The Later Prehistory of North-West Europe

The Evidence of Development-Led Fieldwork

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Setting the Scene

AN ARCHAEOLOGY OF EUROPE?

In 2008, the Danish prehistorian Kristian Kristiansen considered the need for an ‘archaeology of Europe’. The article was one of a series in which he discussed intellectual developments in the discipline. His argument is directly relevant to our project.

Kristiansen (2008) identified a series of changes in the practice of archaeology and, in particular, in the scale at which research has been conducted. Such changes reflected broader theoretical trends in the discipline. There was the alternation between ‘rational’ and ‘romantic’ approaches that had been identified by Andrew Sherratt (1997). It operated on a twenty-five to thirty-year cycle and extended from the nineteenth century to the present day. There was a political cycle in which prehistoric archaeology was influenced to varying extents by broader developments in contemporary society. In particular, it was coloured by different conceptions of cultural heritage, beginning with the rise of the nation-state. Finally, there was a funding cycle to which these features were closely related. At different times research was confined within modern borders, or scholars were encouraged to work in larger teams and over a more extensive area. All these trends could be illustrated by the scope of regional, national, and international journals and by the languages in which the results of the research were published.

Such issues were particularly relevant to intellectual history. Kristiansen suggested that the adoption of particular theoretical perspectives was closely related to that question of scale. Approaches which looked for general patterns among prehistoric societies tended to discuss large regions, as might be expected of projects which adopted a comparative approach. They were characterized by rationalism, and in Britain, the Netherlands, and Scandinavia were influenced by American processual archaeology. At the same time the emphasis on large-scale regularities existed in a certain tension with approaches coloured by romanticism. They showed a greater concern with the practices and beliefs of individual communities and are sometimes described as post-processual. Because these different approaches were favoured at different times, it was hard
to bring them into alignment, so that the work of one generation might be geographically extensive, while its successors would focus on a single region. In Kristiansen’s opinion such changes in the scale and ambition of research also illustrate an oscillation between periods of innovation and phases of consolidation in the development of the discipline.

These variations had more than one source and were not simply the outcome of exchanges between archaeologists and scholars in other fields. Two of the dominant trends in European archaeology were influenced by communism and National Socialism respectively. Both had profound consequences for the scale on which research was conducted, and for the contacts between prehistorians working in different countries. In one sense Nazi archaeology was profoundly theoretical, for its adherents were seeking evidence for an Indo-Aryan people who had settled large parts of the Continent (Legendre et al. 2007). That approach was not confined to Germany but extended into central and northern Europe as well as France (Olivier 2012). Archaeology provided an intellectual justification for conquest, and prehistorians found themselves caught up in the process. Those employed in the Soviet bloc faced similar pressures. Although their work was not as closely supervised, for the most part it was constrained by Marxist ideology. For Heinrich Härke (2002), the emphasis on cataloguing and description that characterizes much contemporary research in Middle Europe was a reaction against theories with such drastic political implications. In that case it is ironic that the most influential prehistorian of the twentieth century—Gordon Childe—began as a follower of Gustav Kossinna whose work was to influence Nazi archaeology. In later life Childe disowned his early book *The Aryans* (1926) and adopted a Marxist framework for his studies of the ancient world. Indeed, his mature work was an attempt to assert European unity as it came under threat before and after the Second World War.

A less explicit change happened in British archaeology and provides the starting point for the project presented here. Until the 1960s many prehistorians shared an international outlook. From the time of pioneers like John Lubbock and John Evans they had travelled widely and contributed to meetings of scholars who came from most parts of Europe. Their successors, who were among the first prehistorians employed by universities in Britain—people such as Gordon Childe, Stuart Piggott, Grahame Clark, and Christopher Hawkes—studied the prehistory of an entire continent, and wrote books with such titles as *The Dawn of European Civilization, Ancient Europe, Prehistoric Europe: the Economic Basis*, and *The Prehistoric Foundations of Europe*. They cited research in many different languages. Not all their articles were written in English, and some of these scholars became involved in fieldwork outside the British Isles.

That was not so true of their successors. Of course, there were researchers who continued to work in the same ways as before, but many more focused on
Britain or Ireland and paid less attention to the archaeology of Continental Europe. From the 1970s they wrote almost exclusively in English and made fewer attempts to acquaint themselves with the publications of colleagues in other countries. Their increasing insularity reflects the politics of the post-war period. The fact that Britain was not invaded between 1939 and 1945 made it seem different from other nations. Today the same ambivalence affects its attitude to the European Union. The perspectives of British researchers were also influenced by the increasing use of English as an international language.

This change of scale illustrates the cycle described by Kristiansen. It can be identified in other European countries and was accompanied by the concern with description and documentation that Anthony Harding (2009) identifies as one of the characteristics of archaeology in Middle Europe. The best illustration is the prestigious German series Prähistorische Bronzefunde which has the aim of cataloguing and illustrating all the metalwork of the Bronze Age. The individual volumes are organized regionally and also by artefact type, but only when hoards are considered as a source of chronological information are different types of object treated together. The result is that the archaeological record is broken up and the relevant material is reviewed according to national boundaries. Having said this, it is right to acknowledge that some of the most recent volumes have been more ambitious.

The publication of archaeological research is fragmented in other ways. There is an increasing number of local journals. Kristiansen’s review suggests that approximately 400 periodicals are concerned with aspects of European archaeology, but only thirty of them feature research that transcends the individual region. Just forty-seven are truly international in their scope. To some extent their quantity reflects the pace of discovery during recent years, but it also illustrates the discrepancy between the limited scale on which most projects are conceived and the larger ambitions of contemporary archaeology.

This distinction is reflected by the choice of language in which to publish. It reveals both the ambitions and the limitations of individual projects. A good example is a review article that appeared in 2005 in the American Journal of Archaeological Research. Its title was ‘European Regional Studies: A Coming of Age?’ (Galaty 2005). The paper discussed the evidence for early settlement throughout the Continent. At first sight it seemed to be comprehensive, for its bibliography listed no fewer than 390 publications. On closer examination, however, just five of them were written in French, and three more were in Hungarian. All the others (98 per cent) were in English. It meant that many potential contributions were ignored.

This problem was discussed in Kristiansen’s article. On one hand, archaeologists working in smaller nations may feel obliged to write in an international language so they can reach a wider audience. On the other, they may be encouraged to publish in their native tongue to emphasize the distinctiveness of local research traditions or to acknowledge the role of government agencies.
in promoting the work. The language in which research appears provides a subtle index of changing political and intellectual alignments. In Spain, for example, the importance of local loyalties means that the results of certain projects are published in Catalan or Galician rather than the national language. In Scandinavia research appears in Danish, Swedish, or Norwegian, but other publications are in English where a generation ago they might have been written in German. In this case the change of language reflects a growing identification with Anglo-American theoretical archaeology.

These issues have led to some debate. Kristiansen draws on a study published in the regional journal *Fennoscandia Archaeologica* (Lang 2000). The author explains how archaeologists in the Baltic states feel obliged to write in English if they are to attract an international readership. His own paper was translated for this reason. It was followed by a series of commentaries by other people and then a summing up. All but one of these contributions were in English. The sole exception was a piece by a senior German scholar which he had written in his own language. It was not translated and was never mentioned in the final discussion. The same tensions are apparent in journals with a wider remit. Until ten years ago it was rare for the abstracts of individual papers to be provided in more than one language. Today the choice of which to use differs from one publication to another. Sometimes an additional procedure is adopted, and even the captions for the illustrations are translated. This is a useful aid to communication, yet in most cases such practices were adopted comparatively recently.

The fragmentation of European archaeology is apparent in yet another way, for some of the research of prehistorians has influenced contemporary politics. Of course this was a feature of the work undertaken under National Socialism, but it is just as obvious on a smaller scale. The results of research have been used to emphasize local identities, sometimes at the expense of the nation-state. Alternatively, they have suggested that connections existed in the past between regions which are now in separate countries. Examples of these conflicts abound. Chris Scarre (1992) has shown how discussions about the origins of the earliest farmers in north-west France follow similar lines to modern debates concerning Breton identity. Did Neolithic communities settle there from a region close to Paris (the seat of the government today), or were they largely autonomous? Might they have been more closely related to people who had travelled along the Atlantic coastline? There have been some sharp disagreements. In the same way, there was a time when the design of Irish megalithic tombs assumed an even more explicit political dimension. One school of thought associated these structures with stone monuments in Britain—the source of the Protestant settlement of Ulster—whilst their opponents favoured an origin in western France which avoided any link with the neighbouring island. It is no accident that the chief proponent of the first theory was Estyn Evans, who believed in the autonomy of Northern Ireland,
while his main opponent was Rúaidhri De Valera, the son of the prime minister and later president of the Irish Republic (De Valera 1960; Stout 1996).

**THE CHANGING SCALE OF EUROPEAN ARCHAEOLOGY**

If the fragmentation of European archaeology is a feature of recent years, there have been attempts to redress it. They have gathered pace since the collapse of the communist bloc and the reunification of Germany. One was the formation in 1994 of the European Association of Archaeologists, which allowed scholars to meet to discuss themes of common interest in the same way as they had during the nineteenth and earlier twentieth centuries. Another was a series of exhibitions that emphasized the links between different parts of ancient Europe. One of the first was held in Venice in 1991. Its title could not have been more explicit: *The Celts: The First Europe* (Moscati et al. 1991). The same kind of thinking lay behind *The Bronze Age: The First Golden Age of Europe*, a sequence of thematic conferences which took place between 1994 and 1997 and sought to demonstrate the essential unity of societies in the past. It was accompanied by another exhibition, *Gods and Heroes of the Bronze Age: Europe at the Time of Ulysses*, which illustrated the connections between prehistoric communities across large parts of the Continent (Jensen 1999). In each case contemporary societies were expected to learn lessons from the past.

Michael Dietler provides one of the best examples of this process in action. In 1994 he considered modern attitudes to the Celts (or the Gauls, as they are sometimes known in France). The available evidence is extremely limited, combining an unstable mixture of literary sources, artefacts, and linguistic evidence, but precisely the same features have supported three completely different perspectives on the past. For Breton nationalists, the Gauls were the original population of the country: the surviving members of a larger ethnic group in Atlantic Europe whose identities were suppressed by incursions of Romans and Franks. For the national government of France from the time of Napoleon III, the Gauls were the people who, led by Vercingetorix, resisted the Roman army. Their defiance provided an origin myth for the nation-state. For the founders of the European Economic Community, however, the Celts were the first people known by name to have occupied large areas of the Continent. That was the argument proposed by the exhibition in Venice. Virtually the same evidence was employed to support each of these incompatible claims. Recent research in Britain, and to some extent in Ireland, has taken a different
course. Some writers have questioned whether the inhabitants of these islands
shared a common 'Celtic' identity in the past (James 1999; Collis 2003). Their
argument was not intended to emphasize the separateness of Britain from
Continental Europe, but it may have discouraged insular researchers from
engaging with the Iron Age archaeology of the mainland.

There have been other attempts to create a distinctively European culture in
modern times, through schemes which allow students and academics to move
between universities and also through new programmes of research. Here an
important development is the creation of the European Research Council,
whose brief is to support 'projects that cross disciplinary boundaries, pioneer-
ing ideas that address new and emerging fields and applications that intro-
duce unconventional, innovative approaches' (<http://erc.europa.eu/funding-and-
grants>). So far the largest number of grants has been awarded for projects in
the United Kingdom, France, Germany, and the Netherlands.

Two of them illustrate the scale of this kind of research in archaeology. Both
share a concern with the same period. One is called The Cultural Evolution of
Neolithic Europe (<http://www.ucl.ac.uk/euroevol>). It applies evolutionary
theory to the prehistory of Germany, France, the Alps, the Low Countries,
Britain, and southern Scandinavia. It focuses on the relationship between
population, climate, subsistence, and social interaction and extends from
the period of the last hunter-gatherers to the beginning of the Bronze Age.
The other has the title The Times of Their Lives and applies new statistical
techniques for the treatment of radiocarbon dates to stratified sequences in
Hungary, Serbia, Poland, Austria, Switzerland, Germany, France, Spain, and
Malta (<http://totl.eu/>). Its aim is to provide a more accurate chronology.

Both these projects are still in progress, but a recent publication, Organizing
Bronze Age Societies (Earle and Kristiansen 2010), provides a model for
international ventures of this kind. It compares the results of four different
field projects, in Sweden, Denmark, Hungary, and Sicily, and looks at the
similarities and differences between them in relation to a general model for the
development of Bronze Age society. The project brought together participants
from sixteen institutions and eight different countries. Together they con-
sidered the natural environment of the study areas, the evidence for settlement
patterns, the structure of living sites, the character of households, subsistence,
technology, and craft production.

A development of a different kind was the Valletta Convention on the
Protection of the Archaeological Heritage, a treaty of the Council of Europe
signed in 1992 and subsequently ratified by most European nations (<http://
conventions.coe.int/Treaty/en/Treaties/Html/143.htm>). This explicitly set
out to establish common principles for the recording and preservation of
cultural heritage. The result has been some convergence in the ways that
archaeology is dealt with by planners in different countries across Europe,
although significant variations remain even now.
THE QUESTION OF SCALE IN BRITISH AND IRISH ARCHAEOLOGY

Until comparatively recently most of the prehistorians working in Britain and Ireland were content to investigate local material. They were encouraged to do so by the emphasis on the small scale advocated by post-processual archaeologists. Although they espoused a new theoretical framework, they were also influenced by the long-established idea that the British Isles would provide a self-contained study area. These islands were located on the outer margin of prehistoric Europe and cut off from the archaeology of the mainland. It was a theme that had influenced most twentieth-century prehistorians, whatever the scale on which they worked.

They made other assumptions, too. The archaeology of these islands paid little attention to the importance of maritime transport. Rather than considering the sea routes connecting Britain and Ireland to the Continent, their work highlighted the movement of people over land. For example, Gordon Childe’s early account of prehistoric Europe emphasized the importance of the Danube and the Rhine (Childe 1925). The main contacts between Britain and the Continent were accordingly across the Strait of Dover and the southern part of the North Sea. That view has proved tenacious and features in a new account of the adoption of farming in the British Isles (Whittle et al. 2011). Irish archaeologists, on the other hand, paid more attention to contacts along the Atlantic coast. In a review of Christopher Hawkes’ book The Prehistoric Foundations of Europe to the Mycenaean Age published in 1940 Childe conceded that this element had been underemphasized in his own research, but his point was largely overlooked until Barry Cunliffe (2001) published Facing the Ocean sixty years later. Jon Henderson takes a similar approach to a later period in his book The Atlantic Iron Age: Settlement and Identity in the First Millennium BC (Henderson 2007).

The dominance of terrestrial models is surprising as one of the most influential books written in the earlier twentieth century, Cyril Fox’s (1932) The Personality of Britain, had already considered the importance of prehistoric navigation. The source of the problem is an idea that has dominated British culture since the Elizabethan period: the island is a kind of fortress defending itself against the outer world. While prehistoric communities may have migrated from one part of the Continent to another, their arrival in Britain was usually described as an invasion. The assumption that Britain was settled by successive waves of immigrants characterized insular archaeology from Arthur Evans’ 1890 study of the Belgae whose migration was documented by Julius Caesar, to the various groups of Bell Beaker settlers postulated by David Clarke (1970) exactly eighty years later. It was easy to confuse the creation of a chronology with the process of writing history. Before the
adoption of radiocarbon dating, both depended on comparing insular material culture with artefacts and monuments in Continental Europe. By extension, their dates were estimated by comparison with the Mediterranean and ultimately with Egypt. These were perfectly proper procedures but the assumption that the British Isles were located on the outer edge of the Continent led insular prehistorians to modify this method to an unjustified extent. They assumed that developments which began on the mainland took a considerable time to be adopted here. To some extent that happened because ideas were slow to travel, but it was also because insular communities were reluctant to countenance new developments.

A good illustration of the changing scale of research is a paper written by the Swedish scholar Oscar Montelius in 1908. His study of the chronology of the British Bronze Age was published in English by the Society of Antiquaries. Its scope was truly international, for it was just one of a series of chronological reviews that were to extend to Sweden, Norway, Denmark, Germany, Switzerland, Belgium, France, Italy, Greece, and Egypt. By comparing the metalwork found in hoards and graves he devised an absolute chronology based on the evidence of contacts between different regions. His account of the British and Irish material had three principal elements. Montelius proposed a new starting date for metalworking around 2400 BC and suggested that insular researchers should follow Continental usage in describing this phase as the ‘Copper Age’. He also suggested a date of 800 BC for the first appearance of iron and divided the insular sequence into five separate periods. All but one were of similar duration and lasted between 250 and 300 years.

Within a few years his views had been rejected by British prehistorians, after which they were ignored. As a result his study is little known today. By the middle of the twentieth century a very different chronology had been devised. It was based on exactly the same method, but in this case the age of the earliest metallurgy had been lowered by 600 years and the adoption of iron was dated to 500 BC. The same discrepancy is evident between the dates proposed in 1908 and those favoured by two leading prehistorians, Jacquetta and Christopher Hawkes (1943), writing four decades later. Whilst they identified many of the same phenomena as their predecessor, the ages they assigned to them were between three and seven centuries later than Montelius’ estimates (Bradley 2013b). The use of radiocarbon shows that the 1908 version was substantially correct. The dates suggested for particular phases were never more than fifty to one hundred years adrift. It is clear that British scholars were unduly influenced by the notion that ideas took a long time to reach the offshore islands. In fact both Britain and Ireland must have been fully integrated into Bronze Age Europe.

Insular chronologies were based on direct comparisons between the artefacts and structures found in different parts of Europe, but how should those
similarities be explained? Childe had emphasized the ways in which innovations might spread from one region to another, but British scholars were too often committed to a chronology based on sudden events. That was when communities in these islands came into contact with those on the mainland. According to Hawkes and his contemporaries the insular sequence was punctuated by a series of invasions.

In 1948 the Council for British Archaeology published a synthesis of what was known at the time (Hawkes and Piggott 1948). It was intended not only as a definitive statement but also as a basis for research. The narrative is punctuated by waves of immigrants bringing new kinds of metalwork and pottery. The process started in the Neolithic period and soon gathered pace. In the eight pages devoted to the Bronze Age the reader encounters four different groups of ‘Beaker folk’, and ‘invaders centred in Wessex’. They are followed by still more incomers: ‘settlers from northern France’; invaders from Holland and... the Lower Rhine; invaders ‘from the West Alpine region’;... [and others] ‘from the north-western fringe of the Hallstatt civilization’. The same applies to the chapter on Iron Age archaeology. Again it was structured around a pseudo-historical narrative, which was taken as given from the outset. Many of the excavations undertaken in the 1930s and 1940s took place on the defences of hillforts, for here it was possible to recover a stratified sequence of artefacts. This was a perfectly sensible procedure, and one that achieved some of its aims, but it happened at a price, for it was assumed that the successive phases identified in hillfort architecture registered specific historical events—they were the defences built against invaders. As a result the new chronology became entangled in a specific interpretation, which postulated a series of incursions from Continental Europe, or from one part of Britain to another. The accepted account of this period was based on a circular argument.

In the end the ‘invasion hypothesis’ was questioned by Grahame Clark (1966) who was unhappy with the logic by which some of the invasions had been postulated. In other cases he called into question the empirical basis for this interpretation. His paper had an enormous influence, but it has proved to be both positive and negative. The positive feature is that he called for a more disciplined interpretation of contacts between the offshore islands and the Continent. The negative aspect is that British scholars felt less inclined to consider evidence from other parts of Europe. What resulted was a new insularity. When Clark was writing in 1966 he accepted without any argument that Britain was settled from overseas at the beginning of the Neolithic period and again when the first metalwork appeared. By the 1990s both these ideas had been questioned and researchers were encouraged to think in terms of cultural continuity and local developments. To a large extent interpretations of the past were contained within national boundaries.
THE IMPACT OF DEVELOPMENT-LED ARCHAEOLOGY

Shifting theoretical trends and ideological and political contexts have not been the only factors shaping perspectives on European prehistory. Changes in the evidence base have also had a crucial impact. One of the most important developments of the past few decades has been the massive growth in data produced by ‘development-led’ or ‘preventive’ fieldwork across much of Europe. In some respects this has improved the prospects for a ‘prehistory of Europe’, as it provides new possibilities for comparing the evidence from different regions. On the other hand, the organization of development-led archaeology requires those involved in it to take a national or more local perspective (Kristiansen 2008). The sheer quantities of new data—and difficulties in accessing them—can also discourage wider ranging syntheses.

Modern European development-led archaeology has its roots in earlier traditions of ‘rescue’ excavation. Isolated examples of rescue fieldwork occurred as early as the nineteenth century, for example an Iron Age and Gallo-Roman cemetery excavated in 1878 at Nogent-sur-Seine in eastern France, due to railway construction (Vanmoerkerke 2011). An important breakthrough was the large-scale excavation of the early Neolithic settlement at Köln-Lindenthal in western Germany, executed in 1929–1934, initially due to the threat posed by the landscaping of a park (Buttler and Haberey 1936). A further innovation in Germany during the late 1930s was the application of trial trench evaluation along the routes of new motorways. This led to the discovery of many new sites such as a late Neolithic settlement with small timber houses at Ochtendung (Vanmoerkerke 2011, 6–7). Unfortunately, it would be decades before similar practices were applied elsewhere. In Britain, the building of military sites just before and during the Second World War led to a series of early state-funded rescue excavations led by W. F. Grimes and others (O’Neil 1948; Grimes 1960; Butcher and Garwood 1994).

Reconstruction and development in the post-war decades drove a growth in rescue excavation across much of north-west Europe, variously carried out by national or local heritage bodies, museums, universities, or amateur groups. While much useful evidence was recovered, the shortcomings of the ‘rescue’ approach soon became plain. A reliance on limited public funds or voluntary donations meant that resources were insufficient to keep up with the pace of development. Excavations were often hasty and carried out in difficult working conditions, taking place in a brief window before the start of the development work or even during the groundworks themselves. Furthermore, only those sites already known to exist, or recognized and reported during the development work, could be investigated; the far greater numbers of threatened but unrecognized sites were destroyed without...
There was also often no provision for funding post-excavation analysis and publication.

The first concerted moves away from purely reactive rescue archaeology and towards modern forms of development-led archaeology took place during the 1980s in some countries, including Britain and France. This involved greater integration of archaeology into the planning process, so that the presence of archaeological remains within a proposed development area could be identified at an early stage—usually through some form of field evaluation—and steps taken either to preserve them in situ or mitigate their loss through excavation and recording. It also involved increasing application of the ‘polluter pays’ principle, with the developer, whether a private company or a branch of the state, held responsible for funding any necessary archaeological work. These principles spread more widely following their inclusion in the 1992 Valletta Convention. As a result of these changes, development-led archaeology has expanded rapidly over the past two decades and now accounts for the large majority of field projects in north-west Europe (Bozóki-Ernyey 2007; Demoule 2007; 2012; Webley et al. 2012). While there has been some reduction in activity since 2007 due to the global economic crisis (Schlanger and Aitchison 2010), levels of work remain much higher than they were before the 1990s. The massive growth in the amount of fieldwork taking place has resulted in dramatic changes to the character of the archaeological record. Although prehistoric archaeology developed over about 150 years, most of the available material has been acquired during the last twenty-five years. This has had an unprecedented impact on understandings of the past.

Such developments have been both exciting and troubling. The excitement comes from the fact that new kinds of ancient features have been discovered, and structures of kinds that were already familiar can be set in a wider context. Excavation has taken place in regions in which little had been done before, helping to free archaeologists from some of the biases inherent in the work of earlier generations of researchers, who often focused disproportionately on particular regions, periods, or site types. Even more importantly, large-scale excavations in advance of major construction projects or quarrying have allowed ancient landscapes to be revealed on an unprecedented scale (Fig. 1.1). The sheer quantity of work means that for the first time it is possible to discern broad trends in the frequency of settlements and cemeteries and to compare them between different periods and regions.

The recent expansion of field archaeology has also led to dismay. Few of the orthodoxies on which twentieth-century syntheses had been based have passed the test of time, and most need reappraisal. It posed a special problem because responsibility for major projects has often shifted from academic institutions to field archaeologists and heritage managers, with the result that those charged with teaching and research have found it difficult to keep abreast of the new developments. In some cases they have not attempted to do
so, taking the view that fieldwork undertaken with commercial funding must necessarily be of a low standard, even though the publications arising from the new regime do not support that contention.

INTRODUCING THE PROJECT

By the 1990s, if not before, research in Britain and Ireland was losing touch with the results of new excavations. It was obvious that the only way of preparing an up-to-date synthesis of the prehistoric archaeology of these islands would be to consult the people responsible for development-led fieldwork and to use the results of their projects. That meant that the research had to be based on some unfamiliar sources, in particular the internal ‘grey literature’ reports prepared for the organizations funding the excavations, and for the managers responsible for implementing the principles of the
Valetta Convention. The results of this enquiry were published seven years ago (Bradley 2007) and already need to be revised. To some extent a new version is offered here, but the process of preparing the 2007 book raised a problem of much greater significance. Just as the archaeologies of Britain and Ireland showed unexpected similarities and contrasts, they needed to be placed in a wider geographical setting. That was not possible at the time, but even then it was apparent that the results of Continental fieldwork were resulting in equally significant changes to the character of the archaeological record. As more was discovered about the prehistory of northern France, the Low Countries, and north-western Germany it was no longer possible to maintain that insular archaeology could be studied on its own terms. The results of the new work meant that any notion that Britain and Ireland were isolated from wider developments had to be abandoned. Unfortunately, that work was little known and its results were comparatively inaccessible. As a result the Continental background to British and Irish prehistory was discussed on the basis of books and articles which were often out of date. The problem was difficult to remedy because in many parts of Continental Europe projects had become much too large for conventional publication to be feasible. Commercial pressures also dictated that new fieldwork often took precedence over the analysis of older projects. It meant that the results of this activity remained virtually unknown to researchers working in other regions and had little influence on their understandings of the past. It was particularly worrying as the scale of this fieldwork meant that entire settlements and landscapes were being examined in a way that had rarely happened before. That problem was shared with archaeology in the British Isles.

In order to overcome that obstacle, a new project was necessary to study the results of development-led archaeology on the near Continent alongside those already obtained in Britain and Ireland. How large a region should be studied for this purpose, and which periods should be considered? The second question was the easier one to answer. The starting point for this account is the sixth millennium BC when the first farming communities were established in parts of Continental north-west Europe, and Britain had been separated from the mainland for at least a millennium. The book concludes with the Roman conquests of the first century BC to first century AD that brought much of north-west Europe into a new kind of super-regional system. The same time span was considered in the Prehistory of Britain and Ireland.

The research set out to investigate the relationship between the British Isles and the area described as the ‘near Continent’. For the purposes of this account it can be characterized as the region running from the Loire to the lower Elbe, extending south-eastwards as far as Alsace (Figs. 1.2 and 1.3). It incorporates some, or all, of the modern countries of France, Belgium, Germany, Luxembourg, and the Netherlands, and takes in the entire area within a
radius of approximately 400 kilometres from the coastlines of southern and eastern England. This particular area was selected because it was already known that its archaeology shared certain features with that of Britain and Ireland, although the character of such relationships was rarely well defined.

Fig. 1.2. Map showing the area covered by the *Later Prehistory of North-West Europe* project, and its predecessor, the *Prehistory of Britain and Ireland* project.
and often depended on similarities between the artefacts found there. It has not been chosen on any grounds of geographical determinism or because its components form 'natural regions'. Beyond this core area, account has also been taken of the results of recent investigations in Jutland. They provide an important point of comparison with other areas. The same is true of the archaeology of south-west France, which is included to ensure that the Atlantic coastline receives sufficient emphasis.

Certain questions were important from the outset. The first was to investigate the changing economic, cultural, and social contexts of prehistoric Britain and Ireland within the wider framework of Continental Europe.
Which were the main axes of contact between these islands and the mainland during the later prehistoric period? How, when, and why did they change over time? Would scientific studies of human bones suggest that people really had travelled from one part of the study area to another? How important was the movement of portable artefacts? Do they provide evidence for the distribution of valuable commodities, or were they associated with alliances which involved the exchange of marriage partners? Were there periods in which one or both islands were more closely integrated with the mainland than at other times, and were there phases in which they maintained their isolation? To what extent was the sea a barrier between these different areas, and how far was it really a link? Such questions can be asked for the first time because of the number of new excavations taking place.

Conversely, artefacts of similar kinds may have been used and deposited in quite different ways from one region to another. The wider setting of Britain and Ireland has been studied through the evidence of portable objects—pottery and metalwork in particular—but little was known about the contexts from which they were recovered. That is no longer true as large-scale excavations on either side of the Channel and the North Sea are producing evidence of settlements, cemeteries, production sites, and votive deposits on a scale that was never envisaged a generation ago. Now that the British and Irish evidence has been assimilated, it is time to compare it directly with its counterpart in Continental Europe.

When this project began its working title was The Continental Background to British and Irish Prehistory. That emphasis remains important, but, as the work developed, it became obvious that the initial scope of the project was still too limited. There are two reasons for saying so. The first is that it implies that the offshore islands had a distinctive identity of their own, when that was one of the questions that needed to be investigated. The distinction between insular and Continental archaeology invokes too many of the dualities on which twentieth-century research had been based. In the light of this experience it is more appropriate to think in terms of a prehistory of north-west Europe: a larger geographical entity in which Britain and Ireland form comparatively small parts.

The second reason for a change of emphasis is even simpler. Any attempt to set insular developments against a wider background would be poorly equipped to take account of phenomena which are not represented in Britain and Ireland but do play a role in other parts of the study area. Rather than insisting on the absence of comparative material in the British Isles, a more ambitious approach allows such evidence to be interpreted on its own terms. That is especially important as the investigation extends into areas such as Jutland where the archaeological sequence is very different from that in neighbouring regions.
THE DATASET

Data have been systematically collated on reported excavations and trial-trench evaluations carried out within the study region since the late 1990s (generally since 1998), where features of late Mesolithic to pre-Roman Iron Age date were encountered. As well as published sources, unpublished grey literature reports were consulted where these were available. Data collection took place region-by-region between 2009 and 2011; the final database and a description of the sources consulted are available via the Archaeology Data Service (<http://archaeologydataservice.ac.uk/>). Information could be collected on 5768 investigations, of which 94 per cent were development-led. This dataset provides a fairly comprehensive overview of recent development-led investigations into the prehistory of north-west Europe, with the caveat that any fieldwork lacking an accessible report will not be represented. The earlier project on the Prehistory of Britain and Ireland involved a similar systematic survey of grey literature reports, albeit covering a different period (mainly 1990–2003: Phillips and Bradley 2004; Bradley 2007). This recorded 3379 investigations.

While the data produced by recent development-led archaeology are very extensive, they are also uneven, both in terms of the types of sites represented and their geographical distribution. Taking only the database for Continental north-west Europe, 81 per cent of recorded sites have settlement evidence from one or more periods and 24 per cent have funerary evidence (with some sites recorded in both categories). Other types of evidence such as hillforts, field systems, or metalwork hoards occur at only a very small percentage of recorded sites. Chronologically, sites of the late Bronze Age and Iron Age tend to be much more commonly encountered than those of earlier periods, although the strength of this trend varies by region. Across Continental north-west Europe as a whole, features dating to after c.1200 BC were found in 74 per cent of the investigations recorded in the database, while earlier features were found in only 34 per cent of cases. This may partly reflect genuine processes of settlement expansion and population growth in late prehistory. Nevertheless, the possibility that the practices of development-led archaeology are creating a systematic bias towards later sites must also be considered. The geographical distribution of sites shows high densities in some regions contrasting with a near absence in others (Fig. 1.4). Again, these patterns probably reflect some real variations in prehistoric activity. Some areas would have been effectively unavailable for permanent settlement during much or all of later prehistory, such as marshes and bogs, which were much more extensive across lowland north-west Europe before the drainage works of recent centuries. Thus the absence of prehistoric sites from some parts of the Netherlands can be understood by reference to
palaeotopographical maps (Fig. 1.5). However, most of the geographical variation in the data cannot be explained in this way. Notably, some of the most striking disparities in site densities correspond with modern administrative boundaries, suggesting that they have more to do with the activities of present-day archaeologists than those of prehistoric people.

There are also marked disparities in the chronological distribution of the sites. Figure 1.6 shows the number of recorded sites per century across north-west Europe as a whole, while Figures 1.7 and 1.8 show the relative

Fig. 1.4. Distribution of prehistoric sites recorded in the database. Sites recorded for the *Prehistory of Britain and Ireland* project are also shown.
frequencies of settlements and funerary sites per century in different areas. The detail varies by region, but the overall trend is one of increasing numbers over time.

Very low numbers of sites are recorded for the hunter-gatherer communities of the late Mesolithic, who occupied the whole of north-west Europe until

Fig. 1.5. Late Neolithic and early Bronze Age sites in the Netherlands recorded in the database, shown against registered barrows, and palaeotopography c. 1500 BC.
Barrows data courtesy of Quentin Bourgeois, University of Leiden; palaeotopographical map courtesy of the Netherlands Nationale Onderzoeksagenda Archeologie.
c.5500 BC and some regions into the fourth millennium BC. This contrasts with the higher numbers of settlements of the earliest Neolithic (Linearbandkeramik) communities dating to the late sixth to early fifth millennia BC in western and middle Germany, the Paris Basin, and parts of Belgium and the south-east Netherlands. A reduction in sites followed around 4900 BC in Germany, Belgium, and Netherlands, though in Germany this was only temporary with a recovery from c.4750 BC. In contrast, c.4900 BC marks the extension of the Neolithic across much of northern and north-western France, leading to an increase in recorded sites. Farming was adopted across the remainder of north-west Europe during the late fifth and early fourth millennia BC, but this did not lead to great increases in site numbers. Rather, recorded settlement frequencies are generally modest, and remained so into the third millennium BC. In some regions settlements are outnumbered by funerary sites for at least part of this period. A notable peak in funerary evidence can be seen c.2800–2400 BC in Jutland.

An increase in recorded site numbers can be seen in some areas from c.2000 BC onwards, followed by a substantial rise almost everywhere in the late Bronze Age, after 1200/1100 BC. A further rise in site numbers took place across
north-west Europe during the Iron Age. Most of this rise is accounted for by settlements, which now far outnumbered funerary sites. The exact stage at which the peak in the occurrence of settlements was reached varies regionally: the sixth century BC in the southern Netherlands, north-east France, and much of western and north-western Germany; the fifth to early third centuries BC in Belgium, much of the Netherlands, and Jutland; or after 150 BC in northern France. In some areas the picture during the late Iron Age is complicated by processes of settlement nucleation, meaning that a reduction in the number of settlement sites may not imply a fall in population (see Chapters 6 and 7).

The data from Continental north-west Europe can be compared with the information collected by Tim Phillips for the Prehistory of Britain and Ireland project. This suggests a similar dramatic rise in site frequencies from the Neolithic to the Bronze Age to the Iron Age across most of England. The same pattern can be seen in the more extensive data from England collected by the Archaeological Investigations Project, based at Bournemouth University (<http://csweb.bournemouth.ac.uk/aip>). The pattern is less clear in Phillips’ data for Scotland and Wales, while Ireland is different entirely. Here a large peak of sites in the Bronze Age—many of them being the ubiquitous ‘burnt mounds’ (see Chapter 5)—was followed by a dramatic fall in the Iron Age to a level similar to that for the Neolithic.

Here we are faced with a problem: how far do the patterns outlined above reflect genuine processes of demographic change through prehistory, and how far are they influenced by issues of site visibility and recovery? Over six millennia of later prehistory, communities across north-west Europe lived in very different ways, and their practices created very different archaeological records. This could lead to an under-representation of some periods.

For example, although it is likely that the early farmers of the Linearbandkeramik lived at higher population densities than Mesolithic hunter-gathers, the disparity in site numbers could be exaggerated by factors of visibility. Mesolithic occupation sites are ephemeral, often consisting of flint scatters. By contrast, early Neolithic communities used substantial houses and enclosures—which are highly visible in aerial photographs and trial trenches—and easily recognizable decorated pottery (Chapter 2). Similarly, the generally low numbers of sites in the later Neolithic and early Bronze Age reflect a return to ephemeral forms of settlement with few recognizable structures. The two regions with slightly higher settlement numbers from this period—Jutland and early third millennium Nord-Pas-de-Calais—are effectively the only ones in which a normative house form has been identified (Chapters 3 and 4). While the huge increase in site numbers during the late Bronze Age and Iron Age must surely reflect settlement expansion and demographic growth, the relatively high visibility of sites from these periods must also be considered. During this time settlements in many regions were robustly built—sometimes incorporating
Fig. 1.7. The chronological distribution of settlement sites in the database from different regions of north-west Europe. The data have been scaled to represent the number of sites per century (as in Fig. 1.6), and then converted to a percentage of all settlement sites from that region. For example, a value of 10 for a given century indicates that 10 per cent of recorded settlement sites in that region were occupied during that century. Paris Basin = Picardy, Upper Normandy, Ile-de-France, Champagne-Ardenne; north-east France = Lorraine, Alsace; north-west France = Lower Normandy, Brittany, Pays de la Loire; western Germany = Rhineland, Rhineland-Palatinate, Saarland, Hesse; north-west Germany = Lower Saxony, Westphalia, Bremen, Hamburg.
enclosures—and contained significant accumulations of material culture. The one region that differs is Ireland, where the absence of pottery and other diagnostic artefacts seriously hinders the recognition of Iron Age sites (Chapter 6).

This brief survey of the distribution of the data suggests that they do not perfectly mirror levels of prehistoric activity; some regions, periods,
and site types are likely to be under-represented compared to others. This can be partly explained by the fact that certain kinds of site have a higher archaeological visibility. It may also be linked to variations in the organization and practices of contemporary archaeology across north-west Europe, as different ways of working may favour the recovery of different kinds of evidence.

Clearly then, in order to understand the data produced by development-led archaeology we must examine the ways in which it was created. How do the organization and practices of contemporary archaeology affect the character

Fig. 1.8. Chronological distribution of funerary sites in the database from different regions of north-west Europe. Methodology as Figure 1.7.
of the archaeological record in different regions across north-west Europe? Factors that must be considered include: the intensity and nature of the development pressure on archaeological sites; the organization and funding of the archaeological response to development; the methods used in fieldwork and post-excavation analysis; and the arrangements for the production and dissemination of reports (see also Webley et al. 2012 and Haselgrove et al. forthcoming).
Development Pressures

The level of development pressure is obviously one of the most important conditions determining the amount of development-led fieldwork carried out. It is therefore unsurprising that many of the greatest concentrations of fieldwork shown by Figure 1.4 correspond with regions with a high population density and high levels of economic activity, such as south-east England and the southern Netherlands. At a more local level, development pressures are often concentrated in lowlands and valleys rather than in upland areas. This reflects the distribution of population, and also the fact that valleys are a focus for gravel quarrying and often serve as transport corridors. This lowland and valley bias influences the kinds of sites uncovered. Late Bronze Age and Iron Age hillforts, for example, are not often investigated in a development-led context. Protected areas such as national parks may be entirely out of bounds to development and hence to development-led archaeology. Similarly, legal protection of certain classes of monuments such as upstanding megaliths and barrows means that they rarely fall within the remit of development-led work. This is strikingly illustrated in the Netherlands, where registered barrows have a quite different distribution to development-led investigations of late Neolithic and early Bronze Age sites (Fig. 1.5). This is because upstanding barrows are usually protected monuments and also tend to be located in upland and heathland areas that are largely shielded from development.

The types of development leading to the investigation of prehistoric sites were recorded in the project database. For north-west Continental Europe as a whole, housing or commercial development was the most important cause (41 per cent of recent investigations), followed by road and railway construction (20 per cent) and quarrying (8 per cent). Forestry, agriculture, pipelines, and airport construction are of more minor importance. Their geographical distribution is variable. Quarrying, for example, is concentrated in areas such as the river valleys of northern France and is largely absent from the Low Countries. Large-scale opencast lignite mining, along with associated development such as the relocation of villages, has created a major concentration of investigations in the Rhineland to the west of Cologne. In several regions, long-distance projects such as motorways, railways, and gas pipelines have had a major impact on site distributions, by producing linear strings of investigations. These variations are important as different types of development can produce different kinds of archaeological evidence. The largest contiguous excavated areas are often associated with quarries, airports, and large
industrial estates or housing schemes. Such large-scale excavations can provide good insights into the development of ancient micro-landscapes, and are often the only projects to reveal dispersed, low-density prehistoric sites. Gravel quarry excavations in particular often produce a wealth of evidence as gravel terraces were frequently a preferred locale for prehistoric occupation. In contrast, linear projects—and pipelines in particular—generally allow only a narrow slice of individual sites to be uncovered. However, long-distance linear projects can play an important role in providing a transect through the landscape, revealing variations in the use of different topographical zones.

The Organization of Development-Led Archaeology

While the Valletta Convention has to some degree achieved its aim of bringing about greater convergence in systems of development-led archaeology, in practice the broad recommendations of the convention have been interpreted in differing ways across north-west Europe, reflecting the different political discourses in each country. Wide variations can also exist within federal countries such as Belgium and Germany, where control of heritage matters has been devolved to a regional level (Table 1.1).

Nowhere in north-west Europe is it considered feasible or desirable to evaluate all development sites. Systems are therefore required to monitor planning applications and advise the local planning authorities on which developments require archaeological work. This stage of the archaeological process is always carried out by state employees, attached to local government or to other locally based public bodies, such as the ‘monument offices’ in the German Länder or designated local museums in Denmark. However, the criteria used to assess which development sites require archaeological work can vary significantly, even between different local authorities within a single country. Such variations will clearly have an impact on the numbers and types of sites investigated. Decisions will usually be informed by some form of historic environment record or archaeological map, maintained at local or national level. Some administrations require prior indications that archaeology is expected within the development area before any fieldwork is undertaken. This is generally the case in western Germany, where most information comes from the Landesaufnahme surveys (Kuna and Dreslerova 2007, 152–3). This creates a danger that work is disproportionately focused on upstanding monuments and other types of site that leave clear surface traces, such as crop-marks or scatters of diagnostic artefacts. Elsewhere, systematic field evaluation (most often trial trenching) is routinely called for in development areas judged to have the potential to contain archaeological remains. In some cases this is based on a standard surface area threshold, as in France where there is a national legal requirement that all development areas above three hectares
## Table 1.1. Summary of models for delivering development-led archaeology in north-west Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>Funding model</th>
<th>Delivery of fieldwork</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium—Flemish Region</td>
<td>Mainly developer funding (gradually introduced in 2000s); public funding for e.g. ‘strategic’ industrial areas</td>
<td>Excavation firms competing in market system. The regional archaeological service has a monopoly for public infrastructure projects</td>
<td>De Clercq et al. 2012; Wouters 2012</td>
</tr>
<tr>
<td>Belgium—Walloon Region</td>
<td>Public funding</td>
<td>Regional government</td>
<td>Plumier 2007</td>
</tr>
<tr>
<td>Denmark</td>
<td>Developer funding (since 2003)</td>
<td>Local museums with monopoly within their designated area</td>
<td>Mikkelsen 2012</td>
</tr>
<tr>
<td>France</td>
<td>Developer funding gradually introduced from 1980s. Since 2002 a general development tax funds evaluations and subsidizes some excavations; direct developer funding for most excavations since 2004</td>
<td>Mainly public bodies (INRAP and local collectivities); licensed excavation firms allowed to compete for excavations (but not evaluations) since 2004</td>
<td>Collart 2012</td>
</tr>
<tr>
<td>Germany</td>
<td>Varies by federal state. Developer funding fairly well established in some regions (e.g. Landschaftsverband Rheinland), mainly public funding in others</td>
<td>Mainly public bodies (the ‘monument offices’ of each federal state, and archaeologists from local authorities). In some states (e.g. Hessen, Landschaftsverband Rheinland) excavation firms also work under contract from the monument offices</td>
<td>Andrikopoulou-Strack 2007</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Public funding</td>
<td>Musée National d'Histoire et d'Art</td>
<td>Bis-Worch 2007</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Developer funding (since late 1990s)</td>
<td>Licensed excavation firms competing in market system (since c.2001)</td>
<td>Bazelmans 2012</td>
</tr>
<tr>
<td>Republic of Ireland</td>
<td>Developer funding (since 1980s)</td>
<td>Excavation firms competing in market system</td>
<td>Gowen 2012</td>
</tr>
</tbody>
</table>
must be evaluated. Where the evaluation reveals significant archaeological remains, a full excavation will normally be required before the development can go ahead.

In a few places, the same public-sector bodies that advise the local planning authorities on archaeology also carry out any necessary fieldwork. This is the case, for example, with the Danish local museums and many of the German state monument offices. More usually, these functions are separated to avoid any actual or perceived conflict of interest. In other countries such as the UK, Ireland, and the Netherlands there is a well-established market in archaeology, with developers free to choose a contractor from a range of competing organizations.

**Funding**

In line with the Valletta Convention, the principle of developer funding is now established across most of north-west Europe (Table 1.1). Nonetheless, there is much variation in the level of financial commitment actually required of developers. At a minimum, there is agreement that developers are responsible for funding excavation where the presence of archaeological remains has been established, but differences emerge over who pays for other stages of archaeological work.

In some jurisdictions, such as the UK and the Netherlands, developers are routinely required to pay for evaluation fieldwork as well as any subsequent excavations. They should also fund post-exavcation analysis and reporting, even if some projects receive only limited work in practice. The market in archaeological services is intended to ensure a fair deal for developers, although concerns have sometimes been expressed by archaeologists that the downward pressure on costs could negatively affect the quality of the work. A similar framework has now emerged in Flanders, although here public money is still used for work relating to certain kinds of developments, such as ‘strategic’ industrial areas. The situation in France is slightly different in that evaluations are not funded by individual developers, but rather by a general development tax. The funds raised by this tax are also used to subsidize some excavations, for example in the case of public social housing schemes. This arrangement has some advantages, but in practice the tax has consistently failed to generate funds sufficient to cover all the necessary work (Collart 2012). Also in Denmark, there are special arrangements for evaluations. Developers are obliged to fund large evaluations (covering more than 5000 m²), but many smaller evaluations must be paid for by public funds. In the absence of any market mechanism, budgets for developer-funded evaluations and excavations are set by the local museums that carry out the work but must be approved by the national Heritage Agency to ensure that they are...
reasonable. In western Germany, debates still rage over the proper interpretation of the developer-funding principle (e.g. Möller 2010). While the principle is relatively well established through practice in some areas, as in the Rhineland, elsewhere there has been less success and there is still a reliance on the public purse. Even under the best circumstances developers are generally only required to pay for test trenching and excavation where there are prior grounds to suspect the presence of significant archaeology. They may pay for a basic excavation report, but are rarely required to fund detailed post-exavocation work or publication. Special contractual arrangements apply to the vast lignite quarries in the Rhineland, where the mining company pays a set annual sum towards fieldwork, research, and publication. An impressive amount of evidence has been generated as a result, although the funding allows only around 5 per cent of the area consumed by the quarries to be investigated. The finite funds are allocated according to a research strategy that favours investigation of earlier Neolithic, late Bronze Age, and Iron Age sites over those of other prehistoric periods, thus skewing the dataset. In Luxembourg and the Walloon Region of Belgium, meanwhile, no formalized system of developer funding has yet developed. Developers have, however, provided resources for fieldwork in the case of a few major infrastructure projects such as gas pipelines and high-speed railways (Le Brun-Ricalens et al. 2002; Plumier 2007; Fock and Remy 2012).

The availability of funding is a key factor in determining the amount of archaeological activity in a given region, both in terms of the number of field investigations and the levels of post-exavocation analysis. Comparison of Table 1.1 and Figure 1.4 clearly shows that the numbers of investigated prehistoric sites tend to be lower in regions in which developer funding is poorly established or absent and there is a reliance on limited public funds. That said, archaeologists working within a developer-funded framework are not immune from financial pressures either. In market systems competitive tendering provides a check on the costs allocated to individual projects, while in situations where a public body sets the amounts that developers must pay there will inevitably be political pressure to keep these sums ‘reasonable’, as has occurred in France (Collart 2012).

Fieldwork and Post-Excavation Practice

Further important factors influencing the kinds of data generated by development-led archaeology are the methods used for fieldwork and post-exavocation analysis. In some places these methods are closely regulated, as in the Netherlands where they must follow a national set of quality standards (Willems and Brandt 2004). Elsewhere norms have been established through practice.
Across north-west Europe, the organizations involved in development-led archaeology are required to complete large numbers of projects rapidly and cost-effectively. Concerns have been raised that these pressures may mean that fieldwork follows set routines and may not be tailored to any specific research questions. In some countries, there have also been concerns that the administrative regimes for development-led archaeology tend to emphasize the recording of archaeological remains as an end in itself. The notion that ‘preservation by record’ is the goal of development-led archaeology has been extensively critiqued in recent years, and it is now widely recognized that practice should be focused on increasing understanding of the past (e.g. R. M. Thomas 2010). Recent initiatives to improve the research focus of development-led archaeology have included the development of research agendas for the Netherlands, (<http://www.noaa.nl>), Flanders (<https://onderzoeksbalans.onroerenderfgoed.be>) and various regions of the UK (e.g. Last 2012), generally written by committees with representatives from across the archaeological sector. The existence of such research agendas has not of course prevented individual organizations maintaining their own research priorities or interests, often relating to a particular local region.

The first phase of fieldwork will often be some form of evaluation. The purpose of such evaluations is to detect the presence of archaeological remains within a development area, and to assess their character and preservation. The methods used in each region have tended to become increasingly standardized—or are even laid down by law, as they are in France. Arguably, however, important evidence can be missed unless evaluation techniques are tailored to the specific context of each site. This context includes the landscape and soil characteristics, and the research questions—in other words, what is being looked for.

The initial stage of evaluation may be non-intrusive. Surface survey (field-walking) is sometimes used, for example in the lignite mining areas of the Rhineland. It is only effective on ploughed farmland, and produces best results for those site types that produce abundant diagnostic artefacts. Geophysical survey is used fairly often in Britain and parts of Germany but is less common elsewhere. Its effectiveness varies according to soil type, and it can only identify sites with fairly robust structural features.

In most cases evaluation is synonymous with trial trenching. Systematic trial trenching of large development sites has become routine across most of north-west Europe, making up the bulk of development-led fieldwork and significantly outnumbering full excavations. Exceptions include western Germany and the Walloon Region of Belgium, where large-scale trial trenching rarely occurs. There is much variation across north-west Europe in the standards used for trial trench evaluations, in terms of the sample percentage and the arrangement of the trenches. Samples of at least 10–12 per cent are either required or established by practice in France, Flanders, the Netherlands,
and Denmark, while in Britain smaller samples of around 1–5 per cent are typical, with no official standard. This is a crucial issue, as several studies have shown that the density, size, and arrangement of trenches have a major impact on the character of the archaeology found (Blancquaert and Medlycott 2006; Hey and Lacey 2001; Klitgaard 2002; Verhagen and Borsboom 2009; De Clercq et al. 2011). The sparse features that characterize many prehistoric sites can often be missed in trench evaluations, especially when the level of sampling is too low. For prehistoric sites where most of the evidence consists of artefact scatters in the plough-soil, as is often the case for pre-Iron Age settlements located on arable land, fieldwalking may in fact be more effective than trial trenching (Hey and Lacey 2001). Systematic test pitting with sieving of the topsoil can also be very useful in these circumstances, but is rarely practiced. The potential of an approach combining fieldwalking and test pitting is shown by the work carried out by the Cambridge Archaeological Unit on lithic scatter sites in East Anglia (Edmonds et al. 1999). A different set of challenges is posed by sites covered by thick alluvial or peat overburden, making trenching impractical. The method of systematic coring with an auger has become common in recent years in the Netherlands and Flanders, especially in such ‘buried’ landscapes. This has allowed important, deeply buried Mesolithic and Neolithic complexes to be discovered at sites such as Verrebroek Dok (De Clercq et al. 2011) and Hardinxveld-Giessendam (Louwe Kooijmans 2001a; 2001b). Such examples show how the prehistoric evidence generated by development-led archaeology in certain areas can be enhanced by the use of innovative evaluation methods that go beyond standardized trial trenching.

At the stage of ‘full’ excavation, in some regions of north-west Europe it is commonplace for extensive areas of topsoil to be stripped, while elsewhere investigations tend to be more narrowly targeted. This again has implications for the kinds of prehistoric evidence encountered. In the gravel quarries of northern France, it was formerly standard practice entirely to strip threatened areas, but since 2001 trial trenching followed by targeted excavation has been the rule. The result has been a reduction in the recovery of small and ‘low-density’ prehistoric sites (Dubouloz et al. 2005). Data collection for the Prehistory of Britain and Ireland project showed that the distributions of Neolithic houses, Beaker flat graves, and late Bronze Age cremation burials are almost entirely restricted to projects in which large areas were stripped (Bradley 2007; 2012a). Some forms of ‘off-site’ activity may in fact be drastically under-represented wherever stripping is less than total. Bronze Age metalwork deposits are a case in point. These often occur in isolated locations in the landscape, away from contemporary settlements. In such cases they are likely to lie outside the areas selected for full excavation, except in rare cases where a deposit is actually struck by a trial trench. As a result, the recovery of metalwork in development-led archaeology across north-west Europe has been modest when compared with the much greater numbers of finds made...
by amateurs. For example, a recent study of Bronze Age gold from England and Wales showed that only seven artefacts have been recovered from modern excavations, compared to well over one hundred reported metal detector finds in the period 1997–2010 alone (Murgia and Roberts forthcoming).

Many of the methodological issues concerning excavation techniques are similar to those relating to evaluations. Do methodologies follow set procedures, or are they adapted to each site? And given that total excavation of every site is not feasible, what sample of each site should be investigated? In the UK, for example, one formula often followed is that at least 50 per cent of all ‘discrete’ features and 10 per cent of linear features (such as ditches) should be excavated. Concerns have been raised that this approach leads to a mechanistic ‘digging by numbers’ which adds little to our knowledge about the past. Better insights can be gained where resources are focused on deposits with particular potential to address specific research questions (Fitzpatrick 2012).

There are also other variations in excavation methods. British archaeology places an emphasis on single-context recording and on excavations that dissect ancient deposits according to the sequence in which those deposits formed. Subsoil features such as pits and postholes are sectioned or excavated in their entirety. On many parts of the Continent, however, there is more emphasis on horizontal excavation and deposits are removed in a series of carefully recorded spits. Both methods produce worthwhile results, but they are not exactly comparable, a point which is made by Martin Carver (2009) in his book *Archaeological Investigation*. Many archaeologists assume that there is only one right way to excavate and yet they are happy to bring together the results of projects which employ very different techniques from one another.

Similarly, different regional styles of fieldwork take distinctive approaches to the question of chronology (Tables 1.2 and 1.3). Greater numbers of samples are dated in some areas than in others, and where this is done the results may, or may not, be subjected to statistical analyses. To some degree these variations relate to the levels of funding available for post-exavcation work, but they are also partly cultural, as in some regions prehistorians put their confidence in artefact typology or rely on seriation. Both are true of the parts of Germany considered here. As a result, monuments such as Neolithic enclosures and tombs are more precisely dated in Scandinavia and the British Isles than they are in Germany or France. In regions where radiocarbon dating is routine, whole new categories of features and sites have been identified in recent years. Thus in northern France and southern Britain the recent realization that flat, unaccompanied cremation burials (or small deposits of cremated human bone) were fairly common in the later Bronze Age has come about through the use of radiocarbon dating in development-led projects (Baray 2001; Bradley 2007). Evidence for a previously overlooked Iron Age tradition of inhumation burial in southern Britain has emerged in the same way (Hey et al. 1999).
Table 1.2. Summary of conventional chronological schemes used in different regions of north-west Europe, c.5500–1500 BC (corresponding to Chapters 2–4)
There is an important factor affecting the contribution of development-led archaeology to our knowledge of prehistory in different parts of north-west Europe. As we have seen, there is wide variation in the extent to which developers are held responsible for funding post-excavation analysis and publication. Patchy resources and the sheer volume of fieldwork have meant that the traditional ideal of detailed analysis leading to a journal article or monograph has only been achieved for a small minority of development-led excavations. In some regions, an overview of recent fieldwork can be gained from annual ‘round-up’ volumes, which provide a short note on each project. Such volumes may not be comprehensive in their coverage, and are in some cases running several years behind schedule. Meanwhile, the production of unpublished ‘grey literature’ reports has mushroomed in many countries. Deposition of such a report in a national or regional archive is often a legal requirement or a condition of planning permission. Grey literature reports are normally in the public realm, yet they remain an underused resource. The problem is particularly acute in regions such as England where reports are dispersed between numerous local archives, a situation hardly conducive to synthetic work (Bradley 2006). Fortunately, access to data is now improving in several countries through initiatives using the internet to provide access to grey literature reports. Examples include the Archaeology Data Service in Britain (<http://archaeologydataservice.ac.uk/>), DOLIA in France (<http://www.inrap.fr/archeologie-preventive/la-recherche/bibliotheque-scientifique/catalogue-dolia/p-8648-acces-a-dolia.htm>) and DANS in
Table 1.3. Summary of conventional chronological schemes used in different regions of north-west Europe, c.1500–1 BC (corresponding to Chapters 5–7)

<table>
<thead>
<tr>
<th></th>
<th>W. Germany</th>
<th>Northern France</th>
<th>Netherlands</th>
<th>N. Germany/ Denmark</th>
<th>(Southern) Britain</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500 BC</td>
<td>Middle Bronze Age</td>
<td>Middle Bronze Age II-III</td>
<td>Late Bronze Age</td>
<td>Early Bronze Age Period II</td>
<td>Middle Bronze Age</td>
<td>Middle Bronze Age</td>
</tr>
<tr>
<td>1400 BC</td>
<td>Late Bronze Age (Urnfeld)</td>
<td>Hallstatt A</td>
<td>Middle Bronze Age I</td>
<td>Early Bronze Age Period III</td>
<td>Late Bronze Age Period IV</td>
<td>Late Bronze Age</td>
</tr>
<tr>
<td>1300 BC</td>
<td>Hallstatt B</td>
<td>Late Bronze Age II</td>
<td>Late Bronze Age</td>
<td>Early Bronze Age</td>
<td>Early Bronze Age</td>
<td>Late Bronze Age</td>
</tr>
<tr>
<td>1200 BC</td>
<td>Hallstatt C</td>
<td>Hallstatt Ancien</td>
<td>Middle Bronze Age</td>
<td>Late Bronze Age Period V</td>
<td>Early Iron Age</td>
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<td>La Tène C (Middle LT)</td>
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<td>100 BC</td>
<td>La Tène D (Late LT)</td>
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Roman period
the Netherlands (<http://www.dans.knaw.nl>). DANS alone contained over 21,000 archaeological datasets in December 2013, most of which are grey literature reports. The availability of data is poorer in many parts of Germany, where developers are frequently not required to fund any detailed post-exavation work. As a result, many investigations receive no proper report at all, beyond perhaps a brief preliminary note in a local journal or ‘round-up’ volume. When full publication does occur, it is often the result of a post-graduate student ‘adopting’ the site as a thesis topic.

**CONCLUSION**

The variations in practice outlined above reflect fundamental disagreements about the purpose of all this activity. Is it to document the remains of the past before they are destroyed, or is the main motivation to undertake research? If the main aim is descriptive, to what extent do their findings need to be interpreted, and is there any reason why those observations should be presented in a definitive report? If, on the other hand, developer funding provides a means to an end—the investigation of prehistoric settlements, cemeteries, and landscapes on a scale which has never happened before—is the project of any value unless its results contribute to public understanding of the past? If so, then many projects fail along the way, for across large parts of the study area the excavated material has not been sufficiently analyzed and little information is available in printed or digital form.

This book has been written in the belief that the only justification for development-led archaeology is to provide the raw material for writing human history. If so, then any project has a potential part to play, and it is essential that its results should be made accessible. They cannot be confined to small groups of professional excavators, planning authorities, and managers of the cultural heritage. None of them is in a good position to study the wider significance of the new fieldwork as their time is too often taken up with other responsibilities. It seems ironic that the number of worthwhile projects has grown during a period when the appetite for new research seems to have diminished, for the new work offers exactly the kinds of information that had been sought in vain by previous generations of prehistorians. There is a crisis of confidence in contemporary archaeology, and it reflects badly on a discipline in which increasing amounts of money are devoted to collecting new data.

It is impossible to overemphasize the contrast with what was available before. The material collected during this project involved the findings of over 5700 field projects, and earlier work employing the results of development-led archaeology in Britain and Ireland accounts for a further 3300 investigations. Research on the latter project ended over ten years ago, but this book refers
selectively to more recent findings. In combination, it draws on the outcome of well over 9000 commercially-funded excavations and evaluations. Given the large amount of information that is presently available, it is only right that it should range widely across space and time.

Even so, many problems remain. The results of development-led fieldwork have a huge contribution to make, but it is clear that their potential is not evenly shared across all the regions, periods, and issues considered here. Taken in isolation, they cannot provide a balanced picture of the past, and for that reason they must be set alongside other sources of information, including the work of academic and amateur research projects. The archaeological literature extending back to the nineteenth century still retains its importance, and the same is certainly true of museum and private collections. Field survey of undamaged monuments can also lead to new discoveries. If traditional kinds of evidence make a smaller contribution than they have done in the past, it is only because they are overshadowed by the sheer number of new observations coming from development-led archaeology. Just how significant that new information can be—and the ways in which it can be combined with more familiar sources—will be apparent in the following pages.