

INTRODUCTION TO PRESERVATION IN-SITU

'I like roots. Plants don't grow well without them. People are the same.'
(Emmott 1994, 28)

This book is concerned with the preservation of archaeological remains, which includes all types of terrestrial archaeological site; graves, caves, castles, stone and earth buildings, earthworks and battlefields as well as the artefacts (coins, ceramics, weapons etc) and ecofacts (bones, seeds, shells etc) buried at such sites. Different types of site and artefact are often the concern of different groups of specialist archaeologists and curators; each generating different literatures, working in different materials and different craft traditions. However, heritage agencies are required to deal with a wide range of sites, have a consistent approach and apply ethical standards equitably in the preservation of a wide range of monuments. This book identifies some key published works in the different areas of the subject and by combining them with a series 'Introductions' to the various problems and approaches to preservation, it is hoped to create a single volume, which will lead to greater awareness of the subject. By drawing from widely differing sites, materials and approaches I seek to show that although the problems are substantial there are a range of options available and a more coherent approach to the subject is emerging. To aid this process a number of commonly used terms are defined in Table 0.1.

The Nature of the Past

Why is the past so important that we seek to preserve it? We only know things by reference to what we have seen and experienced in the past; therefore, a personal past is essential to

us to identify and understand our present. A more distant past also appears to be an essential human requirement, since it provides us with a wider sense of belonging. This manifests itself in many ways such as the need to trace one's ancestors or the need of immigrants to maintain the traditions of their 'homeland' – the roots in the quote at the start of this chapter. These requirements stem from the need for humans, as social animals, to have points of contact, shared experiences or beliefs so that there is some basis for communication. The unknown is feared, but things which fit into existing schemes of understanding are explicable and thus not frightening or threatening. Denial of an individual's past, like the denial of an individual's beliefs, has always been seen as a restriction on individual liberty; UNESCO identifies a cultural heritage as an essential human right, as it does access to food and water (Lowenthal 1996).

In a similar manner to individuals, groups appear to cherish a past, indeed they invariably define themselves and their traits or qualities by reference to their past. Thus regiments record their battle honours, sports teams record their victories and people erect monuments to their past heroes and leaders. No sooner is a country created than efforts are made to preserve the places and objects associated with its inception and its past. The house of Chairman Mao was a national monument before his death and Americans sought to preserve Colonial Williamsburg barely 175 years after it had been the capital city of Virginia. A past legitimises the present, whilst the new is not trusted since it shows things are easily changed. Thus, 'heritage' (Lowenthal 1996), goes beyond an individual's need to have a past, to be an essential component of almost every social and political organisation.

Studies of societies around the world suggest that many of them divide the past into 3 or 4 divisions (Layton 1994, 5-7)

- Present
- Recent past
- Ancient or distant past
- Origins

Examples include the Inuit (Anawak 1994), Hadza (Ndagala and Zengu 1994), peoples of north west Portugal (Pina-Cabral 1994, 62), Classical Greeks (Sparkes 1994, 126-7), and the Aboriginal peoples of N.E. Queensland (Chase 1994, 172-6). For many such groups the past is seen as a series of events which occurred in a specific sequence, even if there is no separate concept of time. In Europe historians and archaeologists have, since the Age of Enlightenment, developed a hugely detailed factually based 'culture history' account of the past based on written history and archaeological material. Crucially this has an independent chronometric system (years) determined by radiometric measurement, annual environmental and astronomical phenomena and calendars of historic events. This allows multiple separate pasts to be understood as happening at the same or different absolute times and there is an understanding of differing amounts of time occurring between events. However, the public grasp of the past, even in the developed countries of Europe, is often little more than the basic three or four divisions of past; their visits to castles, Roman forts, country houses and prehistoric monuments are often lumped together as things in the 'ancient' past.

When talking of the past, as understood by ancient Egyptians, Baines (1994, 131) remarked 'Like any other society they constructed their present and projected their future out of their

past'. He also noted that for them 'the past legitimates the present order'. This correspondence between the future, the past and the present, was most succinctly noted by George Orwell in the novel 1984 'Who controls the past, controls the future; who controls the present controls the past' (Orwell 1949). Recordings of the oral history of tribes such as the Tiv of Nigeria attest changes in their recounted oral history tradition in order to better explain the present (Lowenthal 1996). This has led Malinowski and other to see myths and oral history traditions as functioning entirely to support present needs (Layton 1994, 1). This is unlikely to be true given the prevalence of physical remains, which act as mnemonics for these accounts. Many oral history and written traditions make reference to, or draw hugely from, the landscape. Examples include the Paez of Columbian highlands (Rappaport 1994, 88), the Aboriginal peoples of N.E. Queensland (Chase 1994, 177), the people of north-west Portugal (Pina-Cabral 1994, 65) and the Inuit (Anawak 1994, 48), where prominent features in the landscape anchor the accounts of creation and the distant past. Their pasts, like all pasts, are made up of physical remains, and the narrative (oral or written) including associated beliefs, activities and traditions, which explain them. In Geoffrey of Monmouth's *History of the Kings of Britain* (1154); Arthur's father Uther Pendragon is buried at Stonehenge, whilst in William Caxton's *Chronicles of England* (1480) the Neolithic chambered tomb of Wayland's Smithy is associated with Volund the smith from Norse mythology.

The oral history tradition, prior to written records, is what binds these monuments into a past; but the oral tradition is potentially both long lived and inaccurate. Evidence exists for its ability to transmit information from a distant past, Panday (1994) suggests that even prehistoric past is recalled and written down in 11th century AD India. However, Pina-Cibal

(1994, 60) has shown that oral traditions of N.W. Portugal are all recent, failing to record significant changes of the 15th-19th century. Written texts can be similarly long lived and inaccurate. In such cases the sites or artefacts mentioned were seen as physical proof of the written or oral account of the past. These remains were valued for their associations with significant individuals or supernatural beings and for being proof of the truth of the past. Indeed the need for such physical 'touchstones' of the past was so great that they were sometimes recreated – as at the step pyramid of Djoser at Saqqara where a symbolic south tomb alludes to older burials in Upper Egypt. Funerary structures, originally temporary, were rebuilt symbolically in sturdy form and stone vases inscribed with 1st and 2nd dynasty kings names were buried in galleries beneath the pyramid to create the illusion of history, power and the sanctity that is attendant on a distant past (Baines 1994, 134).

Artefacts are hugely emotive symbols conveying messages powerfully to people and they also form physical evidence, proof of the past. They were frequently used as mnemonics to invoke the past and support, even legitimise the present, wearing the crown made you king. Many non-western cultures consider the spirit of the maker or owners of objects to be suffused into the fabric of the object. Archaeologists recognised that artefacts provide a detailed record of society – providing through changes in object form and decoration a means to identify culture, date, wealth, status, beliefs activities of peoples of the past, though context provides crucial evidence for accurate interpretation (Caple 2006).

Memorials identify particular events, people, or ideas from the past, which are important to a present society. They can take many forms, from buildings and objects of the past, to newly created statues, columns, plaques and structures (web sites to museums). It is their

meaning, the ability to invoke / reflect the past which is crucial. As with gravestones, memorials are often not concerned so much with the physical entity of the past rather they are 'sacred to the memory of'. Examples include the ruins of buildings preserved and sacred to the ancestors who 'inhabit' the place, though in reality they come from an entirely different period or culture. This is certainly true for many traditional / non-western cultures.

Though the term 'the past' is used to describe the objects and events of earlier times, Lowenthal, Merriman and others (Lowenthal 1996, Michalski 1994) distinguish between two forms of the past:

- History: The whole of the past, raw unrefined events. History is ever expanding and all inclusive. It explores and explains the past, its purpose is simply to be and be known. This is the past which is taught in classrooms and in books.
- Heritage: A personal inheritance of the past, a past which can be used in the present. It is that subsection of the past which an individual inherits, their family, their ancestry, and the traditions of their nation. It is exclusive, it is biased, and its purpose is to benefit the individual. It is personal memory, an attachment to people, places and things, a past that can be used.

Archaeological remains in a distant part of the country are part of a large data set, a dot on a distribution map, that we call history. But the same site is local to other people, it is where they played as children, local stories and legends, this is part of peoples' heritage – a

deeply personal past (Lowenthal 1996). Whilst it can reasonably be argued there is some continuum between heritage and history; personal heritages graduate into local and regional cultural memory and even national identities, for many people the heritage / history division applies to much of the past.

The landscape, sites, monuments and artefacts of the past can all act as mnemonics accessing the past, triggering memories and stories. However, the value placed on ancient remains is far more than this. It is complex altered by context, ownership and other associated sites and artefacts; they frequently form the focus of ceremonies, festivals and other social activities. Objects and sites can be valued in many different ways by different groups of people. It is important for heritage practitioners to understand these tangible and intangible values before they alter, amend or change the remains – even if that is an act of preservation they can unintentionally destroy key relationships and meanings of the monument/artefact. Preservation in situ aims to preserve as many of these physical and spiritual relationships as possible. Even the peoples who inhabit remote landscapes from the Canadian arctic to the Australia, whether Inuit or aboriginal, are becoming conscious of their changing lifestyles and the need to preserve these sites as a connection to the past; taking conscious actions to preserve the past, both the oral accounts and the physical sites, natural and human made (Anawak 1994, Chase 1994).

Starting to Preserve Remains

The hunter-gatherer communities of the European Palaeolithic and Mesolithic, like more recent aboriginal and bushman groups were mobile and transient; they had to carry everything. Their material culture was functional and they could not retain old, non-

functional artefacts. Consequently their past existed as an oral history, a past preserved through memory and invigorated through traditional practices such as retelling stories, performing ceremonies, dances and redecorating places in nature such as repainting rock art – effectively they created and maintained ‘in situ’ memorials within the landscape.

Some of the earliest evidence of ancestry in the archaeological record of Britain is suggested by Bradley (1998) who noted the visual similarity between megalithic tomb structures, portal dolmens, and the natural stone outcrops, known as tors, in areas such as Cornwall. These Neolithic tombs do not appear to have developed through copying the natural rock outcrops since they occur at earlier dates elsewhere on the Atlantic seaboard. However, since some of the natural rock outcrops appear to be incorporated within human made enclosures, Bradley has reasoned that the Neolithic people appropriated the natural rock outcrops treating them as ancestral places, perhaps seeing them as tombs of gods or ancestors. Thus they appear to have created a past for themselves and incorporated this physical evidence of that past into their culture.

The importance of this concept of ancestry in artefacts is also suggested by Gillings and Pollard (1999) when discussing the biography of the Grey Wether stone, from Avebury. They suggest that polished areas on the stone were initially created whilst it was still a natural boulder in the sarsen stone fields of Salisbury Plain when it acted as an abrasive block for smoothing and shaping flint axes. Over time it acquired meaning, a powerful place associated with activities and people of the past. Subsequently when the large ritual monument of Avebury was created, these sarsen boulders were used to form a megalithic ring, whose significance was initially derived from the accumulated power and meaning of

the ancestral stones of which it was composed. A similar example of a valued ancestral stone is provided by the decorated capstones of the Neolithic dolmen at Gavrinis in Brittany, which can be joined to capstones of dolmens of Table des Marchand and Er Vinglé at Locmariaquer more than 4km distant; an earlier ancestor object, which had clearly been highly valued and decorated then deliberately fragmented and the pieces moved and reused in new locations (Bradley 2002, 36-7).

Once you have permanent dwellings you can retain (protect) objects which are important to you or your society. In 6th century BC, En-nigaldi-Nanna, the daughter of Mesopotamian king Nabonidus, had a collection of ancient objects in a building which has been interpreted as a school (Lewis 1992) and is perhaps the earliest museum; a collection used to educate others. Objects were also collected into the temples of Ancient Greece and Rome, such as that established in 490 BC in the temple of Delphi to celebrate the victory of the Athenians at Marathon. This collection and preservation of artefacts continued at places of worship continued resulting in the treasuries of medieval cathedrals, mosques and Shinto shrines. These objects were venerated not for their age but because they provided physical proof of the people and events in mentioned in holy books and texts. These objects were sometimes such powerful symbols they could have had miraculous powers to heal, cause unusual happenings or sanctify the area around them or things they touched. Objects of the past were also collected by medieval monarchs and, later, classical antiquities were acquired and displayed by the princes of the Renaissance to demonstrated the power, prestige, wealth, knowledge and taste of their owner (Chapter 5). These collections developed into museums by the 19th century as they developed research and educative roles and were eventually seen and used by the public (Lewis 1992). The sites from which these antiquities came

survived through neglect, benevolent ownership or a socially perceived ancestral value (Chapter 8). Legal protection for sites of antiquity started to develop from the mid 17th century (Chapter 4).

The present day philosophical basis for preserving archaeological remains finds its origins in the Age of Enlightenment, which sought evidence from observation of the natural, physical world rather than religious texts and believed that, through reason, humankind could find knowledge and happiness. Sites and artefacts of antiquity begin to be preserved in order that they could be studied and classified, like mounted butterflies or animals preserved in spirit jars. This is part of the larger process of collecting and preserving evidence from the natural world, through which we have built up a detailed cultural history understanding, a factual past into which new specimens and sites can be fitted. We also preserve sites and artefacts, from earthworks to weapons so that future generations can study them and reassess, reorganise and rewrite our past. Though numerous other personal and national motives have become involved with collecting; preserving and presenting archaeological remains, the need to create an evidence-based understanding of the past to match our understanding of the biology, physics and chemistry of the natural world, remains at the heart of the Enlightenment ideal. Every society has a past; one it creates to help support its belief system and social structure. From the 17th century European society developed one based on physical evidence and reason.

The Emergence of the Concept of Preservation in Situ

Medieval monarchs such as Henry I and Henry III had menageries, collections of wild and exotic animals from around the world (Blunt 1976), as well as collections of unusual, ancient

and artistic objects (Lewis 1992). In the centuries which followed the menageries became zoos, owned by nations, cities and learned societies. They were retained or re-established as symbols of civic and national pride and to inform the members of the zoological societies who supported them. By the late 19th century they developed the role of entertaining the general public as they became larger and increasingly funded through paid admission (Blunt 1976, Vevers 1976). However, by the late 20th century, public attitudes had changed, and for many people in Europe and North America capturing and caging wild animals was seen as cruel and oppressive. Through education, film, television and travel the public has become interested in the lives of animals, their actions and interactions, and their role in the natural world. Indeed, this could be described as the 'purpose' or 'meaning' of wild animals to much of modern society. The removal of wild and exotic animals from their natural habitats is no longer seen as justifiable. Consequently zoos in the present century have emphasised their educational role and their involvement in breeding programmes to support endangered species. The expectation now, is that animals will be preserved in the wild. Even if we cannot see them, we believe it is important that they are there and safeguarded (legal protection and reserves or National Parks) for future generations. Present day nature conservation measures are focussed on preserving and even recreating natural habitats such as wetlands, which are widely understood as essential to maintain wildlife.

Ancient archaeological and historic artefacts are following the same public expectations. Antiquities were initially seen as rare and precious curiosities. European archaeologists, like Austin Henry Layard, roamed through the ruins of ancient Middle Eastern civilisations, like explorers in a jungle, sending back specimens to European museums. In 1848-50 he sent

the winged beast gate portals from the palace at Nimroud back to the British Museum, to be, in his words, the 'wonder stock to the busy crowd of a new world' (Chamberlin 1979, 124). However, again through the mediums of education, film, television and travel, the subject of archaeology is developing. The public has become interested in the people of the ancient world and, though their art and artefacts, their ideas and actions can be identified and understood. The archaeological context from which the objects have come is, like an animal's habitat, frequently the key mechanism to understanding its role or purpose. The efforts of many developing countries to retain and display sites and artefacts from their past as well as banning the export of archaeological artefacts and controlling foreign excavations in their countries have greatly enhanced this. Such developments are widely supported by the public in the developed world. Increasingly antiquities are preserved in their original context, their 'natural habitat'. Mosaics, for example, are now rarely lifted but are preserved in the shattered remains of the villas in which they were constructed; a setting in which their shape, orientation, patterns and materials have obvious meaning. Preservation of archaeological remains in situ is a product of changing social values of the past and its role in national and regional identity. Though it can be detected early in the subject's history, it is only in the last 20 years that preservation in situ has become the dominant social presumption for archaeological remains.

Though this subject has deep roots in the concerns of the 19th century, and is increasingly emphasised in the charters which have characterised the 20th century (Chapter 5), much of the literature which relates to this subject is more recent. The Getty Conservation Institute, an organisation which has recognised preservation in situ and reburial as a key approach to archaeological conservation held and published the proceedings of conferences on this

subject in Cyprus in 1983 (Stanley Price 1984), Ghent in 1985 (ICCROM 1986), Mexico in 1986 (Hodges 1987), the Mediterranean region in 1995 (de la Torre 1997), Corinth in 2000 (Teutonico and Palumbo 2000) and Sante Fe in 2003 (Burch and Matero 2004). It has additionally supported a range of preservation in situ projects such as the Laetoli trackways (Chapter 14) and the Mogao Grottoes (Chapter 10). British and European practitioners held and published a series of Preservation of Archaeological Remains in Situ (PARIS) conferences; PARIS 1 in London in 1996 (Corfield et al 1998), PARIS 2 in London in 2001 (Nixon 2004), PARIS 3 in Amsterdam in 2006 (Kars and van Heeringen 2008) PARIS 4 in Copenhagen in 2011 (Gregory and Matthiesen 2012). These conferences initially started with a focus on waterlogged sites but are developing to cover the full range of archaeological sites and burial environments. The journal which covers this subject *Conservation and Management of Archaeological Sites* (CMAS) started in 1998. Specific types of sites, such as earthen architecture (adobe) (Chapter 7), and mosaics have held regular conferences on their subject which invariably featured papers on preservation in situ. Much of the literature on this subject up to 1999 was summarised in the GCI Project Bibliography: Conservation and Management of Archaeological Sites http://www.getty.edu/conservation/resources/archaeology_bib.pdf whilst Sullivan and Mackay (2012) have recently produced a substantial reader on the conservation and management of archaeological sites.

My Perception of the Past and Preservation

Archaeology was created by a 'western' (Europe and its colonies) experience (Bahn 1996, xi), consequently in exploring the development of the preservation of archaeological remains this book will have a considerable European bias. As this book is written by an

archaeologist and conservator who has worked exclusively in Britain it uses many British examples. However, as the subject develops it meets an increasing range of societies and differing attitudes to the past – generating new approaches to how and why archaeological remains can be revealed, understood and preserved. In this book the subject has been initially divided into different types of evidence; archaeological, scientific, legal and conservation whose origins and history are explored (Chapters 1-5). Subsequently six different types of building material or burial environments are identified, which is how most archaeologists will focus on the subject, and their decay and damage problems and the efforts which have been made to mitigate such degradation is described (Chapters 6-11). Finally a number of mitigation strategies; visitor management, shelters, reburial and some concluding remarks (Chapters 12-15) are outlined.

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