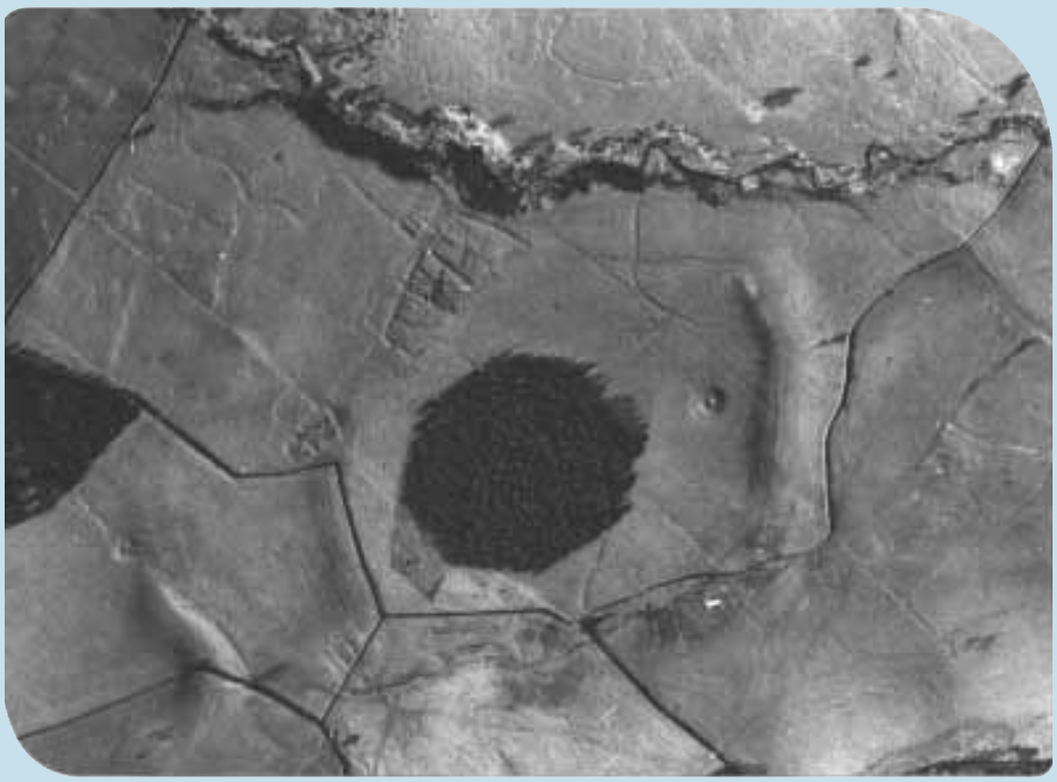
Chapter 5

Reading, Understanding and Explaining: Landscape as Information



Prehistoric archaeology within an area of post-medieval enclosure, North Lancashire

Learning to understand the past

This book amply demonstrates the complexity of landscape, and how its diversity and detail comprise interweaving traces of past activity and time-depth. We have seen how features of different ages lie jumbled together in the modern landscape – the various phases of dikes that cross Dithmarschen dating from prehistory to modern times, and how the high–backed long–acres of Funen overlay Iron Age settlement. We've also seen how survival is rarely complete with early traces partially removed by later phases and existing in a disjointed form, such as the patches of Iron Age field systems in north Lancashire lying inside 18th and 19th century fields.

The question that we must ask now is how do we begin to unravel these traces and explain the processes that have created the modern landscape? Our stories have all shown in one way or another how we know about the past and how we recognise and understand its echoes in the world around us. This chapter takes a more focused look at this issue. It turns our attention to the various methods of understanding and discovery that archaeologists and others employ, and looks at how this information can be transferred into methods of teaching and explaining.

Archaeology can provide a structured approach to the landscape, and there are numerous sophisticated techniques that are used in both excavation and in non-destructive methods. It is important to remember, however, that archaeology on its own cannot answer all of the questions that there are about the landscape – to do this requires an holistic approach that works across many disciplines.

This chapter looks at the early origins of excavation and antiquarianism, driven by the desire to know about the past. We will then look at more modern archaeological field techniques, many of which have been used by the European Pathways to the Cultural Landscape (EPCL) project partners with great success, and the stories presented here will give examples of how these methods

have helped to improve our understanding of the landscape. Various desk–based methods will also be considered, such as analysing maps and air photographs to help identify the historic character of the landscape, and using historic documents to help tell the story of landscape traces. Having looked at how this information is collected together we will finally consider some of the ways that it can be made available to the public in accessible ways, – and mention some of the problems that can be encountered along the way.

Archaeology's origins

From the late 17th century onwards, archaeological excavation began to be undertaken as a serious enquiry into the past across much of Europe. The interest of antiquarians, as they became known, lay in the excavation of enigmatic monuments such as prehistoric burial mounds and it was not uncommon for several sites to be dug very quickly in a single day. In many cases the techniques employed were very basic, amounting to little more than treasure hunting, but it is with these pioneering practitioners that methods of archaeological excavation and recording began to develop and the foundations of the future scientific discipline were laid. These early archaeologists often gained their experience and borrowed skills from other professions where accuracy and a systematic approach were necessary, such as the natural sciences, medicine, surveying or the military.

By the early 19th century there were already a number of influential pioneers who had helped to shape the development of the discipline. They ranged from wealthy people such as aristocrats (and their employees) through to enthusiastic clergymen and teachers; their excavations provide the foundations of many national and local museum archaeological collections. Examples of such personalities within the countries of our network include General Pitt Rivers from England, Christian Thomsen from Denmark, Pater Crolmus from Bohemia and Johanna Mestorf in Schleswig-Holstein, Germany who became the first female professor in a German University in the 19th century. Also from Denmark was a gentleman called Niels Sehested, an important 19th century archaeological figure who is the subject of our first story in this chapter.

All Danish archaeologists know the painting of an elderly gentleman, stick in hand and with spurred riding boots, supervising an archaeological dig. The man is Niels Frederick Bernhard Sehested, lord of the manor of Broholm, Chamberlain and Master of the Royal Hunt. The place is Møllegårds Field, part of Sehested's estate and at the time the site of Denmark's largest Iron Age excavation. It is October 1881, three months before his death in 1882 at the age of 69.

Sehested had taken possession of Broholm in 1839, and he led the estate through a period of much needed improvements in the running of its forestry and agricultural activities and in the modernisation of its farm buildings. In addition, he believed it was imperative to reform the tenancy system to improve living conditions for farm labourers, not only on his own estate but across Denmark. Sehested's writings had a significant influence on the Copyhold Act of 19th February 1861, and therefore directly on the Danish countryside and on the landscape itself.

In 1833 the Broholm treasure – four and a half kilograms of gold artefacts buried at the beginning of the 6th century BC – was discovered at Lundeborg, in a field belonging to the estate. Sehested arrived just after the finds had appeared, and there can be no doubt that the event was the catalyst for an archaeological interest that lasted for the rest of his life. For the next half century he threw himself into the systematic collection of

Niels Sehested observing excavations in 1881 at Broholm, Funen

Broholm, Funen

archaeological specimens and the registration and publication of prehistoric relics in the vicinity of Broholm.

Møllegårds Field became one of Sehested's largest archaeological projects. He himself directed the excavation of the first batch of nearly 400 graves, and the site ultimately yielded more than 2200 graves from the Roman Iron Age to become the largest known burial site of the period. Nor did he keep his results to himself. At the same time as his first book was published, he designed and built a museum in the gardens behind the castle which was opened in 1878, and here he placed many of the artefacts from his collection – the Stone Age material alone consisted of 58000 items. On Sundays he opened the museum to visitors and himself acted as guide to the ancient history of the area. After its refurbishment, the museum was once again opened to the public in the summer of 2002, now a permanent part of the Funen cultural landscape. In the year of his death, 1882, the local people erected a memorial stone to him on Møllegårds Field, the spot where the artist Magnus Petersen had immortalised a man with his stick. In this way too, his life and achievements are still a visible part of the cultural landscape.

Archaeology Today

Excavation continues to form an important part of an archaeologist's work, but it is conducted in a very different manner to that which Sehested might recognise. Today, archaeology is also a discipline of resource management and sustainable development as well as of academic research; like other sciences, it now has 'pure' and 'applied' branches. Excavations today are therefore most often determined by the need to examine and record sites before they are destroyed by development, within research agendas that recognise both conservation and academic requirements.

In the more recent history of the archaeological profession there has been an increased interest in the study of the historic landscape as a whole, instead of the traditional approach of studying a series of isolated archaeological sites. When excavations take place today, therefore, the objective is not simply to find out what happened at a particular site many years ago,

Broholm Museum, Funen

Asva fortified settlement, Kaali

Excavations at the Kaali main crater

but also to try and understand how it fitted into its surrounding environment, and how it still fits into today's cultural landscape.

When an excavation is carried out, a number of techniques are employed, which aim to ensure that the maximum amount of information is gleaned. This process can reveal a great deal about both a specific site and its context as part of the cultural landscape. For example, in Albersdorf, as we saw in a story in Chapter 1, the excavation of wurten has provided an insight into how these numerous features distributed across the salt marsh of Schleswig-Holstein were formed. The discovery and analysis of waterlogged finds and bone assemblages have enabled us to gain a greater understanding of how people lived in this particular environment.

If an archaeologist is fortunate, she or he will discover finds that enable a site or at least part of a site to be dated, typically using diagnostic sherds of pottery and metalwork, or occasionally coins. It is also common for assumptions to be made about the dating of a site on the grounds of form or style; for example, earthwork enclosures of a particular shape located across the landscape might be expected to date from a similar period. In Saaremaa, Estonia, the dating of one particular catastrophic episode in the history of a hillfort has not only provided an insight into the occupation phases of the settlement itself, but has also provided a possible date for the Kaali meteor, with its profound impact upon the landscape. Excavations of the once thriving fortified settlement of Asva revealed that it was destroyed in the 7th century BC, and evidence points to the Kaali meteor being responsible. Archaeologists discovered a thick layer of ash covering the hillfort along with confirmation of an intense heat. Excavations also revealed that there was a long gap between the destruction of the hillfort and the construction of a new settlement on the same site.

Archaeological excavation is therefore an important method of providing information about the landscape, its past land uses and processes of change. Despite the increasing efficiency and accuracy of geophysical techniques that can 'see' below the ground, however, it is often impossible to predict what discoveries an archaeological excavation will reveal about the past. Only when turf and topsoil have been stripped can we begin to appreciate the true nature of a site and the period to which it might belong.

The excavation of sites that date to different periods reveals very different features and information about past land use in the cultural landscape, for example, the site of an 18th century pottery kiln will provide useful information about the technology and

fashions of the time and patterns of trade. The remains of a medieval house, in contrast, might tell us about the status of the family who lived there, its basic functions and maybe an insight into the diet of its occupants. An Iron Age cemetery will tell us about the people themselves.

Dead men tell no tales, but in the hands of archaeologists and anthropologists even the most meagre skeletal remains can be forced to yield significant information about people of the past. Well-preserved finds in peat-bogs of people sacrificed in ancient lakes can tell us much about clothing, diet and haircare. Skeletons from graves, or even the small, charred lumps of bone taken from Iron Age cremation sites can, given the right analysis, provide worthwhile information. If a quantity of graves are present at the burial site, it may be possible to study the gender and age distribution of the population group. In quite extraordinary cases archaeologists have found Iron Age villages complete with their associated burial sites. Here it is possible to compare a study of the age and sex of the buried with the size of the village and thereby calculate the size and make-up of the living Iron Age population. Indeed, we can almost say that the dead come alive and populate the landscape.

On the range of hills called Lykkebjerg in Denmark, a village was established with an attached burial site some time between the 1st and 4th centuries AD. Remains of skeletons from the graves show that the village consisted on average of eighteen to twenty–four people distributed among three – four farms. Each individual farm was run by a family, which typically consisted of a couple, one unmarried adult or grandparent and three children. An Iron Age woman gave birth to six children on average, but with an infant death rate of 50%, only half survived their first year. Despite such a high mortality rate, the large number of Late Iron Age births gave rise to a population with significantly more children and young people than we know in the Denmark of today.

Analysis of skeletal remains and household sites at Lykkebjerg can therefore tell us about the size and make-up of small rural communities in the Iron Age. The results can also be used as a model to describe how the landscape was utilised for arable cultivation and animal husbandry, and the extent to which resources were exploited.

The discovery of certain finds and features can lead to particular techniques being employed on an archaeological excavation. For example, when charcoal-rich deposits are discovered (usually occurring in hearths, or as the result of a fire), samples are taken and sent away for Carbon–14 analysis, allowing accurate dating for archaeological contexts. Another example might be the inclusion of a sampling strategy for rich organic deposits, whereby a percentage sample of the soil from particular archaeological features are collected and sent off to a laboratory for environmental processing.

The next story is from the Bjäre Peninsula in southern Sweden, a fascinating landscape dominated by Bronze Age burial mounds. As part of the Bjäre project small trenches were carefully dug into a small number of mounds. The aim was to collect soil samples to enable the analysis of their pollen content, and this has led to the discovery of new information about the development of this cultural landscape.

Like tangible memories of the past, the burial mounds from the Bronze Age period are densely distributed across the Bjäre peninsula. They differ in size and appearance, but they all have past history and hidden memories in common. The landscape of the Bjäre peninsula is very much affected by its Bronze Age heritage. Traditionally archaeologists have dealt with the mounds as artefacts, seeing them as points on a map, and the greatest interest has been in the discovery of finds in the graves within them. Often they have been used for several funerals over a long period of time, some very rich, which has been a reason why the Bronze Age period is seen as having elaborate social stratification. Also, because of the sizes and the locations of the mounds in prominent and strategic places, they have been seen as monuments. It is rather interesting to think of the places themselves as monuments, even without the mounds placed on top of them, as surely many of these sites have been chosen for burials because they were already important and socially recognised locations.

Finds revealed by excavation, Lykkebjerg, Funen

Bronze Age mounds are a common sight on the horizon in Bjäre

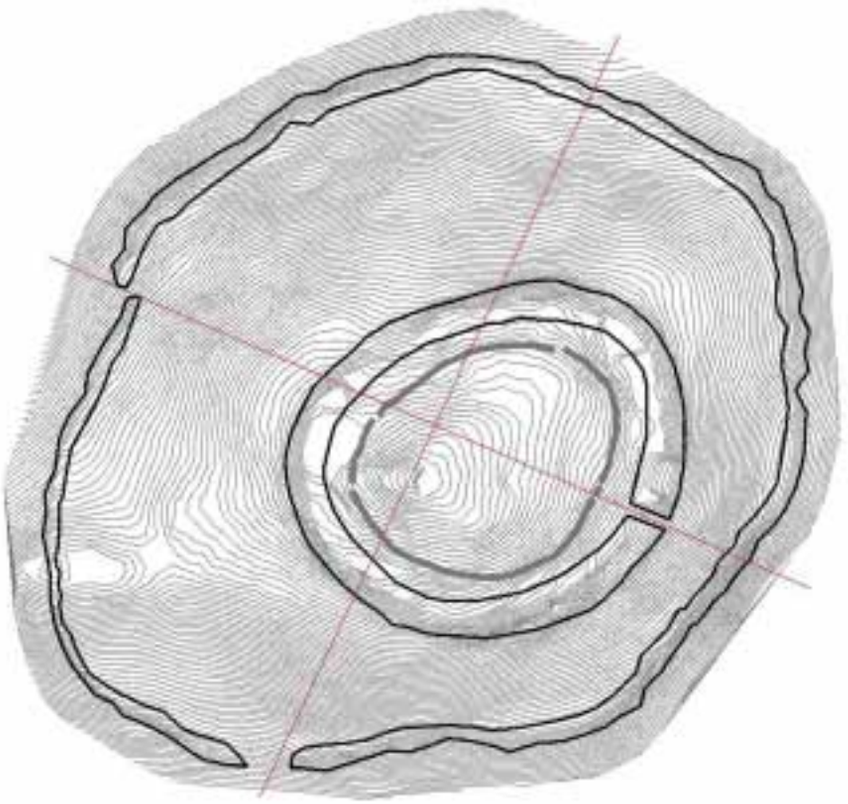
The significance of the mounds has changed over time. The original builders may not have envisaged their later reuse by successive generations, or have had any anticipation of their later proliferation across the landscape of the peninsula over a considerable period of time. Meaning has been added to meaning to create what we today can perceive and interpret. For example, in the 19th century there was a large reorganisation and subdivision of farmland in Sweden. The surveyors used many of the mounds as landmarks when making the new divisions, ensuring that the prehistoric significance of the landscape was still present when creating today's modern agricultural landscape.

Recently, archaeologists have begun to see the burial mounds not only as artefacts placed in the landscape, but also as sources for collecting further information about the cultural landscape. In the Bjäre project, a great amount of energy has been put into getting information from pollen in the buried layers of soil underneath mounds as well as from the present vegetation covering their surfaces.

Pollen analysis has been made on soil samples from both the former ground level and from the fill of the mounds. Pollen from surrounding vegetation is constantly being absorbed into the turf, which means that in buried layers of turf we can find grains of pollen and in different environments they have different levels of preservation. Each plant species produces pollen with a unique appearance which can be identified through a microscope, and by distinguishing and counting the surviving pollen-grains from former turf layers within the mounds we are able to see what plants once grew within the cultural landscape. Pollen samples taken from a mound's surface today can also give us a picture of what has been growing on and around the mound in recent times. In this way we are able to recreate the local cultural landscape in which these investigated burial mounds were erected. The samples are still being analysed but preliminary results show that the Bronze Age landscape seems to be have been an open one where grazing-land was an important feature. Some variation between different locations is expected, and thanks to these analyses we hopefully will be able to understand how the cultural landscape was organised in a smaller scale, and not only in general terms.

Even the grass and herbs growing on the burial mounds today have certain stories to tell about their history, based on the assumption that the mounds are places with

Excavation of a Bronze Age mound in Bjäre



Topographical survey of Boudy hillfort, Prácheňsko

a long history of importance. During the Bronze Age when they were still in use, care was taken not to allow them to get overgrown with shrubs or trees. They seem to have remained important places even into the Iron Age and later, and quite a few of them are still being cared for by grazing or other means in the modern day. This means that the vegetation growing on the mounds may have a very long and different history compared with that found in the fields nearby. The vegetation on the mounds may be the result of older land uses that do not survive anywhere else in an area otherwise farmed intensively.

The Bronze Age burial mounds on the Bjäre peninsula therefore contain testimonies about this landscape stretching back several thousands of years. They continue to influence the physical patterns of the modern landscape as well as our perceptions of it.

Despite the popular image, excavation is only one technique available to today's archaeologists. Other non-destructive types of exploration may be used, which are often carried out over much larger areas and are better suited to understanding more of the whole landscape rather than just small sites. These might include topographical survey of earthworks or geophysical survey, which can locate the tell-tale patterns of buried remains that cause anomalies in the electromagnetic properties of the soil. Another technique particularly suited to looking at large areas, is fieldwalking, the systematic search for diagnostic artefacts thrown up by the plough. This may be used to identify function, form and date – and when carried out over large regions, the distribution and pattern – of buried settlements. The technique involves laying out a grid system over a ploughed field and plotting where surface finds, such as pottery sherds, loom weights or flint implements, are located. Ploughing can be destructive, particularly if archaeological features are located quite close to ground level, so as the soil is churned up objects are disturbed and deposited within the ploughsoil. Concentrations of particular finds can sometimes be identified by fieldwalking, leading to the discovery of buried archaeological features. The EPCL project in Prácheňsko successfully used fieldwalking to explore a large portion of its project area.

Archaeological field techniques can therefore provide a new insight into the cultural landscape, as these examples from across Europe have shown. But it is not necessary to get covered in mud if you want to investigate the past, as there are also a variety of desk-based methods that can be used to explore the historic dimension of the landscape.

One of the best ways to start unravelling the cultural landscape is by looking at a modern map. Maps contain a vast amount of information; they show topography, the network of rivers and springs, the distribution of woodland, patterns of consumption

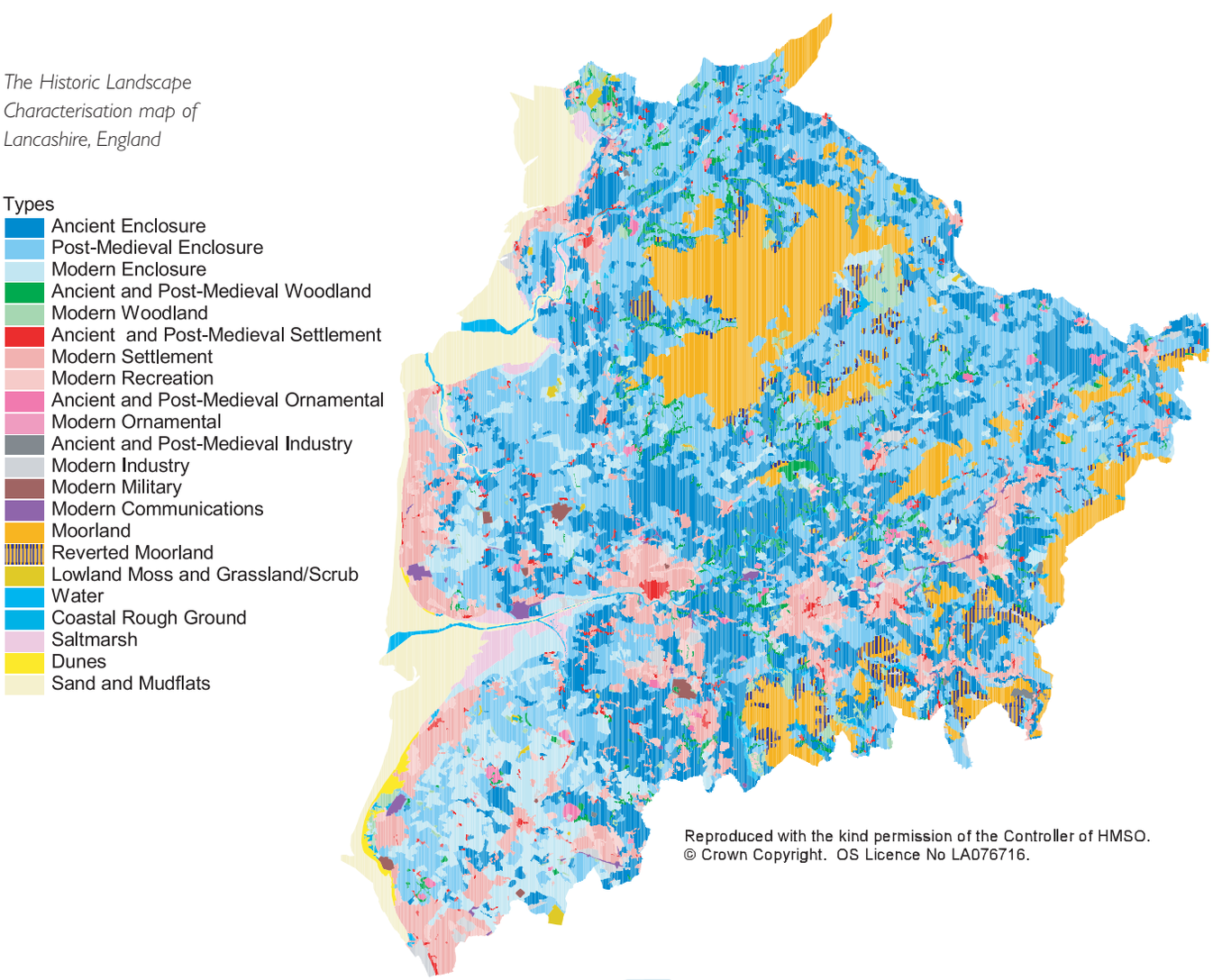
(industry) and social networks such as settlement patterns, as well as identifying key archaeological features. Information is also hidden in place names, which can denote former land use or give clues as to when a village was established. For example, in England place names that have Viking origins are able to indicate the former extent of their influence in the early medieval period: Grimsargh, in Lancashire, which translates as the *ergh* or pasture of Grim, which is a well known Old Norwegian personal name. The modern map is therefore a mine of information. Moreover, when measured against earlier maps, the modern map can be used to see how the landscape has changed over time, for example how the former area of a settlement has grown or the extent of woodland reduced, or how field patterns have been reorganised.

A tool that has recently been developed to provide an understanding of the historic dimension of the modern landscape is Historic Landscape Characterisation (HLC), and the following is an example of how this initiative has been used in Lancashire.

HLC is a 'broad–brush' method of analysis using a GIS (Geographic Information System), that divides the landscape into character types based upon morphological (shapes and patterns) and interpretive (reasoned understanding) criteria, each type with particular attributes that distinguish it from the rest.

Our Bowland project is part of the Lancashire HLC. Here, for example, 'Moorland' is largely defined by unenclosed land with extensive views and tree cover limited to steep–sided valleys. In contrast to this the area identified as 'Ancient Enclosure' (land enclosed before 1600) tends to occur in lowland areas and is defined by a patchwork of irregular fields, interspersed with farms, hamlets and villages. Other character types include 'Ancient and Post–Medieval Settlement', 'Ancient and Post–Medieval Ornamental', 'Modern Woodland' and 'Ancient and Post–Medieval Woodland'.

The Historic Landscape Characterisation map of Lancashire, England



The upland moor, Bowland

Particular archaeological features are likely to occur within each character type. In 'Moorland' these might be Bronze Age cairns or 19th century shooting butts, as well as a high potential for prehistoric remains within the underlying peat; features that can occur in an area of 'Ancient Enclosure' include deserted medieval settlements, common field systems, ridge and furrow, deer parks, quarries and crosses. To some extent we can then use HLC to predict where we are most likely to find monuments of particular types, and in what state of preservation.

The Lancashire HLC also contains a series of information layers that consider former land use and processes of change. For example, this includes the mapping of areas of former mossland along with assarted landscapes that were cleared to make way for settlement and agriculture. Dates are also ascribed to the character types, providing an indication of when a particular phase of enclosure or reorganisation is likely to have taken place.

Change that has occurred in recent history has also been identified in this HLC by comparing the 1840s mapping with the modern edition. This shows where change has completely altered the character of the landscape, as well as highlighting landscapes where 'old' and 'new' are intermingled. In Lancashire, for example, the main area where change has occurred is in the south of the county where industrial developments in the 19th century prompted the massive growth of urban areas – and a corresponding agricultural reorganisation of adjacent land.

HLC therefore provides an overview of the historical diversity that exists within the landscape, and an understanding of what makes it special and distinctive. This information can then be used to support a number of practical management uses such as targeting agri-environment grant schemes for farmers, feeding into village design statements, deciding applications for permission for new development, and considering woodland planting and hedgerow boundary proposals.

HLC provides a context for appreciating how archaeological sites fit into the historic landscape. It is like an historic wallpaper upon which picture frames, or data sets, can be hung. It is also able to provide historic understanding of landscape information, and it is an excellent method of raising the profile of the whole historic environment – with few exceptions the landscape has everywhere been shaped and adapted by human action. HLC is an archaeologists' approach, however. We look at the environment itself, at its physical remains from the past, and we use that material culture to learn about history and to build our perceptions of the landscape. This allows us to look back far beyond written history and maps; but it also gives us a different perspective on events that are recorded in contemporary

documents. It gives us access to the landscape's own story, not just the stories told for reasons of their own by people living in an area in the past. Historical sources, documents, can therefore give us a different picture.

Written Records

Historic documents and maps can give us a detailed but different view into the past of the cultural landscape. We need to be alert, however, as to why they were written, what particular causes they were espousing, what they left out or concealed – and precisely whose story they are telling. They can no more be taken at face value than can the landscape itself. But they are a source of understanding that cannot be ignored.

A case in point concerns the legal disputes about who controlled and owned farmland and slate in Arfon in the 19th century. We have previously told a story of this part of Wales in Chapter 3; here we look behind that story to see motivation and manipulation and to show how documents can be used to explore events that have helped create the historic landscape.

About 4000 acres of harsh, remote upland on Moel Tryfan in the eastern part of the Arfon project area were once common lands, shared between many families and communities. This area has been occupied since prehistoric times, and abandoned settlements and field systems of that date are still part of the landscape. The lower mountain slopes are covered with a patchwork of very small post-medieval farms, while higher up the mountain are small walled fields and cottages.

These fields are encroachments onto the common land, and were often 'illegal', or rather seen as such by the Crown or its aristocratic tenants who claimed to have owned the land since the 13th century. However, the local poor saw it as land over which they had rights of use and this often led to legal disputes. Unlicensed fencing-off of the commons was for a long time largely ignored, because for several centuries the Crown showed little interest in these possessions. But at the end of the 18th century, the area's slate-quarrying industry began to expand and to become highly profitable.

The Crown therefore began to take a greater interest in its Welsh 'wastelands', or rather in the revenues that could be drawn from them, and legal disputes became more common. With law and profit came documents to prove ownership, and the maps and deeds that survive are another example of how we explain the landscape. Acts of Parliament, and the related 'Enclosure Awards' that included maps depicting proposed land reorganisation, are a

Squatter settlement and fields on Mynydd y Cilgwyn, Arfon

major source of information for this period and they provide invaluable details about the material traces that survive on the ground. The argument is also evident in names and folklore: for example, even though it happened as long ago as 1798, one field here is still known as Cae Ymryson, meaning the 'Field of Dispute'.

The change caused by these legal documents could be profound, but sometimes Parliamentary Enclosure merely confirmed and legalised existing smallholdings established by the quarrymen, by constraining and bringing them under stronger political control. Estate surveys of 1869 for the Vaynol estate show in some places very regular fields made by the estate, but elsewhere meandering walls representing either older fields or piecemeal encroachments by squatters on the wastes before the Parliamentary Enclosure of 1808. This shows that not everything was swept away, and emphasises that an understanding of the landscape culled from historic documents and maps often needs to be checked against the real evidence of the landscape itself. Nor, of course, did landscape change come to a halt when the maps had been produced.

The slate industry was expanding and by 1782 fourteen pits were being worked, mainly by farming families. They were encouraged by local entrepreneurs, such as the Wynn family of Glynllifon, which later became more powerful as the hereditary Lords Newborough. The 1745 Crown lease that granted them the rights to extract minerals for the whole area still exists. In 1823, Lord Newborough tried to have a law passed to give him control of all the Moel Tryfan Commons, including the recent encroachments, and to extinguish rights of common. This move was met with fearsome opposition, not least from one John Evans who was concerned that enclosure around the Cilgwyn quarries would affect his own interests, particularly over an illegal dam and watercourse that he had constructed on Crown land in 1816. He organised a commoners' petition against the Bill, with seven hundred signatures. The petitioners claimed that their cottages had been built over forty years earlier, that originally the land had been too

Landscape view of Moel Tryfan, Arfon

wild for cultivation, and that they had improved it by hard work. We have their own words to lay alongside the evidence of the landscape itself and its field walls and houses: 'by incessant labour [we] have so far cleared stones, manured and cultivated as to make them produce potatoes, in many cases slight crops of Corn and in some cases afford the means of supporting one or two cows'. Lord Newborough withdrew the draft law before it was voted on by Parliament, not least because the petitioners had rather cleverly invoked another set of stories, comparing their plight to that of 'fellow subjects' in the new Australian colony.

Public conversations

Information about the cultural landscape is all around us – in maps and documents, earthworks and buildings, archaeological finds and soil samples – and this chapter in particular has shown some of the modern ways in which archaeologists and others explore it. Each EPCL project has collected vast amounts of data about its individual area as part of the programme, a necessary prerequisite given that our first aim was to increase understanding. But our second aim is equally important: to present that information and to improve our communication with the general public about the cultural landscape.

There is a very real need to raise awareness of the historic and cultural dimensions of the landscape. People are not only partly unaware of the fascinating features that lie on their doorstep, but often there is some ignorance about just how much our predecessors have shaped the world that we live in today. In particular, it is often overlooked that apparently natural landscapes such as moorland, in fact have an important human history dating back over thousands of years. All of the EPCL project areas are in some way marginal landscapes in

this sense, being at the edges of popular awareness.

The next story shows how easy it is for aspects of the cultural landscape to be forgotten and how sometimes an effort must be made to bring knowledge back to life, to remind people about their forgotten heritage.

Most visitors to north-west England head for the famous Lake District or the Yorkshire Dales, and miss the delights of the Forest of Bowland and the Lune Valley in Lancashire. This is a part of the country that few people have heard of, yet for those who have stumbled upon it, there are hidden gems ranging from the desolate upland moor to beautiful stone-built villages.

It is not only tourists who have overlooked Bowland; archaeologists have too and, although a handful of individuals have started to study the area, it still lacks a research tradition. It is perhaps easy to understand why in the past academics have looked elsewhere, as the surviving archaeological features are mainly slight and subtle in their form. However, if they had only looked a little closer, they would have seen a landscape littered with evidence of past land use stretching back over the millennia. There are small, irregular hedge-lined fields, for example, that betray enclosure during the medieval period. More regular square fields, often bounded by stone walls, indicate 18th and 19th-century enclosure of commons and waste, often forced through by Act of Parliament, a later layer of the landscape.

A good example of this 'hidden' past is a section of the Roman road that once connected Manchester with Carlisle. That this road ran through the Forest of Bowland is little known, despite the fact that it is virtually intact in some areas, complete with fully functioning water culverts that are still draining the waterlogged peat and making the landscape traversable. In some sections the road survives as earthworks, and from Jeffrey Hill a long stretch of the road is the dominant feature of the landscape as it cuts its way across the view 'fossilised' in a hedge line.

Another significant aspect of Lancashire's overlooked archaeology, this time medieval in date, is the motte and bailey castles that are dotted along the Lune Valley. They are likely to date back to the late 11th century, shortly after the Norman Conquest of 1066, when the earth and timber castle was introduced as a method of symbolising the new authority, controlling the local population, and providing a centre for administration. The castles are built on a small scale and are likely to have been short–lived, with only that at Lancaster being upgraded to stone. To the casual observer these castles go unnoticed or are dismissed as large mounds of earth. Yet they are embedded in the modern landscape,

A Roman road fossilised in the line of a hedgerow, seen from Jeffrey Hill, Bowland

Artist's impression of the Roman road seen from Jeffrey Hill, Bowland © John Hodgson

An artists impression of the medieval motte and bailey castle at Halton, Bowland © John Hodgson

An aerial view of Halton motte and bailey castle, Bowland

often at the heart of villages and with new uses. The motte at Whittington, for example, lies in the parish churchyard, peppered with grave markers and a sundial, while at Melling the motte is part of a heavily planted vicarage garden complete with a tree swing.

Another hidden aspect of the landscape is the abundant traces of industrial activity. Along the Lune Valley many industrial sites, such as bobbin mills or hat factories, have left their mark, yet are overlooked because the common perception is that this is a quiet rural landscape, industry (the 'dark satanic mills') being what you find in south Lancashire. Many industrial buildings have been demolished, but in some cases it is possible to identify the location of former sites from surviving features, such as mills from ponds, and their networks of culverts and leats. Where they survive, some industrial buildings have found new uses as storage, factories and increasingly as modern apartments.

However, while much of the archaeology of the area can be discovered if you know where to look, there are some aspects of the resource that are literally hidden from view because they are buried under peat. Almost no prehistoric monuments are visible in Bowland. This is less likely to be because they never existed than because they lie invisible within the depths of the peat, which has accumulated to a depth of over four metres in some areas. For example, at Bleasdale an enigmatic Bronze Age site was discovered by chance and excavated in the 19th century. It had an outer enclosure, a small circle of timber posts within it, and a central burial from which two urns and a cup were recovered. But in the surrounding area there is very little archaeological information that can help to explain who the people were who built this important site and where and how they lived: we need to excavate the peat to find deposits that will help us to understand. Similarly, deposits in river valleys may also mask hidden features; from the eroding banks of the River Lune near Halton, a large number of waste flakes have been discovered that date back to the Mesolithic period (c 8000-4000 BC).

We therefore have to think of new and imaginative ways of telling people about our rich cultural landscape or it will simply go unnoticed, resulting in serious implications for its future management. Promoting sustainable management was the third aim of the EPCL project, and a subject discussed further in the concluding section of this book.

So, what is the best way to approach this sort of work and to present detailed information to the public? There are many possibilities – giving talks to schools and societies, web site information, guided walks and writing booklets. Our Swedish project, Halland, considered this and the next story provides a discussion of how this can be achieved, and of some of the problems that can be encountered.

When the EPCL proposal was first discussed, it was immediately felt that it was suited to the office of the Regional Director of Museums and Sites. Here was an opportunity to present the archaeological view of a cultural landscape to the general public, a view integrating both culture and nature. In most cases popular information makes a distinction between 'Culture' and 'Nature', each of which is presented as a separate entity, whereas in reality they are two parts of a never-ending process in which each has influenced and continues to influence the other. The challenge has thus been to find methods to integrate the study of the two, and also to solve the problems inherent in the task itself; that is, how to go about connecting with the general public.

The greatest problem is directly connected to the actual communication of information about the past, and here the 'language' seems to be of crucial significance. Whether deliberately or not, experts often use their own technical jargon, and certain words can make a text incomprehensible and thus fail to get the message across. One thing is clear, however that people in the past and their way of life are a subject that has always interested the general public, albeit to varying extents.

It is very difficult to transform the world of inert and speechless artefacts, which appear in museums after excavations, into the world of the people who used a particular artefact or who placed their dead in a burial chamber. We are left with many questions – who were these people, what did they look like, how did they cultivate their fields? And despite the massive amount of knowledge gathered by archaeologists during numerous excavations, they have often failed to present their findings clearly to the public.

There are several reasons for this. One factor is that the majority of our prehistory concerns people and activities associated with an agrarian economy, whereas the recipients of information today are almost wholly conditioned by urban customs. In other words, we find it hard to assimilate all the actions and tasks connected with a farming society. The temporal perspective also complicates the imparting of knowledge: small leaps in a narrative can comprise several thousand years. Two very similar burial monuments, located close together, may very well have been built at intervals of a thousand years. Perhaps it is not important, but the living conditions and the surroundings would have been completely different when the two burial processions approached the graves. Today we would hardly make generalising comparisons between the 21st century and what happened in the Viking Age, a comparable distance in time.

Making the past accessible to the public – bread baking, face painting and making a basket.

So, how can we increase understanding and establish greater acceptance for prehistoric remains when links to today's society are indistinct, and why is it so difficult to reach out with the message? Perhaps it is the case, as has been said before, that language is the real stumbling block, preventing the dissemination of the archaeologists' knowledge. By proceeding in the traditional way from a prehistoric context, a distance is already created between the narrator and the listener. Archaeologists often presuppose that the interested recipient is familiar with the prevailing terminology. Everyone is expected to know what a 'longhouse', a 'post-hole', or a 'cremation grave' is, and this is where we make a fundamental mistake. The terms are not clear, and the result is that much of the information fails in its purpose and the message gets lost. To some extent the communication gap can be bridged if innovative information signs are provided using illustrations, reconstructions, modern-day parallels and stories (like those in this book) to enhance the message we want to put across. Such work does not guarantee success – but at least provokes debate and invites enquiry.

There are a number of problem areas that need to be borne in mind when embarking on work of this nature. It is essential that information is made clear and concise and that the language used does not create a barrier for the reader. One way of overcoming the problems of the written word is to provide information face-to-face, in an environment where the lay person is able to ask questions of the speaker. This could include presentations to societies and schools, or guided walks that explain the landscape as it is being experienced. In some cases, guided walks have been carried out by archaeologists themselves. For example, in Lancashire there is a series of summer walks called WalkPast that present different aspects of the county's cultural heritage each year. In Spessart in Germany and Paneveggio in northern Italy, the concept has been developed further, by training local guides to take tours of the cultural landscape. The guides are able to establish a dialogue with visitors about the cultural and natural history of the district and to answer questions and explain the meaning of specific phenomena or events. Direct contact also encourages the visitors to ask specific questions of the guides. If some of these questions are new, and difficult to answer, responsible guides seek out the answers, further increasing their knowledge of a specific site – in other words, dialogue is a self-generating knowledge builder.

Reconstructing landscape

An approach that has greatly increased our understanding of the past is the reconstruction of archaeological sites and landscapes. This can take the form of sketches and paintings that depict life in the past, helping us to imagine how the cultural landscape once looked. Reconstruction paintings are an excellent method of showing how sites may have looked in the past, and are a highly valuable visual aid for explaining former function and land use; an example from Bowland specially created for the EPCL project is given on these pages. Another, more interactive way of explaining the landscape and its history is to reconstruct an archaeological site. The actual physical reconstruction of archaeological sites not only provides insight into how places looked and functioned but also allows detailed assessment to take place of how they were first made and the techniques that were employed. Two EPCL projects have done just this, and their stories are told here too.

Two sets of reconstruction paintings have been produced specifically for the Bowland project in Lancashire. The first was of a view of Bleasdale and the development of the local environment at six points in time between approximately 11,000 years ago and the early 19th century. Before the artist started work on the project a detailed environmental report was produced, which described in detail the climate and vegetation of the area and how this changed over time. This was then combined with information known about the present day historic landscape to create a series of paintings that show as accurately as possible how the cultural landscape has developed into what we see today.

The second set of paintings shows what four archaeological sites within their landscape context would have looked like when they were in use. These are Halton motte and bailey castle (page 95), Castle Hill Iron Age/Romano British defended enclosure (page 98), Jeffrey Hill Roman road (page 94) and Sabden Fold medieval vaccary (page 35). Each of these is shown alongside a photo of the modern landscape with which they can be compared.

Artist's impression of Castle Hill, prehistoric defended settlement, Bowland © John Hodgson

Aerial view of Castle Hill, prehistoric defended settlement, Bowland

AÖZA (the Archaeological-Ecological Centre of Albersdorf) has worked in the County of Dithmarschen since 1997 to create a landscape that looks rather like it would have done in the Neolithic period about 5000 years ago. An area of archaeological and ecological interest covering about 80 acres, with the character of half-open woodland pasture, is being grazed by cattle, sheep and goats. The project has been informed by palaeo-botanical information provided by recent research carried out by the Ecology Centre of the University of Kiel. Construction of a Neolithic village began in 2000, close to genuine prehistoric grave monuments, which will be used as an open air museum. This work has included outreach events for both children and adults, such as flint knapping and excavations of specially prepared areas, and already this work is beginning to have a positive impact, raising interest in the past and its management in the future.

At Bjäre, a full-size nineteen by nine metre Bronze Age house has been built on the remains – post-holes – of a real house excavated in Sweden. This is an illuminating example of how a two dimensional plan of an archaeological site can be brought to life and how careful planning and detailed analysis can make a reconstruction function. For example, a series of post–holes (which, commonly, is all that an archaeological site is left with) is not going to provide all the answers about how smoke was drawn away from the fire, how low the roof was or even if there were windows. These questions can only be answered and refined through experience. The Bronze Age house replica therefore taught its 21st century builders about prehistoric architecture as well as providing a wonderful visitor centre where experimental educational programmes are conducted, in cooperation with local schools, for dressing up in costume, cooking on the great hearth, making flint tools and whittling wooden objects.

By reconstructing prehistoric buildings and settings, and also performing chores and crafts there, the visitor is given a greater opportunity to assimilate knowledge about how people lived and worked long ago. At a more local level, schools are a natural partner when it comes to spreading knowledge and information about the local environment. They can undertake the management of

individual antiquities, and they can also play a more concrete role in disseminating knowledge. Another possibility might be for a school to re-enact past agricultural techniques and thereby enhance understanding as they create their own prehistoric landscape. Today the traces of past farming methods are visible as countless lynchets and clearance cairns, which to the average person just seem like heaps of stones, but they are really a reflection of a bygone farming method. By clearing the ground around a small group of cairns and tilling the soil in the old-fashioned way, understanding of the function of the site would be increased significantly. The result would also be that all the people involved would acquire a solid knowledge of the remains and thus become archaeological messengers. This is where we find the optimal communication method, in direct contact with people.

Reconstructing buildings from the past is not an entirely new phenomenon. Indeed Niels Sehested, whose story opened this chapter, carried out such projects as long ago as the 19th century. Being a practical man, he put his hand to a number of reconstruction attempts, the biggest being the construction of a Canadian-style log cabin; the entire process of building this from the felling of the trees until the house stood complete on a little islet by Broholm castle, was carried out exclusively with the aid of flint tools of the Stone Age.

Explaining the past is not a new objective, but we do have some new sophisticated technologies available to us that take this work onto a whole new level. The Internet, is a powerful medium and the EPCL project web site has generated a great deal of interest in the historic landscape and has also allowed significant information to be made easily available in a number of languages. Some of our projects also have local web sites. The Bowland and Lune Valley project, has a web site that allows the survey area to be explored by virtual reality – the visitor can jump from place to place via hotlinks and experience the landscape by spinning around within 360 degree photographic panoramas. It is also possible to enter a 3D reconstruction of a medieval motte and bailey castle at Hornby, that has used computer game technology to create a replica of the site as it would have looked in the late 11th century.

Demonstrations provide an insight into early technology at AÖZA, Albersdorf

A reconstructed neolithic grave mound, Albersdorf

The Bronze Age house, Bjäre

Conclusion

We have only touched on a few examples here, but ways of presenting the cultural landscape to a wider public are almost infinite, reflecting the numerous possible ways that we have of interpreting and understanding our surroundings. Perception is an important issue, and how one person sees and appreciates a place or a view from a mountain can be very different from another person's. The cultural landscape is truly diverse, because it is always personal and mental. This is one reason why landscape is such a central and democratic part of Europe's cultural heritage, and why its sustainable management is so important. This final part of the EPCL agenda is discussed in the concluding section of this book.