpretation are more medieval than Iron Age in origin (personal communication L. E. Narmo, 20 August 2008). Guided tours are offered daily in as many as six languages and all of the guides are dressed in period costume (See Figure 5.47). They usually interpret in third person interaction. It must be kept in mind

Figure 5.46: (left) Interior presentation at the longhouse at Lofotr.

Figure 5.47: (right) Tour guide in the crafts area in the longhouse at Lofotr.





Figure 5.49: (above) Part of the living history theatre show for Hurtigruten visitors at Lofotr.

Figure 5.48: A creative playground with wooden animals at Lofotr.



Figure 5.50: The entrance area with gift shop and café at Lofotr.

that many tourist visitors are coming from abroad. Many of the staff are only employed for two months, being flown in to the museum to offer both guided tours and demonstrating a craft. Lofotr is the museum offering the largest variety of activities (See Figure 6.20 and 5.48). With their high visitor numbers as well as their large territory (the latter as opposed to the Pfahlbaumuseum), they have the full range of possibilities.



Figure 5.51: The gift shop at Lofotr.

Living history plays an important role here but because it is such expensive to bring in actors from elsewhere, it is not just a hobby for some volunteers here, but is presented more professionally (See Figure 5.49). The Viking Museum makes a point of being an authority on prehistoric handicrafts. There is an area with activities at about 1.5 kilometres walking distance, but only 10% of the visitors go that way (personal communication L. E. Narmo, 18 August 2008).

5.5.7 Visitor Service

Lofotr has good PR and is doing well with bringing the museum to peoples minds, helping them to find the way to the museum and giving them the feeling of being welcome (See Figure 6.21). They have a self-service cafeteria with plenty of space but the amount of toilets across the large museum area is inefficient (See Figure 5.50). The shop is the largest for all the eight museums (See Figure 6.23) but in comparison with others, it is not a typical museum shop but is rather a shop with Norwegian souvenirs (See Figure 5.51).

The museum staff is very interested in their visitors and collect information about them and their opinion in many ways (See Figure 6.24). They seem however not to store sales data. This, in comparison with their shop assortment could be an interesting study.

'It has developed many products and packages tailor made for differing regional and over-regional customer segments ... together with many outdoor activity providers, tour operators, hotels and camping sites in and outside the Lofoten archipelago' (Peter 2010, 28). With the product partnerships, the museum can rely on powerful marketing and combined sales channels.

5.5.8 Understanding the Visitors to Lofotr

5.5.8.1 Tourist Visitor Characteristics

For Lofotr it is obvious that for a high percentage of the foreign visitors this visit is a once in a lifetime experience. Lofotr has 91% of its tourist visitors attending in only eight weeks. It is open only 167 days a year but has the second highest number of visitors per day (See Figure 7.04). With their planned new museum building, they might be able to prolong the season a bit, which is especially interesting for cruise ship visitors of the Hurtigruten. These people typically select the excursion to the museum while still on board of the ship. When they enter the harbour, they are taken on a coach where they receive an introduction en route. On arrival at the museum, they have a staged chieftain's dinner, a so called feast banquet (See Figure 5.49), in the longhouse, and on the way back to the coach, they visit the shop. The coach takes them to the cruise ship again on the other side of the island, ready to move on. The full visit is timed to the minute.

Tourists visiting the museum usually are the more affluent ones who can afford to take holidays in Northern Norway. Obviously, they have the lowest rate of returning visitors (See Figure 7.07). The division of visitors in categories local, national and international in Lofotr is very different from all others. There are very few regional visitors (4.6%) and a very high percentage of foreigners (58.6%) (See Figure 7.10).

5.5.8.2 The Decision to visit

Just like many other museums, Lofotr was often recommended, either by friends, the tourist office, cruise ship crew or the hotels. Hardly anybody happens to pass by and then decides to visit because the museum is simply too remote. The internet usage in Norway is amongst the highest in Europe, but as many visitors are foreigners who not use the internet much while travelling, this method of reaching potential visitors is not much used. This might change in the future with the increasing use of the internet on smartphones and with the lower costs for roaming.

Visitors to Lofotr are more than average interested in both the past and the local region. The weather is also important, educational value much less than average. Family friendliness too is much less sought after, probably due to the low number of families visiting.

Visitors usually stay quite a long time (See Figure 7.28) with 19.7% staying over three hours. The museum park is well enough equipped for a long stay, but first time visitors usually do not do that. It usually is a far trip to the museum and back again and there are not many other attractions nearby with which you can combine a visit. If visitors would know that in advance, and provided they are not cruise ship visitors whose visit is planned in great detail, first time visitors would presumably stay longer and more could come. The publicity needs to show them they could plan a day long trip here. On repeat visits, many people stay much longer probably because they are prepared (See Figure 7.30). It would be interesting to investigate if they return for an event or anything in particular.

5.5.8.3 Rating the Facilities, Services and Experience

Visitor scores for the Lofotr are quite average within the group of eight museums. They have however the highest percentage of dissatisfied visitors, 9.0% (See Figure 7.35). These unhappy visitors have all been visiting in the high season only. No other museum shows a higher percentage of people thinking the museum was too expensive (See Figure 7.38). The percentage thinking it is cheap is with 2.3% the second lowest. Maybe the high dissatisfaction is because people do not really know what to expect: PR is good at reaching people, but probably less good at preparing visitors well enough.

People attend the showcase exhibition, but this is not the main attraction. Lofotr could benefit from a more interactive approach, but with their visitor frequency peaking in only eight weeks (See Figure 7.01 and 7.03) this is just impossible.

5.5.9 Key Strengths and Challenges for Lofotr

Having described Lofotr, its management and visitors, some key strengths and challenges emerge (See Figure 5.52). At the final stages of this research, in 2011, the Lofotr management looked back on the period since 2008 and came up with some recommendations, shown in Figure 5.53.

	About the Museum
	Management and Finances:
	- The organisation of the museum was a little unstable, but to counter that, they had detailed plans made.
	Staff:
	- none
	Collections:
	- Lofotr is not just an archaeological open-air museum but has many other modules. With the high number of visitors and the vast territory, they could expand and diversify.
	- Some parts of the interpretation do not fit the Viking Age represented, but rather the later Middle Ages; in fact part of the site is pre-Viking Age.
	- The shop is more a souvenir shop than a museum shop. The question remains whether visitors are offered what they want.
	- The museum could do well with a more interactive approach instead of demonstrations only.
	Marketing:
	- The competition for Lofotr is increasing, but not that much with comparable museums nearby with which a visit could be combined; visitors come to see nature.
	- The museum claims an (inter)national position using the term Viking; not that easy.
	- The museum's PR is good in the sense that it reaches many people. There are many product partnerships with several sales channels. The museum is well integrated within the local tourist infrastructure.
Figure 5.52: Key strengths and challenges for Lofotr.	- The internet usage by tourists is low, but knowing the visitors are usually the more affluent, it would be good to invest in smartphone solutions for using the internet onsite.

About the Visitors

- The museum has many international tourist visitors from a wide variety of countries. The offer matches this.
- 91% of all tourists visit in only eight weeks. This is a particular challenge. Very few locals visit the museum, simply because there are hardly any locals. With the construction of the new museum building (an indoor experience), prolonging the season becomes an option.
- Lofotr has the highest percentage of dissatisfied visitors.

Looking back in 2011

The most important change or happening/event between 2008 and 2011 for Lofotr was an investment of 5.25 million Euro (NOK 45 million) into a new building and new exhibitions. This change had external influence - an increase in visitor numbers - and the need for new facilities to serve more people at the same time. The Lofotr management had foreseen this in 2005-2006.

They are to change what they offer tourist visitors in the sense that they are preparing a new building and new exhibitions.

The visitor profile changed, especially with more cruise ship tourists coming (all year round) with 12 to 100 persons per day.

For the future, the Lofotr management expects more and larger cruise ships, and more people visiting at the same time. The new building will increase the capacity from 200 per hour to 600 per hour.

Figure 5.53: Comment from the Lofotr management when looking back in 2011.

5.6 Parco Montale

Parco Archeologico e	Nuseo all' aperto della Terra	amara di Montale
Visiting address:	Via Vandelli (Statale 12 - Nuova Estense) 41050 Montale Rangone (Mo) Italy	Eras and area presented; number of (re)constructed larger houses:
		Two Bronze Age terramara houses, based on a single excavation.)
Postal address:	Museo Civico Archeologico Etnologico	Goal:
	Viale Vittorio Veneto 5 41100 Modena (Mo) Italy	Making people aware of the life of their ancestors through an interactive approach based upon edutainment
Phone:	(+39) 059532020	and learning by doing methodology as
Website:	www.parcomontale.it	the results of archaeological research (personal communication I. Pulini, 11
E-mail:	info@parcomontale.it	June 2008).
Extra information:		
Kind of organisation:	Governmental museum	Key Literature:
Manager 2008:	Ilaria Pulini	Bernabó Brea et al. 1997 Cardarelli 2004
Founding year:	2004	Cardarelli & Pulini 2008 Johansen 2009
Number of employees:	5 FTE	
Number of visitors 200	1-2008:	
20,000		
18,000		
16,000		
14,000		
12,000		
10,000 2001 2002 2003	2004 2005 2006 2007 2008	

Parco Archeologico e Museo all'aperto della Terramara di Montale

5.6.1 Introduction to Parco Montale

The excavations in Montale begun during the second half of the 19th century and were taken up again in 1994. The remains of a terramara were uncovered, a typical village of the central area of the Po River plain around the middle of the Second Millennium B.C.

Following an increasing demand at the end of the 1990s for new methods of exhibiting past cultures, capable of combining a sound scientific approach with a high level of interactivity, the Modena Civic Museum of Archaeology and Ethnology got the idea of opening an archaeological park and open-air museum dedicated to the terramara civilisation (See Figure 5.54).

The first buildings were put in place in 2001, the museum opened in 2004 (See Figure 5.55).

Figure 5.54: Parco Montale at a glance.





Figure 5.55: (above) Two (re)constructed Bronze Age houses at Parco Montale.

Figure 5.56: Interior of one of the (re)constructed houses at Parco Montale.

5.6.2 Education

Parco Montale has a coordinator of educational programmes and three to five guides, depending on necessity. Every group gets between one and two guides. The open-air museum is designed for school programmes. For that purpose there are workshops and a fake excavation with specific archaeological surfaces (re)constructed. There is teaching material that goes with it, both on the internet and printed. Almost all teaching happens in the open-air museum itself, but one specific programme is a combination of half a day in the museum in Modena and half a day in the open-air museum. Another offer takes place in the Apennines where an important ritual was discovered on the top of a mountain (a bronze sword sacrifice). This is a one day visit, developed when schools requested a prolonged visit.

All education activities are based on their own research. The education offer is similar in purpose to the offer for tourists: the idea is to show the path from archaeological excavation to (re)construction (See Figure 5.56). For tourists, a visit differs in methodology. The activities offered mirror daily activities of the past, added to this are occasional demonstrations of crafts or techniques. Education is restricted to school groups of the age 6-14 and available the full period of the school year. The original programmes were made in 2004, but some improvements are made yearly. There has never been a need to make 'custom fit' programmes for specific needs or wishes.

Figure 5.57: Map of the visitor area of Parco Montale. Source: Parco Montale flyer.



5.6.3 Map

Parco Montale visitors in 2008 received a leaflet with some explanation and a map of the visitor areas (See Figure 5.57). It shows the preferred walking route as well as the areas open to tourist public: the excavation site, the archaeological area and the open-air museum. The map shows as well the recognisable buildings nearby, like the local church which was built on top of the archaeological site and the cemetery visitors have to walk around (the blank space in the middle).

5.6.4 Management and Finances

Parco Montale is overseen by the Comune (Municipality) di Modena and the Comune di Castelnuovo Rangone and run by the Civic Archaeological Ethnological Museum of Modena. Parco Montale has an action plan, but no details were given (See Figure 6.03).

They have archaeologists working for the museum and also use archaeological consultancy. Most of the tour guides are archaeologists or archaeology students (personal communication A. Pelillo, 10 June 2008). The museum is not open often for tourist visitors (on Sundays and Holydays of April, May, June, September & October), but the average number of visitors per day is high (See Figure 6.05). The educational offer of Parco Montale has been developed after research in the local region. The museum management realised that schools were demanding this kind of visit in this kind of museum. Even so, it has a large showcase museum besides the open air elements (See Figure 5.58).

The number of FTE dedicated to Parco Montale as part of the larger Museo Civico in nearby Modena is hard to establish. Everybody has a double role in this sense so the actual number of FTE might be much lower than 19 (See



Figure 5.58: The indoor archaeological exhibition at the Civic Archaeological Ethnological Museum of Modena. Figure 6.11). Staff costs are at a normal level of 60.7% (See Figure 6.09). The museum is not there to make profit, but has many other roles, including being a tool for development of the region.

Affiliations to professional bodies are evenly spread among universities, tourism networks et cetera (See Figure 6.07). The regional influence of the museum is the lowest of all eight under research even though this is a museum focussing on exactly the region.

5.6.5 Collections

The sequence of a tourist visit to Parco Montale is as follows. Visitors buy their ticket at the reception (which is also a small book shop) and visit to the indoor excavation first (See Figure 5.59). The excavations are displayed in an indoor room. It is open on controlled entry and here visitors get a guided tour of 30 minutes. After that, the visitors take a guided tour through the two (re)constructed houses (30 minutes) after which they attend a craft demonstration (30 minutes). Returning visitors are usually more interested in visiting the houses and witnessing the activities and less often also visit the excavation area.

The (re)constructions of the open-air museum are mainly based on the specific site of the terramara of Montale. Nevertheless some items of the house furniture are based also upon evidence from other terramara excavations and (where evidence from terramara excavations is lacking as with textiles) from European Middle Bronze Age contexts where those could have been in contact with the synchronous Terramare groups. The full collections fall within the limits of the museum's theme; the collections are complete in the sense that there are no large gaps in the story presented, according to the usual limits of the archaeological record. For wheelchair users the structure of the house was



Figure 5.59: The indoor archaeological exhibition at Parco Montale.



modified, creating a slope leading to the entrance of the first (re)constructed house and then building a bridge which connects it to the second house. However, the indoor excavation area is not fully accessible for wheelchair users (See Figure 5.59).

For safety, there is a fire extinguishing system, specifically designed for this site. The safety measures are all in all 50% of all costs for setting up the openair museum (personal communication I. Pulini, 11 June 2008). Young people destroying signs in the free area around the excavation building are a problem.

Parco Montale assures the quality of the artefacts, both in physical condition and the information provided with them by being accurate and consistent with the archaeological evidence and information (See Figure 5.60). Also when building the house (re)constructions, much attention was given to the archaeological source material. (See Figure 5.61).

The publications about Parco Montale are relatively few. Although staff publishes much, most of it is about archaeological research and not directly about the open-air museum, the research conducted there or the activities themselves (See Figure 6.17).

5.6.6 Interpretation

Because of the controlled system of guiding in groups, information is static as opposed of possibilities of offering layered information where visitors choose what is appealing to them. The guided tour for tourists is a derivative of what is offered to school groups. For children visiting Parco Montale, workshops are *Figure 5.60: (left) Ceramic (re)constructed items at Parco Montale.*

Figure 5.61: (right) Detail of a (re)constructed wooden door at Parco Montale.





Figure 5.62: (left) Craft demonstration at Parco Montale.

Figure 5.63: (right) Uniformed tour guide at Parco Montale. organised in for example making pottery, working wood and building houses or even archaeobotanic analyses. This offer could also be extended to adults. The presentation is in text and images and does not involve the other senses.

However, for their most important target group, school children, this interaction is exactly what a visit is all about; tourists get a programme with the presentations but without the hands-on part of it. There is next to no living history here and most people presenting, like the museum's own guides, wear a uniform and no period costume (See Figure 5.62 and 5.63).

5.6.7 Visitor Service

At Parco Montale, they do not have their own restaurant or cafeteria. There are several restaurants within walking distance, meaning people have to leave the museum to get refreshment, even a cup of coffee. The museum shop is only 10 square metres, the smallest of all eight, and so the assortment of items is limited. Most items are books combined with a few children souvenirs.

Large sales are not a priority here. Information about visitors is collected on small scale only.

A comment box for visitors as well as the documenting of visitor observations could both be useful.

5.6.8 Understanding the Visitors to Parco Montale

5.6.8.1 Tourist Visitor Characteristics

Parco Montale is, after the Matrica Museum, the one with the lowest number of tourist visitors (See Figure 7.01). It is doing well in its double role of educational centre on weekdays and tourist museum in weekends. In July and August, peak months for others, they close because it is with over 30 degrees on average (www.knowital.com/weather/modena/) simply too hot. The museum is with 100 kilometres too far away from the cooler beaches. Visitors are coming from nearby: 80.4% (See Figure 7.10), there are hardly any day trippers or foreign tourists.

The percentage of families (64.8%) between the visitors is nowhere near as high as in Parco Montale. The percentage of singles (2.2%) and the percentage of couples (17.6%) are the lowest of all eight museums under research. 'It could be that there are many schools and that children after the visit bring their families to visit what they have already visited in another way with the school. It could also be a cultural attitude of Italian visitors in that prehistory is less well known than later periods and where open-air museums are less well known' (personal communication I. Pulini, 29 October 2010).

5.6.8.2 The Decision to visit

A very high percentage of visitors come on recommendation, possibly from their own children. The PR method of Parco Montale lies in the extensive use of flyers, spending about 68% of their marketing budget (personal communication I. Pulini, 30 March 2010), but data shows this works very well. Free publicity is used widely by the Parco Montale staff. At first visit to Parco Montale, tourists are primarily attracted by the family friendliness (17.4%) and the educational value (25.2%) (See Figure 7.24).

5.6.8.3 Rating the Facilities, Services and Experience

The (re)constructions at Parco Montale are rated the highest of all eight museums. This does not mean others are less authentic. The guides were rated second best (See Figure 7.32) - usually a positive rating for the one goes together with a positive rating for the other. There is always a guide near or in the houses. Also the craft demonstrations were rated second best. The overall experience was rated highest at Parco Montale too. With 65.8%, an average percentage of the visitors had an experience which exceeded expectations (See Figure 7.35). Open-air museums are unusual in Italy which perhaps is why Italian visitors appreciate what Parco Montale does all the more because it is less often encountered.

5.6.9 Key Strengths and Challenges for Parco Montale

Having described Parco Montale, its management and visitors, some key strengths and challenges emerge (See Figure 5.64). At the final stages of this research, in 2011, the Parco Montale management looked back on the period since 2008 and came up with some recommendations, shown in Figure 5.65.

About the Museum

- Management and Finances:
- none
- Staff:
- The museum staff publish much, but not about Parco Montale.
- Collections:
- The safety measures (mainly protection against arson) accounted for 50% of the costs of building the museum, more than anywhere else.
- Marketing:
- Parco Montale is very much a museum run by archaeologists, mainly for education and showcasing archaeology. For example, the museum shop only has toys and books, for children and informed academics respectively.
- The offer for tourists is a derivative of the offer for school groups but without the hands-on activities. This leaves a presentation to watch only, with nothing to do.

About the Visitors

Although the museum is meant as a place for regional development, regional influence is low.
Figure 5.64: Over 80% of the tourist visitors are local. It is successful in helping to create regional identity.
The overall experience is rated highest at Parco Montale in comparison to the seven other museums. The entrance fees are considered cheap.

Looking back in 2011

The most important change or happening/event between 2008 and 2011 for Parco Montale was the introduction living history for one day per season. This was a consequence of the contact with the other seven museums in the group, learning from their experiences and through the exchange of information within the project. The change was not unexpected but prepared for.

They have changed what they offer tourist visitors only in the sense of the living history approach.

The visitor profile did not change significantly.

For the near future the Parco Montale management expects to cope with the limited budget by keeping to the same program.

Figure 5.65: Comment from the Parco Montale management when looking back in 2011.

The last recommendation of the Parco Montale management is to think about the costs of security, to plan what comes after the reconstruction when dealing with visitors, to think in advance and to define goals.

5.7 Araisi

Āraišu Ezerpils

Visiting address:	Araisi Archaeological Museum Park	Eras and area presented; number of (re)constructed larger houses:
	Araišu, Drabešu Pagats Amatas novads	One Bronze Age house
	Cēsis region	Three Stone Age dwellings
	Latvia	13 Early medieval houses, all based on a
		single site.
Postal address:	Latvia National History Museum	Goal:
	Pils Laukums 3	The aim is to set up an archaeological
	Rīga 1050, Latvia	open-air museum that is effective in
Phone:	(+371) 64107080	scientific research
Thome.		It is a popular leisure and educational
Website:	www.vietas.lv/objekts/	destination, the quality of which is
	araisu_ezerpils/	defined by original archaeological
		finds that explain ancient history,
E-mail:	araisi@history-museum.lv	(re)constructions of the culture historic
Extra information:		Vilka, 26 June 2008).
Kind of organisation:	Formerly a private	The mission of the parent organisation,
je se s	foundation,	the Latvia National History Museum
	at present governmental	is to collect, preserve, research and
	A 1 1 (1)	from Latvia and the world from ancient
Manager 2008:	Anda Vilka	times until today, in the interests of the
Founding year:	1994	Latvian nation and its people
rounding year.		(www.history-museum.lv).
Number of employees:	6 FTE	Koylitoraturo
Number of visitors 2001-2008:		Apals 1974, 1995
		Apala 1992
35,000		Apala & Vilka 2002 Vilka 2000
		VIIKa 2000
30,000		
25,000		
20,000		
15,000		
		.
2001 2002 2003	2004 2005 2006 2007 2008	Figure 5.66: Araisi at a glance.

5.7.1 Introduction to Araisi

Āraišu Ezerpils [The Āraiši Lake Fortress], the (re)construction of a dwelling from the 9th century AD, is located on a picturesque islet in the Āraiši lake (See Figure 5.66). The (re)construction is based on remains of a well preserved complex of timber buildings uncovered during archaeological excavation (1965-1975). Visitors can also view the Medieval Castle Ruin and (re)constructed



Figure 5.67: The (re)constructed lake village at Araisi.

Stone and Bronze Age dwellings. Those Bronze and Stone Age houses are the only life size (re)constructions of this period in Latvia based on scientific research (See Figure 5.67).

The initiative for the museum came from the archaeologist Dr Hist. J. Apals who established in 1993 a public non-profit organisation (Araisi Lake Fortress Foundation) to provide the development and management of the site. This organisation was working in the territory on the basis of the contract with the State Monument Board that was the actual owner of the site. In 2008 the management was taken over by the National History Museum of Latvia in order to provide a future. Araisi was lacking some important facilities like a proper office and toilets to name just some simple things. Besides that, a visitor centre was planned. Such plans required a solid base over a longer period which the original foundation behind the museum could not offer.

The museum is about the development of houses and living environments from the Stone Age up to the Middle Ages, with the emphasis on the Viking Age Fortified settlement (See Figure 5.68). The well preserved cultural landscape typical for this region is also a part of the presentation. On the whole the themes presented are pictures of national history rather than regional or local history. At the beginning, scientific goals were the most influential but by now those have been replaced by interpretation goals. At some occasions in the season, the museum is filled with living history actors (See Figure 5.69).

5.7.2 Education

Araisi shares an education officer with the National History Museum. The education programmes are under production; they will be based on their own research and tied into the national school curriculum and the permanent exhibition at the National History Museum. They will be focused on an interactive exploration of the ancient history of Latvia. The education is restricted to pupils in school groups. By using professional researchers for working out the content, Araisi ensures it is using the latest insights. The education visits take place in the whole open-air museum and are not restricted to a specific area. Education staff is sometimes invited to schools where they teach about the Iron Age. The museum offers themed programmes for example about crafts, occurring all year through.



Figure 5.68: One of the (re)constructed houses at Araisi.



Figure 5.69: A living history actor weaving at Araisi.

5.7.3 Map



Figure 5.70: Map of the visitor area of Araisi. Source: Araisi flyer.

5.7.4 Management and Finances

The Araisi site counts 12 hectares, but as in many places, only a smaller part is intensively used (See Figure 6.01). In 2008, they changed structure and following on that, also director (personal communication Z. Apala, 30 September 2010). With 55 tourist visitors per day the museum is open, Araisi has the second lowest visitor frequency of all eight (See Figure 6.05) but it is open quite a large number of days (See Figure 7.03). While others are closed in what could be the shoulder season, the average number of visitors per day in Araisi would double.

With nine FTE they have relatively many staff members compared to the number of visitors (See Figure 6.11) but the staff costs are not a too high percentage of the budget (See Figure 6.09). After all, staff costs are lower in Latvia than for example in Norway. The museum was transferred in 2008 from the founders to the National Museum and had reasonably many affiliations with professional bodies (See Figure 6.07). Araisi plays a role in strengthening regional and even national identity. Until the National Museum took over some roles of the Foundation, Araisi had a large part of its income from third sources, a fair division (See Figure 6.10). Araisi was the museum gathering the least information on visitors, although this changed in 2011. Staff in 2008 were aware of the visitor wishes, but not capable to make improvements in the situation due to lack of money (personal communication A. Vilka, 8 December 2011).



Figure 5.71: Interior of some of the (re)constructed houses at Araisi.

Figure 5.72: Roof construction details of some of the (re)constructed houses at Araisi.

5.7.5 Collections

The collections of original archaeological data from the lake fortress are unique as they represent the most complex picture of a dwelling site from a certain period in Latvia. The collections correspond to themes presented, but the Araisi lake fortress itself is the most complete. Now it has become a branch of the National History Museum that has the biggest archaeological collection from Latvia representing all the periods; they can easily fill in all the gaps about other eras. Araisi has many other modules besides of the archaeological open-air museum; they have an original site and a historic house to mention just a few (See Figure 6.12). Their weakness is the infrastructure in and around the museum with examples like bad toilets, an almost non existing shop and restaurant or indoor facilities and indoor presentation areas.

The (re)constructed houses, mainly based on the local excavations in Lake Araisi, are not furnished except a single one, which cannot be accessed (See Figure 6.16 and 5.71) and maintenance is a serious issue (See Figure 5.72). If the small houses would be furnished, people would probably have difficulty entering them. It was never meant to present a full (re)construction of how it might have been like in the past; Araisi is an open-air museum in the classical sense.

Araisi has a brochure for their visitors which they occasionally hand out. It shows how to reach the museum and roughly what one can see there (See Figure 5.70). Most of the leaflet's contents are about the history of the excavations. A tour guide can be booked in advance and

this often happens for planned visits. He or she shows pictures from a folder she carries as well as referring to her own period costume (See Figure 5.73). Those without a guide do not use the brochure that much, but instead, use the many posters on the way into the island. These cover the history of the excavation and information on the (re)construction work and are considered a great success.

About half of what Araisi staff publishes is about the museum, the other half is about archaeological research, a fair division.

To comply with health & safety regulations the walking surface in the lake fortress would need to be adapted for wheelchairs, making the entry path wider (See Figure 5.67) and the surface more smooth, but that would mean it becomes less authentic. This has been done since. There are some smaller problems with vandalism, because of which the site is guarded day and night.



Figure 5.73: (left) Costumed tour guide at Araisi.

Figure 5.74: (right) The small shop for refreshments at Araisi with the picnic area.

5.7.6 Interpretation

There is not much interaction possible for the visitors, also very few craft demonstrations the public can watch (See Figure 6.20). This does not mean the story explained does not get across, take for example the posters used. In Latvia, volunteer work is not common, partly because people simply cannot afford doing it. There is not as much living history either, compared to other countries. Araisi employs students and volunteers a bit, for running the visitor survey or keeping up the territory. Araisi is one of the museums where different (pre)historic eras are presented in one single site. This enables the interpreters to teach a lesson, to transfer the perception of time depth.

5.7.7 Visitor Service

The self-service cafeteria is a small kiosk where one can buy cola and candy. This is certainly an area for improvement. The shop is no more than a window where you can ask for post cards et cetera.

5.7.8 Understanding the Visitors to Araisi

5.7.8.1 Tourist Visitor Characteristics

At Araisi, national and international tourists are almost equally present: a number of people staying in Rīga or Cēsis visit the museum as a day trip (personal communication A. Vilka, 10 September 2009). About one third of all visitors have travelled 0-50 kilometers to get to the museum, an equal part has travelled 50-100 kilometers and another equal part travelled over 100 kilometers (See Figure 7.13).

5.7.8.2 The Decision to visit

Araisi has no website of its own and therefore spends nothing on this, although internet penetration in Latvia is 47%, only slightly less than in Italy (See Figure 7.20). Araisi has an own brochure, but only a few people have seen it - three times as many people have seen Araisi in another leaflet or brochure (See Figure 7.19). Many people visit the museum when they are just passing by although the entrance area is not very presentable (See Figure 5.75). First time visitors state often (25.2% against an average in the eight museums of 15.5%) that they were interested in the local region (See Figure 7.24).

Araisi has a very small PR budget, mainly used on mass media, articles and mouth to mouth advertising.

5.7.8.3 Rating the Facilities, Services and Experience

In Araisi, visitors are less happy than average with the tour guides. This is probably because they have not experienced the presence of the tour guide since usually this person needs to be hired to be your personal guide. A visit to Araisi usually is a self-guided tour. The exhibits too, score relatively low. With regular free guided tours, the visitors would make more of the exhibits and the museum in general.



Figure 5.75: Entrance building with cashier, shop and guard area at Araisi.

The cafe is regarded as of low quality, with the lowest score of all eight museums (See Figure 5.74). The management agrees that the infrastructure and services, including toilets, need to be improved; this was one of the reasons for cooperation with the National Latvian Historical Museum. The overall experience rating is 80.0%, the lowest of all eight museums (See Figure 7.37). There may be a range of suggestions existing from this comparison which could improve this situation.

5.7.9 Key Strengths and Challenges for Araisi

Having described Araisi, its management and visitors, some key strengths and challenges emerge (See Figure 5.76). At the final stages of this research, in 2011, the Araisi management looked back on the period since 2008 and came up with some recommendations, shown in Figure 5.77.

About the Museum

Management and Finances:

- The founders were moving the museum into the hands of the National Museum to ensure a stable future.

Staff:

- There are only few students or volunteers because people cannot afford to volunteer.
- There are few visitors per staff member, but thanks to the low salary costs, this is not a big problem. The museum and its staff could easily host more visitors.

Collections:

- Araisi has 12 hectares but only uses a small part. They have several other museum modules, like a site museum and a cultural landscape they could make more use of.
- By becoming a branch of the National History Museum, it will be possible to show more complete collections.
- The modern facilities of the museum like the shop, restaurant and toilets which were not appreciated by the visitors need urgent improvement.
- Visitors mistake the medieval castle for the house of the rich, compared with the wooden houses at the Iron Age fortress as being for the poor. Time depth experience is a problem.

Marketing:

- It is well known across the country and plays a part in building national identity.
- Regarding PR, the museum has a leaflet, but it is used rarely. They have no website of their own either, although the internet is used much in Latvia. Most visitors heard about the museum through a third party.

About the Visitors

- Visitors cannot actively take part in any activity; there are hardly any craft demonstrations either. This makes the presentation very static, especially if one realises most visitors see the museum without a tour guide.
- Both national and international tourists frequent the museum. Even with the limited PR currently in existence it should not be difficult to get more visitors.
- The overall experience in Araisi is appreciated the least out of all eight museums.

Looking back in 2011

The most important change or happening/event between 2008 and 2011 for Araisi was the financial cut to their budget, with staff levels being reduced. Also, the museum leader was replaced. All Latvia was affected by the economic crisis.

There have been no changes made to what is offered to tourist visitors. The programme remains the same and also the shop and restaurant have not changed.

The visitors profile changed slightly; there are far fewer groups of school children (150 guided tours in 2008, 80 in 2010) and more individual visitors. There is an increase in visitors from nearby Russia.

In the near future the Araisi management needs a renovation of their buildings and the fortification walls. Four of the (re)constructed houses have been fitted with furniture including clay stoves, some new information stands have been made and new museum pedagogy programmes are developed. The number of medieval houses (re)constructed has grown from 13 to 16.

In 2009, the ticket office as presented on Figure 5.75 has been replaced by a larger and more modern one.

Araisi has increased their participation in regional and national marketing, for example by participating in the international exhibition Balttour and in regional campaigns, among others on Vimeo. Another successful campaign was when they presented their story and activities in the train from the capital Rīga to nearby Cēsis.

The management has become more active in retrieving information from its visitors. At present, visitors are observed as well as interviewed for feedback.

It is considered important by the Araisi management that they do not lose their identity in favour of higher visitor numbers.

Figure 5.76: Key strengths and challenges for Araisi.

Figure 5.77: Comment from the Araisi management when looking back in 2011.
5.8 The Matrica Museum

Matrica Múzeum és Re	égészeti Park					
Visiting address:	Poroszlai I. str. 1 2440 Százhalombatta	Eras and area presented; number of (re)constructed larger houses:				
Postal address: Phone:	Hungary Gesztenyés u. 1-3 2440 Százhalombatta Hungary (+36) 23354591	Three Bronze Age houses, all based on a specific site Three Iron Age houses, all based on a specific site One Iron Age tumulus, preserved in situ One small not authentic but prehistoric house				
Website:	www.matricamuzeum.hu	Goal:				
E-mail:	info@matricamuzeum.hu	 The main aim of the Százhalombatta Archaeological Park is to preserve 				
Extra information:		and present prehistoric remains,				
Kind of organisation:	Governmental museum	- To raise publicity of the 'Matrica'				
Manager 2008:	Magdolna Vicze	Museum and the Archaeological Park: increase the number of				
Founding year:	1996	visitors, especially students with educational sessions focusing on				
Number of employees:	24 FTE	to the experience with scientific knowledge!				
Number of visitors 200 [°]	1-2008:	- To reach all ages by different				
30,000		entertainment).				
25,000	II	(Personal communication M. Vicze, 29 August 2008).				
15,000		Key Literature:				
10,000		Jerem & Poroszlai 1999 Poroszlai 1997, 2003				
2001 2002 2003	2004 2005 2006 2007 2008					

Matrica	Múzeum	és	Régészeti	Park
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5.8.1 Introduction to the Matrica Museum

The Matrica Museum is a local museum in Százhalombatta, 30 kilometres South of Budapest, along the Danube (See Figure 5.78). The museum operates both an indoor museum in the village centre and an archaeological open-air museum on the outskirts of the village. The open-air museum presents a view on prehistoric life and environment to the visitors, with major emphasis on school groups. The main attraction is an Iron Age burial mound, which can be entered and inside, in situ archaeological finds are explained by means of a multimedia show (See Figure 5.79). When this mound was excavated the idea arose to preserve it in situ and build an archaeological open-air museum around it. The visitors can enter several (re)constructed prehistoric houses with copies of pottery (See Figure 5.80). All these are seated in the (re)constructed natural environment. The archaeological open-air museum lies on a 3.6 hectare territory, which gives enough space for activities.

Figure 5.78: The Matrica Museum at a glance.



Figure 5.79: Entrance to the grave mound presentation at the Matrica Museum.

The theme of the museum is the local Százhalombattan and Transdanubian Bronze and Iron Age, with specific introduction to the city's name-giving (Százhalom = 100 barrows) Iron Age burial mounds and their original vegetation. The primary aim is to preserve and protect prehistoric monuments and introduce prehistoric ways of life (See Figure 5.81). Figure 5.80: Presentation of (re)constructed ceramics in one of the houses at the Matrica Museum.



Figure 5.81: (Re)constructed Bronze Age house at the Matrica Museum.

5.8.2 Education

The Matrica Museum staff do not only teach in the open-air museum and the indoor museum itself, they also go to schools or summer camps on demand. The education activities are based on a combination of their own research and textbook analysis. It is themed differently from what is offered to tourists because the museum staff work from individual class curricula. Within reason museum staff try to be as close as possible to ancient daily life, creating the image or feeling of the original know how and materials. Although programmes for lifelong learning are offered, these are hardly booked. The age of the pupils is between seven and 14 years. The programmes used are up to four years old and permanently under development. Custom fit programmes are available. No handicapped groups have approached the museum yet but the museum is used for gardening-therapy. The regular education programmes are seasonal; outside the season some education takes place in the indoor museum instead.

The available recent education publications and non-print media the museum produced are printed booklets, or occasionally paper based sheets/ survey for children and a DVD about stone working.



5.8.3 Map

At the Matrica Museum, a map is available of the area open to tourist visitors (See Figure 5.82). It shows the entrance area the Bronze Age area (Bronzkori falu), the original Iron Age burial mound (halomsir) on the far end and the Iron Age area (Vaskori falu). In the middle, a few of the other original burial mounds are sketched in, obvious structures in the landscape.

5.8.4 Management and Finances

Over the five years previous to 2008, the Matrica Museum has undergone some changes. It still is dependent on the local government, but the museum is not being run anymore by the founder, the late Dr Poroszlai. Also, there has been a large organisational restructuring and competition in Hungary has increased (See Figure 6.02). Over the years around 2008, the indoor museum was being redecorated and therefore closed. The Matrica Museum has no business plan or action plan. This is the only museum with more school children than tourists in their open-air museum, and they have the lowest number of tourist visitors per day (See Figure 6.04 and 6.05). The museum staff is actively running their own excavations and this means they are expanding their collections by doing active research.

The museum has affiliations with professional bodies, albeit not with tourism or business networks (See Figure 6.07). They feel like they promote tourism in the region and the truth is, they are one of the only attractions in this area. The amount of tourist facilities is very poor in this region. There are no other museums or any specific cultural heritage for cultural tourism, no hotels, baths, wellness centres for recreation, or landscape characteristics for adventure. In contrast, the region north of Budapest (Szentendre, Visegrád, Esztergom, the Danube curve) offer all this. The town is financially dependent on the power station and oil refinery, both of strategic importance to the country. If they do not change their view towards tourism, the archaeological open-air museum remains school focussed. The Matrica Museum depends heavily on public money and has no income from third party sources (See Figure 6.10). This is a potential risk. The store and the cafeteria are not bringing in enough money.

5.8.5 Collections

The archaeological park of the Matrica Museum is also an archaeological site and a cultural landscape, on the edge of the Danube. The collections of the indoor museum, the Matrica Museum, focus on local history and resources. These



Figure 5.83: (left) Mannequin dolls in one of the (re)constructed houses at the Matrica Museum.

Figure 5.84: (right) Interior of one of the (re)constructed houses at the Matrica Museum.



Figure 5.85: House exterior with kiln (left) at the Matrica Museum.

are unique, because both the original (Iron Age) in situ construction (wooden chamber and stone packing), and (re)constructed houses can be seen at the same place. Part of the environment is also (re)constructed: trees, shrubs, plants.

Nothing was brought into the open-air museum that was not in accordance with the original concept. The Iron Age households will have to be completed and one more Bronze Age house is to be built in the future. Nothing is shown which cannot be scientifically proved or explained (See Figure 5.83 and 5.84).

Every detail needs to be derived from the original site itself, not from other sites. Some construction details however would by now have been done differently due to new insights. All houses are documented in full detail, including museum objects, but the information is not accessible except to researchers (See Figure 6.14). The buildings look like and are constructed like the originals might have been, but are not used as in the past (See Figure 6.16).

The authenticity principle used here means (re)constructed artefacts are shown with the (re)constructed houses, but staff do not play prehistory. Keeping the buildings reasonably empty also makes it easier to run school programmes.

By far the most literature published by museum staff is not about the archaeological park but the other research activities of the museum (See Figure 6.18).

Health and safety regulations have not affected the museum except that the roofs are fire-safe (See Figure 5.85). There are no problems with vandalism or other visitor-related problems.

5.8.6 Interpretation

The Matrica Museum is a classic open-air museum: the museum presents its collections outside. The collections are not to be used except for or by school children. In the past they organised mission related events (like Pyres on the



Figure 5.86: The Matrica Museum is well signed out in the nearby area.

Danube). They hardly do any living history, although sometimes a craft demonstration is done in period costume. Of all eight, the Matrica Museum offers the least different types of activities (See Figure 6.20). They work with all kinds of people, but demonstrations are not being given by students like for example from the nearby Budapest.

5.8.7 Visitor Service

The Matrica Museum archaeological park can be easily found (See Figure 5.86). There are signs along the road, a bus stop in front of the entrance and the entrance itself is clearly recognisable as such. Unfortunately, programmes cannot be ordered in foreign languages, but probably this has never been requested. Some of the senior staff speak English. The museum is mostly barrier-free. The entrance area does not look very good, the only attraction is three flags marking that something is here.

The shop is small. There are only a few categories of products, but within these groups, the assortment is wide, especially where it concerns books and replica pottery (See Figure 5.87). Almost all products (90%) are related to the themes of the museum collections (See Figure 6.23).

5.8.8 Understanding the Visitors to the Matrica Museum

5.8.8.1 Tourist Visitor Characteristics

The Matrica Museum has the lowest number of tourist visitors, 5,370 (See Figure 7.01). The Pfahlbaumuseum has about 34.5 times as many. They have a relatively long season, starting in March and ending in October (See Figure 7.03). They could do well with organising activities in the spring and autumn holidays. The museum seems to have a negligible number of international visi-



Figure 5.87: Gift shop at the Matrica Museum.

tors; the division between local and national visitors is almost 50/50 (See Figure 7.10). According to data (the management survey), the Matrica Museum is not such a tourist magnet at the weekends. Only having the capital Budapest nearby just is not good enough, just like Fotevikens Museum is not benefiting of the vicinity of the nearby capital Copenhagen (personal communication B.M. Buttler Jakobsen, 10 November 2008). Araisi, as another example, gets many visitors from the far away capital Rīga; many of those are city people who spend their weekends in the countryside.

Compared to others, the repeat visits for the Matrica Museum are much less from the local area. In general, very few people come from far away (See Figure 7.13).

The percentage of families with young children (37.3%) is lower than almost anywhere else. This probably has its origin in the limited amount of money these families have to spend on excursions. The area around town is not a tourist area - there is only one hotel, mainly focussing on business people visiting the electricity and petrol plants in town. Previously this hotel was called Oktan, nowadays Training, self-explicatory names, but not ones attractive to tourists.

Contrary to what would be expected, the percentage of locals between the repeat visits is lower than at first visit, instead of higher. This might mean the museum is not rooted well in local society, locals are uninterested to visit the museum, even when they have visitors themselves and want to show them the region or even when the museum has a special offer, like an event. There are not many museum events to tempt visitors to come back.

5.8.8.2 The Decision to visit

Many people come to visit the Matrica Museum because they were recommended (31.0%), only at Fotevikens Museum is this slightly higher (31.1%). This is a sign that the official PR channels might be less successful in reaching potential visitors. Brochures are definitely not the way to reach potential visitors but websites score well, even though Hungary has a low internet penetration (See Figure 7.20). In 2008, the museum website was brand new. After Fotevikens Museum and HOME, their website is the largest in the group. More than anywhere else, in the Matrica Museum, people first visit because they are interested in the past (40.5%) (See Figure 7.24). Regarding the weather, only at Parco Montale do people care less for this aspect. It is not known how long people stayed (See Figure 7.28).

5.8.8.3 Rating the Facilities, Services and Experience

The Matrica Museum excels in three of the themes people could rate (See Figure 7.37). The (re)constructions and the tour guide are rated average. Guided tours are not offered regularly. The exhibits however get the highest score of all, probably because in this museum, the artefacts are really presented as exhibits and not as things to work with. The brochures and signs are also rated highly. It must be said, however, that the signs target a scientific public and are partly in English - although there are no foreign visitors. One of the signs counts for example 260 words and scientific names of crops are used. The materials used,

the designer and the person who executed it are all mentioned. The Bronze Age houses have signs in three languages, the more recent Iron Age houses not - they have plasticised A3 posters. The cafeteria is rated the highest of all eight museums. It is well within the museum premises, as at HOME, and you can sit here and take a break from your visit. The menu is relatively simple. The archaeological open-air museum as a whole seems not to be kept up to date, as all attention in 2008 went to the indoor Matrica museum.

5.8.9 Key Strengths and Challenges for the Matrica Museum

The percentage of people whose experience met their expectations is high (42.6%) (See Figure 7.35). Those unsatisfied have visited in the shoulder season only. The entrance fees are generally judged to be cheap or about right (See Figure 7.38). Having described Matrica Museum, its management and visitors, some key strengths and challenges emerge (See Figure 5.88). At the final stages of this research, in 2011, the Matrica Museum management looked back on the period since 2008 and came up with some recommendations, shown in Figure 5.89.

About the Museum

Management and Finances:

- The museum has no business or action plan: many things are changed on the spot.
- Affiliations with professional bodies do not consist of tourist agencies or business networks. This could be a great challenge.
- The local town, which owns the museum, is dependent on factories and has little interest in tourism. If this does not change, the museum remains an education centre only.

Staff:

none

Collections:

- The presentation is very loyal to the spirit of authenticity, which is understood here differently to anywhere else: it is important at Matrica that every detail of the presentation is derived from the original archaeological site.
- Houses are constructed and presented as museum objects and are documented as such.
- The shop is small and mainly offers replica pottery and professional books.
- The cafeteria is rated best of all among the eight museums.

Marketing:

- For the Matrica Museum, competition has increased, although the immediate area has few tourist facilities: everything is in the region north of Budapest, not south.
- The museum website is in a good state, despite the fact that the internet is not used that much in Hungary.
- Matrica Museum is well signposted in the nearby area.
- Brochures and signs on site appear mainly to address the international professional visitor a very small segment of the total visitor population. It seems that the museum is intended for school children and academics only.

Figure 5.88: Key strengths and challenges for the Matrica Museum.

About the Visitors

- The site has more school children visiting than tourists.
- Repeat visitors are usually not local, implying the museum is not well rooted within the local community. In contrast, at the Scottish Crannog Centre for example, many repeat visitors are locals bringing their friends and colleagues, being proud of what is shown of 'their' past.
- The museum offers little variety in its activities.
- Dissatisfied visitors attended in the shoulder season only. Best chances are in creating a better offer in the shoulder season. Therefore, arranging extra activities in the school holidays could be a good way of ensuring a higher degree of visitor satisfaction.
- Although the place is much frequented by school children, there are few families with children among the tourist visitors. For most families, this museum might be too expensive. In the years since 2008, there has however been an increase in families with children visiting.

Looking back in 2011

The most important change or happening/event between 2008 and 2011 for the Matrica Museum was the museum's achievement in remaining strong during the economic crisis. In addition, most of the staff and volunteers who are in contact with the public now wear prehistoric inspired garments, a change which the public likes very much. Also, the guides are practicing the third-person narrative type of guiding. The changes were induced both from outside (the seven other museums in the group) and from inside the museum.

They have changed what they offer tourist visitors as they do annually. Parts of the programmes were changed, like for example regarding crafts: instead of prehistoric stone tool making they offer bone tool preparation and the like. The so called playhouse-story is always different as well, in the sense that there are several stories, with one being substituted for another.

The ratio of visitors from different groups remains the same. There was a slight increase in the number of retired people who visited the Matrica Museum during the last two years, thanks to some of the programmes being aimed specifically at this age group.

For the near future, economic perspectives in Hungary are not good. But on the positive side, from 2011 on, the museum has a special marketing strategy aimed at Budapest intellectuals, part of a plan to increase the number of the tourists. Some new interactive points (a fixed audio-guide system) will be installed within the open-air museum to widen the options.

A final aim of the Matrica Museum management is to keep a good eye on quality and authenticity. They would like to get a valid marketing assessment. Figure 5.89:

Comment from the Matrica Museum management when looking back in 2011.

5.9 Fotevikens Museum

Fotevikens Museum						
Address:	Museivägen 24 236 91 Höllviken	Eras and area presented; number of (re)constructed larger houses:				
Phone:	Sweden (+46) 40330800	22 Viking Age houses, all based on general information from archaeological				
Website:	www.foteviken.se	excavations in south Scandinavia and general information from the written sources from old manuscripts from				
E-mail:	info@foteviken.se	11 -12 century				
		Goal:				
Extra information:		The museum works in three spheres:				
Kind of organisation:	Foundation	the history of the maritime cultural				
Manager 2008:	Björn M. Buttler Jakobsen	landscape and heritage of Scania. - The creation of a Viking Age/Early				
Founding year:	1993	medieval village, bringing history back to life.				
Number of employees:	18 FTE	 Knowledge and information through the use of digital IT-techniques. 				
Number of visitors 200 [°]	1-2008:	(www.foteviken.se)				
32,000		Key Literature:				
30,000		Rosborn 2004, 2005				
28,000						
26,000						
22,000						
2001 2002 2003	2004 2005 2006 2007 2008					

Figure 5.90: Fotevikens Museum at a glance.

5.9.1 Introduction to Fotevikens Museum

Fotevikens Museum finds its origin in underwater archaeology on the coast of Vellinge, Sweden. The concept was based on the maritime past of this municipality, also connected to the strong history of the Viking Age and the Battle of Foteviken (See Figure 5.90). It was a single person, Björn M. Buttler Jakobsen, who was the key factor, but very early there was a group around him, helping to develop from the maritime approach into an open-air museum and then into living history.

Fotevikens Museum has some 70,000 square metres of meadowland at The Bay of Höllviken. Located in the lowland area, near the parking lot where one enters the Fotevikens Museum area, are the administration, IT and research buildings (See Figure 5.91). The handicraft workshops and warehouses are also situated in this area. There are also three large activity halls, covering an area of 600 square metres. These buildings house the restaurant and the great feast hall. The restaurant is fully licensed and can accommodate about 200 guests. The



Figure 5.91: Entrance to Fotevikens Museum.



Figure 5.92: Entrance to the Viking Reserve at Fotevikens Museum.



Figure 5.93: Encounter with an education group (in a kind of period costume) at Fotevikens Museum.

(re)constructed Viking Reserve is situated upon a plateau. It is created to show how a large settlement during The Viking Age and early Middle Ages might have looked (See Figure 5.92).

5.9.2 Education

The education programmes of Fotevikens Museum are developed in-house and reflect the themes of the museum (See Figure 5.93). The school programmes do not correspond entirely with the Swedish curriculum. The museum has an education officer, shared with the Cog Museum in nearby Malmö. Fotevikens Museum is the Vellinge municipality museum and as such offers free programmes for local groups in the period when other schools cannot come. Staff start in winter at the school, then do live interpretation in the museum, then again in school. Education is not only restricted to school groups. Programmes are updated with the latest insights into the matters the museum works with. The museum is divided into an education area and a tourist area. If school groups are going into the tourist area, they meet live interpretation Vikings. The activities offered are both depicting daily life and themed with, for example, the gods, crafts, trade, calculations, storytelling, laws. They use first and third person interpretation. The main programme is called mini Viking which includes the guided tour with some handcrafts. Another possibility is Viking Day which consists of the guided tour, the crafts and games. Finally, there are camps when children spend the night in the museum.

The museum is accessible for the disabled. Fotevikens Museum does not make customised programmes; visitors have to adapt. The available education publications and non-print media the museum produced are available online and in the museum shop.

5.9.3 Map

At Fotevikens Museum, in 2008, visitors received a simple flyer with a map of the Viking reserve (See Figure 5.94). At Number three, 'the border gate between Sweden and The Viking Reserve' is presented.



- 1. Entrance and museum shop. 15. The house of the tanner.
- 2. Lavatories.
- 3. The border gate between Sweden and The Viking Reserve.
- 4. The house of the witch.
- 5. The shepherds cottage.
- 6. The poultry-house.
- 7. Rune-stones.
- 8. The house of the slaves.
- 9. The sacrificial grove.
- 10. The enclosed pasture for the sheep and horses.
- 11. The south gate.
- 12. The tannery.
- 13. The smokehouse.
- 14. The house of the fischer man.

- 16. The house of the juror.
- 17. The house of the craftsman.
- 18. The house of the blacksmith.
- 19. The warehouse of the blacksmith.
- 20. The cooking house of the
- blacksmith.
- 21. The Thinghöll.
- 22. The blacksmith's workshop.
- 23. The house of the tradesman.
- 24. The rune-stone of Pierre the
- Blacksmith.
- 25. The house of the potter.
- 26. The north gate.
- 27. The archery court.
- 28. The burial-mound of King Fote.

Figure 5.94: Map of the Viking reserve at Fotevikens Museum. Source: Flyer Fotevikens Museum.

5.9.4 Management and Finances

The foundation which is running Fotevikens Museum stresses the archaeology and explaining the science to the visitors. It owns the Foteviken private limited company, taking care of the economics, the maintenance staff, servicing all the houses, and doing their maintenance. The museum staff itself is not employed by them. The money earned is invested again in the foundation. Parallel to this is the Fotevikens Kulturcenter for the more commercial activities.

In the years 2007-2009, a major organisational restructuring took place to counter the possible negative aspects of so called Founder's Syndrome. This is a phrase covering the problems a museum experiences when the leading and charismatic manager(s) who founded it leave(s) (Block 2004, 135). The organisation was originally run by two or three persons including archaeologist Rosborn. This has changed into a steering group of nine persons even though none of the original founders had left.

Fotevikens business plan only covers two years, making it more like an action plan with a very detaild action plan following from that (See Figure 6.03). From the beginning of Fotevikens Museum there were archaeologists in the management (Rosborn) and the board (Westerdahl). Fotevikens Museum was much dependent on unemployment schemes, in this sense comparable to HOME. There is no financial information available on Fotevikens Museum except for that the museum has no debts.

5.9.5 Collections

The number of (re)constructed houses is continuously growing: a season without a new house is a lost season (See Figure 5.95). They also sometimes change existing houses, like moving the entry to another wall. It is part of the living concept. The houses are built by their own staff, but sometimes external scientists, volunteers and students are involved.



Figure 5.95: One of the (re)constructed houses at Fotevikens Museum.

Ancient techniques were tried out, and are the only way of working in the summer season, but in winter they are replaced with modern techniques to save time. Experiments are still running but remain unpublished. For example, all the clay walls have a different mix. In the old days, in such a town, people from different areas would come together, bringing their own distant ideas and combining those with what they found in town.

Fotevikens Museum has a unique approach to (re)constructing buildings. 'The basic idea is to not build monuments, based on what we know one meter over ground. It is by using the scientifically knowledge from the sources we can reconstruct a village from the type of houses we have the knowledge about Lund as an example. From the function and the task for the house we then decide how it is going to be built. In every house we put up a number of scientific questions that we like to get answers into' (personal communication B.M. Buttler Jakobsen, 11 December 2011) (See Figure 6.13).

There are no parts of the collections which are beyond the theme of the museum. The houses in the living history area are furnished like family houses and not for school groups with extra sitting areas.

It needs to be said that the museum seems to have a very non-conformist approach to archaeology and how to run a museum - they call their open air part the Viking Reserve - but when looking at the affiliations (See Figure 6.07) they are more main stream than could be expected. For example, they publish just like other archaeological open-air museum staff does, both about the own museum and other research.

There is no vandalism. The place is officially not guarded at night but there is one person living nearby, with a dog. The museum is close enough to the village Höllviken, but many have been here as school children and they are ambassadors - they like the place very much (personal communication B. M. Buttler Jakobsen, 12 September 2008).



Figure 5.96: Interior with shields of different European living history Viking groups at one of the (re)constructed houses at Fotevikens Museum.

5.9.6 Interpretation

The story presented is that of the change from Viking Age to Medieval times. The basic idea is that the guides are talking about a late Viking Age city, the differences between the longhouses and the city houses and, for example, the difference between the old gods and Christianity.

Although the museum has experience with modern media (using digital IT techniques is one of their main spheres), you will find nothing of that kind in the open air reservation.

Visitor's participation is an important method for Fotevikens Museum and they would be nowhere without living history in all its forms (See Figure 5.96). They put much effort into maintaining a network of living history Viking groups across Europe, pushing the social aspect of being a Viking.

A visit to the Viking reserve is an immersive time travel with both an external dimension of physically changing environment as well as 'an internal dimension through the use of one's imagination to "experience" the past' (Riis Svendsen 2010). Children in school programmes have the best such time travel experience; for tourists, this could be improved (Riis Svendsen 2010). The museum offers almost any listed activity (See Figure 6.20); activities are very important for running the museum. They convey fun very well. Fotevikens Museum has their library and archive open for research. They also have an extensive website.

5.9.7 Visitor Service

Inside the village there are no signs, no escape signs and no electricity. All information is from leaflets. The rest is communicated by the staff: a combination of craft people, volunteers and archaeologists (See Figure 5.98). Just outside the village, there are posts at spots with a good view over the area. At these posts, texts are applied on shields (See Figure 5.97). There are fire hoses behind the doors, all staff are fire-trained, one house inside the village has water for the fire brigade, also electricity, so there can be light when needed outside opening times.



Figure 5.97: (left) Interpretative panels explaining the landscape around Fotevikens Museum.

Figure 5.98: (right) Living history Vikings camping at Fotevikens Museum. The museum is modestly accessible for handicapped people - every door is 73 cm wide - for wheelchairs. All houses have at least two exits, for safety reasons.

The museum has a full service restaurant, just like HOME, but it is outside the area with the (re)constructed dwellings. The shop, in the modern service building, is the second largest of all eight museums. Although there are modern souvenirs available too, these still have a connection with the Viking theme of the museum.

Fotevikens Museum employs various methods to learn to know more about their visitors. A few weeks every summer, one of the managers sits in one of the (re)constructed houses and asks standard questions to everybody coming in. Although this survey is very informal and no notes are taken, it appears to be a good way of getting feedback (personal communication B. M. Buttler Jakobsen, 12 September 2008).

5.9.8 Understanding the Visitors to Fotevikens Museum

5.9.8.1 Tourist Visitor Characteristics

Due to the very limited number of visitor surveys filled out at Fotevikens Museum in 2008 (45 at a total visitor number of 24,160) and due to the fact that not all questions were asked or all answering options were made available to visitors, only limited conclusions can be drawn on their visitors (See Figure 7.01).

The picture of Fotevikens Museum is that of a place visited mostly (77%) by foreign, non-Scandinavian tourists (Metro 2010). This survey itself refers to 68.9%, but that is based on only a very small sample. Obviously because so many foreign visitors are attracted, their total repeat visitor percentage is almost as low as at Lofotr (See Figure 7.07). It also means that most visitors at Fotevikens Museum are not from the same language area, many of them



Figure 5.99: Living history volunteers during the tourist season at Fotevikens Museum.

are German. They attract all ages, but have a peak in 13-30 years old visitors who like living history (See Figure 5.99) (personal communication B. M. Buttler Jakobsen, 12 September 2008). Reaching teenagers and young adults is a spectacular result which you will find nowhere else in the eight museums. Understanding how this works could be very important to others.

5.9.8.2 The Decision to visit

A very high percentage visits Fotevikens Museum because it has been recommended (31.1%) and many others does after a visit to the tourist office (17.8%, multiple answers apply) (See Figure 7.19). Still, their own brochure and their own website are important instruments in interesting the potential visitor. Tourists are especially interested in the family friendliness and educational value of the site. The options 'interested in the past' and 'interested in the local environment' were not given to the visitors. Visitors stay here a little longer than average (See Figure 7.28).

5.9.8.3 Rating the Facilities, Services and Experience

Fotevikens Museum scores near the average; not a single item was rated were either extremely high or low (See Figure 7.32 and 7.37). In general, there are just too few results to make a judgement; in all cases less than ten votes were registered.

The percentage of people whose expectations were met or exceeded at Fotevikens Museum roughly equals the average (See Figure 7.35). None of the respondents thought the museum was too expensive (See Figure 7.38), but, again, there are actually too few answers to draw upon.

Their shop is one of the larger ones, and is well designed and inviting, with enough space, light et cetera (See Figure 5.100).



Figure 5.100: Gift shop at Fotevikens Museum.

5.9.9 Key Strengths and Challenges for Fotevikens Museum

Having described Fotevikens Museum, its management and visitors, some key strengths and challenges emerge (See Figure 5.101). At the final stages of this research, in 2011, the Fotevikens Museum management looked back on the period since 2008 and came up with some recommendations, shown in Figure 5.102.

About the Museum

Management and Finances:

 Just before 2008, many changes in the museum organisation had been set in motion. Partly for that reason, the museum action plan is very detailed.

Staff:

- The museum staff run experiments, but they do not publish much of the results.
- Tour guides and living history staff, a mix of craft people, archaeologists and volunteers, are the most important means of interpretation. Visitors' participation is important to create an immersive experience. Children in school programmes have the best 'time travel experience'; this could be improved for tourists.

Collections:

- In the museum, a new (re)constructed house is built every year in the reservation part. These construction works are part of the living history experience. Unlike anywhere else, staff at Fotevikens Museum use the totality of the Viking building tradition as their inspiration, rather than taking a single archaeological site as an example.
- In the reservation part, there are no visible signs of modern life, such as a water tap or electricity.
- The full service restaurant in Fotevikens Museum is located outside the experience part, the reservation, as is the shop. The shop offers souvenirs, all relating to the Viking theme of the museum.

Marketing:

- none

About the Visitors

- The museum has many foreign visitors from outside Scandinavia. Few of them are repeat visitors and most are between 13 and 30 years old.
- In general, the museum does not score well or badly, but rather in-between.

Figure 5.101: Key strengths and challenges for Fotevikens Museum.

Looking back in 2011

The most important change or happening/event between 2008 and 2011 for Fotevikens museum was the increased number of non-Scandinavian visitors, in particular from France, Italy, Spain and China. This has led to more visitors in August and September than previously. This change, caused by external influences, was not predicted by the museum.

They have changed what they offer tourist visitors in the sense that they have stopped offering guided tours. With higher visitor numbers it was too demanding to continue these tours.

They increased the number of Vikings in the reservation and divided them into talkers and doers. They moved the restaurant into the shop to streamline service and cut the number of staff. Finally, they extended the traditional museum part with a new building to give visitors a better introduction.

For the near future, the Fotevikens Museum management worries about the Swedish currency, the Krone. It is getting stronger, which can mean fewer visitors. On the other hand, the Region Scania is concentrating on ancient history as a goal for increased tourism, which includes Vikings, meaning new opportunities for Fotevikens Museum.

The management of the Fotevikens Museum agree that it is better for an archaeological openair museum to evolve from a small place into something larger, rather than starting with big plans from scratch. The focus should be on local finds, rather than on some distant concept people cannot identify with. If the feedback from the public is not good, then there needs to be change. An archaeological open-air museum should not become too commercial: there is a difference between a museum and an entertainment village. Defining and keeping up quality is tricky. A museum should not copy and paste without thinking; there are too many others with a similar concept.

Figure 5.102: Comment from the Fotevikens Museum management when looking back in 2011.

5.10 Conclusions

The stories of how the eight museums came into being are more colourful than can be described in a short summary, although an attempt is made for each of them. Six of the museums originated as a result of local excavations. The archaeological activities had a great impact on the local community, politicians and on the archaeologists themselves: for some, like Dr Apals at Araisi, the site they had excavated became their life's work and reputation.

Some museums have very few school groups, like Lofotr, while others, like the Matrica Museum, Parco Montale and HOME were primarily planned for educational programmes. In some cases these programmes influence the tourist experience, for example at Parco Montale where the tourist offering is a derivation of the education offering.

Overall an image emerges of eight very different places which at first sight have only a few elements in common. In the next few chapters, the eight museums and their visitors will be compared to find out if similar mechanisms are in operation at the different sites and, if so, whether they produce similar results.

Although most archaeological open-air museum visitors will think first of (re)constructed buildings, it is the intangible heritage - the stories told and especially the dedicated staff – that is the core treasure of an archaeological open-air museum.

The number of visitors is not relative at all to the size of such a museum: even in two hectares a museum presentation can be constructed which satisfies many people over the year. More than might be expected, the opportunities for museums lie in attracting a greater number of visitors in the shoulder season or (because they usually stay on site for up to three hours maximum) by spreading visitors over the day or over different days in the week. A two hectare site with a maximum number of 1,000 simultaneous visitors could easily host over 100,000 visitors per year, technically.

In many museums, the management are aware that the cafeteria, gift shop and toilets are important to visitors, but not a single museum excels in these aspects. This is surprising, given the fact that advice in these matters is easily obtainable. It is worth stating that the management usually has more affinity with their (re)constructed houses than with the modern facilities.

After looking in detail at the eight museums, their management and visitors, it is clear that the variation within this small group is very large. This was a deliberate aspect of the methodology. However, it is possible to recognise strengths and weaknesses, opportunities and threats which resonate with all these museums, although in each case in a different mix. The initial survey, taken together with the detailed information from the case studies, represents a unique set of data with which to inform an evaluative assessment, identifying options for the sector and for the case study museums in particular. For every museum it is possible to list a set of strengths and also suggest ways to enhance the provision.

- The Scottish Crannog Centre has a strong focus in their roundhouse, which is well documented. Their gift shop is very well done. The crannog is iconic to Scotland, representing a remarkable success for this reasonably small museum. The tour guides offer a good introduction followed by interactive demonstrations.
- HOME has many period costumes which are reasonably well made for their purpose. They have many volunteers. Their visitors stay quite long and the museum is good at attracting visitors in school holidays in the shoulder season.
- The Pfahlbaumuseum has complete and unique collections. Their back office is small but effective. The competition with other attractions is heavy, but they do well; visitor numbers are very high and they have more repeat visitors than anybody else.
- Key strengths of Lofotr are the many different faces of the museum: they have a vast territory and plenty of options. Their PR is good and targets the right channels to reach potential visitors. Due to their location they have more international visitors than anybody else.
- Visitors to Parco Montale are very satisfied: the museum's offer for tourists, a derivative of their school programme combined with craft demonstrations, works well. The entrance fee is cheap.
- Araisi has good chances of updating their infrastructure now that they are part of the National History Museum. The museum had in 2008 enough staff to cater for the visitors. The museum is well known and part of the national identity of Latvia. Many visitors travel far to see the museum.
- The Matrica Museum is very loyal to authenticity. Their cafeteria serves many happy customers. Their website is comprehensive and very well done, because the museum is mainly focused on school groups.
- The strength of Fotevikens Museum is that it is a living museum with many living history actors and a new Viking type house built each year. When entering the Viking Reserve, visitors can immerse themselves in the experience. Both the shop and restaurant are 100% themed with the Viking Age. The museum has a lot of visitors from abroad.

Understanding the Museums

6.1 Introduction

Chapters Six and Seven deal with understanding the museums and their visitors and are a step towards general recommendations for this museum sector. The chapters follow a structure similar to that of Chapter Five: they start with a descriptive section on the eight museums, followed by an examination of management and finances, and discussions about staff, the collections, marketing, interpretation and visitor service. The structure of this chapter follows the management survey whilst the structure of Chapter Seven follows the visitor survey, starting with visitor characteristics and the steps before the visit, followed by ratings of several aspects of the visit itself.

All the museums are easily accessible and attract different kinds of people, leaving hardly a single type of visitor out. Comparison between the eight museums was difficult, due for example to a large difference in population densities around each of them, resulting in many local visitors in some cases with many national visitors in others. Depending on the perspective, one can divide the museums into different groups, but no one grouping suited all the research questions. In one case museum A fits best with museums B and C, but when looking at it from another perspective, museum A resembles museum C and D. As there were no two museums in the same country, nation-specific similarities could not be investigated. The most frequented museum has about 10 times as many visitors as the least visited in the group. At one site, the tourist season peaks within a six week period, whilst elsewhere it can be up to six months.

This chapter shows that running an archaeological open-air museum can be very eventful. One needs to be very flexible and have more than just management abilities. Many of the staff usually have different responsibilities at different times of the year, and all-rounders are highly valued, working outside in period costume in the season, for example, and in winter helping out with the administration or designing marketing.

Despite the variety of the museums comparable data fit for this research were collected in abundance.

6.2 Data Collection Issues of the Management Assessment

This research's management assessment (See Section 3.8.) consisted of 11 sections of questions on different management items to be filled out by the respective managers during the fieldwork in 2008. Typically, filling out the complete assessment could ideally take about a single day but the reality was different, leading to possible data collection issues in the management assessment. At HOME for example, the assessment was divided into five parts and filled out by just as many people, as they were the coordinators with the most up to date knowledge in those areas. In the end, the assessment files were combined and checked by the manager. At the Scottish Crannog Centre, the assessment was tried out in a very early stage and much feedback was given to the quality and structure of it. The first field visit, in May, coincided with too busy a period in the year for enough time to be spent with the manager to get all the answers needed. Therefore, a second visit was conducted in the off season when the whole survey was filled out in a single day.

At Lofotr, the manager was not present at all during the field work week, something which was not anticipated. Therefore, the questions were answered in the off season in winter 2008-2009 with feedback by email where necessary. This took longer than expected. With the Pfahlbaumuseum, the assistant to the director filled out everything during the field work week independently of the author; hardly any questions needed to be answered regarding the structure of the assessment. In Fotevikens Museum, the assessment was done by interviewing the manager. This was later transcribed. Some remaining questions were answered later by email. The differences in data collection could have made particular comparisons problematic, but eventually detailed data were obtained which were comparable, partly because the collected data could be placed within a larger framework of data gathered during previous visits and at other archaeological open-air museums.

It would have been possible to compare management styles but that was beyond the scope of this research.

6.3 Management of the Eight Archaeological Open-Air Museums

All eight museums in this study fit the EXARC definition of an archaeological open-air museum. It was in the context of these eight museums that the definition was constructed, as part of the *live*ARCH project; the definition was then carried on by EXARC. Even though all eight locations have defined themselves as archaeological open-air museums, only six use 'museum' in their official name. At Araisi the site was originally referred to as a lake fortress, which is the designation of the (re)constructed area. It began as an initiative of J. Apals which was then further supported by public, leading to the creation of the Araisi Lake Fortress Foundation in 1993. The foundation continued to develop the site until 2007, with the aim of setting up an archaeological openair museum. The name 'museum' was not used for Araisi prior to that date, as the assumption was that it neither met museum standards nor possessed an appropriate visitor infrastructure. It was impossible to raise the required amount of money in the Latvian non-governmental sector, and to receive the state financing necessary, the site became a branch of the National History Museum. From 2008 onward the site has included the designation 'museum' in its name, and is known as the Araisi Archaeological Museum Park (personal communication Z. Apala, 30 September 2010). Another example, the Scottish Crannog Centre, is not classified as a museum despite the fact that it carries out its own research and presents a display of original artefacts. 'Accreditation' is a set of national standards for UK museums. To achieve these standards museums must meet published requirements in how they are governed and managed, how they care for and document their collections, and with regard to the information and services they offer their users. Accreditation is open to all museums that meet the 1998 Museum Association definition of a museum: 'Museums enable people to explore collections for inspiration, learning and enjoyment. They are institutions that collect, safeguard and make accessible artefacts and specimens, which they hold in trust for society. The Accreditation scheme is administered by Arts Council England, in partnership with Museums Galleries Scotland, Northern Ireland Museums Council and CyMAL.'

www.museumsgalleriesscotland.org.uk/the-programmes/accreditation.

6.3.1 Parameters and Practicalities

The museums vary greatly in size (See Figure 6.01). Lofotr has an area of 100 hectares, whilst HOME has only two. It must be said that the intensively used area at Lofotr is probably not larger than two hectares either. On average, in all eight museums, the guided tour takes a little less than an hour and covers about 500 metres. The stability of archaeological open-air museums depends on both internal and external factors. Some of these can easily be determined (See Figure 6.02). Not necessarily all of them have a negative influence on stability or success.

	hectares	metres	minutes
The Scottish Crannog Centre	0.5	150	50
HOME	2	500	65
Pfahlbaumuseum	6	800	60
Lofotr	100	500	40
Parco Montale	2.4	350	60
Araisi	12	500	60
Matrica Museum	3.7	400	60
Fotevikens Museum	7	450	20

Figure 6.01: Size of the museum grounds in hectares, physical length of the guided tour (distance) and the average duration of it (minutes).

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Total
Change in dependency	0	0	0	1	0	1	0	0	2
Major construction / opening new building	0	1	1	0	1	0	0	1	4
Increased competition	1	0	1	1	0	1	1	0	5
Major organisational restructuring	0	1	0	1	0	0	1	1	4
Change of executive director	0	1	0	1	0	0	1	0	3
Disaster	0	1	0	0	1	0	0	0	2
Total	1	4	2	4	2	2	3	2	

Figure 6.02: Instability descriptives in the eight museums concerning the years 2003-2008. In three cases, the managing director has been in post less than five years. In the case of HOME, there have been four different managers in 10 years, a fifth one starting in 2010 (personal communication A. Boonstra, 2 October 2010). Four museums have undergone major restructuring during the period 2003 to 2008. It is therefore not surprising that most of these were under new management during this time. A disaster took place at both Parco Montale and HOME: in both cases one or several houses burnt down, due to arson. This led to new construction work. The Pfahlbaumuseum and Fotevikens Museum planned the building of new houses, though not as direct replacements, and four other museums are planning to construct new buildings, albeit modern service areas: these museums are HOME, Lofotr, Araisi and the Scottish Crannog Centre.

Most of the museums are dependent on the government for keeping the museum running and for some, like Fotevikens Museum, EU project money is important in fulfilling and developing the concept. With all the museums, the financial situation is guaranteed for several years to come; one bad season will not mean the end of any of them.

The museums with the highest number of active (in)stability factors are HOME and Lofotr, followed by the Matrica Museum. The Scottish Crannog Centre seems to be the most stable.

6.3.2 Management and Finances

It was evident from the survey that there were thematic issues of management, but those are not unique to these eight museums: 'the management myopia which plagues museums, and underlies their inability or unwillingness to embrace socially relevant missions beyond education and entertainment, is essentially a lack of foresight – a seeming inability to anticipate future events that have little or nothing to do with current activities and commitments' (Janes 2009, 66).

Management approaches are widely known in the museum world. Examples are management by objectives, using business plans, SMART goals (Specific, Measurable, Ambitious, Realistic and within a Timetable, see for example Doran 1981) and an evaluation system with indicators of financial and programmatic performance (Manneby 2002, 74-78). In archaeological open-air museums, professional management often follows less structured ways.

Only three of the eight museums under research (HOME, Lofotr and Fotevikens Museum) have a formulated business plan in writing. This could be explained by the possibility that business plans for museums are a more common practice in Scandinavia and the Netherlands than elsewhere in Europe. However, HOME and Lofotr (See Figure 6.02) are two of the three museums with the most factors influencing their stability. Thus the existence of policies may be a factor contributing to stability. Of all eight museums, the Matrica Museum was the only one without a business plan and an action plan, though Parco Montale and Araisi did not give details. In other business fields it would be unusual not to have a business plan. The most neglected areas of an action plan are the definition of the action steps themselves, and of performance measures; this means the effect is not always quantifiable. A study of management strategies was followed up by tabulating the SMART objectives (Figure 6.03, keywords adapted from

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Total
Measurable goals, possible to evaluate	1	1	1	1	nd	nd	0	1	5
Long term goals	1	1	1	1	nd	nd	0	1	5
Short term goals	1	1	0	1	nd	nd	0	1	4
Action steps	0	1	0	1	nd	nd	0	1	3
Resources Calculation	0	1	1	1	nd	nd	0	1	4
Staff involvement	1	1	1	1	nd	nd	0	1	5
Making priorities	1	1	1	1	nd	nd	0	1	5
Calculation of resources	1	1	1	1	nd	nd	0	1	5
Time line for implementation	1	1	1	1	nd	nd	0	1	5
Evaluation system	1	1	1	1	nd	nd	0	1	5
Indicators of performance	1	1	1	1	nd	nd	0	1	5
Tourist satisfaction surveys	1	1	1	1	nd	nd	0	1	5
Performance measures defined in the institutional plan	0	0	1	0	nd	nd	0	1	2
Total	10	12	11	12	nd	nd	0	13	

Figure 6.03: Overview of the items included in the 2008 action plan, collected from the management surveys (Keywords adapted from Manneby 2002).

> Manneby 2002) as a means of discerning the differences in management policies. In many museums, planning mainly happens only in the short term; external influences dictate the possibilities open to them, not the other way around (personal communication G. Schöbel, 30 August 2008).

> Most managers of archaeological open-air museums are archaeologists by education, and although studying archaeology usually includes gaining affinity with project management, this does not mean that all archaeologists are trained managers.

> An increase or decrease of the budget of over 25% a year hardly ever happened (source: management surveys), but financial reasons were one of the factors why Araisi was about to be transferred from the hands of a private foundation into becoming a branch museum, including an indoor exhibition area, of the National History Museum. Lofotr was also about to change status. There were fewer governmental museums as opposed to private ones, earlier on: this later balanced out. But the type of organisation, government or private, does not necessarily signify much. A governmental museum can be relatively independent, and a private undertaking more restricted in its actions, than expected. The situation becomes more complicated when looking in detail at a museum like Lofotr for example, which calls itself a public enterprise: a combination of two shareholding companies, owned 100% by the municipality of Vestvågøy. The most significant difference is the choice of organisation in Aksjeselskap [Ltd.] and not in Stiftelse [foundation]. The latter has no owner at all, while a stock holding company has an owner. The two shareholding companies still exist one as owner of the museum. The other one (Lofotr Næringsdrift) was sold by Lofotr to the new museum (Museum Nord). Lofotr Næringsdrift continues, but with new ownership (a shareholding company that is owned by a foundation) (personal communication G. Johansen, 8 May 2010).

Neither HOME nor Fotevikens Museum were started by archaeologists, whose role as a result was limited to begin with; at Fotevikens Museum, however, archaeologists were consulted and shortly became part of staff. In all cases, with the exception of HOME, archaeologists are part of the present management of the museum, with either archaeological or administrative tasks. Archaeological consultancy from external specialists is an option for half of the museums (HOME, Parco Montale, Araisi and Lofotr).

The number of tourists per museum differs greatly (See Figure 6.04). The largest museum under research, the Pfahlbaumuseum, has 17.6 times as many as does the smallest in the group, the Matrica Museum. Also the number of days per year open for tourists varies substantially. Again it is the Pfahlbaumuseum which is open most often, 356 days, but Parco Montale is only open 25 days a year (See Figure 6.05), which is not enough for it to be defined as a museum (Gómez Ryan 2002) (See Section 3.7.2.).







Most of the museums have groups or individuals serving in an advisory capacity. In some cases, as at HOME, the Matrica Museum and at the Scottish Crannog Centre, this is formalised; in other cases, as at Parco Montale and Fotevikens Museum, it is not.

The economic impact of a museum is an important factor. A museum brings jobs and tourists who will in addition spend money in the direct vicinity before or after their visit. The impact the museums have on trade in nearby hotels, restaurants or other businesses is difficult to estimate as there are few statistics to rely on. At Sagnlandet Lejre, the estimation is that even though society invested about 1.2 million Euro in 2010 (See Figure 6.06), the money Sagnlandet and its visitors spend brings a yearly balance of almost 376,000 Euro. The use of public money for Sagnlandet can be seen as an economic investment in the region with a positive result of 32% (Sagnlandet Lejre 2011, 8-10).

Sagnlandet Lejre 2011, 10.	Total profit for the region	€ 375,926
Source:	Money invested by the region in Sagnlandet	- €1,165,153
Sagnlandet Lejre in 2010.	money spent by tourists in the region	
expenses generated by	Money spent by tourists in the region	+ €1011871
Figure 6.06. Income and	Money spent by Sagnlandet in the region	€ 529,207

The other side of local impact is the social relevance of the museum. Parco Montale, for example, was created to give a historical background to an area of a recently built suburb lacking in tradition. It is a public museum and raising awareness of culture is one of its tasks.

Culture in this case is a tool for development (personal communication I. Pulini, 30 March 2010). The social relevance is also important at sites like HOME and Fotevikens Museum, where many jobs in the museum itself are created, as part of a government scheme the museums sign up to, for people who would not normally get or keep a job; this is to the mutual benefit of the museum and the government.

The number of affiliations to organisations aiding the museum varies enormously. For this research these organisations are divided into universities, tourism/business networks, national museum associations (including ICOM), governments and other professional bodies (See Figure 6.07). The Pfahlbaumuseum and Lofotr have many such connections, both being large

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Average
University	1	0	0	2	2	1	3	2	1.4
Tourism / business network	4	2	1	5	2	4	0	1	2.4
National Museum Association	0	2	4	1	2	1	2	4	2.0
Government	1	2	1	3	1	3	1	1	1.7
Other professional body	0	1	9	1	1	2	0	1	1.9
Total	6	7	15	12	8	11	6	9	

Figure 6.07: Number of affiliations of each of the eight museums, divided into categories. museums in competitive tourist regions. After 2008, the Pfahlbaumuseum increased its links with with Tübingen University, making them even better connected in all aspects.

National museum associations are the most popular to link up with, followed by tourism / business networks. Although a good mix of such affiliations seems to be important, it is hard to ascertain what number is sufficient for which museum. Often, communication through a museum manager's professional network is as significant to a museum's development as its links with the official cooperation partners, although there will of course be an overlap between the two.

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Average
Do you strengthen regional identity?	5	4	5	5	4	4	4	4	4.38
Do you promote tourism in the region?	5	4	5	5	3	2	5	4	4.13
Do you strengthen regional development?	4	4	5	5	2	3	2	4	3.63
Do you strengthen national identity?	5	3	3	3	0	5	1	4	3.00
Average	4.75	3.75	4.50	4.50	2.25	3.5	3.00	4.00	

Figure 6.08: The regional and national influence of each of the eight museums on a scale of 1-5, where 1 is little and 5 is maximum.

Looking at the influence of the museum on tourism and regional development (See Figure 6.08) it would appear that the Scottish Crannog Centre, Pfahlbaumuseum and Lofotr have the largest influence. The museums with the least influence are Parco Montale and the Matrica Museum, especially with regard to their impact on regional development and on the strengthening of national identity. These two museums are also the least dependent on tourists, with a greater dependence on education visitors (See Figure 6.04).

There is not a single museum amongst the eight under research where staff do not draw up annual accounts and annual budgets. Some of them, however, are not too keen on giving details. The Scottish Crannog Centre, for example, wished to refrain from answering any questions regarding this topic, and suggested asking instead whether or not museums do financial tracking. This, however, does not say anything about the quality of their financial management. For the Lofotr, it proved impossible to fit the data on financial administration into the requested categories. For the Pfahlbaumuseum, costs could be broken down but the income could not. In the end, five of the eight museums provided sufficient information for the results to be compared for this research (See Figure 6.09).

About 60% is the usual figure for staff costs. This is higher at HOME, since they have more staff than anybody else (See Figure 6.11 and 6.09), reflecting the museum's role as a sheltered workshop (personal communication D. Prinsen, 15 May 2010). HOME's high staff expenses are mirrored by higher subsidies, specifically to support these staff.



Figure 6.09: Overview of museum finances, indicating expenses by percentage for those museums which provided sufficient data.

The income division between museum activities (source 1), public money (source 2), and other income sources (source 3) seems to be healthiest at Araisi, the most unstable at the Matrica Museum. HOME should diversify its funding base more (See Figure 6.10). Parco Montale derives its public money largely from the Municipality of Modena, the location of the museum that runs Parco Montale, but about 30% of it comes from the Municipality of Castelnuovo Rangone, the actual location of Parco Montale.

Other income is earned mainly through restaurant, shop and accommodation facilities. At some events, living history groups or craftspeople are able to sell their own goods and many of these people are paid for their performance. Also, much is sold at events by the living history groups themselves, but these transactions do not feature in the financial accounts of the museums.

A calculation of income per full time employee is not often made, due to the fact that the number of full time employees is difficult to ascertain. In some cases contracted staff are counted within the figure, in other cases not. The income does not affect the number of employees directly (personal communication M. Vicze, 13 August 2009). The management survey shows that income per full time employee is between Euro 4,000 and Euro 48,000. Income per visitor could be specified by means of the management survey for most museums,





being between Euro 2.5 and Euro 9.57. These numbers are relative to the full income and expenses of every individual museum and the country they are in. Unfortunately, there are too few data to make a detailed comparison.

The financial priorities for most of the museums are more closely connected with strengthening their overall financial health and stability, than with increasing income / raising funds for a specific project. HOME has the most financial imperatives. The Scottish Crannog Centre is not subsidised by any individual or organisation and seeks grants regularly. At Araisi, challenges lie in renovation of the infrastructure and in fighting financial pressures, although they have permanent state financing. At the Matrica Museum in 2008, there are strong financial cuts commissioned by the municipality running the museum. Sponsorship has been sought but not found.

6.3.3 Staff

FTE stands for Full Time Equivalent of staff on the payroll: if all the working hours spent per year were added together, and divided by the number of hours typically worked and paid for by a full time employee, then the working hours in Full Time Equivalents are calculated.

For many of the museums, staffing is complex with high proportions of part time staff; some work weekends only, or seasonally, or by other arrangements. The information is provided by taking the number of hours worked by a typical 100% FTE as the unit and dividing the total number of hours worked by all staff throughout the year. The FTE figures have been calculated by the museum staff in each country and because of difficulties in calculating, the FTEs per museum (See Figure 6.07) are approximated.



It is hard to believe, that with less than 2,000 tourist visitors per FTE, a museum can still be solvent (as few, if any survive without grants). It has to be noted however that in many places, most of the staff receive low wages, not just in Eastern Europe, but also in for example Fotevikens Museum and HOME, where people who otherwise would not work at all have a subsidised job. In the cases of the museums with over 3,000 visitors per FTE (See Figure 6.11), these arrangements do not exist. Financial profitability is hardly ever a priority or feasibility.

The maximum number of tourists which the museum staff handles on a peak day varies greatly between the museums, from 250 to 3,000. Pfahlbaumuseum and Fotevikens Museum have not shared details, but probably their maximum numbers of tourists on a single day are even higher than 3,000. Araisi is definitely overcrowded with 1,000 visitors on a day, and HOME cannot really cope with numbers like 2,500 on a single day: the active area of these museums is just too small, and it is better for them to host a few medium sized events instead of one larger one. Most museums can rely on volunteer and other extra staff for such events.

There are museums with many school group visitors, i.e. visits booked well in advance and with a low probability of cancellation compared to tourists. At first appearance it would seem these museums are not efficient with their staff, looking at the amount of visitors per full time staff member. However, school visits require more contact time, up to several hours, in comparison to tourist contact time. In all museums, most of the staff multitask and can be assigned to different jobs, depending upon needs. This multi responsibility can lead to distraction and unfinished tasks, since there is a constant need to respond to what is happening at a particular moment. There are seldom extra people available to deal with these interruptions. Within the museum staff, there are large differences between seasonal and non-seasonal staff, indoor and outdoor staff et cetera. There are different strata of staff and not all are paid. Sometimes working with volunteers and students is very helpful, but this is not always possible due to cultural differences or simply the lack of people nearby.

A very limited amount of work is outsourced, probably because these museums have a lot of part time staff who can work extra hours here and there. Expertise is hired for certain demonstrations and research. In three cases, guarding is outsourced; in four cases some of the cleaning work is outsourced. Maintenance is usually conducted by the museums' own staff. Several museums have an external financial expert or marketing expert as the management survey shows.

The Scottish Crannog Centre and Fotevikens museum do not hire external experts. HOME uses only its own network of freelance professionals when hiring external expertise. Four other museums use the same existing network of freelancers around them. Some just advertise in the local newspapers. Four museums get experts from affiliated parties like the university. Similar museums nearby are important, with five of the museums getting external expertise from them.

The main channels for recruitment of new voluntary and/or paid staff are advertising in newspapers (four cases), word of mouth (three cases), their own website (three cases) and their own networks (four cases). In two cases, archaeological departments are specifically mentioned.

Training staff is important to all, and in many cases training is tailor made. At the beginning of the season, there is a peak in training new staff and updating old staff. Fixed staff usually participate in training seminars with external speakers. The training is a combination of theoretical lectures and practice, including lots of mentoring. Only HOME, the Scottish Crannog Centre and Fotevikens Museum have a formal staff manual; in most cases written information is limited.

6.3.4 Collections

Collections at an archaeological open-air museum can be defined in several different ways. In the definition of archaeological open-air museums as used by EXARC (See Section 2.2. for a longer discussion), emphasis is put on intangible collections in the sense that: 'the overall presentation of an archaeological open-air museum holds collections of intangible heritage resources and provides an interpretation of how people lived and acted with reference to a specific context of time and place' (www.exarc.net).

In 2008 however, the collections were defined by the eight museums into the following categories:

- The museum library, photo and video collections and archive
- The archaeological artefacts on display at the museum
- The relevant cultural heritage on site and nearby
- (Re)constructed objects


Figure 6.12: Features of the eight archaeological open-air museums. For more information see Section 2.5.

The relevant cultural heritage on site and nearby is seldom seen as a separate category of the collections, although every museum keeps records of this. Lofotr, Fotevikens Museum, the Scottish Crannog Centre, the Pfahlbaumuseum and Araisi do this in a structured manner; Parco Montale and Matrica Museum and HOME also do this, but to a lesser extent: opportunities exist for them to increase their record-keeping and their use of relevant cultural heritage on site and nearby. Of these more important modules, Lofotr and Araisi have most, HOME the least. The more modules one can rely on, the better one is embedded in the local cultural society and the more diverse the character of the museum is (See Figure 6.12).

There is not a single museum which is designated officially as a zoo or has a historical ship. The (re)constructed boats which are part of the museums are mostly simple logboats; only Fotevikens Museum and Lofotr have ships. The historical houses, either in situ (two cases) or moved to a new location (one case) are generally nice extras to the experience at the respective museums (See Figure 6.12).

(Re)constructed objects are the main focus for all museums. They can be divided into:

- Larger objects such as houses, ships and immovable constructs like kilns
- Smaller objects such as costumes, furniture, ceramics, tools and weapons

One needs to gather all kinds of sources to answer questions which arise during construction of buildings in an archaeological open-air museum. Most museums refer to each of their buildings as inspired by a single site, with additional material imported from similar sites if the original excavation does not provide enough information. In half of the cases, these (re)constructions are, in addition, inspired by a building tradition and documentary research.

Coles (1979) defined three types of (re)construction: look like, constructed like, used like. In several cases in the museums under study, houses were not constructed as the originals would have been: often, a consideration of safety measures changed the dwelling before it left the drawing board, with modern tools being used in its construction. The statement that houses are constructed as an archaeological experiment is valid only in certain isolated cases, never for all buildings in a museum. That at least is the case at the Pfahlbaumuseum and the Scottish Crannog Centre. At Araisi, one now ruined building was built as an experiment (See Figure 6.13).

In many cases, the houses were built by a specialist company, often in combination with a modern contractor and regional craftspeople. Scientists, students and volunteers play a very important role in house construction in the eight archaeological open-air museums (See Figure 6.13).

The houses are usually well documented, the plans filed, the actual house measured and documented (to record whether changes were made between the original plan and the actual house); the use is documented (albeit usually very basically) and the maintenance as well - not only for the scientific record but also for maintenance plans and budgeting. Almost no house documentations have been published in any defined form, a clear requirement of a good experiment (See Figure 6.13). Therefore, most (re)constructed dwellings in the eight museums cannot be regarded as experiments.

In some cases the construction plans are based on old views of archaeologists, historians and architects who might not be specialists in wood construction; similarly, the building work itself may not be carried out by people experienced in working with wood. The museums need to keep their presentation up to date, and for that reason need to maintain a dialogue with both the public and with scientists. It is a strength if a positive attitude towards change is established.

All museums document their collections to assist research. The largest problem for most museums is how to register the objects with an identifiable code (See Figure 6.14). Management says this hinders the use of objects in the daily work of the museum; registering, however, does not require a visible label. The second most important reason for documentation of the collections is to make information accessible to the public (this accords with the views of all the museums, except the Scottish Crannog Centre) followed by simply keeping an inventory (for six museums, not the Scottish Crannog Centre and the Matrica Museum) and finally insurance reasons (five museums, not the Scottish Crannog Centre, HOME and Araisi). Even though, for example, HOME does not keep a documentation of its objects for these purposes, when one of their houses burnt down there in 2003, the existing documentation was sufficient to make an estimate of the lost value. With the exceptions of the Scottish Crannog Centre (of which no data were available), Lofotr and Parco Montale, the museums register at least five different kinds of information.

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum
What are your houses / structures based on?								
Archaeological evidence from a single site for every single structure	1	1	1	1	1	1	1	0
Archaeological evidence from several sites, even for a single structure	1	1	1	1	0	1	0	1
Archaeological 'type of structure' / archaeological 'tradition'	0	1	0	1	0	0	1	1
Historical information	0	1	1	0	0	1	0	1
Documentary research / general information	1	1	1	1	1	1	1	1
Do your (re)constructed houses / structures:								
Look like the originals (but not necessarily 100% built with original techniques and materials)	1	1	1	1	0	0	1	1
Constructed like the originals (100%), like an archaeological experiment	1	0	1	0	1	1	1	1
(Partly) used like the originals	0	1	1	1	0	1	0	1
Who constructed the houses / structures?								
Specialist company	0	1	0	1	1	1	0	0
Regional craftspeople (museums staff)	0	1	1	1	0	1	1	0
Modern contractor	0	1	1	1	0	0	1	0
Scientists	1	1	1	1	1	1	0	1
Students	1	1	1	0	1	1	0	1
Volunteers	1	1	1	0	0	1	1	1
Are any of these people still involved with the museum or (re)constructions?	? 1	1	1	1	1	1	0	1
How are the houses / structures documented:								
The plans are filed	1	1	1	1	1	0	1	1
The actual house / structure is measured and documented	1	0	1	0	1	1	1	1
The use of the house / structure is documented	1	0	1	1	1	1	1	1
The maintenance of the house / structure is documented	1	1	1	1	1	1	1	1

Figure 6.13: Background information on the (re)constructed buildings in the eight museums.

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Total
There is a register of incoming and outgoing items of the collections	1	0	1	1	1	1	1	1	7
The basic information of all objects is registered	1	0	1	1	1	1	1	1	7
All objects are identifiable by a code	0	0	1	0	1	1	0	1	4
All object information is accessible	1	0	1	1	1	1	0	1	6
Total	3	0	4	3	4	4	2	4	

Figure 6.14: Collections registration of the eight museums, following the minimum demands of the Dutch Museum Association (Stichting Het Nederlands Museumregister 2001, 8-9).

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Total
Is research done into the museums' collections or into the themes of the museum's collections?	1	0	1	1	1	1	1	1	7
Do you gain new knowledge based on your collections?	1	1	1	1	1	1	1	1	8
Own staff does research	1	0	1	1	1	1	1	1	7
Outside specialists do the research	1	0	1	1	1	0	1	0	5
Total	4	1	4	4	4	3	4	3	

Figure 6.15: Research into their own collections by the eight museums.

Looking at the research done using their own collections, all eight museums gain new knowledge (See Figure 6.15). If research is done, it is done by their own staff: outside specialists are not involved at Fotevikens Museum, Araisi and HOME. The latter states that the way information is gathered about their collections is not structured enough to call it research (personal communication J. Schuitert, 13 January 2010).

In the museums with substantial archaeological collections (the Scottish Crannog Centre, the Pfahlbaumuseum, Parco Montale and Matrica Museum) the other collections, of (re)constructions, appear less important as the museum itself does not rely on these. The (re)constructed items are replaceable, the archaeological artefacts are not.

A further feature of the object collections is whether or not (re)constructed houses are furnished. The comments are diverse and worth repeating below, as they show different valid approaches to an important point of discussion (See Figure 6.16).

For the six museums (mostly) furnishing their houses, the most important reason is to demonstrate the way people might have lived in the past by presenting a general image.

The second way of presenting, like at the Pfahlbaumuseum, Fotevikens Museum and Lofotr, is through themed interiors which refer to different crafts or occupations, like baking bread for example. This way, the buildings are showcases of a museum which happen to fit with the time and place of the depicted crafts. They are a stage, a showroom which happens to be outside (see for example Ahrens 1990, 178).

Finally, some houses are furnished solely for education purposes like at HOME, the Pfahlbaumuseum, Matrica Museum and Fotevikens Museum. You will find enough seats for the whole group there and the tools or instruments needed to execute a programme with a whole class, like for example grinding stones or weaving implements.

Araisi only has one house furnished, and only partly, for preservation reasons. In addition the houses at Araisi are too small both to be furnished and visited by tourists. Tourists may be disappointed when they are not allowed to enter the houses.

Matrica Museum has no furniture in the houses. Their houses are showcasing only (re)constructions of those artefacts which were found in the original excavation of that specific house. However, the houses themselves are less scientific in the sense that most construction details represent just one option out of many, and large parts remain unproven. The visitors are eager to believe that what they see is real (see for example Ahrens 1990, 178 when he talks about the 'glaubiges Museumspublikum'). However, no single reality gets the chance to be established once more (see for example Baudrillaud 1978, 9, 35-38).

The Scottish Crannog Centre	Partly	We don't have any evidence for beds, etc. So we have only put in what we have evidence for, e.g. hearth We know they kept animals there, though not how they were penned in, so the penned off area is guesswork, but based on the fact they definitely kept animals inside. I don't really call that furnished. We also have domestic utensils that are similar to objects that were found, e.g. butter dish, plate, wooden spoon, etc. So, while they must have had beds, and probably ladders, we have not put them in. No one seems to mind!
HOME	Yes	Because we want to show daily life.
Pfahlbaumuseum	Mostly	We want to demonstrate the way people lived in the past.
Lofotr	Yes	We use (re) constructed artefacts to help interpret the rooms in the hall, and to create an atmosphere similar to how it may have been in the past. Living quarters are more 'flexibly' equipped according to the active craft projects taking place. For example, the smithy is equipped for the performance of smithing, and in accordance with what is found in archaeological material.
Parco Montale	Yes	We use items to stress the point of how people used the houses! (1) House for exhibition of ancient life; (2) House for Pedagogic as well as for Exhibition (3) Thematic use of houses: the 'house for ceramics', the 'house for metals'. We make a distinction between the structure (house) and the furniture; as well as between experimental archaeology and what not.
Araisi	Partly	Because the houses are small, with no windows, this makes preservation and the exploration of any interior (re)constructions that include small items problematic. If we prohibit them from entering the houses, visitors would be disappointed because they love doing it. The full (re)construction of the past environment is not the aim of the presentation, because for many reasons it can't be done (fire protection, safety, preservation of the site etc.)
Matrica Museum	Not with furniture, but with copied boats / ships	The main chosen guideline for the Százhalombatta Archaeological Park is 'authenticity'! Following this line of argument if we (re)construct one specific house, then the (re)construction has to be consistent with the line of argument, i.e.: if a certain house is (re)constructed then only those things known about that specific household are included. For us, the question of authenticity is not about the general Era of the house in question, but its specific archaeological context.
Fotevikens Museum	Yes	We include (re)constructed items because we do not believe in empty shelves - we are not showing houses as outdoor exhibits. It is a combination between archaeological evidence and historical sources (Sagas), and we have a database (based on these sources). We do live interpretation, we are living in the house to see if it works - it becomes natural. If you don't furnish the building, you are showing a live experimental archaeology and you are not an archaeological open-air Museum. The more south you go in Europe, the fewer the houses are furnished.

Figure 6.16: Reasoning (quotes) of the eight archaeological open-air museum directors for furnishing their (re) constructed houses or not, paraphrased from interviews with the respective directors.



Research publications not about the own museum (by staff members)
Research publications about the own museum (by staff members)
Research publications about the own museum (by others)

Figure 6.17: Number of publications per museum. In blue, by museum staff, not about the museum (source: the museums); in red and green publications by museum staff and other researchers about the museum (source: www.exarc.net).

The Scottish Crannog Centre has only one house, which is almost solely used as background for the guided tours. It is only partly furnished, to show daily life - but some essential elements like beds and stairs are missing.

All museums except for the Scottish Crannog Centre use a combination of approaches in their (re)constructions. As very much of the (re)constructions shown is interpretation, it is hard to draw a line between what is still acceptable and what not; this is an individual choice with different outcomes everywhere. The communication, however, about this choice is not always clear. Being honest about how one interprets is one of the key issues in interpretation (personal communication M. Schmidt, 26 January 2011).

In most of the museums staff themselves publish a variety of material, from scientific books to education material and other grey literature (See Figure 6.17). In several cases, the museum literature reflects scientific work which has no direct link to the open-air museum role, such as excavation reports. It is not surprising that the largest two museums, Pfahlbaumuseum and Lofotr, produce the most publications and have the most articles published about them (See Figure 6.17). For every research publication about the museum (by staff and others) the museums on average produce one other research publication on other themes. Providing literature about their own archaeological open-air museum, but published by others, happens most at HOME. That museum, too, publishes relatively little on non-museum activities such as regional research, because there are hardly any such activities (See Figure 6.17). This

could be an important opening for them in the future. At Fotevikens Museum, this type of publication is even rarer, but they have the lowest overall number of publications.

6.3.5 Marketing

Marketing is an important tool device for closing the gap between what is communicated to the visitors and what is delivered (Brogowicz et al. 1990, see Section 3.8). Due to the flexibility in what is offered in archaeological open-air museums at different days in the year, the marketing needs to be flexible as well. This is further discussed in section 8.3.4.

One of the objectives of the *live*ARCH project, in which the eight museums under research were participants, was to raise awareness about marketing and communication strategies. The aim was to discuss ways of improving partner marketing and joint marketing of living history, and to raise the image of living history both among the general public and among academic institutions (Sandnes 2009). Over the years 2007-2009, under the guidance of Sandnes, the eight museums improved their awareness and skills in how to think and work with marketing and communication, regarding both processes and results. With the aid of Sandnes, all eight museums made a marketing plan for the year 2009, usually about eight pages in length (Johansen 2009). As most of the plans were made following a predefined template, and were all in English, they are comparable. HOME did not use the template as in 2008; they had an external company make a plan for them which is more about communication and leaves a few steps out (Theuns 2008). Lofotr did not use the template either, but their lengthy plan covers all regular aspects (Hammer 2009).

Putting the vision of the museum first, and after mentioning some background information including a general SWOT, the marketing programme looks at the stakeholders, market segmentation, competitors and critical success factors (Johansen 2009).

The museums are aware that they must offer a so-called corresponding match: they should deliver what they promise and market what they deliver. What is offered corresponds with the different target groups and is focussed on these. The entrance fee corresponds with what is being offered, leading in some cases to different fees at different times, like for example at HOME and Fotevikens Museum. The marketing material does not always sell to the museum visitor the experience they will get: this becomes clear when viewing the very high satisfaction rates of visitors, indicating that in these cases the marketing material probably promised less than expected. In other cases, when visiting on a quiet workday instead of on a Sunday with an event, data shows visitors are disappointed. Some museum managers mention that it is hard to offer different messages targeting different specific groups at different times.

Getting tourists in means a museum needs to be able to address them, but cultural tourists are not that easily recognisable: 'for many if not most tourists, a visit to a cultural or heritage attraction represents a discretionary or secondary trip activity and not the main reason for travel' (McKercher & du Cross 2002, 139). One day they spend their money on a museum, the next on their business trip or visiting family. An EU report states that Europe is the world's leading tourist destination (http://ec.europa.eu/commission_2010-2014/tajani/headlines/news/2010/11/ 101119_en.htm) Within the expanding tourism sector, heritage tourism is growing fast; in the UK, for example, heritage tourism in 2010 was worth more than the car industry (Heritage Lottery Fund 2010, 9, fig 2). A growing heritage tourism sector also means more competition between heritage sites.

6.3.6 Interpretation

The process of picking up information in a museum is a kind of informal learning or informal education, best described as 'the lifelong process in which people learn from everyday experience' (Jeffs & Smith 1996). The interpretation in a museum can take many forms. Interpretation in this sense covers all kinds of explanation to the public. A practical evaluation guide for informal learning in museums and similar places was recently republished by Diamond et al. and is well worth reading (2009).

Only half of the museums (HOME, Fotevikens Museum, Lofotr and the Scottish Crannog Centre) have a written interpretation policy (See Figure 6.18). In all museums, the interpretation is both guided and self-guided. The guides do not follow a script, but during their training staff receive guidelines for content and style. This leaves enough space for personal interpretation. Museums update the interpretation over time, so that it remains new, and so that the overall concepts, image, atmosphere and experience remain consistent with each other. The experience relates to the target group and image. In general,

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum
Does the museum have a written interpretation policy?	1	1	0	1	0	0	0	1
Is the interpretation both guided and self-guided?	1	1	1	1	1	1	1	1
Do you update the interpretation over time so it retains its value of being 'new'?	1	1	1	1	1	1	1	1
Are the overall concepts / image / theme, the looks, the atmosphere and the experience consistent with each other?	1	1	1	0	1	1	1	1
Does the experience relate to the target group and image?	1	1	1	1	0	1	1	1
Is the interpretation focused on what visitors would like as well as the message which the museum intends to get across?	1	1	1	0	1	1	1	1
Do you stimulate the senses: smell, taste, sight, hearing and touch?	1	1	1	1	0	1	1	1
Are there different layers in the interpretation so the visitor can choose different 'levels'?	1	1	1	1	0	1	1	1
Does the interpretation in the museum correspond with the way (the curriculum) is presented generally in schools?	1	1	1	1	0	1	1	0
Does your museum have physical structures for visitor's participation (for example animals and/or operating machinery)?	1	1	1	1	0	0	0	1
Do you use dynamic exhibits (for example (scale) models or static objects, transparencies, dioramas)?	1	0	1	0	0	0	0	0
Do you use other means of exhibition (for example listening posts, multimedia kiosks, light and sound effects)?	0	1	1	1	0	0	1	0

Figure 6.18: Description of the interpretation in the eight museums.

the interpretation focuses on what visitors would like, as well as on the message which the museum intends to get across. The only museum where the senses are not stimulated, or where there are no different layers in the interpretation so the visitor can choose different levels is Parco Montale; they are also the only one of the eight museums who does not apply living history at any occasion (See Figure 6.20).

Experience and modern technology are coming closer to one another; it is no longer one without the other. Smartphone solutions are an important way forward for engaging visitors with what they would like to know, made fit for purpose. This method of interpretation is not invasive and augments the interpretation offered by museum staff personally. Instead of creating distance and interruption, modern media can augment the atmosphere as created with the (re)constructed buildings, artefacts and the tour guides. As López-Menchero Bendicho puts it: 'technical advances in augmented reality, immersive virtuality and holography seem to anticipate a true revolution for archaeological heritage on-site presentation techniques' (2011, 427). Such advances clearly offer many new vistas for archaeological open-air museums. Techniques like virtual reality are no substitution for a real life experience (Bennet 2009, 91), but they can make visitors more interested, by augmenting the visit and what is learnt.

The interpretation in the museum usually corresponds with the way the curriculum is presented in schools, except for in HOME and Fotevikens Museum. In Southern Sweden the curriculum, as designed in the capital Stockholm, is increasingly seen as too far away from the Scanian reality. In Scania, cultural links with Denmark are increasingly appreciated (personal communication B. M. Buttler Jakobsen, 4 January 2012).

To encourage visitor's participation, one can use animals, scale models or static objects et cetera. Araisi, Parco Montale and the Matrica Museum do not have any of these. But one can find live animals in the other five museums, along with scale models or dioramas at the Pfahlbaumuseum and the Scottish Crannog Centre.

Evidently, in an archaeological open-air museum, the basic ways of delivering interpretive content is by means of permanent exhibits, guided visitor tours and self-guided tours (See Figure 6.19). Almost without exception, all museums have outdoor permanent exhibits, organise mission-related public events like lectures, films et cetera and offer both hands-on stations for the public to try out activities for themselves and demonstrations where the public cannot try the activity. A little less frequently (six out of eight times) museums use third person interpreters, and have both their collections and archive or library available for research - although these are not readily accessible in all eight museums, even for staff.

Archaeological artefacts are only on display at four of the eight museums, whilst three others have collections presented at another location. Parco Montale has their original collections in nearby Modena, the Matrica Museum has theirs in the museum in the same town and Araisi has their collections of artefacts in the Latvian National History Museum in Rīga. HOME is the only one with no original artefacts presented whatsoever (See Figure 6.19).

		The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Total
1	Permanent exhibits	1	1	1	1	1	1	1	1	8
	Guided visitor tours	1	1	1	1	1	1	1	1	8
	Self-guided tours: signage and / or printed guide / brochure	1	1	1	1	1	1	1	1	8
	Printed information to take along	1	1	1	1	1	1	1	1	8
	Own (re)constructed period rooms / architectural (re)constructions	1	1	1	1	1	1	1	1	8
2	Outdoor permanent exhibits	1	1	1	1	1	1	1	0	7
	Mission-related public events (lectures, films et cetera)	1	1	1	1	1	1	0	1	7
	Hands-on stations for the public to try	1	1	1	1	0	1	1	1	7
	Demonstrations but public cannot try	1	1	1	1	1	0	1	1	7
3	Indoor permanent exhibits	1	0	1	1	1	0	1	1	6
	Temporary exhibits organised by the museum	1	0	1	1	0	1	1	1	6
	Art / craft / equipment demonstrations	1	1	1	1	1	0	0	1	6
	Art / craft / equipment workshops (where visitors are actively involved)	1	1	1	1	0	0	1	1	6
	3rd person interpreters	1	1	0	1	0	1	1	1	6
	Collections available for research	1	0	1	1	0	1	1	1	6
	Archives or library available for research	0	1	1	1	1	1	1	0	6
4	Broadcasts (TV, radio, internet)	0	1	1	1	0	0	1	1	5
	Collections of original artefacts in own modern showcase exhibition	1	0	1	1	1	0	1	0	5
	Collections of original artefacts outside the museum in public areas	0	0	1	0	0	1	1	1	4
	1st person interpreters	1	1	0	1	0	0	0	1	4
	School activities: at schools or other sites outside the museum	0	1	0	1	0	0	1	1	4
	Academic classes for credit	0	0	0	1	1	0	0	1	3
	Outreach to groups other than schools	0	1	1	0	0	0	0	1	3
	Use of Multimedia in exhibits	1	1	1	0	0	0	0	0	3
	Theatre (projections, live performance et cetera)	0	1	1	1	0	0	0	0	3
5	Travelling exhibits from other institutions	0	0	1	1	0	0	0	0	2
	Teacher-guided tours	0	0	1	1	0	0	0	0	2
	Collections of original artefacts outside the museum in non-public areas	0	0	0	0	0	1	0	1	2
	Travelling trunk / rental kits	0	0	0	1	0	0	0	0	1
	Self-guided tour: personal audio device	0	0	0	0	0	0	0	0	0
	Total	18	19	23	25	13	14	18	21	

Figure 6.19: Ways the museums deliver their educational and interpretive content, ranked by frequency.

First person interpretation takes place in four museums - Fotevikens Museum, Lofotr, the Scottish Crannog Centre and HOME, but not necessarily daily. Period costumes in all four of these museums is reasonably fit for purpose, but a large proportion of the costumes represents the richer part of society. One would expect more average and poor costumes in the museums. It is remarkable that the museums not using period costumes seem to cluster away from Scandinavia. The Pfahlbaumuseum, HOME, Lofotr and Fotevikens Museum all use a limited amount of projections and modern media. Until 2008, none of the eight museums under research made use of audio guides or similar devices.

The guided tours usually tell the story of the period depicted in the museum. They also refer to archaeology and archaeological methods as sources of information, and link their story, with its unfamiliar objects, to modern familiar items, for example: 'imagine life without electricity' or: 'this is an Iron Age Black & Decker'.

On average, the eight museums offer 20 different kinds of activities, depending on the time of year. Obviously not all of them are available simultaneously (See Figure 6.20). The eight activities almost everybody does are cooking, pot making, weaving, working with an axe and building houses, making music or theatre performances, living history and archery. Fotevikens Museum presents the widest variety of activities, 31, while the Matrica Museum and Araisi offer the least. The Pfahlbaumuseum offers remarkably few activities, probably due to its size and method of accommodating most of its visitors through guided tours only: if more activities were provided visitors would stay longer, which given the limited capacity of the museum grounds would not be appropriate.

Craft activities obviously are more than a mere presentation of a technique. In some cases, they can take the shape of structured and documented experiments. Some of the most interesting crafts for experiments, however, are the most boring to visitors: think for example of an iron smelting furnace which takes a few days to build and dry and several hours to burn monotonously - only when it is opened do things get interesting for the public (See for example M. Schmidt 2000). Besides that, such experiments might be too costly for an archaeological open-air museum. That is why, in such cases, a museum needs to cooperate with a university or other group conducting experiments. The question as to what extent these activities also transfer a message to the public was too hard to answer.

Most of the eight museums use a combination of period costumes, modern costume or uniforms with logo and ordinary clothes depending on the task of the person, the time of year and the need to be recognisable. Only at Araisi and HOME are the staff not recognisable. At Fotevikens Museum front office and education personnel wear period costume. Because their many volunteers do the same, a visitor never knows who are staff and who not.

Data show there is not a single museum without staff interacting with the public. However, the museums do not only use their own staff; all occasionally use external specialists. At Fotevikens Museum, these are living history actors. One can meet students everywhere except in Matrica Museum or Araisi, being the most eastern museums in this research. There are no volunteers active at Lofotr Museum due to its geographic location, neither are there any volunteers at Araisi. Agencies, clubs or associations are not used in interpretation. Lofotr is developing from a static exhibition into using more living history and similar activities (personal communication L. E. Narmo, 18 August 2008).

Apart from Parco Montale, all museums offer living history occasionally or regularly. In all seven other cases, this is about lifestyle and crafts (including cookery), often combined with some music, dance or drama. The two Scandinavian museums, Lofotr and Fotevikens Museum together with HOME

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Total
Cooking	1	1	1	1	1	1	1	1	8
Ceramics: Pot making	1	1	0	1	1	1	1	1	7
Textiles: Weaving	1	1	0	1	1	1	1	1	7
Wood working: Axe work	1	1	1	1	1	1	0	1	7
Wood working: House construction	1	1	1	1	1	1	0	1	7
(Music or theatre) performances	1	1	1	1	0	1	1	1	7
Living history / live interpretation / re-enactment	1	1	1	1	0	1	1	1	7
Archery	1	1	1	1	1	1	0	1	7
Ceramics: Kiln making and firing	0	1	1	1	1	0	1	1	6
Textiles: Spinning	1	1	0	1	1	1	0	1	6
Textiles: Dye use	1	1	0	1	0	1	1	1	6
Wood working: Hand carving	1	1	0	1	1	1	0	1	6
Leather working	0	1	0	1	1	1	1	1	6
Planting (tree saplings, grains, other)	1	1	1	0	1	1	0	1	6
Lectures and presentations	1	0	1	0	1	1	1	1	6
Making replica containers, pots	0	0	1	1	1	1	1	1	6
Metal working: Bronze	1	0	1	1	1	0	0	1	5
Cordage making from natural fibres	1	0	1	1	1	0	0	1	5
Making replica tools / weapons	0	0	1	1	1	1	0	1	5
Textiles: Making costumes	1	1	0	1	0	0	0	1	4
Metal working: Iron forging	0	1	0	1	0	1	0	1	4
Metal working: Pewter	0	1	0	1	1	0	0	1	4
Metal working: Making jewellery / coins	0	1	0	1	1	0	0	1	4
Wood working: Log boat work	1	1	1	0	0	0	0	1	4
Animal hide tanning	1	1	0	1	0	0	0	1	4
Flint knapping	1	0	1	0	1	0	1	0	4
'Be an archaeologist for a day', artificial excavation	1	1	0	0	1	0	1	0	4
Metal working: Iron smelting	0	1	0	1	0	0	0	1	3
Metal working: Noble metals	0	1	0	1	0	0	0	1	3
Wood working: Wood turning (lathes,)	1	0	0	1	0	0	0	1	3
Wood working: Other boat building work	0	0	1	1	0	0	0	1	3
Beer brewing	0	1	1	1	0	0	0	0	3
Log boats to paddle	0	1	1	0	0	0	0	0	2
Night performances: casting	0	0	0	0	1	0	0	0	1
Fish smoking	0	0	0	0	0	0	0	1	1
Trading	0	0	0	0	0	0	0	1	1
Total	21	25	18	27	21	17	12	31	

Figure 6.20: Interpretive activities offered at the eight museums.

are the only ones who offer fight shows, something that would be impossible due to space restrictions at places like the Pfahlbaumuseum or the Scottish Crannog Centre. Background living history refers to having actors in period costume pretending to be showing daily life activities in the museum, as opposed to actors catching a lot of attention with a show or demonstration.

Most of the museums want to increase and expand the range of the living history they use. However, they want to remain in control of what is offered in their own museum. Only those living history groups which can adapt to the museum's wishes are invited, and these will present the particular story of each individual museum. For the future it is envisaged that living history components will be used more often when the quality of the groups is high and the prices are reasonable (personal communication G. Schöbel, 20 August 2008). Management also wants to involve more of their own staff for the sake of quality (personal communication D. Prinsen, 28 May 2010). The danger is that when one uses a mix of first and third person interpreters who both are dressed as Vikings, it can cause some confusion. It is not easy for the guest to distinguish who is in Viking time and who is in modern time (personal communication G. Johansen, 29 December 2011).

6.3.7 Visitor Service

Visitor services are an important tool for the public success of museums. In order to get a grip on this subject, for this research, the structure developed by the International Committee for Regional Museums (ICR) was used (Prasch 2002). The ICR had run a three year project to develop guidelines to improve museum quality and standards, and had collected important contributions to practical aspects of museum quality issues in proceedings (Manneby et al. 2002). Prasch describes visitor service-related quality issues, dividing them into before the visit (See Figure 6.21), during the visit (See Figure 6.22) and on the moment of leaving the museum (See Figure 6.23).

6.3.7.1 Visitor Service before the Visit

Museum management needs to show the potential tourist visitor that they actually exist, to attract them with a fitting message and show them how to find the museum. The visitor however also wants to know how much time a visit will take, why it will be worth coming there and if it is value for money (See Figure 6.21).

In many cases, signs just outside the museum entrance refer to it. These signs often depend on local arrangements. At HOME, this has been a decade long issue (personal communication A. Boonstra, 15 March 2006). At other locations, rules on when and how to signpost a museum are either unclear or not followed well.

In most cases visitors get a leaflet with a map of the museum on arrival, so they can plan their visit better. The facilities like toilets, restaurant, shop, activity areas and information desk are usually signed out well along the route. These signs are usually not made in 'prehistoric style', but are modern. In some museums, like in the Pfahlbaumuseum, different styles of signs are available

	The Scottish	Crannog centre HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Total	
Bringing to peoples mind										
Do you cooperate regularly with tourist information, schools, shops, restaurants, hotels and travel agencies?	1	1	1	1	1	1	1	1	8	
Do you post your special events in public places?	1	1	1	1	1	1	1	1	8	
Helping to find the way to the museum										
Is your museum shown and marked in city or area maps?	1	1	1	1	1	1	1	1	8	
Do you have parking places nearby? How large a percentage of visitors arrives by car / coach?	1	1	1	1	1	1	1	1	8	
Is your museum on walking distance from public transport (bus stop, train station, subway)?	1	1	1	1	1	1	1	1	8	
Is it easy to find the museum from the bus stop / station?	1	0	1	1	1	1	1	1	7	
Giving the visitors the feeling of being welcome										
Are your staff trained to be friendly and communicative?	1	1	1	1	1	1	1	1	8	
Are you offering a welcome gift (nice leaflet or magazine for example)?	1	1	1	1	1	0	1	1	7	
Do you give an overview on all existing facilities at first sight (clear logistics)?	1	1	1	1	1	1	1	1	8	

Figure 6.21: Overview of the visitor service in the eight museums: before the visit.

throughout the museum. In other cases, for example in Lofotr, all signs are in one branded corporate identity. The Scottish Crannog Centre is very small, so no signs are necessary to find your way.

Most of the museums offer benches and other places to stop and rest during the visit. At Lofotr, the cafeteria is near the exit, just like at the Matrica Museum. In HOME, the restaurant is in the middle of the museum area. Besides watching and reading, in general every museum has several areas where visitors can join in activities. How much is offered frequently depends on the timing of the visit. At an event day, there is a lot to see and do, but when visiting out of the holiday season this aspect can be much reduced. At Araisi, there are no activities available to join in, whereas at both HOME and Fotevikens Museum activities are important and often available. If people like to get further information, the most important sources are the museum website and staff, and in a few cases the museum library is open to visitors.

6.3.7.2 Visitor Service during the Visit

Once the visitor has decided to enter the museum, questions are about whether the museum is attractive enough and whether the information is presented correctly. Given the variability in visitor profiles of archaeological open-air museums, it is difficult to provide a corresponding diversity of interpretation for all the different groups. The truth is, not everybody visits a museum to be informed: relaxation is an important impetus as well. On entering a museum, the visitor desires first to be able to get an overview of the museum, to prepare the rest of the visit well, both in time and space. Besides the real thing they intend to visit, equally important are places to rest, toilets, a place to get refreshments et cetera. It is important to guide visitors well through the museum and offer them different sources of information. The great challenge for archaeological open-air museums is to involve as many senses as possible for a positive experience. In many such museums, the visitor experience is passive and focused on watching only. Although it might be too hard to involve all visitors actively in presentations or demonstrations, one could for example trigger the senses more by using smells, sounds or light.

The visitor services are usually good at the eight museums.

Entry fees are recognisable, pricing and opening times as well, although that could be better at HOME and Lofotr. On entry, reception staff give clear information about the museum and what is happening on that specific day. It is important to recognise that human contact, more than written brochures or signs showing information, makes the difference between a mediocre and a good museum experience. Disabled facilities are on offer at almost all the sites and all museums are to some extent barrier free. This of course is a difficult matter to achieve in any archaeological open-air museum, compared to an indoor museum.

There are marked differences between the eight museums regarding the facilities to rest and have refreshment. Five museums have a self-service restaurant. Fotevikens Museum runs a full service restaurant, but only at specific occasions. HOME runs a full service restaurant regularly, even on weekdays with fewer visitors.

The restaurant facilities should be reachable from within the archaeological open-air museum's immersive area. If it is too close to the exit, it will not be an incentive for visitors to sit and rest and prolong their stay, both in the restaurant and in the museum itself. People should not be thinking about leaving while they are enjoying the restaurant.

Instead of offering food and drinks à la carte, museum restaurants could do well by working with a buffet instead. A buffet can offer more when it gets busy and less when it is quiet (Baraban & Durocher 2010, 22-28).

Usually, programmes can take place in one or two foreign languages, if booked ahead of time (See Figure 6.22). In HOME and the Matrica Museum this is not a possibility or happens very seldom. In four other cases, there is a maximum of two foreign languages. Special mention should be made of Lofotr where programmes are available in six languages. This underlines the special character of visitors to this museum, who come from such varied origins (See Chapter 5.5).

At the Pfahlbaumuseum as well as at the Matrica Museum, visitors are not allowed to take any pictures or film, mainly due to commercial reasons. At several other museums, rules exist about commercial filming and photography, leaving options open for leisure photos (personal communication J. Schuitert, 15 April 2008).

	The Scottish Crannog Centre	HOME	Pfahlbaumuseur	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Total
Visitor Service									
Can you easily see what the entrance fees are before you enter?	1	1	1	1	1	1	1	1	8
Are the prices and opening times visible at the first entry as well as at the ticket sales?	1	0	1	0	1	1	1	1	6
Is information clearly and actively delivered by the reception staff to the visitors, especially about discounts and special activities and such?	1	1	1	1	1	1	1	1	8
Do you provide facilities like wheelchairs, ramps, special descriptions, objects to touch?	1	1	1	1	1	1	0	1	7
Is your museum barrier-free? This is of course not always possible, as long as you communicate such.	1	1	1	1	1	1	1	1	8
Places to relax and recreate									
What types of refreshment facilities does the museum offer its visitors?									
- Nothing	0	0	1	0	1	0	0	0	2
- Automatic vending machines	0	0	0	0	0	0	0	0	0
- Self-service or cafeteria style restaurant	1	0	0	1	0	1	1	1	5
- Full service restaurant	0	1	0	0	0	0	0	1	2
Is the restaurant owned and ran by yourself?	1	1	0	1	0	1	1	1	6
Are there good options for people who bring along their own food and drinks?	0	1	1	1	1	1	1	1	7
Are there enough toilets, are they spread well across the territory and are they for free?	1	1	1	0	1	1	1	1	7
Is there a baby care room accessible for both women and men? Is there enough privacy?	1	0	1	1	0	0	1	1	5
Do you have a playground?	1	0	1	1	0	0	0	1	4
Languages									_
Can one order special programmes in foreign languages? How many foreign languages?	1	0	1	6	3	1	0	2	
How many foreign languages do front line staff individually typically master?	1	3	2	3	2	1	1	1.5	
How many languages do the combined front line staff typically master?	1	3	2	6	3	1	0	2	_

6.3.7.3 On leaving the Museum

Most visitors are more than happy with their visit to an archaeological openair museum, and feel that it exceeded their expectations. From the museum point of view, it is important to keep the museum in the visitors' mind, even when they leave. If possible, visitors should leave with the desire to return, for example when there is something different to experience of the same quality. The visitor on the other hand might want to take something tangible home, as a souvenir or for its information value.

All eight museums have a shop, albeit in Araisi only a shop window. At both Lofotr and Fotevikens Museum the shop covers 120-150 square metres (See Figure 6.23). Usual shop statistics are spending per paying customer, and spending per square metre; but in the eight archaeological open-air museums, these figures are either unavailable or confidential. A shop of 20-40 square

Figure 6.22: Overview of the visitor service in the eight museums: during the visit.

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museu	Total	Average
Shop										
Do you have a shop?	1	1	1	1	1	1	1	1	8	
How large is your shop in square metres?	40	18	4	150	10	2	15	120		44.9
Is the shop owned and run by own staff?	1	1	1	1	1	1	1	1	8	
Are the shop target groups the same as of the museum itself?	1	1	1	1	1	1	1	1	8	
Assortment										
Is the assortment deep (many articles per group of articles). 1 = undeep, 3 = deep	3	3	1	3	1	1	1	3		2
Is the assortment wide (many different groups of articles)? 1 = not, 3 = much	3	3	1	3	2	1	3	3		2.4
Do you offer items with a connection to the collections?	1	1	1	1	1	1	1	1	8	
How much (percentage) is directly connected with the subjects of the collections?	75%	75%	100%	50%	85%	75%	90%	75%		78%
Are there items in the shop without a connection to the collections, for example to the local community?	1	1	0	1	1	0	1	0	5	
Do you sell postcards, posters, books, videos and DVDs / CD-ROMS? (material for 'further study')	1	1	1	1	1	1	1	1	8	
Do you have unique products which you cannot find elsewhere in the area? Please give some examples.	1	1	1	1	1	1	1	1	8	

Figure 6.23: Overview of the visitor service in the eight museums: leaving the museum. metres seems to be fitting for these eight museums. The four larger shops (Lofotr, Fotevikens Museum, the Scottish Crannog Centre and HOME) have an assortment which is both wide (with many different groups of articles) and deep (with many articles per group of articles). Usually, the assortment is 75-100% linked with the theme of the museum. The only exception is Lofotr, where 50% are modern souvenirs of that area of Norway, like jackets, travel guides, food et cetera. Obviously, everybody sells material which carries information about the museum like DVDs, postcards and guide books. You will often find custom fit souvenirs like fridge magnets carrying the name of the museum. Each museum has several products you hardly find anywhere else, from ceramic (re)constructed boats / ships to wooden swords, shields and sheep furs. In several cases, however, the question remains as to how far the assortment of products mirrors the interest of the customers. Most of the museums for example have academic publications on sale, but it is not known how many of these are sold, given their specialist character and pricing.

As far as is known, in the top five of bestselling products, the number one and two are usually below Euro 2.50 in price. Postcards and children's souvenirs dominate the top five. Best-selling can be explained in two ways, either meaning the product selling the most or the product with the largest income; this has led to confusion when answering this question.

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6.4 Collecting Information about Visitors

There are many ways to collect information about the museum's visitors. This is especially important in order to close Gap Two, the specification gap between the management's view on what the visitor expects and the actual attraction quality that is specified (See Section 3.8). All eight museums use visitor surveys but not all year through and not for all target groups (See Figure 6.24). School group leaders, for example, often have a survey form handed to them, but this is different for tourist visitors. On some occasions, visitor surveys are run every third year and are, for example, specifically targeted at the largest event of the year. All eight museums make use of informal observations by their own staff. This is not only reception staff, but also the guides and others. All museums analyse the ticket sales data, not primarily on the financial backgrounds, but visitor characteristics, time of visit, which company, et cetera.

	The Scottish	Crannog Centre HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Total
Visitor surveys	1	1	1	1	1	1	1	1	8
Informal observations by reception and other staff	1	1	1	1	1	1	1	1	8
Ticket sales data	1	1	1	1	1	1	1	1	8
Guest book / Comment box	1	1	0	1	1	1	1	0	5
Interviewing visitors for more feedback	1	0	1	1	0	1	1	1	5
Store sales data	1	1	0	1	0	1	1	1	5
Visitor observations	1	0	1	1	0	0	0	1	4
Annual meeting for members	0	0	1	0	0	0	1	1	3
Focus groups	0	0	1	0	0	0	0	1	2
Advisory groups	0	1	1	0	0	0	0	0	2
Employing a consultant or other external assistance	0	1	0	1	0	0	0	0	2
Total	7	7	8	8	4	6	7	8	

Figure 6.24: Overview of how the museum management collects information about their visitors.

Five museums have a comment box or a guest book where visitors can leave comments. All museums accept comment by email which is usually followed up by staff. Also complaints given in person are followed up individually. Another five museums occasionally interview visitors for more feedback, although this is a very time consuming operation. Store sales data are also analysed on the combination of products sold, the top 10, seasonal sales et cetera.

Observation of visitors, for example of the time they spend at different parts of the site, is executed occasionally in half of the museums and can be very rewarding in identifying which parts of the museums are found most interesting. The use of focus groups, advisory groups and external consultants to better understand the visitors and their motivation is very rare.

6.5 Conclusions

Although these eight museums are hard to compare with one another there are common themes with each museum working to its own brief. All are successful in their own way. Nonetheless the eight case studies identified some issues.

Management and Finances

- There is an increase in competition and in organisational restructuring. Most museums, however, still play down accepted management methods and seem to live more by the day, responding to the challenges facing them instead of acting more independently. This is especially the case during the busiest months when everybody is fully stretched. There is little feedback on daily performance. Managers of archaeological open-air museums are often archaeologists and not managers by profession. External professionals are usually active in marketing and finances, two vital tasks for any museum, but archaeological open-air museums should have this expertise in their own hands. Most training is for staff dealing with the public, not for higher and middle management.
- Archaeological open-air museums often bring profit to their region. Investing in these museums is beneficial: the return value is higher than the investment, and the social relevance and added education value comes on top of that. It is comparatively rare to see figures.
- Many museums are dependent on public money alone. They could in fact gain more income through museum activities or, for example, through sponsorship.
- The number of staff is not in relation to the museum's income or to the number of visitors per member of staff. Giving people a job in an archaeological open-air museum is not so much of economic importance, but rather of social importance. Not all staff are paid, and many museums have a social infrastructure of volunteers. There is no standard figure or benchmark for this.

Collections

- The (re)constructed houses are often documented but the documentation is seldom accessible; other (re)constructed artefacts are documented less. While the collections in archaeological open-air museums are often defined in more traditional ways (libraries and archives), chances for improvement lie in concentrating on the (re)constructed artefacts – and, through these artefacts, on the intangible heritage the museums represent. The stories these museums possess are their true treasure, together with the staff bringing them. By focussing on these gems, how to keep and present them, the museums would gain a lot in quality.
- The (re)constructed buildings are an important asset of archaeological open-air museums. In section 6.3.4. it is explained how such houses can be decorated or not to fulfil certain presentation needs. Whatever choice the museum management makes is all right, as long as it is a conscious choice, made with the knowledge that these houses have a huge impact on their visitors.

- The cultural heritage surrounding the museums should be incorporated, placing the museums in their own unique context, recognising the region in the museum and the museum in the region.
- Although many museums publish, most research publications are not about the museum itself. This is a missed opportunity. The collections and its documentation need better structure in order to gain scientific value. It often takes just a small extra step to advance knowledge: reporting and publishing.
- The link with original archaeological artefacts is not often made or actively presented. To improve this is a significant challenge, one that needs to be met in order to present a complete story.

Marketing

- The fixed marketing material tends to be all the visitor has to rely on. This is partly due to the fact that what is delivered varies through the week and depending on the time of year. Using less printed material and more flexible ways of communicating (information accessible through mobile devices) could improve marketing.

Interpretation

- Interpretation, strength of all the museums, is often well-developed but not always well documented. Communication by means of textbooks, information shields or modern media does happen, but museum staff are the main means of interpretation. There are many different ways of doing this and staff are enthusiastic and eager to learn through experience. The number of activities is huge, although these are often standardised and predictable,, hardly unique. With experience being the hallmark of present day society, the challenge to develop original activities should be pursued. Live interpretation using period type costumes is used ever more frequently but not exclusively.

Visitor Service

- The museum visitor service is usually well developed. There are plenty of signs and the museum staff are able to answer the most popular questions easily. The museums could stimulate the senses of their visitors more, by adopting a more interactive approach. The facilities to rest or get refreshment differ too much between the museums, leaving room for improvement in some locations. In many cases, the museum shop has a good assortment but information on the effectiveness of the shops was not shared.

Understanding the Visitors

7.1 Introduction

The aim of this chapter is to better understand the visitors to the eight archaeological open-air museums. Although the museum management might have a specific goal with their museum, it is important for them to understand that visitors might have expectations of their visit different from those anticipated. A museum is successful when the offer suits both the visitors and the management.

This chapter starts by describing the profile of the tourist visitor. It consists of information about the journey to the museum, the company and how the decision to visit was made. Also, the question as to why do tourists visit archaeological open-air museums is answered. Besides an interest in the past, many visitors also visit an archaeological open-air museum out of an interest in the region. Educational value and the fact that the museums are family friendly are the other two important reasons to visit.

In the second part, the visitors evaluate different elements of their visit, including the (re)constructed buildings, the tour guides and activities, as well as the gift shop and café.

7.2 Data Collection Issues of the Tourist Survey

The main tool used to collect data about tourist visitors was a visitor survey. In 2008 the importance of running such a survey was appreciated differently across the eight museums. At some of the museums, a yearly survey was already being conducted; at others a survey runs every five or so years. At a few museums a tourist survey had never been executed before. No similar attempt to collect visitor data across a number of different archaeological open-air museums is known.

Although the main outline of the eight surveys was similar, it was agreed that the museums would add their own question design. Questions relating to profession, education and income, even name and address, are allowed in some countries but not others. The answers to questions which were not asked in all countries were generally ignored. In one case the core questions were changed at the start of, or during, the season of collecting, which meant that the collected answers had to be addressed with great caution. In a few instances, not all answering options were offered, for example whether tourists could rate different aspects of their experience. The statistical relevance per single museum was defined by the margin of error, being a calculation featuring the number of tourists and the number of returned surveys as variables. The margin of error as described in Figure 7.01 was calculated following a model of the American Research Group, Inc. (http://americanresearchgroup.com/moe.html) (See Figure 7.01) using a confidence level of 95%.

The margin of error (MOE) is a statistical phrase and is an indication of representativeness; it does not refer to the amount of 'wrong' answers - in reality there is no such thing as a wrong answer. The margin of error suggests how great the chance is that the answer given is not representative of the group.

The goal was to collect a similar volume of visitor survey results for each of the eight museums. But the surveys were executed differently, and with different intensity, resulting in the existence of more robust data for some museums,



Figure 7.01: Margin of error calculation for tourist surveys 2008. Total number of Surveys: 4,204. The total number of tourists in the eight museums in 2008 was 346,408. Margin of Error: 1.50%.

236 The value of an archaeological open-air museum is in its use



Figure 7.02: The total numbers of answers per question combined of all eight museums and their surveys. and less for others. In some cases, for example, tourists taken on guided tours were directed at the end of their tour towards the survey. This explains a high and positive response in these cases. In another case, surveys were completed by means of an interview by staff members. In yet another case, the order of possible answers was such that the top answer usually was the most wished for by the museum management. In the case of the Matrica Museum, of the 193 returned surveys, 134 needed to be omitted because they were filled out by school groups and not by tourists: in the end only 59 were accepted.

Figure 7.02 shows the frequency of answers per question. Answers with a too low frequency were omitted from further research. As some questions were only asked in six or five of the museums, a different margin of error exists for each question in each museum.

The visitor survey resulted in a collection of 4,204 written surveys. Museum staff collected the forms. Following on from this, a database was made which contained 114,509 values entered by hand, either by the participating museums, the author or an aid. Processing with SPSS led to an output of several hundred pages. The queries were described by the author, the script then written by an assistant. Getting to the point when finally the analysis could be undertaken took a lot of work: honing down the raw output, standardising the data entry, excluding poor or compromised data and creating the summary combinations of themed data pertinent to the research questions.

An overview of tourists per month per museum can be found in Figure 7.03. For clarity reasons, the high season, shoulder season and low season are visualised as separate units. For the purposes of this study, high season is defined as those months of the year 2008 with at least 10% of the total tourists attending, off season is defined as being 5% per month or less. The shoulder season is defined

	January	February	March	April	May	June	ylul	August	September	October	November	December
The Scottish Crannog Centre	0%	0%	4%	10%	11%	11%	18%	20%	11%	12%	3%	0%
HOME	2%	4%	5%	7%	17%	7%	16%	12%	7%	12%	3%	8%
Pfahlbaumuseum	0%	1%	3%	5%	16%	10%	18%	24%	14%	8%	1%	0%
Lofotr	0%	1%	1%	1%	4%	25%	43%	23%	1%	1%	1%	0%
Parco Montale	0%	0%	11%	32%	22%	8%	2%	0%	12%	10%	3%	0%
Araisi	0%	0%	0%	0%	18%	18%	22%	22%	10%	9%	1%	0%
Matrica Museum	4%	1%	11%	9%	13%	10%	11%	11%	11%	13%	4%	2%
Fotevikens Museum	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Average	1%	1%	5%	9%	14%	13%	19%	16%	9%	9%	2%	1%

Figure 7.03: Percentage of tourists per museum per month in the year 2008. Green = high season, Red = shoulder season, Blue = off season.

as all the months in between, but the difference between high and shoulder season should be significant. Colleagues at the Fotevikens Museum have not been able to provide tourist totals per month, so they have been partly omitted from this. They count the number of tickets sold, rather than the number of tourists: family tickets, for example, represent between three and seven people, so exact numbers cannot be ascertained (personal communication B. M. Buttler Jakobsen, 3 March 2010).

Figure 7.04 shows the division of tourists between the high season, shoulder season and off season. In general, July and August are the top months, with a high season extending from May to September not uncommon. Parco Montale is closed in July and August because of the hot weather. HOME is able to prolong its high season into the shoulder season, using the spring, autumn and Christmas holidays. This could also be options for the Matrica Museum, the Pfahlbaumuseum and the Scottish Crannog Centre. Lofotr is the most heavily dependent on the short and very intense high season, with 90% of its tourists attending in just two months.

In the shoulder season and the high season, tourist numbers are evenly distributed from Mondays to Saturdays, with a higher number on Sundays. In HOME, the Netherlands, for example, 39% of all tourist visitors over the years 2005 and 2006 come to the museum on Sundays (personal communication B. van Valburg, 10 February 2007). This is consistent with earlier years (Boonstra 1988-1997, Botden 2001-2003, van Valburg 2004-2007).

Experience of the eight museums confirms that most tourists are attracted during the holidays (See Figure 7.04) and on Sundays. Shorter holidays like Easter and autumn holidays are specifically mentioned. On normal school days, school groups take over the museum grounds, especially just before and just after the summer holidays. Autumn is the season for senior tourists. Events are specifically used in an attempt to reach a large variety of target groups. Looking back at previous years, tourist trends are relatively stable.

The number of returned surveys is influenced, among other factors, by the languages in which the survey was available. At the Pfahlbaumuseum, experiences indicate (personal communication G. Schöbel, 5 August 2008) most of the international tourists come from German language countries (Austria, parts of Switzerland, parts of Luxemburg), so it appeared to be no problem to have the



off season shoulder season high season

Figure 7.04: (above) Percentage of tourists in off, shoulder and high season per museum, 2008.



Figure 7.05: Number of responses per language at Lofotr. Total amount: 387.

survey in German only. Indeed, 69% of foreign responses are from German speaking countries. Most of the international visitors to the Scottish Crannog Centre are from English speaking countries: an equally large part of foreign responses (66%) are therefore from English speaking countries.

In HOME, the survey was available only in Dutch. Two percent of the surveys were filled out by foreigners. Staff confirmed the assumption that over 95% of their visitors are Dutch speaking (personal communication J. Schuitert, 14 December 2011). A different situation exists at Fotevikens Museum, where only about 23% of the tourists originate from Scandinavia (Metro 2010).

At Lofotr, the survey was in eight languages. 36.2% of the responses were in Norwegian, 23.0% in English, and 18.3% in German; Italian, French and Swedish followed, each with less than 7% (See Figure 7.05). In addition to its condensed season, a wide variety of nationality among its visitors offers another challenge to the Lofotr Museum.

7.3 Tourist Visitor Characteristics

7.3.1 Introduction

The 'experience society' is gaining in importance. Archaeological open-air museums in general are less about reading texts and looking at original items in a showcase, and more about (re)constructed items to be touched and used by museum staff and ideally by tourists as well. This interactive approach where tourists are part of the scenery, immersing themselves in an experience, accords well with the idea of the experience society.

The expectations of tourist visitors to archaeological open-air museums have changed over the years. Not only do they expect better facilities like toilets, cafes et cetera (personal communication A. Boonstra, 10 May 2006), they also like a better experience, with more interaction. The 2008 generation's approach to the media all around them needs to be emphasised. This internet generation is used to having a lot to choose from, to picking up small bits and being able to choose by oneself what to see, do, and experience - and what not. Texts with the maximum size of an SMS text message are a good way to start. This does not mean people nowadays are more superficial than past generations.

Archaeological open-air museums are easily accessible. When coming to large festivals, or on any other summer's day, tourists expect something different from an archaeological open-air museum than from a traditional one. This is partly because the audience is composed of different people. About 37% of all tourism can be defined as cultural tourism, but culture is not often the main motivation for tourists. Cultural tourism keeps growing at about 15% per annum (Richards 1996).

There are many different visitor groups, none of which excludes the others. When developing a specific offer for what might look like a small group, one can actually innovate for a much larger number of visitors. For example, the Préhistosite in Ramioul, Belgium, developed an exhibition for blind people which then became truly successful with other visitors in several countries. Cultural tourists are 'older, better educated and more affluent than the travelling public as a whole' (McKercher & DuCross 2002, 136), as described by Richards (1996, 39-45). Tourists to archaeological open-air museums are usually families (either parents or grandparents) with small children (See Figure 7.06). Besides school children as a group (who visit all eight museums, except for Lofotr, in high numbers), families with young children are the most important group, followed by adults in general. There are far fewer families with older children or young adults visiting.

Most museums want to do more about Business to Business groups, although some of the museums, like Lofotr, are already doing very well with that. For the typical tourist visitor and their children, it is much easier to visit an archaeological open-air museum than a traditional museum. The threshold is much lower. In a traditional museum, you have to behave; in an archaeological open-air museum you are much freer, enjoying the open air, the houses, the stories and the food. The public wants to have an experience, a nice day out in the fresh air with some exercise. They like a different location to relax in, where they are not reminded of their everyday life (Opaschowski 2000, 59-60), but that, of course, is only part of the story: if it were not, then the tourists would have chosen to visit an amusement park instead.

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Total
Families with small children	1	1	1	1	1	1	1	1	8
Families with older children	1	0	1	0	0	0	0	1	3
Young people	1	0	1	0	0	0	0	1	3
Adults	1	1	1	1	1	1	0	1	7
School children as a group	1	1	1	0	1	1	1	1	7
Adult groups	1	0	1	1	0	1	0	1	5
Business to Business (B2B)	0	0	0	1	0	0	0	1	2

Figure 7.06: Main tourist groups of the museums according to the selfassessment. In grey the main missing ones as perceived by the management.

7.3.2 Repeat Visits

Repeat visits are not well understood by the museum management. It is however essential that they learn more about their repeat visitors, especially when the average of repeat visits at archaeological open-air museums (See Figure 7.07) is lower than for more general tourist attractions, where the percentage is about 25% (Richards 1996, 231). Those visits are social as well as educational. On a repeat visit, a visitor requires other services from a museum, and other ways of being informed (Falk & Dierking 2000, 26-27). They develop a good knowledge of the museum in question based on direct experience, which contributes to highly specific expectations. For these visitors, sudden changes in for example activities or decoration can lead to tough criticism.

Repeat visitors require a separate approach but to do that, the museums first need to learn more about this category. At their follow up visit, they mention other reasons why they come. The repeat visitors have more and other information than first timers. It would be a marketing opportunity, for example, to make the family friendliness and education value better known as reasons for a return visit. It was impossible to check whether return visitors had visited first on a regular day or Sunday, and then come back for a special event, or if it was the other way around. In the case of the Scottish Crannog Centre, many returning visitors were local inhabitants who were proud to show the Scottish Crannog Centre to their (foreign) guests. Usually, it is easier to keep an existing customer happy than to get new customers. In museums this might be a bit different, but as the example of the Scottish Crannog Centre shows, keeping returning visitors happy definitely pays off.

Pricing issues of entrance fees were not studied in great detail, although they play a role in customer relations. Many of the museums have an annual ticket or family tickets: the question is not so much whether visitors get a discount, but by how much. In the shoulder season when there is less on offer, or at events when substantially more is offered, the pricing is often adjusted.

The average of 21.0% for repeat visits shown by the present research for the eight museums seems to be a bit low (See Figure 7.07 and 7.08). This relatively low percentage of repeat visitors might be because of the location of some of the museums in non-typical tourist areas (especially the Scottish Crannog Centre, and Fotevikens Museum).







Figure 7.08: Frequency of repeat and non-repeat visitors (totals).

In order to challenge a visitor to return, the offer must change slightly. For this purpose, 'events can help to animate static cultural attractions and create specific motivations for repeat visits, visits in the low season or in non-traditional locations' (Richards 1993).

It was impossible to check if return visitors usually came back on event days or occasionally at other moments.

At Fotevikens Museum, high foreign visitor numbers coincide with a low total number of repeat visits (See Figure 7.07 combined with Figure 7.10). Conversely at HOME and the Pfahlbaumuseum, the foreign visitor numbers are low but repeat visit numbers are high (See Figure 7.07). Araisi is remarkable in the sense that they have a combination of a high number of foreign visitors as well as repeat visits. A reason might be that many Latvian people spend their weekends in the countryside visiting the museum.

7.3.3 What is their Permanent Residence?

The data show the diversity of the museums and the backgrounds of their tourists (See Figure 7.09). For the Scottish Crannog Centre, the local region was defined as Tayside and national as the full UK, including Scotland. Tayside is comparable in size to the local region Noord-Brabant in the Netherlands, the local region for HOME; if Scotland had been selected as 'local', the region would have been 79,000 square kilometres with over 5 million inhabitants. The local area for Fotevikens Museum is defined as the Öresundsregion, which covers parts of Scania and parts of Sjælland, Denmark, including the urban areas of Copenhagen and Malmö. The language difference is not an impenetrable barrier here.

In retrospect, the area defined as local in Germany should have been the Euregio Bodensee, the region around Lake Constance which includes small parts of Austria and Switzerland, southern Baden-Württemberg and parts of Bayern (16,187 square kilometres, 3,690,545 inhabitants, calculated 228 inhabitants / square kilometres). This would have led to a scenario with more local inhabitants, and less national and international tourists, visiting the Pfahlbaumuseum. The reason not to do so was that the information available is not detailed enough to make this discrimination for every tourist - the definition of the region itself exists mainly on paper, and not in people's heads. In the assessment, the museum management refers to their region of influence

	Region, called 'local'	km²	inhabitants	inh/km²	Country, called 'national'	km²	inhabitants	inh/km²
The Scottish Crannog Centre	Tayside	7,535	403,820	54	United Kingdom	242,900	60,943,912	251
HOME	Noord-Brabant	5,061	2,415,946	477	the Netherlands	41,528	16,428,360	396
Pfahlbau-museum	Freiburg and Tübingen	18,265	3,995,873	219	Germany	357,022	82,491,000	231
Lofotr	Nordland	38,456	235,124	6	Norway	385,155	4,644,457	12
Parco Montale	Regione Emilia	22,124	4,323,830	195	Italy	301,318	58,145,321	193
Araisi	Vidzeme region	15,346	251,665	16	Latvia	64,600	2,245,423	35
Matrica Museum	Budapest Region	553	1,719,662	3108	Hungary	93,032	9,930,915	107
Fotevikens Museum	Öresund Region	20,820	3,726,859	179	Sweden	449,964	9,045,389	20

as an area of 300 kilometres in diameter, including Baden-Württemberg, and the neighbouring regions of Bavaria, Austria and Switzerland. As the theme 'Lake-dwellings of the Stone- and Bronze Age' is part of the schools' curricula the level of awareness for the Pfahlbaumuseum is high. The region defined as local for the present research at the Pfahlbaumuseum (the Länder Freiburg and Tübingen) had almost as many inhabitants in 2008 as the whole country of Norway. For Norway, the region defined as local, Nordland, is almost as large as the country of the Netherlands.

The local area for the Matrica Museum is the South Buda region which consists of nine settlements and three outer districts of Budapest (XI, XII and XXI). This region in itself is too mixed for a singular strategic approach: it would have been easier to define a region without parts of the capital. For this research, however, the Budapest Region was designated as local, due to the lack of alternatives.

Defining the local region for each case has thus been proven to be problematic. When comparing results, one should keep in mind that what is local is experienced different by each individual and by each museum. Other ways of getting a grip on the data regarding travel distance from home were discarded. As a result, only generalised conclusions can be made about the catchment area of each museum; although one would expect that this type of data is easy to quantify, many factors are subjective - for example the amount of effort one is willing to make to visit a museum, or what an individual or museum calls local.

The question 'what is your permanent residence' was an open question. The data have first been coded into 71 different regions or countries followed by a recoding into three: local, national, international (See Figure 7.10). Data shows foreigners often visit a country in their own language area. Australian and North American tourists, for example, like to visit Scotland, whilst Swiss and Austrian tourists prefer going to Germany and Scandinavians visit among others Norway. Fotevikens Museum is an exception to this rule, with many non-Scandinavian tourists (Metro 2010).

At Lofotr, a total of 58.6% of the tourists are foreign - an extreme situation which the museum seems to handle well. Trying to define the home market in this case is almost impossible. A radius of 500 kilometres would include a population of 500,000 people, but is not the region of provenance of 50% of the total tourist number. 35-40% of the tourist visitors are from Norway, the majority being from Southern Norway. A rough estimate of 'local visitors' (from

Figure 7.09: Description of local regions and countries for the eight museums.

		Local		National		International		No response	
The Scottish Crannog Centre	210	9.0%	1,766	76.1%	317	13.7%	29	1.2%	2,322
Home	529	61.2%	289	33.4%	21	2.4%	26	3.0%	865
Pfahlbaumuseum	60	15.0%	290	72.5%	46	11.5%	4	1.0%	400
Lofotr	16	4.6%	117	33.4%	205	58.6%	9	2.6%	350
Parco Montale	74	80.4%	17	18.5%	0	0%	1	1.1%	92
Araisi	8	11.3%	29	40.8%	34	47.9%	0	0%	71
Matrica Museum	31	52.5%	28	47.5%	0	0%	0	0%	59
Fotevikens Museum	8	17.8%	6	13.3%	31	68.9%	0	0%	45
Average		22.3%		60.5%		15.6%		1.6%	

Figure 7.10: Numbers and percentage of respondents, divided by local, national and international responses. the Lofoten Islands) is between 2,000 and 4,000 tourists (between 3.0 and 6.0% of the tourists) per year (personal communication G. Johansen, 3 March 2010).

Looking at the tourist survey responses, it can be seen that the average division into three categories - local, national and international – for the eight museums in 2008 is 22.3%-60.5%-15.6% (See Figure 7.10).

The Pfahlbaumuseum resembles the average best, followed by the Scottish Crannog Centre. Lofotr's tourist distribution is very different, but this is due to the very low local population and the museum's enormous dependence on tourists. HOME has more local tourists and less national and international tourists than expected, making it a local tourist attraction only. This could be an important growth market for them. For the other four museums, the number of respondents is too low to make a valid judgement.

However the local population density at HOME is much higher than for example at the Scottish Crannog Centre, although the area defined as local is the same size. Therefore, it is even more remarkable that the local impact at the Scottish Crannog Centre is over twice as high (See Figure 7.11). The 9.0% of local respondents at the Scottish Crannog Centre (See Figure 7.10) is a better result than the 61.2% at HOME.

At Parco Montale, their own research shows 50% of tourist visitors come from Modena city and province, with most of the rest from Emilia Romagna (42%), and visitors from outside (not further than 200 kilometres) accounting for 7% (personal communication I. Pulini, 10 May 2010). For the Matrica Museum the figures are similar, but the region here includes the capital Budapest (personal communication M. Vicze, 4 September 2009) which represents an important challenge for the museum. They have no foreign tourists it seems, but that is because the survey was in Hungarian only. The non-existence of a foreign tourist survey at HOME also accounts for the missing foreigners in the statistics. The Pfahlbaumuseum and the Scottish Crannog Centre are notably visited by fellow countrymen: both are tourist icons, dominating the publicity. The Pfahlbaumuseum attracts mainly people from all across Germany, though not necessarily many local inhabitants: the number of local tourists, however, is nowhere as low as in Scotland.

	Local respondents	Local inhabitants	Local impact	
The Scottish Crannog Centre	210	403,820	0.052%	
Home	529	2,415,946	0.022%	
Pfahlbaumuseum	60	3,995,873	0.002%	
Lofotr	19	235,124	0.008%	
Parco Montale	74	4,323,830	0.002%	
Araisi	8	251,665	0.003%	
Matrica Museum	31	1,719,662	0.002%	
Fotevikens Museum	8	3,726,859	0.000%	

Figure 7.11: Percentage of respondents of the total local and national population.

	Total all visits		Total first	visit	Total repeat visit		
Local	939	22.3%	565	17.0%	374	42.3%	
National	2,542	60.5%	2,079	62.7%	463	52.4%	
International	654	15.6%	622	18.7%	32	3.6%	
No response	69	1.6%	54	1.6%	15	1.7%	
Total	4,204	100.0%	3,320	100.0%	884	100.0%	

Figure 7.12: Origin of visitors divided between first and repeat visits.

One will find most repeat visits among local inhabitants, 42.3% (Figure 7.12). Of the international visitors, only 3.6% return.

To attract first visits, local visitors are more important than average at the Matrica Museum, Parco Montale and HOME, probably because these are non-tourist areas. Matrica Museum is the only museum in this research where the percentage of local visitors coming for a repeat visit is lower instead of higher. Regione Emilia (for Parco Montale), Freiburg and Tübingen (for the Pfahlbaumuseum), the Öresund Region (for Fotevikens Museum) and Noord-Brabant (for HOME) all are regions which are populated densely enough for the museums to be able to attract a great deal more visitors. The Scottish Crannog Centre might have opportunities on a national level to reach more visitors. In Latvia and Norway especially, population density is so low that international visitors need to be aimed at.

7.3.4 How far have Tourists travelled?

The distance people have travelled is not directly related to the museum as attraction. For example, those visiting while simply passing by might have travelled a short (3.7%) or long (4.5%) distance. The most important means by which the museums reach their potential visitors are through recommendation (either by friends / family, tourist board or hotels) and through their own museum's brochure. Being in the proximity of a major route or general tourist area is very effective (see for example the Pfahlbaumuseum and Lofotr) but not decisive.

Tourists from nearby, more than any other category, have usually learned about the museum through brochures. Compared to national and foreign visitors, newspapers and magazines have the least effect on them. For those having travelled further, 50-100 kilometres, the most important means of finding out about the museum has been through recommendation, much more than by means of brochures. Data show that for the ones coming from further away, websites play a more important role than they do for those living nearby or within 100 kilometres. The museum being recommended is, however, still the main reason why these more distant visitors come.

Looking at the motivation for tourists compared to how far they have travelled no big differences are seen either. Locals are a bit more interested in the local region, whilst those coming from far away are a bit more triggered by the weather. This is generally the case in all eight museums.

7.3.5 How far have Tourists travelled that Day?

A total of 62.2% of the tourists have travelled a short distance that day to visit the archaeological open-air museum (See Figure 7.13). The only exception is Araisi, where many people come all the way from the capital Rīga to Cēsis to see the museum. In addition, many people leave Riga to spend the weekend in the countryside: Araisi is marketed in Rīga precisely because of this, attracting many day trippers who leave the city for part of the weekend. Lofotr and the Pfahlbaumuseum too are sites where 25-30% of tourists travel a long way that day to see the museum; these two museums are crowd pullers, as are their regions in general. Parco Montale, the Scottish Crannog Centre and HOME have fewer tourists from beyond the local region. Combining all eight museums, an average of 62% travelled less than 50 kilometres, with 20% travelling between 50 and 100 kilometres and another 20% travelling even further.

There are differences between first and repeat visits regarding the distances of visitors have travelled that day to see the museum. For example at Parco Montale and Matrica Museum there are no repeat visits of tourists travelling more than 100 kilometres (See Figure 7.14). However the amount of answers for repeat visits and distance travelled that day is too small for most of the museums to draw any valid conclusions.

7.3.6 With whom are Tourists visiting the Museum?

The distribution of tourists between singles, couples, families and friends is relatively equal.

rure 7.13: Frequency:		The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Average	
ar have you travelled	0-50 km / 0-30 miles	63.6%	68.2%	58.7%	50.9%	73.9%	36.6%	83.1%	0.0%	62.2%	
oday (total number of	50-100 km / 30-60 miles	19.7%	15.0%	14.9%	18.1%	13.0%	26.8%	11.9%	40.0%	18.6%	
ges above the average	100+ km / 60+ miles	16.7%	16.7%	26.4%	30.9%	13.0%	36.6%	5.1%	60.0%	1 9.2 %	
are in grey.	Total	2,283	233	397	265	92	71	59	10		

Fig How f te Percentag



Figure 7.14: Travel distance per museum divided between first visits and repeat visits.

In five western European museums, an average of over 50% of tourists consists of families. This confirms the image of these museums as being well suited to children, even though the educational value or family friendliness are not that clearly mentioned as reasons to visit these museums (See Figure 7.24 and 7.25). These aspects could be further emphasised in their marketing. At Lofotr, the percentage of families with children visiting is lower than 50% (tourist holidays up to North Norway are expensive). At Araisi and the Matrica Museum, the percentage of families with children is below 40%. An explanation cannot be given. It certainly is not an Eastern European phenomenon. At the Biskupin Museum for example, an archaeological open-air museum in Poland, it is quite constant for years that organized school groups and families with children visit, whilst young couples in the beginning of their married life are rather a minority (personal communication W. Piotrowski, 11 October 2010).

The museums with the highest percentage of families with children are Parco Montale and the Pfahlbaumuseum. On average between all eight museums, a little over 15% of tourists are friends and about 4% visit the museum by themselves. It is therefore important that the activities and surroundings suit groups.

It is remarkable how little variation can be found between four of the museums (the Scottish Crannog Centre, HOME, Pfahlbaumuseum, Fotevikens Museum). Between the other four, there is much more variation, partly due to the lack of data, partly due to their different character.

Repeat visitors are more often families with children and to a much lesser extent couples (See Figure 7.15). Most probably, families have discovered the archaeological open-air museum is targeted at families, something they did not



Figure 7.15: Composition of the visits divided between first and repeat visits.

know before their first visit. It would be a marketing opportunity to make this clearer. To achieve this, extra surveys would be needed to see what more could be done especially for this visitor group.

One of the survey questions, about the age of the one filling out the survey, has been generally misunderstood and therefore the answers are omitted. It was hoped for that the one answering the questions would give the age categories of all members of his/her group, but this was in hindsight too much to ask and perhaps also not clearly explained. Many people just answered about their own age and not of (all) other group members of the company they were travelling with.

7.3.7 How long are Tourists staying in this Area?

In this section, at first the companies are reviewed by total, then by day and finally by season. Data showed the Scottish Crannog Centre, the Pfahlbaumuseum and Lofotr to be the museums in the most tourist intensive regions, with tourists often staying in the area for longer than a single day.

At the Matrica Museum and Parco Montale, people leave the area the same day (See Figure 7.16). The data regarding HOME and Fotevikens Museum are more difficult to read. HOME is in a non-tourist area; Fotevikens Museum is in an area with few tourists but still almost 50% of people stay longer than a single day in the area. These two museums could focus their marketing better to reach these people. The same potential exists for Araisi, with 40.8% of tourists staying longer than a single day in the region.

The differences between the museums with regards to how long people stay in the region are enormous. When at the Pfahlbaumuseum more people than average stay a week or longer; at Matrica Museum and Parco Montale, the vast majority are day trip people, reflecting the fact that the area in itself is not a tourist destination. For Lofotr, most visitors stay two to three days in the area, and then move on - the typical tourist hiker of northern Norway, many of



Figure 7.16: Frequency: How long are tourists staying in the area from day trip till more than seven days.

whom take a cruise or travel around by themselves. This has an important effect on the marketing strategy applied at each of the museums. For museums in areas with people mainly staying for a short period only, it should be possible to find out where they stay, what other attractions they visit, and how they collect information on what to do before they decide on coming. Social media could start playing an important role.

The data show that 80% of all visitors to the top four museums (the Pfahlbaumuseum, the Scottish Crannog Centre, Lofotr and HOME) spend one night or more in the region, in accordance with the definition of a tourist. 20% of the people make a day trip to the museum, and 60% combine a visit to the museum with other (holiday) activities nearby. The remaining 20% of tourist visitors are locals. Museums can greatly benefit from nearest neighbour tourist attractions, like other museums, shopping areas, restaurants and beaches. Repeat visitors are either on a day trip, staying seven days or more in the area or else live in the area (48.1%). (See Figure 7.17). First time visitors are usually people who stay two to seven days (63.3%).

When looking at what companies of people stay for how long in the area while visiting the museum, there are not many marked differences between singles, couples, families and friends. Families like to stay four to seven days: they would probably not move around with children just for one or two nights only.

The absolute numbers and the composition of tourists by day of the week show (Figure 7.18) that Wednesdays and especially Sundays are important. Families clearly dominate the Sundays more than any other days. This is why
	Total all visits		Total 1	st visit	Total	Total rpt visit		
Day trip	740	22.0%	580	20.6%	160	28.7%		
2-3 days	931	27.7%	813	28.9%	118	21.1%		
4-7 days	1,136	33.7%	964	34.3%	172	30.8%		
Over 7 days days	560	16.6%	452	16.1%	108	19.4%		
Total	3,367	100.0%	2,809	100.0%	558	100.0%		

Figure 7.17: Length of stay in the area divided between first visits and repeat visits.



Figure 7.18: Total amount of the respondents by day of the week, sorted by visitor group.

many museums offer family programmes on Sundays. Most of the parents visiting with their children are less able to do so during the week because of work obligations, and Saturdays can be for other family activities like shopping.

When looking at what part of the year different types of tourists visit the museum, the composition of the tourists in the different seasons hardly changes. Family visitors are the dominating group all year through. However the percentage of couples increases more in the high season compared to other groups.

7.4 The Decision to visit

Understanding who is visiting, and what they expect, is important in the attempt to close Gap One - the so called positioning gap between what the management thinks the visitor expects and what the visitor actually expects before visiting (See Section 3.8). This paragraph is about this gap.

7.4.1 How did Tourists hear about the Museum?

In order to find out how the respective museums had become known to those deciding to visit, tourists were asked to choose one or several factors from a set of options, like 'recommended', 'internet' or 'just passing by' (See Figure 7.19). This question was intended to show the effectiveness of different marketing tools. For museums, the issues are how to reach potential tourists and how to convince them to come for a visit. Many options were added by individual museums (combined in Figure 7.19 under 'other') of which the options 'guide book' (see for example the Lonely Planet, www.lonelyplanet.com/norway), 'package tour' (Lofotr) and 'the museum is known' (Pfahlbaumuseum) were important additions - although unfortunately these options were not used everywhere. Most tourists visit a museum because it was recommended to them, although whether this recommendation came from friends or family or from the local tourist board or hotel is unclear. Recommendations are believed to be the most important channel, and at Fotevikens Museum this is particularly the case (48.9%). Using magazines and newspapers as free publicity is an important tool at HOME (28.0%), and at Parco Montale. It is surprising that in four museums, 10% or more of the tourists just happened to pass by and then decided to visit, even though the museums seem not to be located on a main route. Apparently these four museums have an attractive enough entrance area to encourage tourists to visit. Pictures of unappealing entry areas are presented in chapters Five and Eight: for HOME and the Pfahlbaumuseum especially this is an issue. Especially at the Pfahlbaumuseum and Lofotr there are almost no accidental visitors. That can be explained by these venues being tourist destinations in themselves. HOME is not on a main route and has no attractive entrance area (off the road) and therefore has no impulse visitors. At Fotevikens Museum, the question was not raised and therefore cannot be explored.

	The Scottish Crannog Centre	НОМЕ	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Average
Recommended	23.2%	19.7%	13.5%	23.0%	25.6%	17.9%	31.0%	31.1%	23.1%
Our brochure	23.6%	5.5%	15.4%	7.6%	19.0%	5.1%	1.4%	15.6%	11.7%
Other brochure	11.1%	1.2%	7.7%	4.6%	nd	15.4%	5.6%	4.4%	7.1%
Our website	4.0%	9.3%	4.2%	4.9%	12.4%	5.1%	7.0%	15.6%	7.8 %
Other website	2.1%	18.7%	nd	4.2%	1.7%	7.7%	15.5%	nd	8.3%
Newspaper / magazine	4.6%	9.9%	5.0%	5.5%	8.3%	5.1%	4.2%	nd	6. 1%
Radio	30.0%	0.1%	60.0%	40.0%	80.0%	0.0%	7.0%	nd	31.0%
TV	6.3%	0.9%	9.2%	1.5%	0.0%	1.3%	2.8%	nd	3.1%
Just passing by	10.3%	2.5%	6.0%	7.6%	11.6%	12.8%	11.3%	nd	8.9 %
Tourist Office	nd	1.1%	nd	8.0%	nd	nd	nd	17.8%	9.0%
Other	14.4%	30.8%	38.5%	89.1%	20.7%	29.5%	14.1%	15.6%	14.6%
Total	2,777	975	520	474	121	78	71	45	



The average PR Budget in the group of eight museums is about 5% (See Figure 6.09). It is difficult to say whether this is either sufficient or effective. 'No accurate figures exist but most UK museums probably spend less than 4% of their income on marketing. This would be laughable in the commercial sector...' (Runyard & French, 1999, 47). The amount spent on PR across the eight museums under research varies between 20,000 Euro and 80,000 Euro.

Websites are particularly good for convincing mainstream tourists, but less effective in reaching those specifically interested in, for example, educational value or family friendliness. Museums spend between 10 and 45% of their PR budget on their own website. Although the amount spent on PR on the internet is high, almost no single manager of the eight museums knows the effect in the sense of page visits, and hardly anybody analyses these numbers – to compare their figures with growing internet usage in the respective countries, for example.

When comparing the sizes of the websites of the eight museums, again there are marked differences, but because hardly any of the museum managers could mention how many visits their website receives, no conclusions can be drawn (See Figure 7.20). In some cases, this information is regarded as confidential, in other cases, the managers really do not know.

It is important to state that although websites may be good sources of information about specific museums, the potential visitor first needs to find these websites, and if they do not know the museum exists, they will not necessarily find the website. Search Engine Optimisation (SEO) and other ways to make sure a website will be found by those interested is unexplored territory for most archaeological open-air museums.

There is more to say about websites and the internet. By 2011 online video is exploding, mobile-device time spent have increased and social networks are used by 90 percent of Internet users in the United States. However the more traditional Internet use is shrinking (http://allthingsd.com/20110623/the-web-is-shrinking-now-what/).

For museums, this requires another way of working when 'the old-fashioned one and only official website of the museum is no longer the only important or dominant factor' (personal communication C.S.H. Jensen, 8 December 2011). There is a need for museums to change their attitudes. New media is not just another way of doing the same things one did before, but requires a very

	Internet availability	MB	files	
United Kingdom	80%	1.59	150	The Scottish Crannog Centre
the Netherlands	88%	122	4,054	HOME
Germany	75%	5.51	379	Pfahlbaumuseum
Norway	88%	12.9	229	Lofotr
Italy	49%	17	457	Parco Montale
Latvia	47%	no site	no site	Araisi
Hungary	35%	95.5	4,397	Matrica Museum
Sweden	77%	233	7,533	Fotevikens Museum

Figure 7.20: Number of files and size in megabytes of the websites of the museums, retrieved 13 September 2008 compared with Internet availability in the eight countries 2007 - 2009. Source: www.internetworldstats.com. different approach. Those receiving information turn to broadcasting what they have just picked up, meaning the museums need to cater for their information to be findable and shareable.

When checking subgroups, data showed that a large part of those interested in the past were convinced to visit the museum by reading a brochure (72.3-73.8%). For people interested in the region, these percentages are much lower (33.2-44.2%) (See Figure 7.21).

The way people have heard about the museum is different between first and repeat visitors (See Figure 7.22). Whilst for first visits, brochures are important for up to 27.8%, for repeat visits this is only 13.3%. Repeat visitors also make more use of the museum's website than tourists do for their first visit. Repeat visitors mention a wider range of other reasons. This different approach to information sources is obvious because on the one hand, repeat visitors are looking for other information and they are able to find sources more easily,



Figure 7.21: Cross table answering how did people hear of the museum and what is their interest.

	Total all	visits	Total fi	rst visit	Total re	epeat visit
Recommended	1,086	21.7%	865	21.8%	221	21.9%
Our brochure	846	16.9%	743	18.6%	103	10.2%
Other brochure	398	8.0%	367	9.2%	31	3.1%
Our website	270	5.4%	193	4.8%	77	7.6%
Other website	275	5.5%	243	6.1%	32	3.2%
Newspaper/ magazine	290	5.8%	212	5.3%	78	7.7%
Just passing by	404	8.1%	344	8.6%	60	5.9%
Other reason	1.429	28.6%	1,022	25.6%	407	40.3%
Total	4,998	100.0%	3,989	100.0%	1,009	100.0%

Figure 7.22: How did people hear about the museum at first visit and at repeat visit by museum.

knowing the museum exists (for example through its website). With the low numbers per reason, it is difficult to compare them - there is no small set of reasons standing out.

7.4.1.1 How did Tourists hear about the Museum and were they satisfied?

When comparing the satisfaction rate of visitors with how they found out about the museum (See Figure 7.23), it is remarkable that data shows visitors who have used the museum's own brochures are more often extreme in their opinion, both positive and negative: this might mean the museums' own brochures are not promising what is delivered, and not giving a realistic image of what can be expected. Those whose experience falls below expectations were mostly those recommended to go, or who were just passing by. Of the 86 dissatisfied visitors 21 (24.4%) were recommended to visit the museum, making this the method of promotion with the highest failure rate, however still well within limits. Visiting a website, other than the museum website, also has often led to disappointment.

Total		86	1,146	2,784	4,016	100.0%
	Percentage	3.5%	6.3%	1.5%		
Museum is known		3	72	41	749	18.7%
	Percentage	25.6%	22.7%	16.8%		
Other		22	260	467	116	2.9 %
	Percentage	11.6%	6.5%	9.5%		
Just passing by		10	74	265	349	8.7%
	Percentage	1.2%	5.1%	6.1%		
TV		1	58	170	229	5.7%
	Percentage	7.0%	5.3%	4.8%		
Newspaper / magazin	ne	6	61	135	202	5.0%
	Percentage	10.5%	7.7%	3.3%		
Other website		9	88	91	188	4.7%
	Percentage	2.3%	4.6%	4.7%		
Our website		2	53	131	186	4.6%
	Percentage	3.5%	6.7%	10.2%		
Other brochure		3	77	283	363	9.0 %
	Percentage	10.5%	14.0%	20.8%		
Our brochure		9	161	580	750	18.7%
	Percentage	24.4%	21.1%	22.3%		
Recommended		21	242	621	884	22.0%
		Fall below your expectatio	Meet your expectatio	Exceed yo expectatic	Total (numbers)	Total (percenta <u>c</u>

Figure 7.23: How did people hear about the museum versus their satisfaction with the museum.

7.4.2 Why do People choose to visit an Archaeological Open-Air Museum?

The reasons for visiting an archaeological open-air museum do not change significantly between first visits and repeat visits (See Figure 7.24 and 7.25) As this includes multi response possibilities, statistic relevance is impossible to ascertain because the same person can be represented at different places in the table. The data show that most people visit an archaeological open-air museum out of interest in the past. This reason is not always present to the same extent, however: at Parco Montale and HOME, an interest in the past is much less evident than for example at the Scottish Crannog Centre, Lofotr and the Matrica Museum.

	The Scottish Crannog Centre	НОМЕ	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Average
Interested in the past	39.5%	25.8%	29.6%	38.4%	20.9%	29.1%	40.5%	nd	32.0%
Interested in the local region	20.1%	4.9%	13.2%	22.5%	3.5%	25.2%	19.0%	nd	15.5%
Weather	3.6%	10.6%	8.0%	9.1%	0.0%	6.8%	2.5%	8.3%	7.0 %
Special event	1.8%	2.5%	6.2%	2.9%	5.2%	4.9%	1.3%	nd	3.5%
Family-friendly	10.1%	12.5%	5.5%	6.2%	17.4%	3.9%	8.9%	33.3%	14.0%
Education value	16.1%	19.9%	3.4%	14.1%	25.2%	9.7%	19.0%	41.7%	21.3%
Entrance fees	0.5%	4.5%	15.5%	0.0%	3.5%	0.0%	0.0%	nd	6.0 %
Environmentally friendly	5.8%	2.5%	10.7%	1.0%	24.3%	7.8%	6.3%	nd	8.3%
Offered programme	0.0%	8.5%	0.0%	0.0%	0.0%	0.0%	0.0%	nd	1.2%
Other	2.5%	8.2%	8.0%	5.8%	0.0%	12.6%	2.5%	16.7%	8.0 %

Figure 7.24: Visitors
motivation at the first visit,
divided by museum.

	The Scottish Crannog Centre	НОМЕ	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Average
Interested in the past	32.8%	17.7%	30.8%	34.4%	28.1%	28.0%	36.4%	nd	29.7%
Interested in the local region	17.7%	5.5%	13.5%	11.5%	3.1%	8.0%	9.1%	nd	9.8 %
Weather	4.4%	11.6%	9.6%	8.2%	0.0%	0.0%	0.0%	nd	6.8 %
Special event	2.6%	5.5%	1.4%	8.2%	0.0%	12.0%	4.5%	nd	5.7%
Family-friendly	13.3%	9.4%	4.8%	14.8%	9.4%	20.0%	13.6%	nd	12.2%
Education value	17.8%	19.9%	4.8%	13.1%	21.9%	12.0%	18.2%	nd	15.4%
Entrance fees	0.3%	5.0%	13.9%	0.0%	3.1%	0.0%	0.0%	nd	5.6%
Environmentally friendly	7.2%	2.2%	10.1%	1.6%	34.4%	4.0%	9.1%	nd	9.8 %
Offered programme	0.4%	12.2%	0.0%	0.0%	0.0%	0.0%	0.0%	nd	1.8%
Other	3.5%	11.0%	11.1%	8.2%	0.0%	16.0%	9.1%	nd	8.4%

Figure 7.25: Visitors motivation at repeat visit, divided by museum.

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At HOME, educational value stands out as key motivation for tourist visits, just like at Parco Montale and the Matrica Museum - not surprising as these archaeological open-air museums are primarily organised for school groups (See Figure 6.04). The local region seems not to be an attraction at all for visitors to HOME or Parco Montale. This is confirmed by the context: both sites are not in an area generally known for its tourist attractions. At the Matrica Museum, interest in the past is more important than average in both visit categories. Family friendliness is important at first visit to Parco Montale, but much less for repeat visits. For the Scottish Crannog Centre, it is the other way around: family friendliness is slightly more important for returning visitors. The 'interest in the past' of repeat visitors is a lower factor than for those at their first visit. At HOME, more than anywhere else, the weather is important to both first and repeat visits. Fotevikens Museum cannot be compared in these matters due to lack of data. At HOME, Lofotr and the Pfahlbaumuseum, weather is markedly more important than at other locations. It is significant that these three are the greatest tourist magnets of all the eight museums.

The most popular reasons for visiting an archaeological open-air museum are usually mentioned in one breath, by the same people. Those interested in the past are regularly also interested in the local region or the education value. For those interested in the past or education value, special events are not a reason to visit. There are no visitors attending the archaeological open-air museums for distinctly different reasons.



Figure 7.26: Reasons why tourists visit the museums by percentage divided between local and national combined and foreign tourists. More than a single answer per tourist is possible.

Data shows tourists visiting an archaeological open-air museum in their own country are usually more interested in a museum being family friendly, environment friendly or having an educational value, while foreign tourists tend to be more interested in the past and the region (See Figure 7.26). This implies that tourists do not identify the presentation in the museum with their own past, but regard it as something strange or as part of the identity of the region they are visiting. The public wants to be amazed and by experiencing unfamiliar activities, their image of their ancestors might change. The museums try to achieve a balance between showing how different our forefathers were on one side, and how much we can identify us with them on the other hand.

Looking at the data, the motivation of tourists differs by season (See Figure 7.27). Off season, people are much less likely to state that they are interested in the past (23.2% off the tourists off season, as opposed to 37.0% of the tourists in high season) but more interested in the educational value or the programme offered. Being interested in the region is a relatively stable factor. The implication is that if museums develop an interesting programme with educational value in the shoulder season, they are likely to expand visitor numbers. A larger peak in visits in high season is more difficult to reach. A good idea for how to get more shoulder season visitors comes from a theme park in the Netherlands, Efteling,

		off season	shoulder season	high season	Total (numbers)	Total (percentage)
Interested in the past		70	494	1,898	2,462	35.3%
	Percentage	23.2%	32.4%	37.0%		
Interested in the region		40	238	907	1,185	17.0%
	Percentage	13.2%	15.6%	17.7%		
Weather		26	87	259	372	5.3%
	Percentage	8.6%	5.7%	5.0%		
Special Event		11	39	128	178	2.6%
	Percentage	3.6%	2.6%	2.5%		
Family-friendly		24	187	489	700	10.1%
	Percentage	7.9%	12.2%	9.5%		
Educational Value		67	265	754	1,086	15.7%
	Percentage	22.2%	17.4%	14.7%		
Fees		6	17	140	163	2.3%
	Percentage	2.0%	1.1%	2.7%		
Environmentally friendly	у	15	103	307	425	6.1%
	Percentage	5.0%	6.7%	6.0%		
Programme		24	23	38	85	1.2%
	Percentage	7.9%	1.5%	0.7%		
Other		19	74	216	309	4.4%
	Percentage	6.3%	4.8%	4.2%		
Total		302	1,527	5,136	6,965	100.0%

Figure 7.27: Number and percentage of responses per season divided by the motivation to visit. The combination of light and dark grey in each row shows the largest differences between the seasons. which offers readers of the local newspapers a discounted offer in the middle of the winter, leading to a stream of 13,000 extra visitors in a week when there are usually hardly any (www.ed.nl/regio/valkenswaard/7743294/13.000-abonneesin-koude-Efteling.ece). Especially in winter, there are few tourists in the area, so targeting the inhabitants is a good choice. The knife cuts on two edges as this increases support and goodwill among the local population.

7.5 Length of Stay at the Museum

A total of 5.6% of all visitors do not even stay one hour in the museum (See Figure 7.28). These are partly repeat visitors (See Figure 7.25), dissatisfied visitors or visitors who got in for free. Most people (65.3%) stay one to two hours, and another 21.9% stays between two and three hours, leading to a total of 87.2% having a visit of between one and three hours in duration. Such a long stay of so many people probably means people are satisfied. A visit to an archaeological open-air museum doesn't usually follow a fixed programme, except for the introductory guided tour. People can leave if they are unhappy, especially those travelling by car.

The time people spend is not relative to the size of the museum or length of the tour (See Figure 6.01) except for at the Scottish Crannog Centre, where 79% stay between one and two hours, almost 15% more than average. This probably is because the museum is rather small, offering an intensive and condensed experience. A meagre 1.1% stays here over three hours, even on event days. There could be an interesting vista in looking at ways of spreading visitors over the day so that higher throughput is achieved. Especially with advertised events this could work, with a major show presented at several times during the day instead of as one single finale.

Araisi has a very high 26.8% of visitors staying less than one hour, although they have a large museum. A total of 93.0% (26.8% + 66.2%) have left the museum after two hours. If they had more to offer and better facilities, the museum might be able to prolong the visit of many.

At HOME, 0.7% stays less than one hour. The number of people staying two or three hours and more is much higher than usual and exceptionally many stay over three hours. One of the reasons is the restaurant, situated in the middle of the museum and not near the exit. Another reason might be the high number of smaller and larger events organised here in 2008. Unlike the

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Average
Less than 1 hour	5.9%	0.7%	5.7%	8.5%	1.2%	26.8%	nd	2.3%	5.6%
1-2 hours	79.0%	26.3%	48.3%	36.8%	64.6%	66.2%	nd	39.5%	65.3%
2-3 hours	14.0%	32.2%	39.2%	35.0%	31.7%	5.6%	nd	44.2%	21.9%
More than 3 hours	1.1%	40.8%	6.8%	19.7%	2.4%	1.4%	nd	14.0%	7.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	nd	100.0%	100.0%

Figure 7.28: How long did visitors of each museum stay.

	Total fir	st visit	Total repeat visit		
Less than 1 hour	157	5.4%	41	6.5%	
1-2 hours	1,943	67.2%	357	56.7%	
2-3 hours	607	21.0%	179	28.4%	
More than 3 hours	186	6.4%	53	8.4%	
Total	2,893	100.0%	630	100.0%	

Figure 7.29: How long did the total number of visitors stay, divided between first visit and repeat visit.

Scottish Crannog Centre and the Pfahlbaumuseum, it seldom happens that HOME is overcrowded; 3,000 visitors in one day staying for three hours or more is feasible here. The Pfahlbaumuseum cannot cope with a high number of visitors staying for a prolonged period.

Tourists coming on a repeat visit stay longer than at their first visit (See Figure 7.29). For the Matrica Museum there were no data available, and for Fotevikens Museum there were too few data available to make a judgment. There are more repeat visits lasting two hours and up (36.4%), compared to first visits (27.4%). One explanation could be that after a satisfying first visit, one decides to come back on an event day. Another explanation could be that visitors have found out about the family friendliness or other aspects they only discovered when they visited.

Both at Araisi (61.8%) and the Pfahlbaumuseum (16.9%), there are significantly more repeat visits lasting one hour or less than elsewhere; people stay significantly shorter here on repeat visits than they do anywhere else (See Figure 7.30).

7.5.1 Length of Stay and were they satisfied?

The length of stay, long or short, does not correspond with the satisfaction rate; people do not leave the museum early because they are unhappy or stay longer because it is such a great experience (See Figure 7.31). Probably, people have planned a certain time for their visit and stick to that, or else the museum visit is designed to fit a certain time span.

For the people whose experience exceed the expectations (the majority of people, see Figure 7.31), the optimum duration of a visit is 1-2 hours.

7.6 Visit Evaluation

7.6.1 Ratings

Visitor evaluation is important in defining the specification gap between what the museum thinks the visitors expect and what visitors truly expect (See Section 3.8). It can also shed light on Gap Three, the gap between service specified and delivered. Visitors could rate several aspects on a scale between one and five where one was poor and five was excellent. In practice, many visitors used two values, like for example 2-3, or indicated a half score like 2.5. In order to not have decimal places, all values were uniformly multiplied by two.

It was important when setting the bars to look at the average of the eight museums. Because no comparable research is known, it was decided to set the bars as follows: a score of 6.0 was considered the bar for satisfied / dissatisfied. A



Figure 7.30: Length of stay sorted by museum and divided between first visit and repeat visit.



Figure 7.31: Visitors divided by satisfaction rate compared with the time they spent in the museums.

score between 6.0 and 8.0 was considered 'poor', between 8.0 and 9.0 'average' and above 9.0 was considered to be 'good' (See Figure 7.32). Four of the nine most rated items all scored higher than 9.0 which is very high (See Figure 7.33). Most dissatisfied visitors (ratings with a score below 6.0) can be found when talking about the gift shop (22.9%) and the café (19.5%) (See Figure 7.34). The percentages of dissatisfied visitors (See Figure 7.34) are much more variable than the average rating would suggest (See Figure 7.33).

	The Scottish Crannog Centre	НОМЕ	Pfahlbau-museum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum
	score score lower than 6.0 total							
Rate the (re)construction	9.73 0.9% 2,221	8.31 3.5% 741	8.94 6.7% 374	9.08 7.6% 275	9.81 1.2% 85	8.83 11.4% 70	8.88 5.9% 34	9.75 0.0% 8
Rate the tour guide	9.83 0.6% 2,274	8.37 6.0% 199	8.48 18.4% 370	8.70 15.2% 171	9.74 0.0% 85	8.17 25.0% 12	9.28 6.4% 47	9.00 14.3% 7
Rate the exhibits	9.09 6.7% 2,239	8.10 7.3% 371	8.64 12.9% 365	8.08 21.5% 265	pu pu	7.82 34.8% 66	9.12 6.0% 50	9.00 12.5% 8
Rate the craft	9.71 0.4% 473	7.98 11.1% 650	8.20 20.5% 268	8.10 <i>19.7%</i> 203	9.41 2.7% 74	pu pu	9.41 8.1% 37	9.00 16.7% 6
Rate the hands-on activities	9.67 1.1% 2,240	pu pu	7.37 36.0% 139	7.61 32.4% 105	pu pu	pu pu	9.27 9.1% 11	8.86 28.6% 7
Rate the signs/ brochures/guides	8.52 14.6% 1,873	7.84 7.0% 57	pu pu	8.00 26.6% 207	8.61 16.7% 72	pu pu	8.65 16.3% 43	pu pu
Rate the gift shop	8.19 22.3% 1,909	7.76 10.4% 492	6.84 <i>45.0</i> % 180	7.37 37.1% 186	7.74 32.8% 61	7.64 33.3% 33	8.00 33.3% 3	8.67 16.7% 6
Rate the café	8.20 22.4% 49	7.85 10.9% 759	7.18 40.1% 142	7.28 36.0% 172	pu pu	6.86 <i>57.1%</i> 21	8.93 13.3% 15	9.43 0.0% 7
Rate the overall experience	9.22 0.4% 2,063	8.07 6.3% 398	8.51 11.6% 337	8.29 16.9% 248	9.49 0.0% 71	8.00 14.8% 61	9.24 6.0% 0	9.00 0.0% 5
Total number of answers	15,341	3,667	2,175	1,832	448	263	240	54
Average score	9.13	8.04	8.02	8.06	9.13	7.89	8.98	8.08
Average Dissatisfied	7.7%	7.8%	23.9%	23.7%	8.9%	29.4%	11.6%	9.9%

per item per museum on a scale between 1.0 and 10.0, where 1 was poor and 10 was excellent: 'score', percentage of visitors giving a lower score than 6.0: 'score lower than 6.0' and total numbers of scorers: 'total'. Dark grey, the highest score on that theme, light grey the lowest score on that theme, Fotevikens Museum is left out from the top scores because of the low number of replies.

Figure 7.32: Score

7.6.1.1 Rate the (Re)construction

The architectural true to scale construction, popularly referred to as the (re)constructed house, is generally what visitors come to see and is the feature given most prominence by the museum itself. It is obvious that this almost gives the top score possible. The rating for this subject was most frequent of all and with the least debate (the percentage of visitors giving a remarkably low score is only 2.7%) (See Figure 7.34). The most satisfied are visitors to Parco Montale; the least happy were the visitors of HOME. This probably in both cases depends s much on the presentation as on the quality of the (re)constructed houses. At Parco Montale, there are two larger houses which are presented as outdoor museum objects, usually with museum staff available on the spot for a guided tour. At HOME, the houses (over a dozen) are not always staffed. Visitors have to make up their own story if they do not read the leaflet they have received on entry.

7.6.1.2 Rate the Tour Guide(s)

The tour guides generally score better than anything else, at least at the Scottish Crannog Centre, HOME, the Matrica Museum and Fotevikens Museum. This has no connection to whether guests are guided or not. At the Pfahlbaumuseum and the Scottish Crannog Centre, nobody enters the open air area without a tour guide. HOME has one free guided tour daily; Lofotr has about 10 guided tours per day. At Parco Montale, every station in the park has an onsite tour guide, and at Araisi, one can hire a personal tour guide. The Matrica Museum offers regular guided tours, although not daily.





A total of 4% of the visitors are unhappy with the tour guides but in general, they score a 9.5 (See Figure 7.33 and 7.34). This underlines one of the unique selling points of these museums: live interpretation to the visitors, usually made fit for the respective audiences. More important than the houses (which could burn down and be rebuilt) are therefore the people who populate these museums and bring them to life, whether as open-air museum showcases or as living history arrangements.

The tour guides usually are paid staff, but volunteers often populate the museums at certain dates and events. Seeing how important these people are to the visitors' experience, it follows that much attention should be paid to these volunteers. The museum management should be critical of their volunteers, and others playing host in their own museum, as there is a quality standard for how visitors expect to be hosted.

7.6.1.3 Rate the Exhibits

Although showcased or other exhibits in a museum context form an important addition, and in some cases are the starting point of the story unfolding at an archaeological open-air museum, they score a too low 8.83 (See Figure 7.33 and 7.34). This could have various reasons. The exhibits are often not advertised as clearly as the outdoor part. Further, there is less experience for the visitor, less involving of all senses and less interaction in this modern indoor part. The approach in the indoor museum and the outdoor museum should be more similar; the indoor exhibits can prepare the visitor for what he or she is about to experience in the open air. Therefore the showcase experience could be better





emphasised with, for example, the use of film and virtual reality. Original artefacts are a welcome part of the story told by an archaeological open-air museum.

7.6.1.4 Rate the Craft

Craft demonstrations are not available everywhere, let alone available continuously, as they are for example at the Scottish Crannog Centre. When present, these demonstrations are rated average (8.6), with 10.2% of people unhappy with them (See Figure 7.33 and 7.34). One reason for craft demonstrations not scoring well enough might be the much-to-see-nothing-to-do character of these. The demonstrations vary greatly in character and quality. In some cases they might be too specialised, for example when a specialist demonstrates basket weaving; other cases of non-interest could be explained by the long duration of an activity before it comes to a result, for example with the dyeing of wool. In a case where there is no immediate or spectacular result, the role of the demonstrator as a narrator becomes more important. There is a need to have some items prepared to show the different stages and the finished product, so that the process can be explained and understood even if the visitor is not able to see it all happen in front of them.

7.6.1.5 Rate the Hands-on Activities

A difference was made between crafts as demonstration and hands-on activities. For future research, this difference could be omitted as some crafts are delivered hands-on. In contrast to the craft demonstrations, hands-on activities are highly appreciated and achieve the second highest score. Visitors come to see life and live activities, more than the (re)constructions the museum advertises. The Scottish Crannog Centre does not usually offer living history, but offers its crafts as live interpretation in third person: this means that although the staff are dressed in Iron Age-like costume, they do not present themselves as being from the Iron Age (first person interpretation), but instead tell the Iron Age story from a third person perspective (See Chapter Two and Tilden 1957). The fact that these crafts are demonstrated by a guide in period costume, and that visitors are given the chance to have a go themselves, is part of what makes this museum a top attraction. In HOME hands-on activities are only offered to children, making it impossible to compare them to the other museums.

7.6.1.6 Rate the Signs/Brochures/Guides

Signs and any paper guides are rated averagely. Several museums use different types of information carriers simultaneously, and corporate identity has not everywhere been appreciated equally. In some cases, explanatory texts are over 300 words in length, which will reduce the number of people appreciating them; in other cases short texts are combined with pictures, resulting in an attractive communication medium. In one museum, signs were partly made to look old fashioned: written communication addressing modern visitors, however, is best presented in a modern way on modern information carriers, so as not to interfere with the historic atmosphere.

7.6.1.7 Rate the Gift Shop

The gift shop is a real weakness of many museums (See Section 6.3.7.3.), as is the café and restaurant facilities. Though these two modern service areas are not the core business of archaeological open-air museums, they are also the two areas where external expertise is readily available to turn them into a success. These two areas - if successful - can make the difference between financial survival and decline. There is plenty of expertise available, both in the museum world and beyond. ICOM has an international committee for museum facility administrators, IAMFA, active in benchmarking, covering issues like utilities and service level agreements (www.facilityissues.com/Museums/). Important and recent literature about museum shops is widely available, for example Leimgruber & John 2011, which discusses every imaginable issue regarding shops in museums.

7.6.1.8 Rate the Café

With the lowest score of all, the café scored an average of 7.71. In four out of six museums, the café or restaurant facilities, although present, score poorly (See Figure 7.34). It is important to note that only 1,165 people rated this item. At Parco Montale and Fotevikens Museum, they were not asked because the option is not present. In some cases like at the Pfahlbaumuseum and at the Scottish Crannog Centre there are legal issues which prevent the museums from having their own, good café.

7.6.1.9 Expectation Rating

When the visitor survey was put together, the museum managers decided the question regarding the general satisfaction of visitors was important enough to be asked separately from other similar questions. It was actually the same question as to rating the overall experience. The answers to the expectations are summarised in Figure 7.35, the ones to rating the overall experience in the average score of Figure 7.32.

For over 69.4% of the visitors, the visit exceeded their expectations (See Figure 7.35). This means, the information on which they based their decision to visit was more conservative in its depiction than necessary. If for example the leaflets were more fitting to the museums, people who would otherwise not come might take a different decision. For 28.4% the visit met their expectations. Although a visit to the Scottish Crannog Centre is relatively short, they have the most satisfied visitors: 85.4% and the highest average score: 9.13. Both at Araisi (65.2% and 7.89 score) and HOME (62.0% and 8.04 score), the percentage of visitors whose expectations were met by the experience is very high, which is not a good sign as this is worse than average between the eight museums. At HOME, they stay relatively long, at Araisi not. Remarkably, in four museums (the Pfahlbaumuseum, Araisi, HOME and Lofotr), the percentage of visitors whose experience matches their expectation is higher than the percentage of very satisfied visitors. Except Araisi, these four museums are the ones with the highest visitor numbers. Crucially, these museums have done well for the visitors, but not better than that. In all other four museums, visitors are happier than they had anticipated.

There seems to be no significant differences between the high season evaluation and the rest of the year, except for the amount of dissatisfied visitors. Unfortunately, the numbers of surveys in the shoulder season and off season are too low to compare each museum on different subjects. When comparing visitor numbers per season, however, the total number of visitors at several museums is high enough in the shoulder season for visitor surveys to be collected in those months. With the museums having a different offer in that period, and with the need for museums to get a more even spread of their visitors over a longer time of the year, it would be important to do some more research into the opportunities and problems of visiting archaeological open-air museums in the shoulder season.

The visitor's experience exceeds the expectations by 74.6% on first visit (See Figure 7.36). This goes down to 46.5% at repeat visits which still is a high percentage. The percentage of disappointed visitors is in both cases relatively small. Data shows that the museums leaving the visitors the most satisfied at first visit are the Scottish Crannog Centre, Parco Montale and Fotevikens Museum. The museums which exceed expectations at a repeat visit are the Scottish Crannog Centre again and the Matrica Museum. On repeat visits in general, the visit meets the expectations for many (See Figure 7.36). This might sound like an obvious statement, but this also says these museums are not changing very much and cannot surprise their repeat visitors. A matching offer for repeat visitors, with needs and expectations different to those of new visitors, still needs to be developed.

7.6.1.10 Conclusions of the Ratings

The museum with the most responses and the highest overall score is the Scottish Crannog Centre (See Figure 7.01 and Figure 7.37). They clearly benefit from a personal approach, a guided tour for every visitor and a controlled experience. This also acts to homogenise the results because everyone gets the same experience. Where visitors do not get a guided tour, the variation is greater because one visitor saw the house with an interpreter inside whereas another visited the house when it was unstaffed.

The differences between the museums become clear when looking deeper into the results (See Figure 7.32). In some cases, museums can improve, in other instances, the context of a positive or negative result makes change too complicated. In Araisi (four items) and HOME (three items) we find

	The Scottish Crannog Centre	HOME	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museur	Average
Fall below your expectations	0.3%	6.2%	6.4%	9.0%	0%	6.5%	1.9%	0%	2.2%
Meet your expectations	14.3%	62.0%	58.3%	49.0%	34.2%	65.2%	42.6%	22.2%	28.4%
Exceed your expectations	85.4%	31.8%	35.3%	42.0%	65.8%	28.3%	55.6%	77.8%	69. 4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Figure 7.35: Satisfaction of the visitor experience divided by museum. In grey the highest percentage per museum.

100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%

F

	Average 1st	Average rpt
Fall below your expectations	2.1%	3.2%
Meet your expectations	23.3%	50.3%
Exceed your expectations	74.6%	46.5%
Total	100.0%	100.0%

Figure 7.36: Satisfaction of the visitor experience at the first visit versus repeat visit.

	Number of items for which the museum was top scorer	Number of items for which the museum was low scorer		
The Scottish Crannog Centre	4	0		
HOME	0	3		
Pfahlbaumuseum	0	2		
Lofotr	0	0		
Parco Montale	2	0		
Araisi	0	4		
Matrica Museum	3	0		
Fotevikens Museum	0	0		

Figure 7.37: Average score per museum on all items which could be rated.

the museums with the most extreme low scores, while the Scottish Crannog Centre (four items) and the Matrica Museum (three items) are the ones with the most extreme high scores. In general, the visitors seem very satisfied with the archaeological open-air museums. In three cases the museum scores around 90% satisfaction and in the other cases around 80%. The overall dissatisfaction rates are much more varied between the museums. With the Scottish Crannog Centre, HOME, Parco Montale and Fotevikens Museum scoring between 7.7 and 10%, it gets a little worse at Matrica Museum. The opinions are much more negative in Lofotr, the Pfahlbaumuseum and Araisi, the latter also being the one with the lowest average score.

7.6.2 Fees

The traditional question about the entrance fees was originally planned to be part of the items people could rate. This factor was however seen as so important by the museum management, however, that they posed it as a separate question.

Although 69.4% of visitors were more happy than they expected to be (See Figure 7.35), almost 72.1% of them found the entrance fee just about right and 17% found it 'expensive but worth it' (otherwise abbreviated to 'expensive'). People are quite happy but would not pay more, meaning the pricing generally is right (See Figure 7.38). The group of people being unhappy with what is offered is 2.2% (See Figure 7.35), smaller than the group -4.3% - who thinks they have paid too much (See Figure 7.38).

At Lofotr 12.3% of people think it was too expensive, which is far beyond the average of 4.3%. Norway is an expensive country for the many foreigners visiting the Lofoten Islands, but it is hard to see if Lofotr is too expensive compared to their home country or to the other, competing, offers.

At Araisi the message is very mixed: there are high percentages stating it is too expensive or it is too cheap. The reason might be they have a high percentage of foreign visitors (See Figure 7.10) and a reasonably high percentage of repeat visitors (See Figure 7.07) who might get in cheaper than others.

At Parco Montale, like at Araisi, a high percentage finds the entrance fees cheap but in this case, the percentage of people thinking it is expensive is very modest. Their pricing is modest compared to what is offered.

Research shows that the more satisfied visitors are with their museum experience, the more satisfied they are with the entrance fees (See Figure 7.39).

Recent research by the Dutch Museum Association shows that low entrance fees or free entry are not an especial incentive for visiting a museum: the main stimuli are the museum contents and how they are presented (Geukema et al. 2011, 194).

7.6.3 Rating grouped in two Shares

The items most often mentioned positively in one breath are shown in Figure 7.40. These are listed separately in Figure 7.41. The items with a more modern atmosphere are given in Figure 7.42.

Research shows that the correlation between appreciation of the crafts and the hands-on activities (0.555) as well as between the (re)construction and the overall experience (0.528) is reasonably high (See Figure 7.41). In the second grouping, the only marked correlation is between the appreciation of the gift shop and the signs (0.547), and between the gift shop and the café (0.519) (See Figure 7.42).

Figure 7.43 shows that the (re)construction, tour guide, craft, handson activities and overall experience score an average of 5.1% higher (92.1%) than the combined exhibits, gift shop, info on paper, ticket sales, and the cafe (86.2%). The museums with the most obvious differences between the two groups are the Scottish Crannog Centre and Parco Montale. At Fotevikens Museum (0.4%), HOME (3.4%) and at the Matrica Museum (3.7%) the two groupings are very close.

The unique selling points of archaeological open-air museums (the (re)construction, the tour guide, the crafts and the hands-on activities) together score very well. The museums stand at their weakest with the generic points

	The Scottish Crannog Centre	НОМЕ	Pfahlbaumuseum	Lofotr	Parco Montale	Araisi	Matrica Museum	Fotevikens Museum	Average
Cheap	7.3%	3.3%	1.1%	2.3%	24.7%	25.4%	17.2%	11.1%	6.6%
About Right	80.9%	65.3%	43.5%	57.0%	66.2%	53.7%	72.4%	88.9%	72.1%
Expensive	10.9%	20.5%	45.2%	28.4%	9.1%	9.0%	3.4%	0.0%	17.0%
Too Expensive	0.8%	11.0%	10.2%	12.3%	0.0%	11.9%	6.9%	0.0%	4.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Figure 7.38: Visitor evaluations of the entrance fees per museum.



Figure 7.39: Overall visitor satisfaction rate divided by satisfaction with the entrance fees.

The tour guide	&	The (re)construction	2,203
The tour guide	&	The overall experience	1,927
The (re)construction	&	The overall experience	1,911
The tour guide	&	The hands-on activities	1,841
The (re)construction	&	The hands-on activities	1,750
The overall experience	&	The hands-on activities	1,615

Figure 7.40: Number of people evaluating two themes equally high (score 10).

	The (re)construction	The tour guide	The craft	The hands-on activities	The overall experience
The (re)construction	1.000	0.427	0.412	0.282	0.528
The tour guide		1.000	0.531	0.449	0.466
The craft			1.000	0.555	0.440
The hands-on activities				1.000	0.424
The overall experience					1.000



	The exhibits	The gift shop	The signs/ brochures/ guides	The ticket sales	The café	The entrance fees
The exhibits	1.000	0.344	0.328	0.242	0.187	-0.220
The gift shop		1.000	0.547	0.218	0.519	-0.157
The signs/brochures/guides			1.000	0.472	0.366	-0.090
The ticket sales				1.000	0.220	-0.206
The café					1.000	-0.040
The Entrance Fees						1.000

Figure 7.42: Pearson productmoment coefficient between theme group two.





which are not unique to them (the exhibits, gift shop, information on paper, ticket sales and the café). External expertise for these points is easily found, however, but seldom used.

7.7 Conclusions

Chapters Six and Seven have been about understanding the museums and their visitors. An attempt has been made to compare the eight museums with each other, following a structured approach. Such an approach makes it easier to see how one museum relates to another regarding specific aspects.

Tourist Visitor Characteristics

- In most museums, a clear high season and off season can be defined, with a less clear shoulder season. The shoulder season is a challenging period for the museums. In that period, the percentage of couples is lower so what is on offer could be diversified. Visitors are usually less satisfied in the shoulder season, because they expect to see more. Obviously, there is less on offer, but precisely because of the different mix of visitors and the diverse interests represented, people may expect to see more.
- Most museums attract the majority of their visitors from their own language area, although exceptions like Lofotr and Fotevikens Museum demonstrate multilingual success. Here lie chances for those who can adjust well to the specific tourism character of their own region. For example, if many Germans come to Southern Sweden, a change in focus to facilitate those already visiting would be advantageous.
- If many people stay at least one night in the area, a museum does not need to attract people from further away, but should convince those already nearby to visit.

- Visitors expect more interaction and a better experience than they did a decade ago. It is a challenge for the museums is to keep up with changing expectations.

The Decision to Visit

- The repeat visit rate in archaeological open-air museums is lower than in other types of museums – this requires further research and comparisons. Repeat visitors are likely to be families with children interested in the education value. They tend to stay longer than they did on their first visit.
- The best ways to attract visitors are by recommendation and to a lesser extent the use of brochures. Internet is a growth market many museums have yet to embrace. People who have visited before frequently use a museum's website when planning to return; at first visit this tool was probably not yet available. The brochures do not always give a realistic image of what can be expected, either overpromising or under-promising. A museum website is better in tune, probably because it is updated regularly to fit the upcoming events.
- Most people visit an archaeological open-air museum out of an interest in the past, for the educational value and because of an interest in the region. Interest in the region represents a growth market for these museums: by better linking with the area around the museum and its characteristics, the museums can gain a lot of extra interest. What they offer will be brought more in sync with the expectation of the visitors.

Length of Stay

- Of all visitors, 87.2% stay 1-3 hours at one of the eight museums. The challenge would be, just like in restaurants, to achieve double occupancy, meaning to get the same space used twice by spreading visitors over the day. This could be accomplished by programming several highpoints in one day. People do not leave earlier because they are dissatisfied or stay longer because they are happier; they seem to have planned the length of stay before arrival.

Visitor Evaluation

- Visitors are most happy with the (re)constructions, museum staff and the hands-on activities. The tour guides address and serve the public very well, using the houses, artefacts and activities. This is a strong combination the museums should cherish.
- The signs and the showcase elements in the archaeological open-air museums are appreciated less well, but with a little twist, these could blend nicely into the success story.
- Finally, visitors are least happy with the café and shop. These are really dissatisfiers; a real shame with so much professional expertise available elsewhere.

Chapter 8

Key Factors for Archaeological Open-Air Museums

8.1 Introduction

The key factors presented here are the conclusions and collection of ideas distilled from this PhD research. They form recommendations, ideas and strategies which are applicable not only to the eight archaeological open-air museums under study, but to any such museum in general. They are designed to be informative statements of use to managers across the sector.

Recommendations are given in short statements, as a toolkit for archaeological open-air museums. The recommendations are divided into the following categories: Management and Finances, Staff, Collections, Marketing, Interpretation, Visitor Service and Understanding the Visitors. Some of them are based on good practice within archaeological open-air museums; some come from other types of museums or neighbouring professions.

The definition of success in archaeological open-air museums changes with the museum context. There is no blueprint for success for any such museum; neither can one learn everything from a book. One has to practice it, have a wide frame of reference and a good network of colleagues in different disciplines. There is no single solution that works for all archaeological open-air museums; the ideas that follow are merely to think over, and many of them will be familiar to most people working in these museums.

Many details of this research have not been articulated on paper before in this structured way. This is a problem for the sector as whole: there is little explicit knowledge with much remaining tacit. In this chapter issues are presented that may be helpful to consider even though in many cases museum employees are well aware of most of them.

8.2 Reflection on Methods

8.2.1 Broad Scale Observations

The broad scale observations were a good starting point in that they provided an overview of this type of museum. The overview was needed first to get a grip. These preliminary observations were used to set the eight case studies in context. While the literature and internet search were adequate, some of the questions of the first survey and second survey did not deliver the answers hoped for. Not many museum managers like to talk about money, for example. Questions about the goal of the museum and its purpose were too much overlapping. The last question, where museum management were asked to give scores on keywords appeared to be too difficult and should have been left out or redesigned.

Addressing the museums by email and later by letter was a good way of getting enough response - especially once the survey was translated into some often used languages. Phoning the museums also helped to raise the profile of this research. Many museum directors had already heard about the research and I had already visited many of the museums in my capacity as EXARC Director.

8.2.2 The Eight Case Studies, the Management Assessment

The eight archaeological open-air museums were very open and willing to engage in this research. Their commitment has been instrumental for data collection and analysis. Even years later the museum managers continued to offer their time and input, which has been greatly appreciated.

In the present research, the focus was on eight museums and data was collected over one season only (2008). Carrying out more intensive interviews with a greater number of visitors or staff, or extending the personal observation, would surely bring more valuable views, but this was outside the scope of this research.

One can recognise a chaîne opératoire for archaeological open-air museums which deserves more research in order to define further key success factors tailored to the life cycle of these museums. The phases in the life cycle of an archaeological open-air museum are:

- 1. The conception / idea phase when many things seem possible
 - a. Business plan / mission statement
 - b. Making contacts with prime stake holders
 - c. Getting start-up funding
 - d. Finding a suitable location
 - e. Establishing the organisation structure
- 2. Setting Up the museum
- 3. Running / using the museum
 - a. On-going maintenance / repair / minor and major developments
- 4. Ending or a shift in focus
 - a. Possible leaving of the founders

Why do many museums have less than 17,500 visitors and very few have more than 75,000 (See Figure 4.18)? Why do museums not grow: are they stable as they are or is it a constant fight for survival preventing growth? Which are the archaeological open-air museums that have not made it? What made them different from the others? Can we learn lessons from the failures as well as from the successful museums?

8.2.3 The Eight Case Studies, the Visitor Survey

Many aspects of the present research into the visitors and management of archaeological open-air museums have never been brought together in such detail in one study. This research builds on previous studies but has shown other areas to investigate for the future. The visitor survey approach as used in these studies has proven extremely useful and offers comparable data for the eight museums if repeated in the future. No more than about 400 surveys need to be collected and analysed to get results. One way of doing it would be to ask 60% of the questions each season, and change a few questions every year. This way, the results between the years are comparable, with issues that need to be addressed only every few years being researched just now and then. This is a low cost and effective way of learning a lot about one's visitors instantly. EXARC is building on the results of the present research and developing visitor surveys and analysis methods for their members.

The visitor surveys were fit for purpose, but the data have only been compared to themselves. On the one hand, it would be good to compare data from a single museum with similar surveys from the same museum but dating to other seasons. On the other hand, an important extra source of information would be visitor survey data covering visitors to other kinds of sites, like showcase museums or theme parks. This is a major undertaking and would need to be financed by local or regional authorities. In the present economic climate such studies are difficult to finance.

Finally, the tourist visitor details could be compared in the future with national and international tourism trends. The results of such research are already available in more general terms, for example at Eurostat (http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home).

Collecting information about visitors and analysing this could be expanded, using different methods beside simple visitor surveys. Data from ticket and shop sales offer a valuable insight, but museums do not usually allow these detailed data to be analysed by outsiders. Another possibility is using focus groups, but this is time consuming.

Regarding the questions asked, these could be adjusted and the order should be changed. Questions should for example be asked about the direct competitors or other tourist magnets in the local area. EXARC are taking the visitor surveys in archaeological open-air museums further as they carry out their present EU projects on adult education and culture.

In 1978, the Countryside Commission executed an interesting research into visitor centres in the UK (Countryside Commission 1978). Their focus was to discover the extent to which visitors' knowledge was expanded as a result of their experience, as well as to assess their satisfaction with their visit. Four roughly measurable factors for the survey are (Countryside Commission 1978):

- 1. The visitor's past experience and interest in the periods the respective museum is themed with;
- The increase of the visitor's short term knowledge as a variable and as a proxy for understanding;
- The level of enjoyment which the visitor has experienced in and from the museum;
- 4. The level of on-going interest which the experience has aroused as a proxy for motivation.

For the current research, it was too complicated to find out in detail about the increase of the visitor's short term knowledge and the level of enjoyment experienced. These are recommended subjects for future research. The visitor surveys offered a more quantitative approach. It would need different, qualitative approaches to measure the depth of the visitor reaction. Visitor survey research should also last longer than just a couple of days or for the high season only. For many museums the shoulder season has proven to be an important period for potential development.

The visitor survey could not take into account all possible variables; closed questions with multiple choice answers were needed in order to acquire comparable data. For the open questions the answers were very diverse and it took much time to label the answers, as for example with the data concerning the provenance of the visitors.

An updated survey form is provided in Appendix F for future off the shelf use by any archaeological open-air museum. Originally, a Likert scale in numbers was used when rating but because in different countries these can be experienced differently, it is better to use smile symbols or words (Cooper & Schindler 2003, 253-254).

8.2.4 Archaeology and Archaeological Open-Air Museums

The success or quality of archaeological open-air museums lies in the eye of the beholder. Many archaeologists are keen on giving an opinion. However, there are different groups of archaeologists, some employed in field work, others in academic jobs, to mention just a couple of simple categories. Not every archaeologist is in contact with the public and their goals may generally be very different from those of an archaeological open-air museum. An interesting line of research would be to interview archaeologists, either those who are involved in these museums or those who are not, and discuss what is in it for archaeology: what are the benefits of cooperation and what are the pitfalls? It would especially be interesting to interview archaeologists who are opposed to this type of museum. Archaeologists could be asked to make clear what they think is the importance (or lack of it) of the archaeological open-air museums for archaeology, compared to other instruments which archaeology has at its disposal.

It is important to find out if there is any interest from the museums in archaeologists and also the other way around. If archaeologists recognise the archaeological open-air museums as part of their toolkit to reach their goals and if this can be set in the right perspective, then a part of the value of these museums is ascertained.

The future of archaeological open-air museums might very well be 'to build a virtuous circle of exchange among research, education and tourism that has its centre in experimental archaeology in archaeological open-air museums' (Comis 2010, 9-12). The value of such museums would increase if they develop a way to feed back the information from their demonstration activities into research and to focus on the intangible heritage that experimental archaeology holds.

8.3 Analysis, Recommendations, Ideas and Strategies for Archaeological Open-Air Museums

8.3.1 Management and Finances

There is much to say about management and finances of archaeological open-air museums. Basically what follows is a list of statements and recommendations. Key literature is collected in Appendix G.

An archaeological open-air museum is about conveying a story about the past but needs a healthy economy and management as well.

- Ensure a balance between a content / authenticity model and a business model.

Management staff rely more on their own experience than on anything else. This makes professional adaptability harder.

Install an executive group advising the management regularly. Inform them well so they can feed back. Use their experience and network.

Describe the explicit aims of the museum and try to define its implicit motives and those of the stakeholders.

- An important aspect is capitalising the asset. The character of staff employed in the museum is vital for the management. Have a structure where the commitment, knowledge, experience and network of permanent and volunteer staff feeds back to the management.
- Competition increases all the time; do not let others surprise you: be aware of what happens around the museum and make regular site visits not only to colleague archaeological-open air museums but to other competitors / colleagues as well.
 Collect information (good and bad examples) about colleague archaeological open-air museums and make structured observations.
- Evaluate all aspects of the museum regularly and do not be afraid to change or adapt the strategy.
- Short term planning based on flexibility is often needed, but do not lose sight of long term planning and aims.

Archaeological open-air museum management does not always use management tools applied elsewhere in the museum profession, like business plans and action plans.

- Let bureaucracy be a tool in the service of structuring and running the museum and do not let it burden the daily museum business too much. Plan ahead, rather than be too focused on the daily reality.
- Do not make business and action plans just for the sake of having them follow up on them with measurable goals, check if they work and feedback to new action plans if they do not.

Many archaeological open-air museums are dependent in their early phase on a single charismatic director. The often innovative and very knowledgeable founder has a great need to achieve things (this is the so called founder's syndrome) but running a museum after the founding phase is over requires another set of social and management skills (Block 2004, 135-154). The problem is that the 'baby boomers make up over 72% of all non-profit leaders' (www.arts.state.tx.us/toolkit/leadershiptransitions/trendwatch.asp) and are soon to retire.

- What phase is the museum in (See Section 8.2.2.)? Did it just start, has the founder already left or does the management cope with founder's syndrome? Recognising the problem is the start of solving it.

- Archaeological open-air museums do not have all the know-how they need in house.
- Enter into affiliations with others and do not just ask for one-off advice at critical moments. The open-air museums link with the area around the museum, with sites of archaeological or historical interest, but also with hotels, restaurants et cetera. These symbiotic links between the open-air museum and the local area are very important. The museum becomes important to society and vice versa.
- Be actively included in different networks, with different aims and at different levels: national museum networks, regional tourism associations, international archaeological open-air museum groups and local business networks with symbiotic relationships, as with accommodation and transport services. Diversifying in networks is important, and a good neighbour is often just as valuable as a far colleague.
- Take part in award schemes for tourist attractions et cetera. Not only does the museum gain credibility among the public, it also helps the museum gain business support and funding.

Archaeological open-air museums bring their region economic profit; they are socially relevant and increase the tourism potential.

- The museums need to maintain good relations with the local government and vice versa. If the local administration does not have a good understanding of what the museum is about, and the value of the museum for local society, their support will evaporate. If however the understanding is right, the museum can benefit greatly, for example when it comes to issues of local infrastructure, such as roads and the provision of signs. Therefore museums need to stay in contact with the relevant politicians but not become tied to one agenda.
- Calculate the financial, social and cultural relevance for the region or, better still, let an independent agency do so; be anchored in the region in all these aspects.

A sustainability approach is the way forward in the long run.

- Include sustainability in all aspects of the museum: people, planet, profit. Visitors to archaeological open-air museums interested in the past and being outdoors will share an awareness of sustainability.

Economics are an important factor for museums; this has been made particularly clear with the advent of the global financial crisis.

- Plan the museum's budget such that it is partly dependent on its own income (visitor fees, shop and restaurant), partly on governmental sources, and partly on third party funding (for example project funding from Lottery money).
- Do not compromise on issues which can become vital for the museum, for example being prohibited to have a shop or restaurant.

EU funding can be important when starting up or making big changes: but with EU funding one can also continue to do things better and have access to an international background of colleagues who intend the same.

- Identify where the museum needs to improve and seek cooperation with others with similar issues; set up a project to improve exactly those points.
- EU funding possibilities definitely are not all about culture only.

8.3.2 Staff

Because of the specific nature of these museums, they usually attract highly motivated staff members and volunteers. These are often trained within the museum itself by other motivated staff, giving them a good training, fit for purpose. The personal approach between staff and with the visitors is very important. Volunteers interpret the museum's story and often do more - the museums heavily depend on them. However, it is increasingly difficult to keep volunteers and get new ones. Therefore a museum should pay close attention to acquiring a good group of volunteers, as in many cases a museum cannot pay for the number of staff needed. The job of the volunteer coordinator is very important.

There is little literature specifically on the theme of those employed in archaeological open-air museums (See Appendix G).

Staff are the most important asset of an archaeological open-air museum. They with the public and bring to life the story of the (re)constructed houses, artefacts and associated activities.

- There is no standard benchmark to calculate if the number of staff is efficient. This depends much on the different roles of the museum and on the time of year. They are needed to run the museum well, but there are more reasons for having staff than just satisfying the visitors.

Retaining staff is a problem.

- Make a priority of employing staff over the winter or getting them back next year. All round staff can be employed off season as well, if planning and financing is right.
- Try to offer staff a competitive salary or chances to develop within the museum organisation.
- Train staff regularly, preferably not just on the job but together with staff of colleague museums so personnel can benchmark themselves. Staff members should be eager to learn and develop themselves and their own organisation.
- There are marked differences between the baby boom generation and the younger generations. The younger ones volunteer differently, work differently but if understood in time, they can help change the museum to fit their needs and those of the future.

Structuring work and responsibilities is a problem.

- Multitasking staff is fine, but this requires a clear organisation structure with a vision, mission and goals.
- Hire external expertise where needed, but try to keep the core activities in house so the museum does not become dependent on single specialists who are hard to replace.
- Instead of hiring (seasonal) staff from far away, try to involve local craftspeople, not only by inviting them to present their craft but also by supporting their work. This way the museum becomes more firmly embedded in the local community, and the support works in both directions.
- An archaeologist as staff member is very beneficial, if employed as archaeologist.
- Volunteers if embedded appropriately can be an enormous help to the museum. Give them attention when needed and offer them facilities general visitors do not have access to. One staff member fully dedicated to volunteers and students will often earn his or her salary back.

Archaeological open-air museums have a low visibility in scientific circles and between colleague museums.

The museum's own staff should prioritise the regular publication of articles or books relating to the museum's activities in a variety of popular and academic channels.

8.3.3 Collections

The collections found at archaeological open-air museums can be regarded from different perspectives (See Section 6.3.4). The series of statements is long, the number of recommended literature to start with is short (See Appendix G), but well worth it. Documentation of the collections is a challenge but worthwhile.

- An important way archaeological open-air museums can contribute to science is by documenting their (re)constructions, including their planning, building, maintenance and use. Experiences can be collected in order to prevent others from reinventing the wheel. This could be linked with university programmes such as Reading University, for example, is attempting (www.reading.ac.uk/archaeology/research/Projects/arch-RH-experimental.aspx). Document the (re)constructions well and make the information publicly accessible. A collections registration is a structured approach to each museum's collections, making clear where the strengths are, and which blank spaces need to be filled. A registration system of the collections is vital to ensure that the essential information does not get lost and the origins can always be traced.
- A lot of information exists only as 'oral history' do something about it before senior staff and advisors have left the museum beyond reach. As not everything can be written in reports, one way would be to use taped interviews as archive.
- The museum collections are not acquired / collected, but made. This makes them susceptible to subjectivity. Be honest and clear about the backgrounds of the collections.

Maintenance of the collections is a continual worry.

- Do not delay maintenance until it is too urgent and becomes too expensive. Otherwise all the maintenance comes in one go.
- After the first couple of years, each archaeological open-air museum starts facing the endless maintenance issues of their (re)constructed buildings. In most cases, this type of work requires specialist knowledge which is not readily available and is labour intensive. One usually cannot just hire any contractor. This type of investment is part of the running costs of an archaeological open-air museum and therefore not that easily funded from external financial sources.
- Turning repair works into improvements instead of simply copying the old situation requires time and energy that not every museum has at its disposal. But repair work is the perfect time for making changes and represents an opportunity to revitalise the museum.
- Turn maintenance or construction activities into experiences visitors can witness or even participate in: do as much as possible as performance and only use machines when really needed.

There is far more that an archaeological open-air museum can offer.

- The combination of having replicas besides the original artefacts is a smashing hit in many places. They are two sides of the same story and need to be presented as one.
- Combining indoor and outdoor will not only keep the visitors staying longer, but makes the museums and tourism in general less dependent on the weather.
- Be best friends with the nearest archaeological museum. Do not lose the connection with archaeology and stay updated on relevant archaeological information.
- Combine the role of the archaeological open-air museum with one or more roles, for example that of an indoor museum or an archaeological site (See Section 2.5.).
- There is a growing interest in cultural and natural heritage which influences both tourism and local identity (European Commission 2003, 15-23). By embedding the museum in its direct surrounding, the landscape, museums can explore the fact that the story they present is not just about humans and their society, but humans in relation to the environment. This is relevant both to the past and to the present. No longer will the museum be some kind of distant past, and it will also be less anonymous because of the local unique face.
- Use the museum's own grounds and the natural resources on hand.

Modern regulations have an influence on the museum collections.

- Do not save money on health and safety measures, but do not let these compromise the presentation either.

8.3.4 Marketing

Marketing is a sensitive but established topic. Much information is available about museum marketing in general. There are also good accounts which explore the themes, for example by McKercher & du Cross 2002 (See Appendix G). It was much easier to collect a series of recommendations for marketing than for other topics. An important issue is how marketing tools influence the decision to visit an archaeological open-air museum. Knowing more about this process is vital to some museums. There is a wastage rate of 90% of brochures but still they seem to work in several museums; some museums use the internet intensively and others do not; some use social media without a goal. What marketing mix works best will depend on the context.

There are many different marketing channels.

- The internet is changing, static websites are doing worse and social media are doing better; and what about newspapers, radio or flyers? Tomorrow this will have changed again. Each museum needs to find out which media work well (what audience needs to be reached, when and with what message) and make a cross media mix. Evaluate the marketing tools regularly but remain consistent over time.
- Be aware of trends, but don't just follow any trend because it is fashionable. Many developments are predicted a few years ahead.
- The internet has grown to incorporate much more than websites only; think of online video, the use of mobile devices and social networks. Mobile devices will not replace tour guides but can augment them in various situations. In order to reach visitors, the combination of old media and new media must form a good marketing mix with enough references and synchronicity between the different communication channels.
- Marketing does not end at the front gate of the museum; especially important is the information delivered on entry by signs, flyers and reception staff.

Visitors often do not know what to expect.

- Archaeological open-air museums often deliver more than expected by their visitors. This is a marketing issue; do not underpromise and overdeliver – it means some potential visitors decide not to come because they cannot accurately assess the experience on offer. Similarly, do not overpromise and underdeliver – the visitors will not return.
- Define entrance fees by what people will get (one can vary by day of the week or by season) and do not let the fees be dependent only on who is visiting (children versus adults).
- With not many visitors knowing exactly what to expect, a one-liner describing the museum is well worth it.
- If at different occasions another offer is presented, marketing should be flexible enough to change to fit the contents.
- Many visitors stay two hours or more but the length of stay seems often to be planned before arrival. This makes the channels for informing visitors prior to their arrival more important. Many visitors decided to come and see the museum because they were recommended to do so. Leaflets are important as well. Websites and social media are an important challenge.

Marketing partnerships are very important.

- Set up product partnerships with other sales channels in the region, for example a combined visit to the museum and a nearby restaurant, a coach service connecting several attractions or selling museum bread in local bakeries.
- There is a symbiosis needed as an attractive nearby offer could encourage visitors to make a combined visit instead of no visit at all. If the offer is matching, a lot is gained; if the offer is competitive (for example an excursion into nature instead of going to the

museum), people will not easily combine one with the other. Museums need to improve and innovate to survive, something which is demonstrated best by the museums in the most competitive environments.

- Archaeological open-air museums should stand out from their competitors. The number of competitors varies considerably: in some places they are almost absent, in other locations abundantly available.

8.3.5 Interpretation

Interpretation in archaeological open-air museums takes many different forms. It is not just about people dressing up in costume and playing a game or telling a fun story while showing visitors around.

Interpretation is the backbone of the archaeological open-air museum.

- Document the museum's interpretation; if the basics are documented, they can also be questioned and improved.
- Do not just lean on one group or rely on a few very qualified staff members alone to deliver the contents.

Live interpretation (of which living history forms a part) is an important method of presenting at heritage interpretation sites (Duisberg 2008, 5).

- When live interpretation goes beyond the simple passive observation for visitors and turns into active participation it becomes really successful. Try to actively include visitors, make them participate in the story as it is told. Do not deliver a presentation behind a rope unless absolutely necessary.
- When applying live interpretation, be professional and construct a proper mix of activities and abilities.
- Involve as many of the visitors' senses as possible, but only to make a point: not many people would like to 'really smell' a medieval city, but they do want to be informed about what it might have been like.

The stories brought in an archaeological open-air museum need to fit.

- Be honest in any way the museum is interpreting to its visitors.
- Be ambitious in what to teach visitors; do not underestimate what they are capable of taking in. Move beyond a merely technological approach to the past and think of themes which are relevant to the present. Do not get stuck in a fun-only approach; look, for example, into issues such as drugs in the past, or immigrants, poverty and other subjects. The past is not just archaeology; an archaeological open-air museum can handle any theme which can be recognised both in the past and the present.
- Keep the museum's message and the stories presented up to date.

Just as the content of the interpretation is important, so is the way in which it is presented.

- Think how modern interpretation media could enhance the stories presented, but be aware of the dangers of a too high-tech approach. For example, in the shoulder season, one might like to use interactive film in the (re)constructed houses when live interpreters are too expensive due to the low visitor numbers.
- Visitors want to be convinced by the museum; they like to learn something. It is however much more valuable to make them question the past and the present.
- The goals of the museum's interpretation are various.
- Get the visitors interested in visiting museums more often in general, not just the one visited.
- Link science and visitors: bring them in touch with each other.

8.3.6 Visitor Service

As described in detail in paragraph 6.3.7, visitor service is a very important though often neglected field of interest in archaeological open-air museums. The visit evaluation (See Section 7.6) exemplifies this in detail.

Before the visit:

- Being accessible and visible are important for museums in order to get visitors through the gates. Therefore, the museum should be easy to find with a variety of means of transport.
- Signposting the museum on the nearby roads is very important. But for this, museums have to rely on local officials and their neighbours.
- The museum entrance should be appealing and convey instantly what the museum is about.
- A visitor would like to get a good overview of their visit before they go in: what is offered and approximately how much time will they need to spend?

During the visit:

- Archaeological open-air museums have a potentially very strong advantage: involving all senses hugely improves a museum visit.
- Have a good guiding system so visitors will know where to go and what to expect. Such a system does not have to be in tune with the rest of the presentation (use of authentic materials and techniques) as long as it is clear and consistent.
- Offer different sources of information: guided tours, signs, well informed staff, smartphone information and interactive programmes.
- A good café or simple opportunity to have coffee and cake offers the visitors a moment to relax and reflect and prolongs their visit enormously. Keep the visitor's minimum standards in mind; such facilities need to fit the purpose.
- The demands of visitors keep changing but can be predicted to a certain extent. Change depends partly on demographics (the baby boomers becoming older and changing roles for example), and partly on global (economic) developments. Keep up with modern standards.

On leaving:

- Have a shop with many personal items one cannot find easily elsewhere; these do not need to be expensive, think of postcards for example. Do not offer just souvenirs, but souvenirs with a link to the museum. A museum shop is not a supermarket.
- Have enough items in the shop which can be bought with pocket money, but see to it all is of good quality.
- Friendly and polite staff will make visitors want to return.

8.4 Understanding the Visitors

8.4.1 Tourist Visitor Characteristics

The visitor mix (the percentage of foreigners versus locals for example) is different for every museum. For a new museum, this should be carefully looked into, as competitors and the nature of the museum's location will already provide much of this information.

Most of the archaeological open-air museum managers have little knowledge about their visitors. Much of the information available is derived from single incidents or single contacts with visitors (Critical Incident Analysis). The management might believe they know something of their visitors without having done much research, but they do not prioritise or have sufficient resources to change. Thus the catastrophe governs knowledge in the sense that the strongest memories tend to be of times when things have gone extremely wrong regarding the visitors (Johns 2004, 131).

8.4.2 The Decision to Visit

Visitors come to see archaeological open-air museums because of an interest in the past, an interest in the local region, for the education value, or to be outdoors and enjoy the weather.

Repeat visits are understood even less than visitors in general. Research at other types of museums shows that repeat visits could be an interesting avenue for archaeological open-air museums to explore, with good chances for long lasting and rewarding relationships. Although trying to attract new customers is important, keeping the old ones is just as relevant.

The national curriculum, the minimum set of themes which need to be taught at school, offers many opportunities for archaeological open-air museums to be relevant to all visitors, not just to school children.

The shoulder season is the time of year with the most abundant chances for archaeological open-air museums to attract extra visitors, for example in school holidays. The type of visitors will be slightly different and so should be the activities. The offer could, for example, be tailored to local inhabitants at times of the year when tourists are too far away. Adjustments are not necessarily about increasing absolute visitor numbers alone, but could well be about addressing other types of potential visitor or offering a new set of activities. Museums with both an indoor and an outdoor area will be able to take advantage of the shoulder season, when visitors like to go out, but often do not because of the risk of bad weather.

8.4.3 Visit Evaluation

The visitor experience usually exceeds the expectation, meaning the museums do better than expected. This is partly due to the immersive experience that visitors get. There is plenty of interaction between the guides and the visitors and in future visitors will want more of that (Schöbel 2011a, 30). The visitor facilities (shop, restaurant, playground, and toilet) are an add-on rather than an integral part of the museum concept. Overall, archaeological open-air museums are good at the specialist offer they bring, but could learn a lot from other types of museums on how to design their museum and treat their visitors. They could be running more survey programmes to acquire a better understanding of their visitors.

Who are visiting?

- Some demographics are missing in archaeological open-air museums; the challenge lies in reaching these groups and not being dependent on a single category of visitors only.
- Visitors are more interested in the local area and the past than one might expect. Combining these works really well. In addition, the museum needs to be well anchored in all aspects of the region, as described earlier.
- Collect enough information about the visitors, not just about extreme situations and not just in the high season. Be sure about the questions before starting to collect

- information. If a comment box is used, be prepared to actually follow up on the comments.
- Try to compare visitor information with previous years or with colleagues.
- What works perfectly well in one country can be an utter failure elsewhere; don't copy a situation 1:1.

What does the museum offer its visitors?

- Develop offers for non-mainstream groups of visitors this might lead to unexpected innovation for all. For example, an exhibition developed for blind people (Ramioul, BE) can be very successful for all visitors.
- Recurring events do not often change. However, the key to success is innovation. Think out of the box and renew some of the events every year. Examples are chocolate casting for children (Parco Montale, IT) or a Roman oracle using original Roman pottery sherds and phrases by Classic authors (Viminacium, RS).

When do visitors visit?

- The smaller museums cannot host too many visitors at the same time, while the larger ones seldom use their surface area to its full potential. Try to include the surface area next to the museum for bigger events several times a year.
- Try programming activities so that the museum gets what restaurants call double occupancy, with visitors either coming early for 3-4 hours, or coming late for the same period.
- Develop an approach to stimulate returning visits it often is easier to keep a customer then to get new ones.
- How does the museum make money on repeat visitors? Extra visitors (guests) going with the repeaters?
- Develop a clear approach for the shoulder season. Think of special activities during half term and other holidays; focus on specific target groups, for example subscribers to the local newspapers at times when few tourists in the area are predicted.
- Turn the local inhabitants into repeat visitors: when they are a fan, they might bring their guests to visit as well.

8.5 Conclusions

8.5.1 Not Theory Only

The broad and detailed results of this research present a clear view of eight museums and where they stood in 2008. By putting these results into context with broad scale observations and information derived from the literature, this research also explores many ideas which are central to archaeological open-air museums in general. One cannot learn how to set up and run an archaeological open-air museum from a book alone. It requires several books, a sense of daring and experience from different professions, as well as courage, learning by doing and the willingness to adapt. Creativity is essential, but museum management tools are needed as well. An archaeological open-air museum is not just a museum: it has a financial and social role in local society. Museum key issues and visitor key issues augment each other; it just needs another, more objective angle on the museum organisation for the potential for improvement to be defined.

8.5.2 Basic Outlines of the Recommendations

A book like the present reviewing archaeological open-air museums is long overdue and it is hoped that this is a distinctive contribution to the literature on archaeological open-air museums as well as to experimental archaeology, a field of study which can best be appreciated with basic knowledge of archaeological open-air museums. The role of the eight case study museums and their staff needs to be highlighted where they allowed me to use their information. They are thanked for their openness. It is hoped that in return, this study is of value to them and a range of people beyond those archaeological open-air museums.

Staff are the most important asset of an archaeological open-air museum. With their personal approach they are the glue between the (re)constructed houses, activities and the public, inviting visitors to participate and adjusting the approach depending on the public's wishes and needs.

The collections of (re)constructions and artefacts require good registration, publication and finally good upkeep. All this is specialist work and safeguards the actual collection of intangible heritage. More museums should combine original artefacts with (re)constructions.

It is important to establish co-operative marketing ventures with nearby culture tourist attractions, making a matching offer. Websites and brochures work fine, but sooner rather than later museums should move into online video, the use of mobile devices and social networks. The marketing material needs to fit what is offered, and since the offer changes depending on the time of visit, flexible marketing tools like websites and social media are worth looking into.

For interpretation, living history and experimental archaeology function well side by side. There are dozens of different ways of interpreting. The question of which one to apply and when depends on the sort of visitors, the message to be put across and the context.

Further research into visitors at archaeological open-air museums is much needed, and should not be limited to finding ways to encourage repeat visits. The shoulder season offers great opportunities for a museum to expand its activities, using the existing infrastructure but making another offer based on the different season and different type of visitor.

Visitors come to see archaeological open-air museums because of an interest in the past, in the local region, the education value and to enjoy the weather. They are more than happy with the (re)constructed environment and the tour guides, but much less satisfied with the gift shop and café. There is much expertise available to improve this.

8.5.3 Back to the Aims

Even if the variety in these archaeological open-air museums is enormous, they form a distinctive type of museum. The European archaeological open-air museums are characterised across their diversity, starting with their history and development (chapter Two), the broad scale observations (chapter Four) and the case study approach (chapters Five, Six and Seven).

Advice on the different aspects of archaeological open-air museums culminated in recommendations and strategies in this chapter, building on chapters Two and Four, but especially clarified by the case studies.
Where the management is confident in the quality of their (re)constructions and presentation, they play down accepted management methods as well as more modern marketing techniques. The return value for their region is substantial, not only when it comes to economics, but also in number of jobs and raising the profile of the region regarding local identity and tourism. The management does not include the cultural heritage surrounding them enough.

The aims of the museums for their visitors experience are compared in detail with the visitors' actual experience (chapters Six and Seven) with the gaps in both the service provision cycle and the service consumption cycle in archaeological open-air museums (See Section 3.8) identified. The issues raised by these gaps have led to many of the recommendations presented in chapter Eight. Although the museum staff and the (re)constructed buildings and items are highly appreciated by visitors, their actual experience of archaeological open-air museums goes short when it comes to basic visitor service, leading to less attention for the actual museum experience they came for in the first place. This, together with developing a good offer for visitors in the shoulder season is the best points for improvement for these museums, seen from the visitor's perspective.

There are good ideas everywhere, for start-up archaeological open-air museums, for those who have been longer in business and for those needing to shift focus. This dissertation offers a beginning: the value of an Archaeological Open-Air Museum is in its Use.

Appendix A

Terminology

Different key words, often used in this research are described here instead of time and time again in the running text. Although many of these terms are used frequently, the definition depends on the author, his or her background and mother language. The problem is that those words have a different meaning in different languages and as made clear earlier, only about 50% of all literature is in English, much of it written by non-native speakers. As example, interpretation in English is something very different from the German word Interpretation causing problems in understanding.

A great help was the work of Fotevikens Museum in *live*ARCH, making an overview of terms and how they were understood in the eight different museums of this research, clarifying many misunderstandings between languages in Europe (Buttler Jakobsen unpublished).

Archaeological Open-Air Museum

'An archaeological open-air museum is a non-profit permanent institution with outdoor true to scale architectural reconstructions primarily based on archaeological sources. It holds collections of intangible heritage resources and provides an interpretation of how people lived and acted in the past; this is accomplished according to sound scientific methods for the purposes of education, study and enjoyment of its visitors' (www.exarc.net).

Extra ICOM requirements for museums are followed (Lohr 1999, 63) in the sense that archaeological open-air museums need to be open periodically and need to be run by a professional director.

Archaeological Education Centre

An Archaeological education centre is a non-profit permanent institution with outdoor true to scale architectural (re)constructions primarily based on archaeological sources. It holds collections of intangible heritage resources and provides an interpretation of how people lived and acted in the past; this is accomplished according to sound scientific methods for the purposes of education.

Archaeological Site Museum

An archaeological site is a place where human activity occurred, resulting in remains or traces which are or may be recorded by archaeological methods. An archaeological site museum is a museum, dedicated to presenting a specific archaeological site or its broader story. The site museum houses the archaeological site it refers to within its territory and is therefore fixed in location.

Experimental archaeology

'A sub-field of archaeological research which employs a number of different methods, techniques, analyses, and approaches within the context of a controllable imitative experiment to replicate past phenomena (from objects to systems) in order to generate and test hypotheses to provide or enhance analogies for archaeological interpretation' (Mathieu 2002, 1).

Chaîne opératoire [operational sequence]

The sequence of tasks undertaken to make a tool or complete a process. The different stages in the sequence reveal technological choices and other social information.

Creative Tourism

'Tourism which offers visitors the opportunity to develop their creative potential through active participation in courses and learning experiences which are characteristic of the holiday destination where they are undertaken' (Richards & Wilson 2006, 1215).

Interpretation Centre

'An institution for dissemination of knowledge of natural or cultural heritage. Interpretation centres are a kind of new-style museum, often associated with visitor centres or ecomuseums, and located in connection to cultural, historic or natural sites.' 'Unlike the museums, interpretation centres do not aim to collect, conserve and study objects; rather they enable visitors to gain a better appreciation of the site's natural and cultural values by providing the necessary information. These centres work to educate and to raise awareness' (Izquerdo et al. 2005, 31).

Model

The phrase (re)construction instead of the simpler reconstruction is used to emphasise that in situations when a building is planned where 'only a ground plan survives, any structure based upon it can only be conjectured and is, therefore, best described as a construct (Reynolds 1999b, 159).

A free standing archaeological (re)construction in this sense is a life size architectural house model (see Model) based on archaeology in a surrounding which is freely accessible, like a public park or forest. If access is by controlled entry but the facilities do not have all characteristics of an archaeological openair museum or educational centre, those reconstructions usually depend on a museum.

Models are life size reconstructions of houses. An early example of this therm is from Planck when he discusses 'Will der Besucher nur den restaurierten Befund, d.h. die ursprünglich vom Archäologen angetroffene Situation, möchte er den – nachgebauten – Urzustand, die Rekonstruktion im Maßstab 1:1 erleben, oder genügt ihm beispielsweise das Modell eines römischen Tempel in kleinem Maßstab, aufgestellt in einem Museumsraum?' [Would the visitor merely like to experience the restored find, i.e. the original situation as found by the archaeologists or would he prefer the – reconstructed – original situation, the reconstruction in size 1:1 or would it for example suffice him to see the scale model of a Roman temple in a museum room?] (Planck 1991, 63).

H. Schmidt extended this line of thought by stating: 'Ein historisches Bauwerk, einmal zerstört, ist nie wieder zurückzugewinnen. Wenn es hoch kommt, wird die Rekonstruktion ein weitgehend originalgetreues Abbild des Verschwundenen sein, üblicher Weise ist es jedoch ein Modell im Maßstab 1:1 mit vielen Fehlern, das unseren heutigen Kenntnisstand wiedergibt und errichtet ist mit neuzeitlichen Arbeitsmethoden und Materialien. [A historical building, once destroyed can never be gained back. If it is erected, the reconstruction will mostly be a faithful image of what has disappeared, usually however it is a model size 1:1 with many mistakes, depicting the present state of knowledge and built with modern working methods and ditto materials] (H. Schmidt 1993, 243).

However, the term model became in general use after M. Schmidt used this term extensively from 1994 onward (See M. Schmidt 1994, 17).

Museum

'A museum is a non-profit, permanent institution serving society and its development, open to the public and collects, preserves, researches, conveys and exhibits material evidence of mankind and its environment for study, educational and entertainment purposes' (International Council of Museums ICOM code of professional ethics, www.icom.museum).

Non-Profit Organisation

'A legally established body- corporate or unincorporated- whose income (including any surplus or profit) is used solely for the benefit of that body and its operation. The term "not-for-profit" has the same meaning' (International Council of Museums ICOM code of professional ethics, www.icom.museum).

Open-Air Museum

'Open air museums are defined as scientific collections in the open air of various types of structures, which, as constructional and functional entities, illustrate settlement patterns, dwellings, economy and technology', Constitution Article 1 (AEOM 1973, 109).

(Re)construction

See Model

Site Museum

An archaeological site is a place where human activity occurred, resulting in remains or traces which can be recorded by archaeological methods. An archaeological site museum is a museum, dedicated to presenting a specific archaeological site, series of sites or their broader story. The site museum houses the archaeological site it refers to within its territory and is therefore fixed in location.

Theme Park

Theme Parks are capital intensive open-air visitor attractions run as a commercial enterprise. They create phantasy 'man modified, recreational environments' (Pearce 1988, 60), away from the daily life visitors are used to, 'usually emphasising one dominant theme around which architecture, landscape, rides, shows, food services, costumed personnel, retailing are orchestrated' (Kemperman 2000, 14).

Tourism

'Tourism is the temporary movement of persons to destinations outside their normal home and workplace for leisure, business and other purposes, the activities undertaken during the stay and the facilities created to cater for the needs of tourists' (World Tourism Organisation WTO 1989).

Appendix B

List of Personal Contacts referred to

In some cases information and insights are not from published sources but from tacit knowledge which has contributed greatly to my understanding and deserves attribution. This thesis has involved detailed interviews and useful insights from centre managers or senior figures and in some cases also those with specific responsibilities (such as education, marketing, restaurant, shop, human resources), or a great deal of experience of working with the public such as the senior volunteers with many years' experience. I have asked permission to use their personal observations in my thesis and would like to thank them for being willing to share their experiences with me. The list below gives the details and affiliations of individuals who appear in the text as providing personal comment contributions. The affiliations date to the position they were in when quoted.

Name	Affiliation	Position	City, Country
Z. Apala	Āraišu Ezerpils Fonds	Board Member	Cēsis, Latvia
N. Arts	Archeologische Dienst Eindhoven	Municipal Archaeologist	Eindhoven, the Netherlands
B. Andrian	The Scottish Crannog Centre	Director	Loch Tay, United Kingdom
A. Boonstra	HOME	Director	Eindhoven, the Netherlands
M. Sullivan	Shakespeare's Globe Trust	Commercial Director	London, United Kingdom
C. Daval	Free Lance	Archaeologist	Froges, France
J. Flamman	Archeon 1	Centre for Experimental Archaeology	Baarn, the Netherlands
D. Freeman	Butser Ancient Farm	Iron Age Consultant	Chalton, United Kingdom
B.M. Buttler Jakobsen	Fotevikens Museum	Director	Höllviken, Sweden
C.S.H. Jensen	Nationalmuseet	Web Editor	Copenhagen, Denmark
G. Johansen	Lofotr	Director	Borg, Norway
R. Kelm	Archäologisches Ökologisches Zentrum Albersdorf	Director	Albersdorf, Germany
B. van Lingen	HOME	Head of Interpretation	Eindhoven, the Netherlands
W. Lobisser	Vienna Institute of Archaeological Science	Experimental Archaeology	Vienna, Austria
L. E. Narmo	Lofotr	Experimental Archaeology	Borg, Norway
R. Obert	Bachritterburg Kanzach	Director	Kanzach, Germany

Name	Affiliation	Position	City, Country
A. Pelillo	Parco Montale	Science & Pedagogics	Modena, Italy
W. Piotrowski	Muzeum Archeologiczne w Biskupinie	Scientific Director	Warsaw, Poland
D. Prinsen	HOME	Director	Eindhoven, the Netherlands
I. Pulini	Parco Montale	Director	Modena, Italy
R. Sandnes	Firma Richard Sandnes	Director	Gravdal, Norway
M. Schmidt	Niedersächsisches Landesmuseum Hannover	Vice Director	Hannover, Germany
G. Schöbel	Pfahlbaumuseum	Director	Unteruhldingen, Germany
N. Schoeren	HOME	Head of Education	Eindhoven, the Netherlands
J. Schuitert	HOME	Coordinator Shop & Restaurant	Eindhoven, the Netherlands
L. Staals	HOME	Secretary of Director	Eindhoven, the Netherlands
B. van Valburg	HOME	Director	Eindhoven, the Netherlands
P. Vemming Hansen	Middelaldercentret	Director	Nykøbing F., Denmark
M. Vicze	Matrica Museum	Director	Százhalombatta, Hungary
A. Vilka	Āraišu Ezerpils Fonds	Director	Cēsis, Latvia
D. Willaert	VZW Legia	Chair	Ghent, Belgium

Appendix C

Description of www.exarc.net

In 2011, EXARC counted 50 archaeological open-air museums across Europe among its 83 members. Sending them surveys and analysing the data proved important experience in devising the surveys for this specific research.

The website www.exarc.net has been instrumental when writing this PhD thesis. The site is the main communication platform of EXARC on the internet, and the author of this research, as EXARC Director is responsible for it. Many features have been designed by me and several features have been solely my authorship, like the list of known archaeological open-air museums in existence in Europe. The bibliography on experimental archaeology, education and archaeological open-air museums finds its origin elsewhere but is mostly compiled by myself. Both the list of museums and the bibliography have first been presented on a standalone website and are only recently merged into www.exarc.net.

The list of museums

The locations are collected since 1982 and are divided over several categories; many of them fall into different ones at the same time. For example, most archaeological open-air museums are also used as archaeological education centres. Some of them also have a showcase museum / exhibition. Definitions of location categories are available in the glossary. The number of locations is growing by the day and especially because independent (re)constructions are hard to find. My personal bias means there is an overrepresentation of those countries where I speak the languages of (Dutch, English, German, Danish and to some extent French and Polish). By November 2011, it counted 276 sites, with another 15 waiting to be added.

The bibliography

The bibliography holds references for those interested in experimental archaeology and archaeological education as well as to archaeological open-air museums. A bibliography is best kept online because it is never complete. Online, it is more easily searchable, not only by language and such, but for example also articles about Bronze Age, Ceramics, in German, about Austria.

With the founding in 2001 of EXARC by M. Schmidt, Johansson & Paardekooper, the Institute of Ancient Technology (IAT) in Sweden encouraged and helped me with starting out with this online bibliography. It goes back on the 2,078 entries of the Bibliographie zur Experimentellen Archäologie (Devermann & Fansa, 1994) but by November 2011, the bibliography held 9,806 titles.

Sources

The following publications have been reviewed and yielded an extensive amount of entries for the bibliography.

On-going publication series, Checked until 2010:

- 1986. Archaeological Textiles Newsletter, Center for Textile Research, Denmark
- 1991. Bulletin of Primitive Technology, Society of Primitive Technology, USA
- 1995. Experimentelle Archäologie in Deutschland/in Europa, by EXAR, Germany
- 1996. Bulletin voor Archeologische Experimenten en Educatie, VAEE, the Netherlands
- 2004. EXARC Journal (formerly: EuroREA), EXARC, the Netherlands

Bibliographies and ended journals:

- 1974-1996. Nordic Archaeological Abstracts (NAA)
- 1980-1990. Bulletin of Experimental Archaeology, University of Southampton
- 1981-1994. Forntida Teknik, Institute of Ancient Technology (IAT)
- DEVERMANN, H. & FANSA, M., 1994. Bibliographie zur Experimentellen Archäologie. *Archäologische Mitteilungen aus Nordwestdeutschland*, Beiheft 7, Oldenburg: Staatliches Museum für Naturkunde und Vorgeschichte.
- HESTER, T.R. & HEIZER, R.F., 1973. Bibliography of Archaeology I: experiments, lithic technology, and petrography. An Addison-Wesley Module in Anthropology. Reading.
- WHITTAKKER, J., atlatl bibliography, www.grinnell.edu/academic/ anthropology/jwweb

The future of the website

The current presentation is gradually being extended. The idea is to turn it into a wiki like cooperation where subscribed correspondents can add their own information. It has a critical size, large enough to be useful, but too large to keep developing single-handedly.

Appendix D

List of Archaeological Open-Air Museums having answered the First and / or Second Survey

Country	Short name	Details
Austria	Asparn	
Austria	Carnuntum	only Survey 1
Austria	Dietenberg Ligist	
Austria	Elsarn	
Austria	Heldenberg	
Austria	Kulm Keltendorf	
Austria	Magdalensberg	
Austria	Mitterkirchen	
Austria	Salzwelten Hallein	
Austria	Schwarzenbach	
Austria	Klein Köris	only Survey 1
Belgium	CEDARC	
Belgium	Gallische Hoeve	
Belgium	Malagne	
Belgium	Ramioul	
Calatonia	L'Esquerda	
Catalonia	Calafell	
Catalonia	Noguerra	
Cyprus	Chirokitia	
Cyprus	Lemba	
Czech Republic	Curia Vitkov	
Czech Republic	Louny	
Czech Republic	Netolice	

Country	Short name	Details
Czech Republic	Repora	
Czech Republic	Spolecnost EA	
Czech Republic	Tesetice	
Denmark	Bork	
Denmark	Bornholm	
Denmark	Dall Hede	only Survey 1
Denmark	Egetofte Naturskole	
Denmark	Ertebølle	
Denmark	Esbjerg	
Denmark	Fyrkat	
Denmark	Giver	
Denmark	Hjerl Hede	
Denmark	Hvolris	
Denmark	Kjællinghøl	
Denmark	Middelaldercentret	
Denmark	Moesgård	only Survey 1
Denmark	Mortenstrupgård	
Denmark	Næsby	
Denmark	Ribe Vikinge Center	only Survey 1
Denmark	Sagnlandet Lejre	only Survey 1
Denmark	Ulvsborg	
England	Arbeia	
England	Bernera	
England	Butser	
England	Chiltern	
England	Culverwell	only Survey 1
England	ESAMP	
England	Flag Fen only Survey 1	
England	Hadleigh Park	
England	Historical Land Group	

Country	Short name	Details
England	lceni Village	
England	Little Woodham	only Survey 1
England	Lunt Roman Fort	
England	Murton Park	only Survey 1
England	Peat Moors Centre	
England	Portland	
England	Ryedale Folk Museum	
England	Segedunum	
England	Shakespeare's Globe	only Survey 1
England	Trewortha	
England	West Stow	
Finland	Kierikkikeskus	
Finland	Sommelo	only Survey 1
Finland	Kurala Village Hill	
Finland	Kurala Village Hill	
France	Archéosite Gaulois	
France	Asq, Asnapio	
France	Chalain	
France	Château d'Orville	
France	Courtinals	
France	Ethni'Cité	
France	Guédelon	
France	Harriak	
France	La Maisnie Jouain	
France	Les Amis des Baux, Paléolab	
France	Les Gorges du Verdon	
France	Les Rues des Vignes	
France	Marle	
France	Mas de Tourelles	
France	Melrand	

Country	Short name	Details	
France	Montans		
France	Paléosite Saint-Césaire		
France	SESTA, Tarascon		
France	Tumulus de Bougon		
France	Virges Armes		
France	Les Gouloises d'Esse		
Germany	AFM Oerlinghausen		
Germany	Alamannen Museum Vörstetten		
Germany	Alcmona		
Germany	Altenburg Bundenbach	only Survey 1	
Germany	AÖZA Albersdorf		
Germany	APX Xanten		
Germany	AZH Hitzacker		
Germany	Bachritterburg Kanzach		
Germany	Bad Windsheim	only Survey 1	
Germany	Bajuwarenhof Kirchheim		
Germany	Bauspielplatz Roter Hahn		
Germany	Bliesbruck-Rheinheim		
Germany	Borg		
Germany	Bronzezeithof Uelsen		
Germany	Bronzezeithof Ulesen		
Germany	Düppel		
Germany	Ellwangen		
Germany	Federseemuseum		
Germany	Funkenburg Westgr.	only Survey 1	
Germany	Gabreta		
Germany	Hahnenknoop		
Germany	Haithabu		
Germany	Hechingen Stein	only Survey 1	
Germany	Heuneburg		

Country	Short name	Details
Germany	Kempten	only Survey 1
Germany	Klein Köris	
Germany	Kussow	
Germany	Limesmuseum Aalen	only Survey 1
Germany	Lütjenburg	
Germany	Mammutheum	
Germany	Oldenburger Wall	
Germany	Opfermoor Vogtei	
Germany	Pfahlbaumuseum Unteruhldingen	
Germany	Raddusch	
Germany	Römermuseum Seebruck	
Germany	Saalburg	only Survey 1
Germany	Sachsenhof Greven	
Germany	Siegsdorf	
Germany	Slawendorf Passentin	only Survey 1
Germany	Steinbach	
Germany	Venne	
Germany	Villa Hasselburg	
Greenland	Narsaq	
Hungary	Csiki Pihenökert	
Hungary	Matrica Museum	
Iceland	Þjóðveldisbæinn	
Ireland	Shannon Development	
Italy	Antiquitates	
Italy	Archeoparc Schnalstal	
Italy	Archeopark Boaria Terme	
Italy	Archeopark Boaria Terme	
Italy	Lago di Ledro	
Italy	Livelet	
Italy	Parco Montale	

Country	Short name	Details		
Italy	Travo			
Latvia	Araisi			
Latvia	Uldevens	llidevens		
Lithuania	Kernave			
Macedonia	Ohrid Lake			
Macedonia	Tumba Madazri			
Norway	Avaldsnes			
Norway	Lofotr			
Norway	Midgard	only Survey 1		
Poland	Biskupin			
Poland	Karpacka Troja			
Poland	Krzemionki			
Portugal	Castro de S. Lourenço			
Romania	USAIC			
Russia	Paleodrevnya			
Scotland	Archaeolink			
Scotland	The Scottish Crannog Centre			
Slowakia	Liptovska Mara			
Spain	Algaba de Ronda			
Spain	Arqueopinto			
Sweden	Ale Vikinggård			
Sweden	Årsunda Viking			
Sweden	Ekehagen	only Survey 1		
Sweden	Eketorp			
Sweden	Forn Åker			
Sweden	Fotevikens Museum			
Sweden	Gene			
Sweden	Grottbyn	only Survey 1		
Sweden	Gunnes Gard	only Survey 1		
Sweden	Jernalderhusets Interesseförening			

Country	Short name	Details
Sweden	Lojsta Hall	
Sweden	Malmö Kogg Museet	
Sweden	Malmö Kogg Museet	
Sweden	Österhus Vänner	
Sweden	Skäfftekärr	
Sweden	Stavgard	
Sweden	Storholmen Norden	
Sweden	Trelleborgen	only Survey 1
Sweden	Värmland	
Sweden	Vikingatider	
Switzerland	Augusta Raurica	
Switzerland	Gletterens	
Switzerland	Laténium	
Switzerland	Pro Visitilacio	
Switzerland	Wauwil	
The Netherlands	Archeon	
The Netherlands	CNME	
The Netherlands	De Engelse Schans	only Survey 1
The Netherlands	De Kaardebol	
The Netherlands	Dongen	
The Netherlands	Hapsproject	
The Netherlands	HOME	
The Netherlands	Hunebedcentrum	
The Netherlands	Nehalennia Tempel	
The Netherlands	Swifterkamp	
The Netherlands	Veendam	
The Netherlands	Wilhelminaoord	
Turkey	Asikli Höyük	
Wales	Llynnon Roundhouses	
Wales	St Fagans	

Appendix E

List of Archaeological Open-Air Museums visited by the Author

Country	Short name	Last visit	Number of visits
Austria	Asparn	13 November 2005	3
Austria	Elsarn	13 November 2005	2
Austria	Heldenberg	13 November 2005	1
Belgium	Aubechies	14 July 2006	4
Belgium	Gallische Hoeve	13 September 2009	2
Belgium	Malagne	14 June 2009	1
Belgium	Ramioul	11 October 2005	1
Catalonia	Calafell	11 March 2011	8
Catalonia	La Draga	18 October 2011	1
Catalonia	L'Esquerda	19 October 2011	1
Catalonia	Noguerra	4 February 2011	1
Germany	AFM Oerlinghausen	4 February 2010	9
Germany	Albersdorf	13 October 2006	4
Germany	Altburg	27 June 2009	1
Germany	AZH Hitzacker	24 April 2007	2
Germany	Bajuwarenhof	26 July 2007	1
Germany	Bliesbruck-Reinheim	17 October 2004	1
Germany	Düppel	8 October 2010	5
Germany	Federseemuseum	9 April 2011	5
Germany	Haithabu	19 October 2002	3
Germany	Heuneburg	20 May 2009	2
Germany	Hochdorf	27 July 2007	2
Germany	Kanzach	8 April 2011	4

Country	Short name	Last visit	Number of visits
Germany	Rathingen	15 June 2009	1
Germany	Saalburg	23 July 2007	1
Germany	Uelsen	19 October 2008	1
Germany	Unteruhldingen	23 May 2009	7
Germany	Xanten	27 June 2009	2
Denmark	Albertslund	3 March 2009	2
Denmark	Dybbøl Banke	24 April 2007	2
Denmark	Fyrkat	17 July 1989	2
Denmark	Guldager Plantage	8 April 1990	1
Denmark	Hjemsted	18 October 2002	2
Denmark	Hjerl Hede	17 October 2002	3
Denmark	Hollufgaard	17 August 1990	3
Denmark	Lejre	25 July 2011	12
Denmark	Lindholm Høje	17 October 2002	1
Denmark	MC Bornholm	31 January 2008	1
Denmark	Middelaldercenter	1 May 2011	8
Denmark	Moesgaard	16 October 2002	4
Denmark	Naesby	15 October 2002	3
Denmark	Ribe	18 October 2002	3
Denmark	Trelleborg	15 October 2002	3
Denmark	Vingsted	4 May 1990	1
England	Butser	2 November 2009	2
England	Peat Moors Centre	14 April 2009	2
England	Trewortha Farm	10 February 2004	1
England	West Stow	16 April 2009	1
Spain	Algaba de Ronda	30 November 2007	1
France	Guedelon	15 July 2006	1
France	Marle	16 July 2006	1
France	Samara	17 July 2006	1
Hungary	Szazhalombatta	20 October 2009	6
Italy	Ledro	18 September 2009	1

Country	Short name	Last visit	Number of visits
Italy	Montale	26 March 2009	3
Italy	Senales	19 September 2009	1
Luxemburg	Lotz.w. Schule	14 June 2009	1
Latvia	Araisi	28 October 2008	3
Latvia	Lielvarde	20 June 2008	1
the Netherlands	Haps Apeldoorn	2 June 2002	15
the Netherlands	Archeon	1 October 2011	38
the Netherlands	Dongen	26 September 2010	4
the Netherlands	Emmen	13 April 2002	1
the Netherlands	Enkhuizen	12 October 2008	15
the Netherlands	HOME	14 August 2011	99
the Netherlands	Hunebedcentrum	5 October 2011	12
the Netherlands	Hunebedcentrum	5 October 2011	12
the Netherlands	Kaardebol	27 July 2006	1
the Netherlands	Nehalenniatempel	14 August 2010	1
the Netherlands	Orvelte	5 July 2002	4
the Netherlands	Schothorst	14 September 2000	4
the Netherlands	SPNF new	5 June 2007	5
the Netherlands	SPNF old	20 June 2002	10
the Netherlands	UBC	1 January 1997	1
the Netherlands	Wilhelminaoord	30 January 2010	5
the Netherlands	Zelhem	7 October 2006	2
Norway	Avaldsnes	9 july 2011	1
Norway	Jernaldergarden	7 july 2011	1
Norway	Landa	8 july 2011	1
Norway	Lofotr	30 October 2008	3
Poland	Biskupin	28 May 2004	8
Poland	Bochnia	17 December 2008	1
Poland	Dziejba	13 December 2008	1
Poland	Nowa Slupia	10 August 1999	1
Scotland	The Scottish Crannog Centre	16 November 2008	4

Country	Short name	Last visit	Number of visits
Sweden	Birka	30 June 2005	1
Sweden	Ekehagen	2 July 2005	1
Sweden	Eketorp	29 April 2011	2
Sweden	Foteviken	15 September 2008	8
Sweden	Malmo Kogg Museum	13 September 2008	3
Sweden	Salvestaden	27 April 2011	1
Sweden	Skäftekärr	28 June 2005	1
Sweden	Tingby	27 April 2011	1
Sweden	Vikinga Tider	24 January 2009	2
Slowakia	Liptovska Mara	21 September 2003	2
Wales	St Fagans	4 March 2010	3

Appendix F

The standardised Visitor Survey Form

This is the amended visitor survey form for future use in archaeological openair museums. It is based on the one used in this research, updated with new insights after using in eight such museums for a full season.

What date is it today?

.....

What factors made you choose to visit us today?

□ Interested in the past □ Interested in the local region □ Enjoy the weather □ Children friendly □ Educational value

□ Other

How often have you visited us before?

 \square I / we have visited you times before, the last visit was in (year).

How did you hear about us?

□ I / we have been here before (see earlier question)

□ Recommended by the Tourist Office

- \Box Recommended by the hotel / camping / B&B
- □ Recommended by friends
- \Box A Brochure

 \Box A Website

□ I / We know the museum already for a long time

- □ I was / we were just passing by
- □ Other

How easy was it to reach the museum?	\odot		$\overline{\mbox{\scriptsize (s)}}$
How did you enjoy the following:			
The buildings (reconstructions)	\odot	\bigcirc	$\overline{\mbox{\ensuremath{\otimes}}}$
The offered programme of activities	\odot	\bigcirc	$\overline{\mbox{$\odot$}}$
The tour guides / the staff	\odot	\bigcirc	$\overline{\mbox{$\odot$}}$
The guided tour	\odot		$\overline{\otimes}$
The entrance fees	\odot	\bigcirc	$\overline{\mbox{$\odot$}}$
The café/restaurant	\odot	\bigcirc	$\overline{\mbox{$\odot$}}$
The gift shop	\odot	\bigcirc	$\overline{\mbox{$\odot$}}$
The signs & leaflets	\odot	\bigcirc	$\overline{\mbox{$\odot$}}$
Overall experience	\odot	\bigcirc	$\overline{\otimes}$

How long have you stayed with us? □ Less than 1 hour □ 1-2 hours □ 2-3 hours □ 3+ hours

Did your visit today

□ Exceed your expectations
 □ Fall below your expectations
 □ I didn't know what to expect

Will you visit other places today? □ No, I / we only came for you

□ I / we don't know yet

Yes, namely:

□ ... □ ...

□ ...

□ ...

Open questions What did you like about us?

What could we improve?

Where do you come from?

City, Region, & Country

Where did you travel from to see us? □ I / we travelled from home □ I / we travelled from a Holliday address □ Different:

With whom were	e you visiting us?		
□ Single	\square with my partner	□ Family	Different:

••

How old are you? 1-14 years 15-20 years 21-30 years 31-50 years 51-65 years Over 65 years

Appendix G

Recommended Literature on Archaeological Open-Air Museums

For ease of reference, here a presentation is given of basic literature for the benefit of archaeological open-air museums. It starts with a thematic approach followed by literature on specific aspects of archaeological open-air museums. These shortlists are meant as fast reference for those pressed for time and needing to get an overview fast.

Thematic literature for archaeological open-air museums

History and Development:

- AHRENS, C., 1990. Wiederaufgebaute Vorzeit. Archäologische Freilichtmuseen in Europa. Neumünster: Wachholz Verlag.
- BARROIS, N. & DEMAREZ, L., 1995. Les Sites de Reconstitutions Archéologiques, Actes du Colloque d'Aubechies, 2-5 Septembre 1993. Aubechies: L'Archéosite D'Aubechies.
- IZQUIERDO, P.T., JUAN-TRESSERAS, J. & MATAMALA MELLIN, J. C., 2005. *Heritage Interpretation Centres: The Hicira Handbook*, Barcelona: Diputacio Barcelona.
- KEEFER, E., 2006. Zeitsprung in die Urgeschichte. Von wissenschaftlichen Versuch und lebendiger Vermittlung, in E. Keefer (ed.), Lebendige Vergangenheit. Vom archäologischen Experiment zur Zeitreise, Stuttgart: Theiss Verlag, 8-36.
- PELILLO, A., et al. 2009. *Guide to the Archaeological Open-Air Museums in Europe*. Modena: liveARCH, Museo Civico Archeologico Etnologico di Modena.
- PETERSSON, B., 2003. Föreställningar om det Förflutna, Arkeologi och Rekonstruktion Thesis (PhD) Lund: University of Lund.
- RENTZHOG, S., 2007. Open Air Museums. The History and Future of a Visionary Idea, Kristianstad: Jamtli Förlag & Carlssons Bokförlag.
- SCHMIDT, H., 2000. Archäologische Denkmäler in Deutschland. Rekonstruiert und wieder aufgebaut, Stuttgart: Theiss Verlag.

- SCHÖBEL, G., 2008: Von Unteruhldingen bis Groß Raden, Konzepte zur Rekonstruktion frühgeschichtlicher Denkmäler im 20. Jahrhundert, in anonymous (ed.), Das Denkmal als Fragment - Das Fragment als Denkmal. Denkmale als Attraktionen: Jahrestagung der Vereinigung der Landesdenkmalpfleger (VdL) und des ... 10.-13. Juni 2007 in Esslingen a.N., Stuttgart: Theiss Verlag, 93-118.
- STONE, P.G. & PLANEL, P.G. (eds), 1999. The Constructed Past. Experimental Archaeology, Education and the Public, Oxford: Routledge.

Science and Experiment:

- COLES, J.M., 1979. Experimental Archaeology, London: Academic Press.
- COMIS, L., 2010. Experimental Archaeology: Methodology and new Perspectives in Archaeological Open-Air Museums. *euroREA. Journal for (Re)construction and Experiment in Archaeology*, 7, 9-12.
- GOLDMANN, K., 2001. Phantom oder Wahrheit? Archäologische Freilichtmuseen und Experimentelle Archäologie, in M. Paβlick (ed.), Experimentelle Archäologie, Bilanz 2000, Archäologische Mitteilungen aus Nordwestdeutschland, Beiheft 37, Oldenburg: Isensee Verlag, 177-180.
- HANSEN, H.O., 1986. The Usefulness of a Permanent Experimental Centre? in O. Crumlin-Pedersen & M. Vinner (eds), *Sailing into the past*. Roskilde: The Viking Ship Museum, 18-25.
- KELTERBORN, P., 2005. Principles of Experimental Research in Archaeology, EuroREA, (Re)construction and Experiment in Archaeology – European Platform, 2, 120-122.
- MALINA, J., 1983. Archaeology and Experiment, Norwegian Archaeological Review, 16:2, 69-85.
- REYNOLDS, P.J., 1999b. The Nature of Experiment in Archaeology, in A.F. Harding (ed.), *Experiment and Design. Archaeological Studies in Honour of John Coles*, Oxford: Oxbow books, 156-162.

Education and Learning:

- BAY, J., 2004. Educational Introduction to the Historical Workshops in Denmark, *EuroREA*, (*Re*)construction and Experiment in Archaeology, 1, 129-134.
- HOOPER-GREENHILL, E., 1995. A Museum Educator's Perspective, in A.F. Chadwick & A. Stannett (eds), *Museums and the Education of Adults*, Leicester: the National Institute of Adult Continuing Education, 49-64.
- HEIN, G., 1998. Learning in the museum, Abingdon: Routledge.
- JEFFS, T. & SMITH, M.K., 1996. *Informal Education. Conversation, Democracy and Learning*, Ticknall: Education Now.

ZIPSANE, H., 2006. Lifelong Learning in Open Air Museums – a fascinating Part to play in Europe. Paper prepared for the 22nd Conference of the European Association of Open Air Museums August 2005 in Finland, Åbo. http://www.nckultur.org/attachments/article/109/Lifelong%20Learning% 20in%20Open%20Air%20Museums.pdf

Tourism:

- EUROPEAN COMMISSION, DIRECTORATE-GENERAL FOR ENTERPRISE – TOURISM UNIT 2003. Using Natural and Cultural Heritage to develop Sustainable Tourism in Non-traditional Tourism Testinations, Brussels: Luxembourg: Office for Official Publications of the European Communities.
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the value of an Archaeological Open-Air Museum is in its use

There are about 300 archaeological open-air museums in Europe. Their history goes from Romanticism up to modern-day tourism. With the majority dating to the past 30 years, they do more than simply present (re)constructed outdoor sceneries based on archaeology. They have an important role as education facilities and many showcase archaeology in a variety of ways. Compared to other museum categories, archaeological open-air museums boast a wide variety of manifestations.

This research assesses the value of archaeological open-air museums, their management and their visitors, and is the first to do so in such breadth and detail. After a literature study and general data collection among 199 of such museums in Europe, eight archaeological open-air museums from different countries were selected as case studies. They included museums in a very varied state with different balances between public versus private funding levels on the one hand, and on the other the proportion of private individuals to educational groups among their visitors.

The issue of 'quality' was investigated from different perspectives. The quality as assessed by the museum management was recorded in a management survey; the quality as experienced by their visitors was also recorded using a survey. In addition on-site observations were recorded. Management and visitors have different perspectives leading to different priorities and appreciation levels.

The studies conclude with recommendations, ideas and strategies which are applicable not just to the eight archaeological open-air museums under study, but to any such museum in general. The recommendations are divided into the six categories of management, staff, collections, marketing, interpretation and the visitors. They are designed to be informative statements of use to managers across the sector.



