





■ Experimental Centre Lejre Fishing Stone Age style

Linking Experimental Archaeology and Living History in the Heritage Industry

This article describes the way four archaeocentres go about gathering information on the past and how they pass on that information: Butser Ancient Farm in Hampshire, England, Lejre Historical-Archaeological Centre in Denmark, the Scottish Crannog Centre in Perth and Archaeolink Prehistory Centre in Aberdeenshire, both Scotland.

Carolyn FORREST (UK)

The main purpose of experimental archaeology is to seek a better understanding of how prehistoric artefacts were made and used. This involves using current archaeological data to reconstruct identical representations using similar materials and techniques. The aim of my research is to discover what forms of knowledge are generated through experimental archaeology, and how they are acquired, also, to consider how such knowledge informs our understanding of the past and how this knowledge is used. One of the largest domains for the generation and application of experimental archaeology is the heritage industry, which provides a hugely diverse assortment of historical periods and methods of portraying them. My research is centred on four different historical centres within the heritage industrv. This research (another word for 'research'?) will also show the advantages of using an anthropological approach to archaeological practice and interpretation. Recent anthropological study in the areas of craft, apprenticeship and enskilment; and history, memory and the past in the present, have had limited utilisation in any of the other associated disciplines and has had no impact on experimental archaeology at all. I hope to show that integration of these issues to be extremely beneficial in aiding our understanding of the past and will be applying them to the archaeological context, especially in relation to experimental archaeology.

My experiences over the last few years participating in historical interpretation, which often involved living history, have been instrumental in my choice of locations within the heritage industry. I have spent many happy hours at Archaeolink Prehistory Park dressed in a woollen tunic, sitting bare-foot in a roundhouse reconstruction. I have also participated in experimental

archaeology, which involves trying out various methods of simulating artefacts or actions through looking living history affects our knowledge of the past and how experimental archaeology contributes to this type of learning.

I am aware that an archaeologist is searching for clues to enable a better understanding of the past, but I am also aware that people in the past had complex social and cultural structures within their societies and this information cannot be accessed directly through the archaeological remains. Anthropology is concerned with gaining knowledge of how societies function by way of observing other cultures. Examining the way modern contemporary subsistence societies utilise their skills and possessions may provide explanation and insight into how ancient cultures functioned (Coles 1979: 4). I feel that historical interpretation would benefit immeasurably by looking at the archaeological evidence from the viewpoint of both disciplines.

Because there were no records written in prehistory which could tell me about life in that period, I have to look to the discipline of archaeology to provide the data I need Archaeologists have the hard, laborious task of excavating remains from the past, but also require the skill of interpreting their finds. Often, it is not the artefacts of high monetary value which are the greatest finds, but those of everyday objects, used by ordinary people, which help to fill in the blanks about life in the past.

However, it is not enough to just unearth these objects and look into their context. They do not tell us anything about when they were made, how they were made, who made them or how they were used For this we have to examine another area which is expanding within the realm of archaeology - interpretation - and one of the ways to help with the interpretation of archaeological finds is through experimental archaeology. I am particularly interested in the way we can gain knowledge by looking at what is left behind, whether it is a dwelling or an implement of some description, then trying to construct something similar using the technologies available in prehistory. What is interesting is looking at the various different ways this can be achieved and hoping that the physical act of reconstruction can offer a previously unseen or unthought-of insight into the actions of our ancestors.

Many of the skills and local knowledge of life in the past have been lost over time. Even the most simple (and I use this term loosely!)

task, like lighting a fire (without the aid of a box of matches) is beyond most of us. Of course, to be able to do this you need to be taught and information like this would have been readily passed down through generations It does not need to be written down and the transference of most of the skills would have been taught from a young age through hands-on demonstration. However, the advancement of technology has added to the decline in the demand for many of these skills and they have been lost. Experimental archaeology is one way in which we can gain insight into how things may have been done. I cannot stress the word 'may' enough, as experimental archaeology is not an exact science and only provides possibilities in answering hypotheses, but we do not have any way of verifying the results.

Over the last few years, thanks to programmes like Time Team and the new Ray Mears series, there has been a great revival of public interest in the past This growing band of 'armchair archaeologists' has also impacted on another phenomenon - 'prehistory centres'. These are centres where periods of local (pre) history are reconstructed and acted out either for entertainment or educational purposes. They vary in size, historical period and quality of recreated structures, but the one thing that they have in common is that they are imparting information about the past. My research is primarily based on looking at whether these centres help to further our understanding of the skills needed for life in the past and how they go about preserving and promoting these skills. How good is the quality of the information that is being portrayed? How it is being represented? How much experimental archaeology is being used to advance this knowledge? Or is the centre only being used as a means of entertainment?

Prehistory centres are a useful way of helping to give an insight into the past to those who are unable to envision it through verbal or written description alone. However, are we truly painting a picture of the past or just presenting an 'idyll' snapshot of what we think it was like? (Sorenson 2000: 65). Are we emphasising the fact enough that this is only what we think it may have been like. I am absolutely certain that these places offer the chance to experience sights, sounds and skills that are no longer the norm and learning from a 'hands on' perspective is often more valuable and lasting than reading about them. What I am most interested in is to see if these centres are a valid way of enhancing our knowledge of past skills through hands on activity or whether they are holding back the advancement of our knowledge, through lack of coordinated experimentation and analysis of results and a reluctance to progress and revise when new information becomes available.

For my research I chose four centres in Britain and abroad to study how they go about gathering information about the past and how they pass that information on. I spent four weeks at two well-established centres - Butser Ancient Farm in Hampshire, England and Lejre Historical-Archaeological Centre in Denmark, both of which have been going for over thirty years. I also selected the Scottish Crannog Centre in Perth and of course Archaeolink Prehistory Centre in Aberdeenshire, Scotland; both of which have been running for ten years or more. It was to my advantage that I have three years working experience as a Historical Interpretation Assistant and a university degree which incorporated a great deal of prehis-



■ Butser Repairing walls of large roundhouse



■ Butser Iron Age Farm and Livestock



■ Butser Re-daubing small roundhouse

tory. I was, therefore, able to quickly join in with the daily working routine after brushing up on localised knowledge. This was extremely helpful in gaining firsthand experience of how the centres function from the inside. However, initially I took the time at each centre to first visit it as a paying customer would, to give myself an unbiased, outside point of view.

Butser Ancient Farm

My first placement was in April 2006 at Butser Ancient farm near Portsmouth in Hampshire. It was set up in 1972 by the late Peter Reynolds, who wanted to create a site for education and scientific research into the late Iron Age (400 BC to AD 400).

Reynolds established himself as one of the world's leading experimental archaeologists and he was keen to make sure that his site was there for the main purpose of furthering our knowledge of the past and not to be used as purely public entertainment venue (Reyolds 1999: 126). Most importantly, he was very scientific in his approach to the experiments carried out at Butser and meticulously logged his experiments and the results. These have been published and are easily accessible. His experiments with roundhouses have been the blueprint for many other sites and have shown that reconstruction is a valuable tool in learning about the past. For example, previously many reconstruction

drawings showed a hole in the roof to let smoke out. The staff at Butser explained to me how Reynolds proved that the draught from the door would turn the hut into a furnace and it would catch alight very quickly. He showed by constructing round houses that the smoke would filter slowly through the thatch. Another important aspect of Butser is that things are allowed to naturally age and decay over time. The structures are not expected to be overly maintained or kept in a pristine fashion. Reynolds wanted to see how these structures functioned and endured over time as they possibly would have centuries ago (Reynolds 1999: 131) Therefore, Butser is a continually evolving site.

The other important aspect of Reynolds's work is the fact that he chose to reconstruct roundhouses and a Roman villa, using the exact dimensions and information from local archaeological sites. This is a chance to see these structures in a threedimensional form, something that many people are not able to visualise from the archaeological remains that are usually only left at ground level.

At Butser there is no living history taking place, unless it is for a special event. There are no costumed guides and the staff wear a t-shirt or sweatshirt with the Butser logo to distinguish themselves from the public. There are no guided tours and the public can wander around the centre at their leisure. There are

few, if any, information signs, so unless a member of staff is working in the vicinity there is no one in any particular spot to give out information. This can often be frustrating for the public, but the staff is wonderful and generous with their time and information.

I was able to assist in helping out with a visit from a local school and was able to see first-hand the quality and ability in which the information was imparted to the children by the staff. It is impossible not to notice the enthusiasm and interest the children have in being part of a 'hands-on' learning experience, something which I observed is a common occurrence at all the centres I have visited. Also, thanks to the meticulous nature of Peter Reynolds, any experimentation has continued to be scientifically logged for future reference by any interested parties. One of the highlights of my stay was the re-daubing of one of the smaller roundhouses. I took part in taking the old daub off the outside wall, mixing it with water to make it muddy again and then re-daubing the structure. Then I got the job of painting it with a lime wash to make it white I managed to hone my daubing technique and was able to look at the successes and failures of previous re-daubings over old and painted daub. I feel that being able to experience the textures, smells and techniques of daubing first hand gave me a far better insight than any text on the subject



■ Crannog Making fire with bow drill



Next, I spent two weeks in May and September at the Scottish Crannog Centre, which is situated on the banks of Loch Tay in Perthshire. The crannog is an example of an ancient loch dwelling, which has been based on underwater archaeological evidence from the Oakbank crannog site in Loch Tay, at a place nearby called Fearnan (Dixon 2004: 107) Work began on the crannog construction in 1994 and was finally opened to the public in July 1997. The visitors centre was opened in the Spring of 2000, where they exhibit many of the original artefacts found at the Oakbank site, display information and set up short videos of the underwater archaeology.

The staff takes the public on guided tours, works in the shop and carries out any maintenance that needs to be done. Unlike Butser the public are only allowed to visit the crannog as part of a guided tour. This is mainly due to safety reasons, as there are a maximum number of people allowed in the crannog at any one time. The tours run about every forty-five minutes, depending on demand, and last about forty-five minutes. The first fifteen minutes are unsupervised in the exhibition centre, and then a guide takes the tour party out onto the crannog and explains about its construction and life in the Iron Age. Finally, back on shore, the



■ The Scottish Crannog Centre View of crannog from shore

guide demonstrates several skills ranging from wood-turning, stonedrilling, spinning wool, grinding grain and fire-making. After the demonstrations by the guide are over the public are then free to try their skills out. The guides at the crannog centre wear a woollen tunic over their own clothes and the result is an odd mixture of the old and the new I went out on the tours with each of the guides and it is clearly evident early on where their particular interests lie. For example, one of the guides is from a farming background and has extensive knowledge about animals; another was more knowledgeable about plants and herbs. The guides' knowledge of the crannog and its

construction was superb and whoever gave the tour provided accurate and interesting information. Although more organised and more formal than Butser, the information is readily available and the public have the opportunity to try out various Iron Age technologies However, it has to be said that Butser has a more natural and authentic feel and you can have the chance to sit in a roundhouse on your own, away from any modern surroundings, unlike the crannog. Part of the problem is that whilst Butser has a large site to spread itself over and is in a secluded rural area, the Crannog Centre is on a smaller site in the heart of a busy countryside community.



■ Crannog Thatching demonstration



■ Experimental Centre Lejre 18th century farmhouse cooking

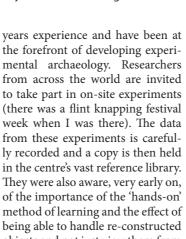


at the Historical-Archaeological Experimental Centre in Lejre, Denmark. The centre was opened in May 1964 by Hans-Ole Hansen on fifty hectares of land donated by Count Knud Holstein-Ledreborg, with the sole aim of scientific archaeological experimentation (Rasmussen & Grønnow 1999: 137). Within the first three years an Iron Age village had been constructed and a number of experimental workshops had been established pottery and textiles in particular. Like Butser they have over thirty

in Lejre

objects and not just view them from behind a sheet of glass.

The centre is set in an enormous area of beautiful landscape, with five main areas of interest - Stone Age,





■ Lejre Wild boar and their offspring

Iron Age, Viking Market, 17th century country cottages and the workshops. All are set apart from each other and the natural habitat helps to give you the impression that you have stepped back in time. There is usually a permanent staff of about ten, made up of academics, secretaries, area managers and craftspeople They can sometimes employ up to fifty additional staff during the main season, depending on how much funding is available. Often these people are students studying in related subjects and so have good background knowledge of the area to which they are assigned.

What is so impressive about the centre, apart from the sheer size, beautiful location and quality of structures is the attention to detail. They are extremely careful about making sure that if they do something or dress in period costume that it is as accurate as possible. After two weeks observing how the centre functioned I was allowed to participate with the families staying in the Iron Age Village. They stay for one week at a time and must remain in character and costume whilst the centre is open to visitors. The aim of their week is to go about the daily life of the village and possibly learning a new skill or do some repair work. It is fascinating for visitors to see people preparing and cooking their food, sometimes being offered a taste. The fact there is a range of age groups adds authenticity, as there would have been children in a real Iron Age village.



■ Lejre Re-enacting an Iron Age bog burial ceremony



■ Archaeolink Prehistory Park Wooden Henge and Stone Circle



■ Archaeolink Iron Age Roundhouse and Farm

Archaeolink Prehistory Park

For the remainder of the season I was back at work at Archaeolink Prehistory Park in Oyne, Aberdeenshire. Archaeolink was opened ten years ago at the foot of Berryhill in Oyne. On the hill behind the park there are archaeological remains of a roundhouse and at the top of the hill there are prehistoric remains of a defensive earthwork. This makes it an ideal area to promote local prehistory. It is also in the shadow of Bennachie, where it is claimed the Battle of Mons Graupius took place in 84AD when the Romans fought with local Celtic tribes On the park there are several areas which start at the Mesolithic and Neolithic periods, there is a Bronze Age forge, a Roman marching camp and finally, the Iron Age roundhouse and farm.

The Park is run by the Interpretation Team, who provides one-hour tours in the morning and afternoon, depending on demand, imparting interesting information about each of the sites and the local history involved. Efforts are made to dress in the appropriate period, although they are not as strict as in Lejre.

Like Lejre and the Crannog Centre there is a great emphasis placed on education through entertainment and there are many dedicated events throughout the year, albeit with an historical flavour. Over the last two years the management has tried to push forward their involve-

ment in experimental archaeology by inviting interested academics to work alongside them on various projects. One such project was the building of a huge Mesolithic boat from animal skins. It was successfully launched off the coast of Banffshire in the summer of 2006 at the Portsoy Boat Festival, and stayed afloat! Archaeolink realise the importance of experimental archaeology and are keen to be part of this developing subject.

Conclusion

The centres I have been using for my research put local historical knowledge into a physical context, which caters for education and tourism in order to produce revenue The historical constructions at all of the sites are predominately based on local archaeological evidence and are built with locally sourced materials

using prehistoric techniques, which are usually discovered through experimentation Although Lejre and Butser were established initially as places for scientific research into the area of experimental archaeology, neither can function without the revenue that education and tourism brings due to poor funding opportunities from the government and private charitable institutions.

So, how important is experimental archaeology in the heritage industry? To learn about the present we need to understand the past. Not just the big events or the famous people in history, but how people functioned at all levels of society and how progressive changes over time have shaped life today. Experimental archaeology helps to fill in the gaps in our knowledge of the past. By being able to try out ideas based upon archaeological infor-



■ Archaeolink Main Visitor Centre

mation, and putting it in a historically based context it will, perhaps, give us a better idea of how life *may* have been. For those wishing to participate in historical interpretation, experimental archaeology can show that there are numerous interpretations of the remains that archaeology unearths in order to recreate artefacts or structures By using this knowledge heritage centres can provide information and entertainment through living history and replication.

The fact that visits from schools and other educational facilities provides a significant part of the centres' revenue shows the realisation that from a pedagogical point of view this is a good way to provide information about the past. Teachers are aware that this is a subject where text book learning can be enhanced through hands-on activity. Educators and the wider public are no longer content to view their history from behind a glass panel, but want closer contact with prehistoric artefacts (Merriman 2004: 88) However, they are valuable, yet vulnerable to wear and tear, so replicas and constructions can create an historical context, without damaging the originals, allowing the generation of inter-generational skills to be passed on and the generation of new input and ideas from a younger perspective. There is nothing like children to put a whole new slant on an old idea! By watching the interaction of the children and the artisans it may give a broader insight into the various processes of learning, which demonstrate how skills have been handed down from master to novice and from the old to the young throughout time.

Interest in traditional crafts and skills ensures these centres have a place within the growing tourist industry (Vergo 2000: 61). Furthermore, an increased awareness of green issues and sustainability, and the resulting quest for knowledge into skills that are less intrusive and damaging to the environment has led many people to look to the past. Our ancestors relied on the land for survival and knew the importance of treating their environment with care and respect. Much of the traditional skills and knowledge were replaced with the advancement of technology. However, there has been, over the last few years, a great revival of interest in these ancient techniques and experimental archaeology has gone a long way to fill in some of the gaps in our knowledge By demonstrating these ecologically-friendly skills, heritage centres are enhancing the learning experience through visual stimulation and the promotion of sound environmental practices.

Why was it important to visit and experience the four different centres?

Although all four sites are basically trying to do the same thing – provide information about the past – it was interesting to see their differences and similarities and the questions these raised as part of my research, for example:

The importance of being in costume or not? Given the variation in levels of costume between the centres, this is a broad area of research Do costumes add or detract from the overall picture the centre is trying to create? Does the costume help to visualise the past or differentiate and alienate the guide from the visitor? Who is perceived to be the more knowledgeable, those with a costume or those without? Is it better to have no costume than one that is not historically accurate? Does wearing a costume create an empathy that helps with the process of experimental archaeology?

In fact, do we really need living history to bring to life what is learned by experimental archaeology, or can

experimental archaeology be fully explored without the social interaction that living history requires? Can we just build a structure or copy an artefact without looking at the human element?

Further, what is the value of a guided tour as compared to being left to one's own devices? Does location play a strong part in getting the right "feel" for the period being portrayed? Do the public ask the same questions at each centre, regardless of whether or not a guided tour was provided?

Peter Stone and Philippe Planel argue in their article in 'The Constructed Past' (1999: 1), that it is not enough just to build a construction. They point out that archaeology allows for a number of possible interpretations, therefore any information offered should stress that it is only one of, perhaps, many variations. What is important is for the construction to stimulate the visitor into wanting to know more about it Whether the vividness of history can be portrayed by a guide or a living history actor surely depends on their knowledge base, not the outfit they are wearing? However, a costumed guide can help to stimulate the visitor's mental imagery. What is important is that some sort of interaction is taking place between the visitor and the structure or artefact. Without it they become a static display like those found in museums. The fact is that these centres require continuing experimentation to develop the information from new archaeological evidence in order for them to evolve



■ The Scottish Crannog Centre Bow lathe demonstration



To undertake this experimentation they need to generate revenue and by providing living history, through what is learned by the experimental archaeology, they are able to provide education and entertainment in order to achieve this goal.

In my view the importance of the work being done in these centres will only be appreciated when experimental archaeology is readily recognised as a valid and valuable subject within archaeology. This can be helped by putting it on a more scientific basis (making sure of a clear hypothesis, logging methods and results). At present it is often put in the category of hobby, with the image of enthusiastic eccentrics messing about at weekends, or it being used as a means of entertainment The problem of a lack of coordinated resources has led to people 're-inventing the wheel', with many of the same experiments done over and over again. This in itself is not a problem, as there is no one true method of achieving a result, and as in present life there are many different ways to do something. However, what is needed is a way of getting a dedicated network of information started, so people are able to see what is currently happening in the subject. There also seems to be an air of distrust within the heritage industry with sometimes what appears to be an obsessive fear of passing on information. Visits to other sites are often undertaken like an MI5 espionage mission! I think far more can be gained by sharing information. I know I learned so much last year by being able to work alongside skilled artisans, which is exactly what would have happened in the past. Whether the knowledge is passed on through living history, costume wearing or otherwise, what is important is that people are able to access and experience this unique form of historical information, through hands-on participation, which is after all, what real life is about.

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Summary

Die Verbindung von Experimenteller Archäologie und "Lebender Geschichte" in der Kulturwirtschaft

Prähistorische Zentren oder Archäoparks befassen sich aus Unterhaltungs- oder Bildungsgründen mit der Rekonstruktion bestimmter Perioden der örtlichen (Ur-)Geschichte. Wie stark aber wird die Experimentelle Archäologie genutzt, um Wissen zu verbreiten? Die Zentren und Archäoparks, die in der Studie untersucht wurden, bringen Themen der lokalen Geschichte in einen dinglichen Kontext, der edukativen und touristischen Zwecken dient, um Einnahmen zu erzielen. Die historischen Konstruktionen aller Einrichtungen basieren vor allem auf Erkenntnissen der lokalen Archäologie und sind unter Anwendung urgeschichtlicher Techniken, die in den meisten Fällen durch experimentelle Forschungen rekonstruiert werden konnten, mit vor Ort gewonnenen Baumaterialien errichtet worden. Auch wenn Lejre und Butser ursprünglich als Orte für wissenschaftliche Forschungen zur Experimentellen Archäologie angelegt wurden, so können sie doch ohne die Einnahmen aus den pädagogischen Programmen und dem touristischen Angebot nicht existieren.

Insérer l'archéologie expérimentale et l'Histoire vivante dans l'industrie patrimoniale

Les centres de la Préhistoire ou autres archéoparcs restituent la (pré)histoire locale dans un double objectif ludique et pédagogique. Quel est l'apport de l'archéologie expérimentale dans l'avancée des connaissances? Les centres et archéoparcs utilisés comme terrains de recherche permettent de replacer les connaissances historiques dans un contexte concret, qui contribue à la formation et au tourisme, générateur de revenus. Les reconstitutions historiques dans la plupart de ces sites reposent principalement sur des témoignages archéologiques locaux et sont construites avec des matériaux locaux et avec des techniques préhistoriques, gestes qui sont le plus souvent retrouvés grâce à l'expérimentation. Bien que Leire et Buster aient été initialement créés comme des terrains d'expériences pour les scientifiques, aucun ne pourrait fonctionner sans les revenus que leurs apportent les actions pédagogiques et touristiques.

■ Carolyn Forrest, having completed her MA(hons) in Celtic Civilisation at the University of Aberdeen, is currently completing the last year of her reseach PhD in the Anthropology Department. She is especially interested in the value of experimental archaeology as a method of archaeological interpretation of the past.