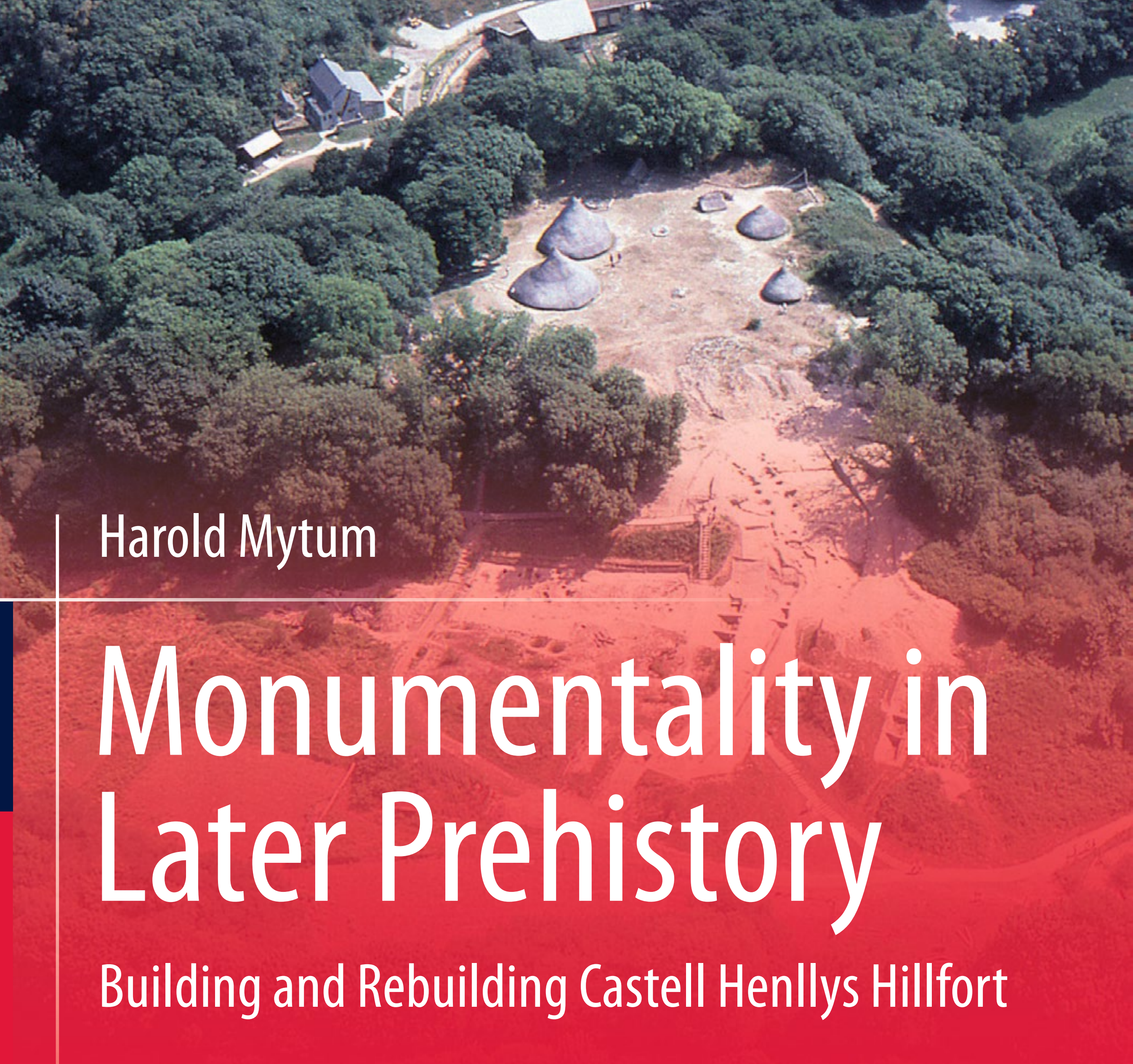

Harold Mytum

Monumentality in Later Prehistory

Building and Rebuilding Castell Henllys Hillfort

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This book is dedicated to those who moved the earth and made Castell Henllys: to those who initially constructed it and carved the landscape so dramatically and those who did their best to peel back the layers to understand the past and make a heritage site in the present. The still-enduring Castell Henllys earthworks and this book stand as two forms of recognition of all their efforts.

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Part I
Setting the Scene

Chapter 1
Enclosure and Monumentality: Hillforts in British and European Late Prehistory

Abstract The later prehistoric hillfort is found across Europe, and it is seen as a vital component in settlement patterns. Whilst a military purpose is often assumed, the investment in their scale of earthworks is seen as socially significant. Two concepts are particularly relevant in analysing these large settlements. The first is that of enclosure, by which the area is defined and contained; enclosure is a frequent prehistoric phenomenon, but rarely on this scale. The second is monumentality in the visually impressive nature of the earthworks; this may be visible in other features such as burial mounds and other ritual structures, but here its role within the hillfort tradition is considered.

Two important concepts in archaeology are those of monumentality and enclosure. Monumentality does not only refer to settlements, but to many forms of structures such as tombs, boundary markers, and even transport routes. Enclosure is more frequently considered in relation to habitation but can also encompass ditches around barrows or agricultural systems. Both concepts are often combined in archaeological discussions regarding hillforts, those archetypical structures of later prehistoric Europe, though similar structures occur elsewhere across the globe, in regions as diverse as Japan (Ozawa et al. 1995), the Pacific Northwest (Moss and Erlandson 1992), Polynesia (Anderson and Kennett 2012), and the Arabian Gulf (de Cardi and Doe 1971), with those of New Zealand being most often cited as parallels in Britain (Armit 2007; Bellwood 1971; Davidson 1987; Fox 1976; Hayward 1983). Both enclosure and monumentality form part of the debates regarding hillforts in Britain and Europe, though the brief outline of recent archaeological research interests given below reveals that these are often seen as relevant supporting evidence for other issues such as state formation and the origins of urbanism, rather than being research themes in their own right. Whilst hillforts are relevant to these issues in some parts of Europe at certain periods, it is clear that these do not provide overarching explanations of the construction and use of hillforts in the vast majority of cases in Iron Age Britain.

This short introductory chapter is designed to outline the important features of monumentality and enclosure in general and to consider how these concepts assist in our understanding of the past with reference to hillforts. Both terms are widely used, though the level of detailed consideration of their application and meaning is surprisingly limited, though two papers linked primarily with data from southern England do provide inspiration for some of the discussions below (Hamilton and Manley 2001; Lock 2007). At times the two concepts are combined or conflated, and in many discussions of hillforts it can be difficult to identify whether it is the phenomenon of enclosure that is the major point of discussion, or that of monumentality. Each is significant in its own right, but the combination creates a particular, monumental, form of enclosure. Both terms are generally regarded as unproblematic and can be applied without any qualms, but on further consideration it is clear that they both carry implications or associations that require some further discussion.

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This book is the detailed examination of an extensively excavated late prehistoric settlement belonging to the British Iron Age that is enclosed in a monumental way. As such it has a particular relevance at local, regional, and national scales. Through the extent of the excavation and the length of time taken to reveal and ponder on the remains, however, it provides a window into the complexities of the archaeological record and how this richness can throw light on the major themes of monumentality and enclosure, amongst others. This brief review provides a context for the detailed site evidence to follow, with a broad, albeit brief, theoretical and hillfort historiography that provides the setting for the study.

The book demonstrates how the particular details of site's structural evidence, set in its complex stratigraphic relationships, allow us to build up models or interpretations that may compete with each other but nevertheless allow us to gain fresh insights into enclosure and monumentality both at a general level and at that of personal, lived experience in the past.

1.1 Hillforts in Britain and Europe

The hillfort is one of the most iconic features of late prehistoric archaeology (Ralston 2006), most being constructed during the Iron Age, but in some regions such sites were built from the late Bronze Age and indeed in some from much earlier still. Here, however, the late Bronze Age and Iron Age sites will form the focus of attention, though some were refurbished or at least reoccupied in the early historic period. Ralston considers that there may be up to 30,000 such sites in Europe; only c. 7 % of these are found in Britain, but it is here that the most attention has been paid to these sites, both in terms of detailed survey and of excavation. In most of Europe it is the largest sites, often known as *oppida*, that have attracted most investigation. These are frequently linked with monumental barrow burials that are also considered within a package of practices and material culture usage that links long-distance trade, state formation, and conspicuous consumption with both the forts and the burials (Collis 1984; Härke 1982; Moscati et al. 1991; Wells 1980, 1984, 2001). A relatively small number of major excavations of these large sites are repeatedly referenced (Moscati et al. 1991), and hillforts such as the Heuneburg set and create agendas that perpetuate themselves (Arnold 2010; Kimmig 1991). The sites that contribute to these debates dominate the literature, though some parts of France and the Iberian Peninsula, with different narratives, have recently received considerable attention (Álvarez-Sanchís 2005; Collis 2010; Moret 1996; Ralston 2006).

The sites that have received most attention were clearly important in the past and have helped throw light on major socio-economic changes in Europe, but there is a risk that the alternative hillfort histories, functions, connections, and meanings are not revealed if only these sites are considered. Even within the relatively small English region of Wessex, for example, the two distinctive and diverse biographies of Danebury (Cunliffe 1984, 1995; Cunliffe and Poole 1991) and Maiden Castle (Sharples 1991a; Wheeler 1943) can both be contrasted not only with each other but also with those of other hillforts in the same region (Cunliffe 2005; Sharples 2010). Within a British context, it is clear that most hillforts were never intended to be on the same scale of occupation as Maiden Castle or Danebury, and did not necessarily serve the same socio-economic, symbolic, or landscape functions either. Brown (2009) reveals the problems of definition and interpretation of such a broad category as hillforts, even within England and Wales, as the description and typological classification of monument form and assumptions of simple culture-historical invasion hypothesis explanations (Forde-Johnston 1976; Hogg 1975) are no longer seen as sufficient.

As more regionally based studies using rich locally derived contextual data become available, the diverse trajectories and roles of hillforts will become clearer even if the "grand narrative" of the settlement type dissolves. The monuments archaeologists group together as hillforts have superficial similarities in form and location, yet the accumulating evidence indicates that past social groups could decide to construct and use such monuments at many different points in time and for many different combinations of reasons. Moreover, they could choose to continue to use, abandon, reuse, adapt, or ignore these sites thereafter. Latent with potential, such locations could continue to hold significance if not function, and at any time their physical and topographical qualities could attract new periods of use, meaning, and manipulation.

1.1.1 Form and Classification

Hillforts come in a range of morphological categories, based on their size, location within the landscape, and nature and complexity of the earthworks. Whilst the interiors may vary greatly in character, this is only sometimes possible to ascertain without excavation, so the topography and defining boundary features have tended to be used in most studies (Brown 2009; Ralston 2006). A great deal of effort during the twentieth century was devoted to detailed surface survey of hillforts, with spectacular individual results and an overall corpus of data that is of high quality, often through surveys conducted by the Royal Commissions in England, Wales, and Scotland (Forde-Johnston 1976; Hogg 1973, 1975, 1979). In some cases this has now been augmented by extensive geophysical surveys (Payne et al. 2006).

The size of hillforts varies very greatly, and at the lowest levels merges into sites of similar size that are generally considered as enclosed farmsteads. The lower limit is often seen as around 0.25 ha (half acre), but most sites enclose several hectares (Hogg 1979). Castell Henllys lies towards the lower end of the range with an interior of c.0.5 ha, increasing to c.1 ha when including the annexe area. The largest forts may be hundreds of hectares in area, but these—often termed *oppida*—are a distinctive category that only seems to appear in the late pre-Roman Iron Age across Europe, with sites of 30 ha and above (Collis 1984).

The lines of enclosure vary in number and may not be consistent round all parts of the circumference. Forts with a single wall or bank and ditch are termed univallate, those with two bivallate, and two or more are termed multivallate (Forde-Johnston 1976). Recent excavations at a number of sites, and careful assessment of field evidence at others, have demonstrated that in many cases hillforts have complex sequences of earthwork construction, and some sites that appear multivallate were only ever univallate in any one phase, with some lines of enclosure replacing rather being merely additions to existing features. Both survey and excavation have indicated that entrances may shift or be blocked, may become more complex over time, or be left to decay.

1.1.2 Chronology

The chronology of hillforts across Europe is in general well established, though in many regions this is based on a very small proportion that has been excavated. Moreover, most investigations have concentrated on the earthworks and their sequence and may not have identified phases not easily recognised in narrow trenches or of phases of activity within the sites that did not entail any reworking of the boundaries. The sequences are therefore provisional in that more phases of activity may yet be identified, and it certainly appears that in different parts of Europe the construction and use of hillforts was intermittent across the later prehistoric and early historic periods. There is no overall pattern and, whilst in Britain there is now considerable evidence for some hillforts being first constructed in the late Bronze Age, others were not constructed until many centuries later. Cunliffe (2005) has developed a model for Wessex hillforts that sees the early establishment of sites followed by an abandonment in the middle Iron Age of many as a select group of "developed hillforts" remained, with a further shift in favour of lowland oppida in the pre-Roman period. This model, however, is not that followed in other regions of Britain.

1.2 Enclosure

The concept of enclosure is one that for many decades was applied in archaeology with little consideration of its significance except as a classificatory tool, though recently there has been more attention paid to this phenomenon (Neustupný 2006; Thomas 1997; Venclová 2006). One of the major typological distinctions in settlement studies is the identification of enclosed and open settlements as one of the fundamental, binary, divides from which further classification and interpretation may flow (Edis et al. 1989; Hingley 1990; Thomas 1997). This is in large part because the physical features of enclosure are seen in the landscape, either as upstanding earthworks or as crop or soil marks.

Archaeological visibility, and so amenability to classification, investigation, and interpretation, has meant that in many regions enclosed settlement is better known and understood than unenclosed settlement. This is particularly the case where settlements have low artefact densities, as is the case with many regions in the British Iron Age, and so other effective methods for site location are restricted. Intensive aerial photography and geophysics have identified a significant number of areas where open settlements are frequent in southern and eastern Britain (Cunliffe 2005), but even here only certain types of unenclosed settlement—larger villages and those with subsurface structures such as souterrains that are visible on crop marks—may be reliably identified. Discoveries made along archaeologically arbitrary if not random lines such as pipelines or roads reveal other, sometimes quite isolated and small, settlements; some only survive where post-depositional conditions have unusually preserved the ephemeral remains that in most circumstances would be lost in the taphonomic processes operating in Britain. Such finds may demonstrate that these sites existed, but are not yet sufficient to indicate their frequency, significance within the settlement pattern, or how this affects understanding of social structures, population densities, and indeed the role of enclosed settlement within this more extensive and complex landscape.

Settlements may be enclosed or unenclosed, as can other features such as ritual sites or burial areas, fields, and route ways. Some Iron Age landscapes, such as much of Wessex and the river valleys of southern England, can be heavily enclosed (Collis 1996; Hingley 1990), but there can be open settlements with enclosed fields, as in parts of eastern England, and enclosed settlements with no enclosed fields, as in West Wales (Murphy and Mytum 2012). What may or may not require enclosure (or at least enclosure in an archaeologically visible manner after several millennia) varied greatly, as did the scale and nature of these boundaries. In a few regions of Britain, such as the upland Cheviot range in Northumberland, settlement and agricultural activity over millennia are unusually well preserved and visible as surface evidence. In the most recent phase of a long tradition of intensive field research, evidence for shifts in prehistoric settlement and land use, investment in settlement and ritual structures, route ways, and territorial markers have been identified in a block of 66 km^2 (Topping 2008). It is only in these circumstances that the role of palisaded and completely unenclosed settlements can be evaluated alongside a variety of enclosed forms. This is unfortunately not possible in the region of Castell Henllys.

Whatever the context of the decisions to enclose, archaeologists certainly have many enclosed settlements to study where this process can be investigated at least in terms of that site and others of similar morphology. Enclosure is a conscious act, involving the expenditure of resources that could have been employed elsewhere. Neustupný (2006) considers the practical, social, and symbolic significance of enclosure and that prehistoric peoples would not have necessarily been able to distinguish these as discrete. Archaeologists give these three types of significance varying degrees of importance in their interpretations, depending on their theoretical preferences, some denying the relevance of some, others attempting to articulate a complex interdependence. There is also some dispute as to what should be considered functional or social, such as defence. As warfare and conflict and the rules that govern them are socially constructed, is defence social or functional? These are particularly relevant issues regarding hillfort enclosure and are discussed further below and in Chap. 15.

Enclosure has the practical effect of limiting access and at the same time creating defined points of entry and egress. Unenclosed settlements may have such routes, but they are not controlled by physical barriers. However, it should be remembered that archaeologists tend to prioritise continuous physical barriers, such as ditches or ramparts, above boundaries marked less visibly but which held significance to those in the past. Hingley (1990, 2006) has indicated the importance of liminal depositions, though our definition of liminal depends on archaeological identification of boundaries; such divisions could have been far more common and not marked by subsurface features. It is the presence of the physical features, however, that allows archaeologist some degree of certainty that patterns of movement can be inferred. Even whole enclosed settlements might themselves have been liminal. One of the arguments for some isolated locations for hillforts is that they were in neutral, boundary locations where communication between strangers could take place and particular types of social interactions, perhaps linked to ritual and economic activities, could be performed. The model for Danebury proposed by its long-term excavator has it as a central place in the socio-economic and physical landscape (Cunliffe 1995, 2005); for others, Danebury was a specialist, peripheral, locale (Hill 1995b; 1996).

If a settlement's access points can be closed, then people and animals can be both contained on the one hand or be excluded on the other. Containment can be for safety—preventing loss of livestock to predators or children becoming lost—or can be as a measure of control, varying from the lightest of temporary constraint to that of permanent incarceration. Archaeological interest in spatial modelling, access analysis, and the ways that power can be exerted through controlling bodily movement (and indeed visibility) is most noticeable in historic contexts such as prisons (Casella 2007; Mytum and Carr 2013) and complex architectural structures such as those of the Middle Ages (Gilchrist 1994; Mathieu 1999; Richardson 2003) but has been applied to Iron Age sites (Foster 1999). Most study of Iron Age enclosure has emphasised control of those outside—limiting access by the use of architecture including gates and guard chambers (Bowden 2006; Cunliffe 2005), as these structural features have been supposed to have clear practical functions. On closer examination, however, some of the logic behind these assumptions is seen to be drawn from social, military, and cultural forms seen in more complex societies such as those of the Middle Ages, which may not be appropriate. It is now recognised that, even where there are classical sources describing hillforts, these can no longer be simplistically applied across time, space, and cultural context to explain the role of hillfort enclosure, even if such scholars agree about little else (Armit 2007; Lock 2011).

Enclosure may provide social, symbolic, and even psychological frameworks for living, and this has been discussed at many scales from the subdivision of communal space into separate rooms up to the scale of landscape divisions, from periods as diverse as the Roman and historic (Gosden 2005; Johnson 1995). The majority of Iron Age settlements that are enclosed do not have massive boundary features, and it may be that the significance of enclosure for many hillforts may not lie in the nature of the earthworks but their very containing presence. The monumentality created by location and scale may be a separate feature, discussed below, but as many hillforts started as palisaded settlements or simple earthworks, the creating of an interior world for living defined in physical form may initially have been of paramount importance. That many other settlements did not obtain this boundedness may reflect control over who could erect such features, different concepts of space, and alternative relationships with the wider environment. It certainly was not due to resources, as some enclosed settlements would have involved very few person-hours in digging small ditches and mounding up the spoil. Some of the implications of living within an enclosed, bounded space, and arranging settlement structures and activity areas within the Castell Henllys settlement, will be discussed in the second volume. Of direct relevance here is the enclosure first by a palisade and then an earthwork, involving considerable planning and allocation of human and material resources in a manner that indicates moving beyond only defining an area within which to live and carry out domestic tasks.

Enclosure can be a form of protection, and the importance of this as a motivation in design and construction, and in maintenance and enhancement, has been a key theme in hillfort studies (Avery 1976, 1993a; Ralston 1995). The very term hillfort implies this association, and it could be argued that the word fort carries with it military associations that inevitably render a certain expectation regarding function. Whilst the abandonment of hillfort for the use of a more neutral term has its attractions, its ubiquity now makes this difficult to carry out, and no alternative has been found which is also not loaded with inference or inaccurately describes some of the sites that fit within the broad umbrella covered by the term. Rather than changing the term, it is more important to consider the role of enclosure as a defensive factor, and here debate has intensified along lines that have periodically been set out in British archaeology. In brief, there are arguments that emphasise different elements in past cultural behaviour which affect the role of enclosure in defence.

The first approach places importance on the technology of warfare, with swords, spears, and slings providing ever greater ranges of interaction, and fire and undermining as the threats to structural integrity of any enclosing features. Enclosures are designed to withstand assault but also provide opportunities for return of fire and counter-attack. The location of settlement, effects of topography on visibility and weapon range, the spacing of different lines of enclosure, and protection of weaker points of entry or lines of approach are usually of major consideration. In contrast, the other main approach to defence emphasises the behavioural, with the rules of combat, scale of forces, and purposes and social context of conflict requiring attention. Here, Iron Age military activity is seen largely as small scale, relatively localised, intermittent, and linked to enhancement of individuals' prestige and acquisition of trophies such as cattle or slaves. For some, however, larger forces and more sustained warfare is implied, with guards at gates and along ramparts to provide watch and control, able to raise the alarm and mobilise larger forces to react to any threat. The role of physical protection within the Iron Age decision-making that led to the location and layout at Castell Henllys is discussed in Chap. 15; to what extent this was a prehistoric concern was a key research theme throughout the project, as were the social and symbolic motivations that may have been at play.

Protection is articulated in terms of interpersonal conflict, rather than combating alternative forces. Wild animals may be noted as a possible threat and may be claimed as a factor in the construction of less substantial enclosures, but other forces are not considered. Giles (2008) suggests that Iron Age weapons may have been required to deal with unseen, supernatural, forces as much as human ones, and it is possible that enclosure was required to combat these types of threat. It is in this context that the liminal ritual activity identified by Hingley (1990, 2006) would be also relevant, and forms of structured deposition (Garrow 2012) associated with gateways and ramparts may also have fulfilled long-lasting roles rather than merely been symbolic of practices and meanings associated with the construction process and the foundation of settlement.

Enclosure can also be a social manifestation of separateness, often argued by archaeologists as an indicator of enhanced status of individuals or groups. Nested spaces can reflect differential degrees of access, each requiring permission to move to the next level within. This type of approach often links the social with aspects of the symbolic, as one is claimed to reinforce the power of the other and as the scale of enclosure may be invoked as an indicator of social control. It is therefore more useful to include those forms of interpretation with those associated with monumentality.

1.3 Monumentality

Whilst enclosure has generally, albeit incorrectly, been considered a simple descriptive term without hidden implications, monumentality has always carried with it an association with grandeur and deliberate investment in display. This may be in support of activities that are seen as largely ritual, or ones linked to socio-political ambitions, but often these are and were interlinked and interwoven. A large burial mound may have been during its construction associated with rituals which thereafter gave the monument a set of meanings. Thereafter, these could be remembered or forgotten, but the physical monument could also serve a socio-political role in how and where it was built and how it was seen and used by those involved with its erection but later by any group in the area. The biography of the monument soon moves beyond the control solely of its builders.

Monumentality has been applied to many structures in prehistoric and early medieval Europe, from megalithic monuments (Boado and Vazquez 2000; Sherratt 1990) through henges (Brophy 2005; Kirk 2006; Richards 1996), burial mounds (Barrett 1990; Bourgeois and Arnoldussen, 2006; Carver 2001; Furholt 2010; Williams 2003) and settlements defined by massive palisades (Harding 2000). Monumentality indicates that the investment in the material form of the structures creates a visual impact that is both deliberate and substantial, well above the norm in that cultural context, and where alternative solutions to whatever function (covering a burial, defining or defending a settlement) would require. Issues of visibility are crucial in the term monumentality; whilst there may be conspicuous consumption of resources in creating the structure, this can also be achieved without monumentality, as with votive depositions of artefacts in bogs or rivers or richly furnished burials without substantial above-ground features. Similar issues have been considered in the New World, though again the detailed consideration of monumentality as a phenomenon to be explained in and of itself has only recently emerged (Burger and Rosenwig 2012).

Monumentality is often framed in architectural terms, implying form of design and application of style that creates a culturally meaningful signal to those viewing the structure. Such signals may be effective from the outside—to those approaching the site or seeing it from a distance—or may be experienced by those within the structure, whether visiting a megalithic tomb (Bradley 1998; Thomas 1991; Turnbull 2002), or within a stone tower settlement such as brochs in Scotland (Rennel 2010) or nuraghi in Sardinia (Blake 1998). These are potentially two very different audiences, and aspects of monumentality may have been designed to affect these distinct constituencies. Constructing in a monumental form is seen to be a deliberate strategy, but can also have more subtle, even unconscious effects on those who continue to use or experience the monument. Once again, the internal aspects will be considered subsequently as part of the lived experience within the fort; here emphasis is placed on the external effects.

The presence of a feature such as a hillfort or burial mound can, in subsequent generations, continue to have an effect on either the same, continuing group using the structure or on others who had not previously had a link with it. The resilience, if not permanence, of monuments in the landscape is now recognised as a major factor in the formulation and reformulation of places of special significance in the landscape (Bradley 1987). Indeed, the presence of already ancient and potentially disused monuments can lead to the construction of those now required in a new cultural context, with sites such as Tara, Ireland, having Neolithic, Bronze Age, and Iron Age structures creating a rich palimpsest but one where it is not just the latest monument that gives the place power and importance but the totality with their varied biographies, myths, associations, and powers (Newman 1998; Newman and Fenwick 1997; Waddell 2011). In the case of hillforts, their longevity as features in the landscape leads to their periodic reuse and also their acquisition of meanings and mythologies with purposes quite distinct from those intended by their original builders (Gosden and Lock 1998). That this could be happening widely within the Iron Age should not be forgotten.

Hillforts are so obviously massive, and located in often dramatic natural locations, that their association with monumentality is often assumed. Even in theoretically aware and recent works such as Sharples (2010), monumentality does not appear in the index, despite the author's interest in the social construction of major earthworks and houses. Where the monumental features of the sites are emphasised, these are often linked to the scale of the earthworks, which may be widely visible across the landscape, but are often most explicitly considered in relation to access routes where even today the scale of the overlooking ramparts creates a powerful visual effect. Other features often presented as monumental include the timber or stone front revetting of ramparts to create visually stunning architecture, often involving use of vast resources which could have been avoided if a different, though less spectacular, architectural solution had been chosen. Monumentality interpretations tend to emphasise the social, with most concentrating on the motivations of elites controlling material and human resources and displaying these in an extremely public way through these features. More recently, there has been greater interest in the social implications of participation, the communality of construction, and the binding of communities as they together produce the earthwork (Lock 2011; Sharples 2010), a trend also seen elsewhere (Pauketat 2000).

Labour required to construct hillforts was clearly substantial. Recent research at Segsbury suggests that the ditch digging and associated rampart construction would have taken 889 days assuming a rate of 0.8 m^3 of material moved per hour. At this speed the earthwork part of the perimeter would have taken 44 days with 20 people working (Lock et al. 2005: 102–104) but probably required even more resource to move the material from ditch to rampart, sort it, pack it down, and create the appropriate profiles for both ditch and rampart. Moreover, at this site a front revetment would have required 1,250 substantial split timbers which would have to have been identified, cut, worked, and transported even before they could be erected on the site.

Sharples (2010: 117) has noted how several hillforts have later phases where stone not immediately available was brought in for additions, including Segsbury and Maiden Castle. This Sharples interprets as a product of a form of potlatch, service in labour and building materials that formed a key part of Iron Age social negotiations where the conspicuous consumption of labour, and at times materials also, was manifested in monumental structures. The ramparts represented the relationship between those who did the construction and those for whom it was carried out—the occupiers of such sites (Sharples 2010: 120). The implication for Wessex which Sharples is considering is that the hillfort monumentality unites a community or communities across an area through an endeavour that creates the monument. Lock subscribes to a similar interpretation where the shared activity, the creation, and maintenance of the hillforts, he terms as the “paraphernalia of identity”. Hamilton and Manley (2001) had already indicated the defining roles of the ramparts as monumental features above the defensive enclosing qualities, but here the social practices that could have led to their creation and continued presence are more clearly proposed.

All these models carry with them assumptions about the Iron Age; the archaeological evidence does not usually allow clear identification of traits that would distinguish between these alternative inferences, so they sit as parallel views of the past.

1.4 Conclusions

The role of hillforts within settlement hierarchies and social systems varied across time and space. Bradley (2007) has suggested that many hillforts often had only temporary occupation and had structures that were generally less substantial constructions than on other settlements. This, however, seems to be based on relatively few southern British examples and those elsewhere which are in such high altitudes or exposed positions that it is unlikely that permanent settlement on any scale would have been practicable. Certainly many regions have hillforts with internal structures very similar if not identical with those on farmsteads, and some were clearly occupied on a permanent basis; Castell Henllys is one of these.

It is undoubtedly the case that the functions of hillforts varied greatly. At one extreme were those which were never occupied and a significant number that may have been either unfinished or used for temporary assemblies associated with any combination of trade, ritual, or social activities. Most sites appear to have had complex histories with phases of more intense activity between periods of limited use or complete abandonment. At the other extreme are those hillforts that were intensively occupied by a permanent population for the length of their use.

Castell Henllys had a continuous occupation of several centuries, followed by the removal of all structures though with some probably non-settlement usage, followed by a brief period of refurbishment, possibly with associated settlement. For its internal area, it had substantial investment in the definition of its boundaries on all sides. The character of this investment varied round its length, and only the extensive, long-term investigation could yield these important results. The forthcoming chapters describe and discuss the evidence in detail, providing a resource not only for this author to interpret the site, but for others to draw data and inspiration for studies elsewhere.

Chapter 2
Castell Henllys in Its Temporal, Cultural, and Intellectual Contexts

Abstract Castell Henllys is an inland promontory style of hillfort located in West Wales, on the western edge of Britain, in a landscape with large numbers of known enclosed later prehistoric settlements. The hillfort settlement was constructed in the middle Iron Age, c. 400 BC, and in the first or second century BC it was abandoned and a smaller settlement established in its annexe area, before a brief reoccupation of the promontory in the late Roman or post-Roman (fourth or fifth century AD) and then abandonment. Castell Henllys became important again in the late twentieth century as an archaeological site, with a long and complex excavation biography, and as a heritage attraction and educational resource.

The writing of a large excavation report is an experience that combines hard work with confusion, consternation, elation, frustration, and intellectual gymnastics. Many types of field record—written, drawn, and photographic—are drawn together, though they have been created by a vast array of different individuals over many seasons. The aims, assumptions, and experiences of those involved in the project in the field, and subsequent analysis, all affect the development of the archive and the types of questions asked and answers that are revealed. Memories and old interpretations that fitted the partial evidence at one stage of the excavations have to be tempered with the more recent discoveries and the re-evaluation of stratigraphy, spatial patterning, and assumptions about the Iron Age that have been coloured by changing intellectual environment in this case over a quarter of a century. Nevertheless, the site itself provides, through its form and content, important constraints as to the types of evidence available to the researcher. Whilst the patterning of the data are in part due to field and analytical methodologies, an explicit statement of these can aid the author and others in their assessment of the results and future reinterpretation of the data.

This chapter provides a series of introductory sections that help to define the site under discussion and its physical, cultural, and intellectual context. The changing approaches to the fieldwork are explained, and the constraints on the data caused by natural and cultural factors in the past and present are outlined. There is at present much discussion and experiment in conduct of archaeological fieldwork and the production of archaeological reports (Barrett et al. 2000; Hodder 2000; Mytum 2012a), and the ambitions and role of this volume are explicitly discussed in the last part of the chapter.

The following chapters describe and discuss the physical evidence for the earliest, palisaded settlement and the subsequent earthworks at the site under a series of topic headings. Here the detailed stratigraphic and spatial data are outlined, and the constraints and possibilities for interpretation set out. In places interpretation may be limited, in others a variety of possible options can be set out, with the evidence for and against each alternative. Where one possibility seems much stronger than the others this is made clear; multivocality (by the same author) is allowed but not encouraged to the point of avoiding responsibility for interpretation. As the person so long involved in working and thinking

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about the site, it is my duty and my joy to provide some assessment of what seems most likely to me. An appendix discusses how the narratives for the rampart sequence would have differed if only some of the evidence were available. This insight into the effects of partial excavation reveals what elements of the narrative are easily identified and remain robust and which inferences can only be held with certain partial data. Clearly, not all data has been collected; even the most complete that is presented here is itself partial, but it does set parameters against which less extensive excavations can be set. Moreover, the full description of the limited artefactual and ecofactual evidence is not presented in detail here, and the internal structures will be described and interpreted in a subsequent volume. Emphasis is here placed on the monumental definition of the site and access to it.

The earthworks that define the Castell Henllys site and which are so typical of the Iron Age hillfort tradition are reviewed and interpreted in Chap. 6. Here issues of defence, social status, symbolism, and monumentality are considered, though not the details of possible above-ground reconstruction of the entrance, which is to be placed alongside other building reconstruction in the second volume that also incorporates the internal structural evidence. Here the role of the experimental reconstructions will have a bearing on the entrance architecture as well as that of the houses, and so visualisation in general is discussed there. The Castell Henllys adventure is not over, but this monograph marks a significant milestone in the wider understanding of Castell Henllys and will provide a tool for others to develop their understandings of the site and its context, wide or narrow. This form of publication does not greatly allow for the presentation of emotions and experiences that such an undertaking engenders. The monograph already has more than enough duties to discharge, so these and other aspects of the work will be produced in other forms and archives of the primary data will also be stored (see Sect. 2.9).

2.1 The Spatial and Cultural Context of Castell Henllys in the Past

The archaeological sequence at Castell Henllys can be summarised to provide a background to the detailed discussion and analysis of the earthwork sequences reported here. The whole history of the site up to the present is outlined so that other discussions of land use, changing research designs, and the social context of the site can be appreciated. Castell Henllys has been set within a changing landscape over several millennia, but emphasis will be placed here on its original period of occupation in the middle Iron Age (c. 500 BC) to early post-Roman period (c. 450 AD) and then its role today, with limited discussion of the intermediate centuries. Castell Henllys has a long history, and one that contains phases when it was of great local significance, and others when it was of minimal importance. Despite periods of intermittent activity from the Mesolithic through to the Bronze Age, when lithic artefacts were reworked or deposited on the inland promontory, it was only in the middle Iron Age that a permanent settlement was established. Discussion will first focus on the spatial and cultural context of the site's establishment and occupation through the middle and into the late Iron Age, with a reflection on its role in the late/post-Roman phase. The contemporary role of the site will then be considered, within the local community and those with wider interests including tourists, students, and archaeologists.

2.1.1 Iron Age Castell Henllys

Castell Henllys is located in north Pembrokeshire, West Wales, in a region noted for its dense distribution of relatively small enclosed settlements of various forms and with very few larger hillforts (Fig. 2.1).

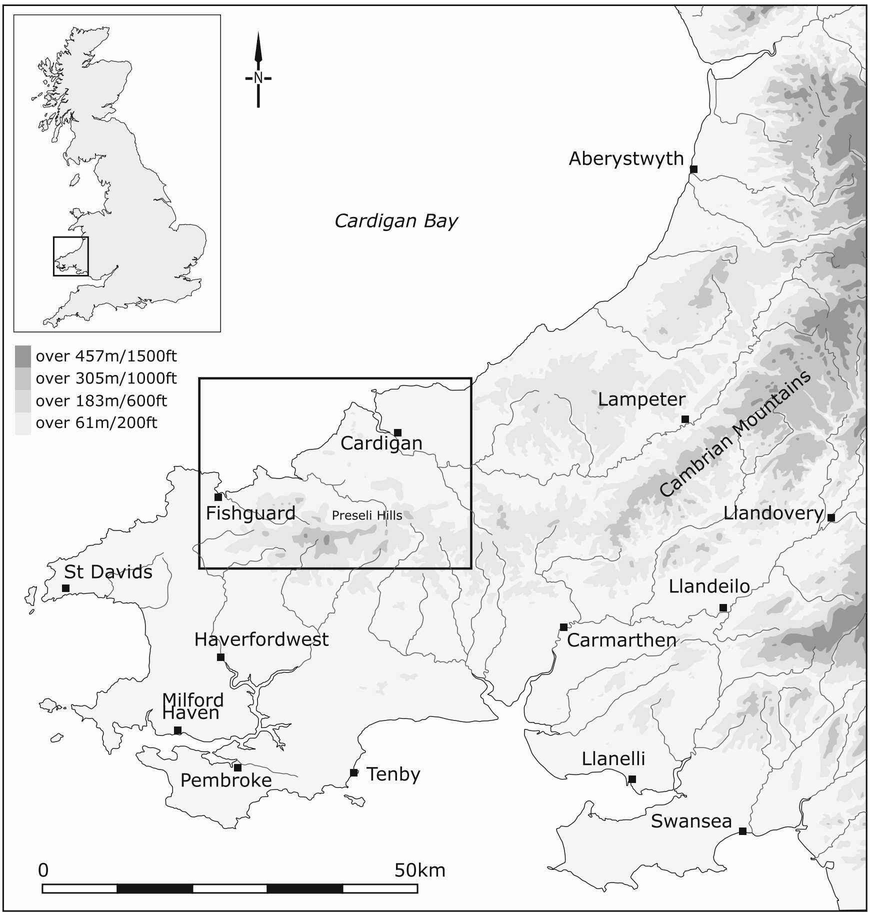

Fig. 2.1 Location of Castell Henllys in Britain and West Wales

The detailed landscape around Castell Henllys is unknown both for the time of the settlement's foundation and during its occupation through the Iron Age. This is a problem not unique to this site but represents a limited appreciation of later Bronze Age and early Iron Age settlement in West Wales generally. However, it is clear that the construction of the settlement must have had a major impact on the immediate environment, with probably significant though selective changes being made further afield, to acquire specific structural timbers and the large amounts of roofing materials required. Unfortunately, the lack of knowledge concerning an immediate prior settlement in the region makes the implications of this impact even more uncertain, but Castell Henllys as a settlement defined by earthworks can be considered as possibly contemporary with typologically similar sites known in some numbers from the region. These can be used to provide a potential settlement context for Castell Henllys once in use, though even here superficial similarities may belie different settlement histories, as with Berry Hill fort near Newport with its short, significantly earlier sequence (Murphy and Mytum 2012).

The first middle Iron Age settlement was a palisaded enclosure with its outer, northern, extent marked by a stone *chevaux-de-frise*, an arrangement of upright stones set in the original ground surface. This was closely followed by an inland promontory fort defined by ramparts (banks) and ditches defining an inner settlement zone and an outer annexe. By the scale of the defences in relation to the internal area, and the scale and complexity of the gateway architecture, the site was of considerable importance during the first phases of occupation. The use of stone walling, and the provision of guard chambers, indicates that the inhabitants of Castell Henllys were participating in the current trends in fort building seen elsewhere, such as in the Welsh Marches (Cunliffe 2005). These structures collapsed and were rebuilt in a different style with only one pair of guard chambers which then collapsed again, this time not to be replaced. The regional importance of Castell Henllys may have waned, though it is also possible that elaborate gateways were no longer required or desired. It is unclear whether occupation of the annexe area began during the main fort occupation, but if it were it would seem that this was not intensive. The inner enclosed area continued in use until the late pre-Roman Iron Age, when the numerous timber roundhouse sites were abandoned, and some were replaced by four-post granaries. It is unclear whether there was human habitation in the outer, annexe area at this time, but it is unlikely that the site as a whole was ever completely abandoned.

Castell Henllys can be seen as part of a distribution of inland promontory forts that can be identified in the valleys of northern Pembrokeshire and southern Cardiganshire. There are three main concentrations of such sites. The Nevern valley, and its tributaries, is the one which includes Castell Henllys; to the west is the Gwaun valley, and to the east is the Piliau, a tributary of the Teifi. Each of these valleys has been filled with forts that share similarities in siting and form and which imply that the landscape around these valleys was being fully exploited and controlled, though only the Nevern group immediately around Castell Henllys is described and discussed here.

The extent to which the extensive plateau areas between the valleys were occupied and exploited is uncertain. Interpretation is dependent not only on the extent of the lands or territories assumed to be associated with each of these forts but also on the chronology and therefore contemporaneity or otherwise of the forms of enclosed settlement known from earthwork, aerial photographic and geophysical survey in the plateau areas. Nevertheless, the similarities between the inland promontory sites form a useful starting point in the discussion of the settlement and landscape, and the social and ideological worlds within which these operated and in each of these zones other nearby sites are also discussed.

2.1.1.1 The Nevern Valley (Fig. 2.2)

The river Nevern flows out into Newport Bay, with its beaches that could have been used to land seagoing vessels and an estuary that produces large quantities of reeds suitable for thatching. It meanders inland with various tributaries of which the Duad is the most significant here. The valley bottom is a narrow flood plain beyond which steeper slopes lead up to rolling plateau areas. It is on the upper edge of these slopes that forts are located, often where a spur has been naturally formed where a tributary joins the main river, or there is a particularly sharp curve in the valley side. It is this latter topographic position that provides Castell Henllys with a suitable site.

Castell Henllys is the only fort in the Duad valley, though one sub-circular enclosed farmstead, Henllys Top Field, is known on the plateau to the north (Mytum and Webster 2001), and a rectangular enclosure on the opposite side of the valley immediately to the east of Castell Henllys has been recently identified. However, both are likely to be later than the occupation of the main fort; radiocarbon dates for Henllys Top Field indicate late Iron Age and Roman occupation, and the morphology and internal plan derived from geophysical survey at the other site suggest a similar chronology.

To the south the river Nevern provides suitable locations for forts on two closely spaced small promontories, and both have been identified as sites. Cwm-pen-y-benglog is a bivallate fort, with evidence of scarping of the valley sides. Nearby is Castell Llwyd, a univallate fort with a counterscarp bank.

On the top of the plateau between the Nevern and the Duad lies Castell Mawr, a large sub-circular enclosure with an inner quarry ditch and outer bank; it was later subdivided by a bank and ditch. Magnetic susceptibility survey demonstrated higher readings inside the sub-circular earthwork than

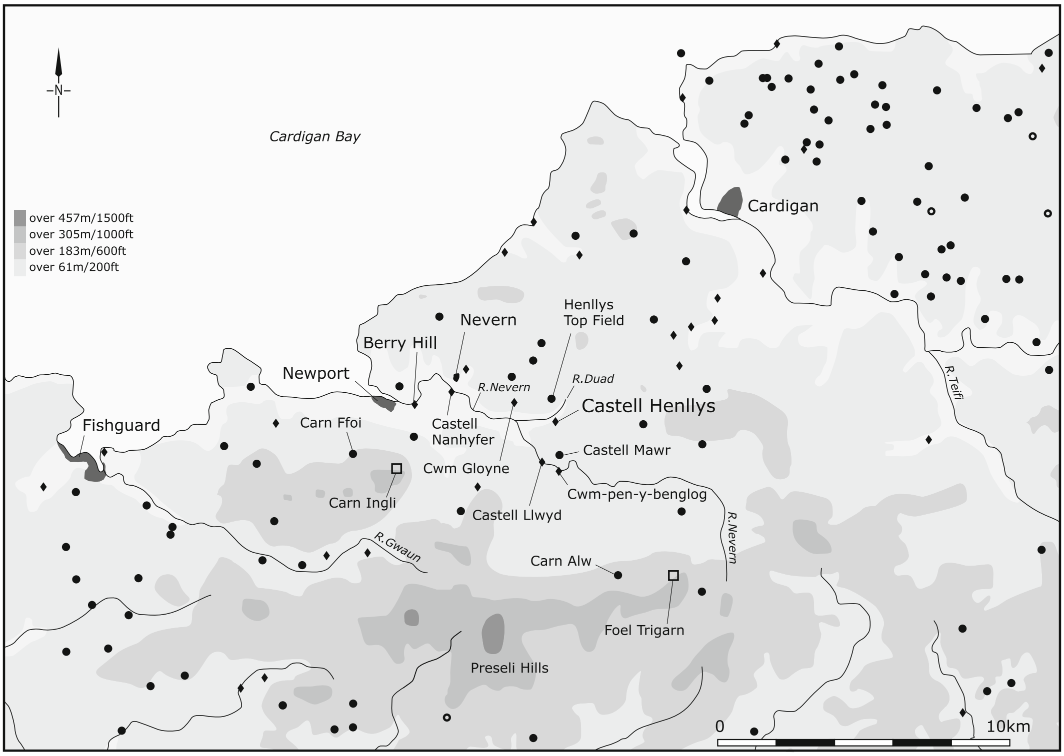

Fig. 2.2 Location of Castell Henllys in relation to local Iron Age sites

outside, with the highest readings inside the area enclosed by the later bank (Mytum and Webster 2003). The large enclosure may be a late Neolithic henge monument, or a fort may be similar to Broadway in the Llawhaden study area and may be the earliest enclosed settlement in the area, belonging to the late Bronze Age (Williams and Mytum 1998). The smaller enclosure is probably a late Iron Age reoccupation similar to other plateau settlements.

Soon after the Nevern and Duad join, a small stream runs in from the north, and here two almost conjoined small forts can be found at Cwm Gloyne (Mytum and Webster 2001). These may be small versions of sites like Castell Henllys or may be promontory versions of the enclosed farmsteads on the plateaux. Evidence of occupation in the later Iron Age was recovered, but the limited excavation and degree of animal disturbance makes the negative evidence for earlier occupation insufficient to rule out contemporaneity with Castell Henllys.

The next fort to the west is at Castell Nanhyfer, Nevern, though now overlain and modified by the Norman and Welsh motte and bailey castle (Turvey 1989). This makes it difficult to be certain of the original design, but it is likely that the fort was probably bivallate and may have had further outworks. Like Castell Henllys, the valley slope was extremely steep, and most effort was probably expended on defining the sides to the north and north-west. It is noteworthy that this fort remained the local power base which was at first seized by the Normans who constructed a motte and remodelled the earthworks. It was then briefly recaptured by Rhys ap Gruffydd in 1191, only for him to be subsequently imprisoned there for a time by some of his sons (Turvey 1997). In under a decade, however, the Normans finally seized full control of the area. They shifted military and administrative functions to the newly constructed castle at the Norman urban foundation of Newport, and Nevern was deliberately left to decay. Recent excavations have concentrated on the medieval phases and have not thus far examined locations where survival and identification of earlier remains is likely (Caple 2009). It is probable that Nevern had remained the major regional power centre after Castell Henllys was deserted in the late Roman/post-Roman period; its church was a major early foundation, with a variety of early medieval sculpture spanning several centuries and was one of the two sites in the county along with Carew with large stone crosses (Edwards 2007; Nash Williams 1950; Thomas 1994) and is the centre of the largest single parish within Pembrokeshire. It is also noteworthy that the parish stretches as far east as to include Castell Henllys.

Until recently, no other forts were known between Nevern and the sea. However, in 1989 Terry James identified a crop mark site at Berry Hill. This site encloses a small knoll next to the cliff leading down to the beginnings of the Nevern estuary. This large, oval enclosure lies at a right angle bend in the river, with two sides defined by steep natural slopes. The long north side is marked by a ditch and internal bank, and an entrance with a slight hollow way approach lies on the western side, with a short stretch of earthwork running on to the scarp edge. The enclosed area is over 0.5 ha, similar to that of Castell Henllys and Nevern. Recent excavations (Murphy and Mytum 2012) indicated that the fort may have been unfinished and certainly did not have a long and complex occupation history, despite its excellent location. This reveals the complex and varied dynamics in site construction and use that makes interpretation of unexcavated earthwork site data difficult.

The settlement evidence suggests that three main forts lay along the Nevern valley and its tributaries, at Berry Hill (albeit briefly), Nevern, and Castell Henllys. Two pairs of smaller forts, the two at Cwm Gloyne, and Cwm-pen-y-benglog and Castell Llwyd, provide further sites that occupy all the topographically likely locations within the valley system. Assuming that most were occupied at the same time, it would appear that the landscape was divided up into a series of blocks divided by river valleys, each able to control a stretch of valley and the plateau lands more suited to grazing and arable farming.

2.1.1.2 Other Settlement Types

The Llawhaden cluster of sites has provided an outline chronology of settlement change for the region (Williams and Mytum 1998). To this can be added recent work on coastal promontory forts that suggests that, whilst some had late Iron Age and Roman period occupation, there was an earlier phase of construction of such sites. Indeed, several may have begun life defined by *chevaux-de-frise*, though these have only been observed in eroding cliff-face sections, preserved as at Castell Henllys beneath later earthwork ramparts.

The uplands of the Preseli mountain range provides some enclosed sites that share some characteristics with Castell Henllys. Carn Alw has a *chevaux-de-frise*, and the angled approach to the entrance is also similar to that of Castell Henllys. A smaller area is enclosed, but natural slopes provide much of the defensive strength and monumental appearance of the site (Mytum and Webster 1989). At a greater distance, and without the *chevaux-de-frise*, is Carn Ffoi (RCAHMW 1925, no. 816), which otherwise is similar to Carn Alw. The large enclosure on top of Carn Ingli (Hogg 1973), intervisible with Castell Henllys, probably belongs to a much earlier period, though to exactly what date the irregular stone walls joining rock outcrops should be ascribed is unclear. Of more certainty and relevance is the multivallate stone-walled hillfort of Foel Trigarn. Excavated well for the time by Sabine Baring-Gould in 1899, the site has produced a range of Iron Age artefacts including spindle whorls and glass beads (Baring-Gould et al. 1900). The site is notable for the large number of hut scoops still visible on the surface, and excavations concentrated on these. Baring-Gould did not have the methodology to identify the remains of timber buildings, so it is uncertain whether the platforms had structures and if so of what type. Nevertheless, their number and density suggest large levels of activity at least seasonally on the hilltop. This site may have acted as a regional meeting place and centre for those living in the scattered polities controlled from sites such as Castell Henllys. Foel Trigarn may have remained important during the later Iron Age and Roman period, when the scattered farmsteads were occupied, as Roman casual finds are reported from the hilltop. The excavations did not yield such finds, however, so activity may then have been physically restricted or may not have involved settlement.

No open settlement is known for the Iron Age in the region around Castell Henllys. The palisaded site at Drim in the Llawhaden (Williams and Mytum 1998) and the open settlement evidence from the sand dunes around Stackpole Warren in south Pembrokeshire (Benson et al. 1990) merely hint at a wider range of settlement forms than those already known. What is unclear is whether the absence of evidence in the regions with the numerous inland promontory forts reflects a real absence of other settlement or not.

2.1.1.3 Discussion

At one extreme, the builders of Castell Henllys entered an empty landscape and were its only inhabitants. At the other extreme, the region was full of unenclosed settlements, in a landscape already well managed and exploited. In this situation two further possible scenarios can in turn be postulated. In the first, the fort builders came from these communities that joined forces to create the enclosed and nucleated settlement that is the subject of this report. In the second, the fort builders were incomers who stamped their authority over the area by the construction of this visible and monumental site. In this case the indigenous population may have remained as an underclass, may have been integrated, or even removed or displaced (see Sect. 15.6).

The critical issue with regard to wider interpretation of Castell Henllys, and indeed Iron Age settlement in many regions of Britain and Europe, is the extent to which the archaeologically visible settlement forms represent all or only part of the original pattern. This affects how resources were managed and shared, the labour available to construct and maintain the settlement in all its aspects, to whom any symbolic communication is being directed, and from whom any violent threat may be perceived. In some sense, the abundance of data from the fort itself highlights the problems with wider interpretation that this uncertainty creates. As some of the buildings excavated at Castell Henllys leave no subsoil trace even in excellent conditions of preservation, the absence of evidence cannot be used to definitely deny the presence of settlement, particularly in this aceramic context. For most of the history of the project, it was assumed that there was a subservient population living outside the main fort enclosure, perhaps within the annexe area and certainly scattered across the landscape managing fields, flocks, and herds. This assumption therefore pervades some of the description and ongoing interpretation throughout the volume. In places, however, an alternative view is considered, one where the inhabitants of sites such as Castell Henllys were the sole occupants of the landscape, and it was on their own efforts and resources that the settlement depended.

2.1.2 Castell Henllys in the Late Iron Age and Roman Period

In the late Iron Age, occupation shifted to small enclosed farmsteads scattered on the plateau areas on which the agriculturally better brown earth soils were located. A double farmstead was established in the outer annexe area of the Castell Henllys fort. The four-posters within the fort were also removed, and the fort seems to have been completely abandoned. The shift was definitely before the arrival of Roman military presence in the area and can be seen as part of the local reaction to social and economic changes seen elsewhere in southern Britain and which clearly had an impact even in West Wales. It is not clear to what extent there was already settlement between the main fort earthworks and the outer rampart, but from the late Iron Age onwards there was a settlement with several roundhouses, four- and six-post structures, and a stockyard for cattle. This seems to have been in use till the fourth century AD or later, when the fort was reoccupied (see below).

During all the time that the farmstead was occupied, the main promontory fort interior was not in use for any activity that left archaeological trace. Not even refuse was dumped there, and for part of the time at least access through the main northern gateway was impeded by ditches defining a paddock or yard attached to the outer settlement. The reasons for this are obscure, but the deliberate avoidance of this area suggests a strong reason for this change in use. Why there was such a dramatic turning away from the fort is uncertain, though the general settlement shift to smaller farmsteads is well attested in the region. It is likely that the most important inhabitants moved just a short distance from inside the fort to the annexe area, whilst others set up new small enclosed farmsteads in the surrounding countryside. Aerial photography has revealed several such sites, and more are being discovered each summer, especially in drought conditions.

The late Iron Age and Roman period settlement consisted of two farmsteads, one arranged around a stockyard. Over time the buildings changed from circular roundhouses similar to those of the fort to smaller oval structures. Four- and six-post granaries continued throughout the history of the site. The second farmstead was smaller and less complex; it may have been a separate household or could have been an adjunct of the main farmstead. The inhabitants at the Castell Henllys farmsteads seem to have been the most important in the region, as more late Iron Age metalwork and Roman ceramics have been found at this site than at any others, even bearing in mind the scale of excavations at various sites. Castell Henllys thus seems to have retained its elite position in the settlement hierarchy, even though the fort itself was abandoned.

The shift to smaller farmsteads seems to have been part of a process that had both economic and social aspects, with a growth in the importance of cereals, already seen with the appearance of four-post structures in the final phase of the fort and on the smaller enclosed farmsteads (Mytum 1988a, b). The number of querns and the density of carbonised grains also increase at this time. This economic change is probably linked to political shifts whereby the small units represented by the inland promontory forts were absorbed into larger polities, held together and reinforced by tribute payment for which the increased cereal production was required. This system developed prior to the Roman period but then continued through it, with inhabitants of sites such as Castell Henllys gaining differential access to imported goods such as wine, metal objects, and ceramics, with little or nothing percolating out to other settlements in the area. Although the size and monumentality of the settlement was reduced, the inhabitants probably retained as much local power and influence as they had wielded in earlier centuries. The change was that rather than being an independent, small unit reliant presumably on alliances with regional neighbours, the group was now subservient to another group as part of a much larger polity that allowed and stimulated not only increased agricultural production, for payments of tribute, but also a level of security previously not guaranteed.

2.1.3 Castell Henllys in the Late Roman or Post-Roman Period

At a date that cannot be clearly defined, but probably in the later fourth or fifth century, the annexe settlement was abandoned and the promontory fort was briefly reoccupied. Evidence for this phase comes from a simple stone entrance constructed on top of wash and soil formation that had built up whilst the fort was abandoned. Unaware of the earlier stone defences, the occupiers built a simple stone-built gateway of freshly quarried stone, also used for interior drystone walling constructed on the rear of the visible earthwork. On the west and east where the earlier defences were no longer visible, a ditch was rapidly dug and the material thrown up to make a small rampart. The ditch was open for a short period of time, at most a few years and perhaps only months, when it was then filled in, in places with the material that had been dug out from it only a short time before.

No interior structures could be linked to this phase, and no artefacts were recovered apart from two Roman finds from the western ditch fill: a copper-alloy brooch and one sherd of Severn valley ware. Both must have been brought into the site by the constructors of these defences as no other Roman period finds have been recovered from the fort. As Roman finds occur as heirlooms in early medieval graves in region, the dating of their deposition remains problematic.

The most likely historical context for the reoccupation, followed by permanent abandonment until recent times, would be the arrival of elite members of the Irish Deisi tribe, well known at a slightly later date for their inscribed memorials and whose area of settlement may be indicated also by place names.

The polity that had controlled the area that included the Castell Henllys farmstead was threatened and perhaps had collapsed under either late Roman socio-economic decline or localised threats from the invading Irish. It would seem that the enclosed farmsteads were abandoned at this time and all their inhabitants retreated back to the promontory fort which was refurbished in a communal attempt to protect land and local power. The lack of continued settlement on any part of the fort suggests that these efforts were unsuccessful. It is likely that the local elite that had occupied first the promontory fort and then the enclosed farmstead in the annexe at Castell Henllys was, after about a millennium, removed from power by the invading Irish warrior aristocracy, the Deisi, though this may have been achieved at least in part through intermarriage (Thomas 1994). The nearby inland promontory fort at Nevern now was the main centre, though the land including Castell Henllys may have been controlled from a settlement now represented by Henllys Farm. The name "llys" means "princely residence" and "hen" means "old". Castell Henllys was not so called because it had been the site of this old prince's residence but rather because it was a Castell on the Henllys estate. Nevern remained the most important political centre until the Normans created the stone castle and coastal town of Newport in the twelfth century. By this time Castell Henllys was under agricultural use, as later medieval and early modern documentation attests.

2.1.4 Castell Henllys from the Middle Ages to the End of the Twentieth Century

Although no longer occupied, the prehistoric site was never forgotten. The earthworks are noted in a medieval grazing agreement, and an eighteenth-century estate map of Henllys shows the ramparts of the fort within a field named Parc Castell (Mytum 2010, Fig. 11).

The site was recorded on all editions of the Ordnance Survey and received the following enthusiastic description in the Royal Commission for Ancient and Historic Monuments for Wales, accurate apart from a consistent confusion of east and west when describing the ramparts, terrace, and entrance:

> 770. *Castell Henllys* (6 in. Ord. Surv. sheet, Pemb. 6 S.W.; lat. 52° *V 2",* long. 4° 44' 38").
>
> This is a fine promontory camp situated some 300 yards north-west of Meline parish church. The earthwork stands on the bank of the river Duad, which here forms the boundary between the parishes of Nevern, Meline, and Eglwyswrw. The east and south slopes show distinct signs of scarping to a terrace 25 feet wide, which has been utilised as a roadway to an entrance on the eastern side of the camp. The tongue of land is cut off by a formidable rampart drawn in an imposing crescent across the northern and western sides of the enclosure. The enclosed area is a little over one acre; it is known as Parc Castell (Tithe Schedule, No. 922). The northern side of the rampart rises 15 feet from the level interior and falls about 40 feet to a ditch 20 feet in width; both have been largely destroyed to the west. The entrance to the east has been disturbed, but the clubbed end of the rampart is still to be traced.
>
> (Visited, 8th July, 1914. (RCAHMW 1925))

A smallholding consisting of the cottage of Pant Glas and a few fields including that containing the fort was sold off from the Henllys estate in the early twentieth century.

The site received intermittent visits by archaeologists confirming the main features for unpublished records compiled by the Ordnance Survey, Cadw (and its earlier manifestations), and regional sites and monument records. The University of Cambridge took two oblique black and white aerial photographs of the site in 1955 (QP 27, QP 28) which show the state of vegetation and the nature of the earthworks at that time. For most of the twentieth century, however, the site remained of little interest to archaeologists and was used largely for rough grazing by the occupants of Pant Glas. Although the annexe area was ploughed during periods of wartime food shortages, the site was often largely overgrown with blackthorn and bracken. The site passed through several hands until in 1980 it was purchased by Hugh Foster, an accountant from Maidenhead, England, who wished to develop the site as a tourist attraction. It was during his ownership that much of the fort interior was excavated, and most of the reconstructed buildings were erected.

In 1991 Hugh Foster died, and the Castell Henllys site was put up for sale. There was much local interest in the site by this time, and there was concern that it might revert to a private ownership in which the reconstructions would be torn down, excavations cease, and public access denied. The Pembrokeshire Coast National Park was encouraged to manage the site, and in 1992 the entire Pant Glas property was purchased and its future guaranteed. In the years that followed, the National Park developed its plans for the site and appointed a permanent manager and began to develop the infrastructure of the site. Excavations continued, with some financial and logistical support from the National Park, and expanded to examine in a more extensive manner the ramparts, gateway, and the annexe area.

2.2 Spatial and Cultural Contexts of Castell Henllys in the Early Twenty-First Century AD

By the twenty-first century, most of the excavation was complete, with fieldwork on the site ceasing in 2008. The excavations had formed part of an extensive field training programme and formed an element of the visitor experience during the summer season (Mytum 2012c). The excavations have now been largely backfilled, though the fort interior has never had any topsoil replaced, the surface of the subsoil gradually being colonised by new vegetation. The key excavation results are interpreted using panels and in guided tours. Research has also spread out into the wider landscape, to place Castell Henllys within its context both as part of an academic research programme and as a contribution to the National Park's goals in interpreting the landscape of the region. The site is now an established educational and tourist venue and is well supported with resources for both the National Park school programmes and some interpretive literature for the public.

Castell Henllys today has significance both greater and less than it had in the Iron Age (Figs. 2.3 and 2.4). Few people rely for their livelihood upon it (though a handful of dedicated staff do), and none live in the fort itself. It does not serve a resident local population, but instead it has a wider set of roles for a variety of audiences and groups who feel some sense of ownership for the place. Castell Henllys is known and visited by the public, both local and more distant, and by archaeologists and heritage professionals. As such it can be seen as set within many different contexts.

Until 1980 Castell Henllys was on private land, overgrown, and only occasionally visited by those involved with the heritage as it was a scheduled ancient monument. Once purchased by Hugh Foster, it changed into an asset as part of a fledgling tourist attraction. With the commencement of archaeological excavations in 1981, the site entered the wider consciousness of archaeologists and some of the local population. It now has a range of values to various local communities and has a wider significance within the Pembrokeshire Coast National Park and within the schools, heritage and archaeological professions.

Fig. 2.3 Castell Henllys from the air, viewed from the north. Entrance and parts of annexe under excavation, with the cottage Pant Glas and the Education Centre visible at the top of the image, in the valley below. The steep slopes of the promontory to the east, south, and west are visible despite the tree cover

No systematic study has been conducted of local views of Castell Henllys, but many opinions have been obtained directly by the author and through comments made to students when away from the site. Many are now proud of the site and see it as a cultural and economic asset. Some have visited the place, though many have not, and rely on general publicity, gossip, and the views of their children who have been on site visits. A minority see the site as a fraud; because the buildings have been reconstructed, they are of the opinion that all the archaeology is invention, and indeed some imagine that the archaeology for the year is created and prepared ahead of the gullible students attending the dig. The overall view, however, is that this is a site that represents Welsh culture, a Celtic past unsullied by invading Romans and Normans. The Iron Age was a period of freedom, achievement, and independence that has a resonance with nationalist sentiments. This is how Castell Henllys is seen in a wider Welsh context, where images of the site create a vision of the past that is represented in most other locations only by earthworks. It is noteworthy that the National Museum of Wales has itself constructed a small Iron Age farmstead at its St Fagan's museum, set beyond the moved actual structures of later centuries. This museum is itself a monument to nationalist ideals that, in a postmodern context with elements of national control devolved to the Welsh Assembly, may need redefinition. The inspiration of Castell Henllys has led to this simulation within a museum of real buildings and artefacts, itself an indication of how far the images promoted by Castell Henllys have infected the Welsh subconscious.

Hugh Foster was an Englishman establishing a business in a Welsh-speaking part of Wales, but his charisma, enthusiasm, and outlandish appearance tended to create mild amusement rather than antagonism

Fig. 2.4 Reconstructed roundhouses on the sites of the original foundations

(Fig. 2.5). When the site was taken over by the Pembrokeshire Coast National Park, this was both welcomed, as it saved the site from possible closure and destruction of the reconstructions, and also resented. As the planning authority based in "distant", English-speaking Haverfordwest, relations with those north of the Preselis were not always good. Some locals have an ambivalent attitude to the site because of its associations with authority, and notably control over many local desires for development, rather than because of its cultural and economic role per se. The Pembrokeshire Coast National Park, on the other hand, sees Castell Henllys as a visible and real contribution to the northern part of the area for which they have responsibility. The levels of investment would suggest that this is no mere token involvement, but the range of perceptions of motives and actions remain mixed.

Castell Henllys is an important educational asset for schools in the region, but also further afield (Mytum 2000). During term time many parties come each week to be educated by costumed interpreters (Fig. 2.6) following induction at the purpose-built Education Centre in the valley. The Welsh National Curriculum for History includes the Celts, and this allows Castell Henllys to fill an important pedagogic and nationalistic role in the education of primary school children from West Wales and sometimes further afield (Mytum 2000). The site is also popular with schools for children with special educational needs, as the many senses and activities employed at the site are particularly stimulating. A significant proportion of all the teaching is carried out through the medium of Welsh, and all the educational materials are available in either bilingual or a choice of monolingual formats.

Visitors attend the site either as tourists passing through (often on their way to or from the Fishguard ferry crossing to Ireland) or as holidaymakers staying in a cottage or caravan in the area. A large number of cottages that had been constructed for agricultural workers in the eighteenth and nineteenth centuries in the countryside, and similar houses for mariners and other trades in Newport, have been refurbished as holiday homes. Many are owned by local people and form part of their diversified income streams in a largely seasonal employment area. Others are holiday homes, let out through agencies or used by family or friends. There are also several caravan parks in the area, but few hotels,

Fig. 2.5 Hugh Foster, initiator of the Castell Henllys reconstruction and interpretation

Fig. 2.6 *Top*: school group entering the smallest of the reconstructed roundhouses. *Bottom*: simulated Iron Age sacred spring

and none that are large. Visitors come to the region for its landscape, walking in the Preselis and along the Pembrokeshire Coast Path, for the beaches and for the heritage that includes Castell Henllys. Mass tourism can be found around Tenby in south Pembrokeshire, but relatively few of these visitors travel as far as Castell Henllys. It is thus visited by those attracted to a quiet family-orientated area, and it would seem that a very high percentage of those staying locally do visit the site. Many are return visitors, and a high proportion of these are middle class and moderately well educated. They are relatively articulate, and many interact positively with site guides and volunteers regarding the site interpretation and also the developments in the excavations over the seasons.

Castell Henllys has been one of the largest training excavations in Britain in recent years. Students varied from sixth-form students through to mature participants, and most camped nearby, on a site on the opposite side of the valley. Excavations are experiences in many ways, so the significance of Castell Henllys for such students is many and varied (Mytum 2012c). The students came mainly from Britain, but with a significant number from North America and Europe, and with a few from other parts of the world. The site has offered a range of training experiences (Mytum 2012b), enhanced by the presence of the reconstructed buildings and the public interpretation. Even for those who do not study archaeology at university, or who do not enter the heritage profession, the experiences of Castell Henllys remain strong in their memories for decades afterwards.

Relatively few hillforts have received intensive excavation in the last part of the twentieth century, and there is even less large-scale research fieldwork being undertaken in the early twenty-first century. Castell Henllys therefore has a place within the history of the study of hillforts that gives it a particular significance to Iron Age archaeologists. Though without the range of finds and features of Danebury (Cunliffe 1984, 1995; Cunliffe and Poole 1991) nor the variety of occupation periods of Crickley Hill (Dixon 1994), it is the other major hillfort excavation of the era. It follows on from the previous generation of work at South Cadbury (Barrett et al. 2000), the Breiddin (Musson 1991), and Moel y Gaer (Guilbert 1976) and provides an important western counterpoint to previous dominance of Wessex and the Marches. It augments the important excavations at Coygan Camp (Wainwright 1967) and Walesland Rath (Wainwright 1971a) in the region and provides the counterpoint to the emphasis on other earthwork categories in the Llawhaden study (Williams and Mytum 1998). Through the researches at Castell Henllys, south-west Wales can provide a well-researched and relatively well-understood regional alternative to those traditionally used in syntheses from Wessex and the Thames Valley. Castell Henllys is also an important site for experimental archaeology, building reconstructions, and heritage interpretation, where it has contributed to international discussion on the modes and roles of public interpretation (Mytum 1996a, 2003, 2004).

Castell Henllys has been a focus for experimental archaeology, much linked with the building reconstructions (Mytum 1986, 1991b, 2003, 2004), but also with earthworks (see Sect. 10.3), slingshot experiments (see Sect. 15.6), and other taphonomic experiments (Mytum and Gilchrist 1986). The significance of the building experiments, and the value of longitudinal studies of buildings erected on their original sites, will be further explored in the subsequent volume.

Castell Henllys has also been important to a significant population within West Wales that has moved to the region for an alternative lifestyle. Hippies, New Agers, and other definitions apply with varying degrees of accuracy to such people, but many see Castell Henllys as of particular power and importance. The replica sacred spring, used in the school programme and the public interpretation, has become to some of these local inhabitants as a real sacred spring (Mytum 1999a, 2004). The Pembrokeshire Coast National Park have on several occasions cleared away genuine votive offerings placed at the foot of the wooden idols, in the spring water, or tied to the branches of the trees, so this remains a dynamic and frequently changing locale (Fig. 2.6). Inspired by still-active but overtly Christian practices in Ireland, these contemporary pagan requests for healing have been removed to leave the simulated Iron Age elements. That they appear at all, however, indicates a much deeper value given to the site in some contemporary groups. This is also emphasised through the “marriage” that took place at the site, outside the roundhouses, of two members of an Iron Age recreation society who were staying at the site to provide public entertainment. Undertaking commitments to each other in this "authentic" setting gave special potency to their mutual commitments. Unofficial entry to the site by other individuals and groups for other meaningful purposes is likely to occur, but remains unverifiable.

In the early twenty-first century, Castell Henllys thus acts as an actively researched archaeological site, a place of learning for all ages, a heritage attraction, a centre of activity for and symbol of the Pembrokeshire Coast National Park, a nationalist and Celtic icon, and a sacred place. Only 25 years ago it was none of these.

2.3 Biography of Excavation: Developing Excavation Research Designs

The excavations at Castell Henllys began with a limited purpose. The site had been purchased by Hugh Foster so that a recreated Iron Age settlement could be built as a tourist attraction. As a Scheduled Ancient Monument, it was protected, but Sian Rees at Cadw agreed that if a suitably qualified archaeologist could be found, then excavation could precede such development. The Llawhaden project was under way at this time, and I was approached as a research-active academic (then a James Knott Research Fellow at the Department of Archaeology, University of Newcastle upon Tyne) to conduct some fieldwork. Preliminary survey took place in late 1980, and excavation began the following Easter vacation, after the interior had been cleared of a thick covering of blackthorn bushes.

2.3.1 Initial Research Design

The only previous published account of the site gave a brief description with no comment regarding any internal occupation (RCAHMW 1925, no. 770). The first task was therefore to assess whether the site had only been briefly occupied, as is now recognised at Berry Hill (Murphy and Mytum 2012), or if it had a long and complex history. If it had been the former, then only limited excavation would have been necessary and then a recreated site, based on evidence from other settlements, could have proceeded at Castell Henllys. Excavation in the Easter 1981 season took the form of some test quadrats scattered across the site and a 1 m wide trench into the rear of the rampart (Fig. 2.8) and another across the annexe (Fig. 2.7). These revealed complex sequences surviving in the trenches and cut features including postholes and gullies in some of the quadrats. This evaluation season demonstrated the nature of the deposits and varying degrees of preservation across the site. It was therefore decided that there was considerable potential for the site, and more extensive excavations were planned according to a more ambitious research design.

2.3.2 The Basic Defensive Sequence and the First Internal Structures

The excavations to date had been completely by hand, but it was quickly found that the topsoil was ridden with blackthorn bush roots in the fort interior and was a well-developed plough soil over the annexe. It was therefore decided that machine excavation of topsoil was the only way of being able to examine larger areas necessary for the research questions and as part of mitigation in advance of reconstruction of buildings. Three areas were opened up, two in the fort and one in the annexe. The first internal area extended from the initial trench across the defences to reveal well-preserved deposits to the rear of the inner rampart; this area was a long-term investment in examining the

Fig. 2.7 *Top*: initial trench across the annexe. *Bottom*: first open area excavation in the lee of the northern rampart

sequence of settlement within the fort, possible through the survival of stratigraphy in this area. The trench through the defences was also extended, still by hand (Fig. 2.8). A machine-cut trench west of the visible inner earthworks was designed to locate the entrance; the earthmoving machine was set to cut through the ditch, but when the opposite section was examined, it was clear that it had clipped the ditch terminal and had cut into structural features and surfaces associated with the entrance. The excavation of this trench was therefore immediately terminated, and examination of this area did not take place for a number of years when an open area could be revealed, allowing the complexity of the entrance to be examined more effectively (see Chaps. 3, 12, 13, and 14). Nevertheless, some damage to the deposits did occur during this evaluation, and this is discussed where relevant in Chap. 12. However, the evaluation did identify the exact location of the entrance and indicate its complexity so that the excavation strategy for that part of the site could be prepared effectively.

The other area that was initially exposed was towards the southern part of the site, where topsoil could be removed down to the surface of the glacially deposited gravels and clays, and into which cut structural features could be found. This was the area that could be completed most quickly, allowing assessment of structural evidence and providing a plan of a roundhouse (Fig. 2.8). This structure could then be reconstructed on its footprint and utilising the excavated data, in time for the summer

Fig. 2.8 *Top*: Rampart excavations, view from outer rampart looking south. Near figure stands in what was thought to be the bottom of the ditch but was later shown to be a recut and the original ditch was over 1 m deeper. *Bottom*: excavation of the first roundhouse, from the south

tourist season of 2002 (Mytum 1986). The smaller, southern defining earthwork was also investigated with a 1 m wide trench, revealing a build-up of deposits including considerable amounts of iron slag. Excavation down the slope revealed the extent of the scarping, but dry conditions meant that the presence of a ditch on the terrace was not appreciated at this stage.

2.3.3 The Interior and the Annexe

The atypical ownership and land use of Castell Henllys provided an opportunity for a long-term investigation of a small inland promontory fort with the possibility of leaving areas open to be excavated over several seasons. This allowed the balancing of training with research as time pressures to complete one area were less severe than if backfilling after each season had been necessary. Areas were covered with plastic where necessary, or left to weather slightly, as this could lead to the better definition of cut features in the glacial gravels and clays. From 1982 a large area of the annexe was machined off and investigated, following the promising results in the initial annexe trench, and areas within the fort immediately behind the northern rampart and in the southern part of the interior were also under investigation, with what was to be the second roundhouse to be reconstructed and excavated in the Easter field season of 1984.

By summer 1985 the southern portion of the site had been excavated, and the second roundhouse could be reconstructed. Moreover, an area immediately behind the northern inner rampart had been completed, indicating the survival of deposits, and this area was extended up onto the rear of the rampart to better understand the later phases of occupation. The areas of excavation were extended along the eastern side of the interior, joining previously separate excavation areas. Wet weather in 1985 led to the extensive excavation of some of the external ditches that were cut in gravel on the northwestern slope of the site, as these were workable when the annexe area was completely filled with water. As a result of the delays to the annexe in 1985, considerable effort was devoted to this in 1986, and in 1987 another internal roundhouse was excavated and reconstructed in the following summer. Scooped structures and working areas on the eastern slope of the interior were gradually defined and fully excavated in 1989; these were only fully understood with the final seasons of 2004 and 2005 when excavation was extended to the edge of the steep scarp. Excavation areas were also stripped on the southeastern part of the interior, leaving a large spoil heap down the centre of the site that was used as a viewing platform by the public. Various scoops, roundhouse gullies, and a four-post structure were defined by 1989.

In order to aid understanding of the various areas under investigation, the central spoil heap and the topsoil beneath were removed during 1988 (Fig. 2.9) to reveal the central spine of the promontory where, despite significant truncation, structural evidence for further roundhouses was found. The spoil was used to form a terrace at the northern boundary of the property adjacent to the old road to Cardigan, the first major alteration of the Castell Henllys topography since the construction of the fort two and a half millennia earlier. This allowed those with mobility problems to enter and park transport at the point, avoiding the steepest part of the climb to the fort. Given the limited evidence surviving in the central area, much was examined in the same year, with small amounts necessary in subsequent seasons. By 1990, the level of survival of the drystone rear revetment west of the entrance and down the western side of the site became apparent, as the build-up of deposits in the northwestern portion of the interior began to be excavated. This thick deposit of up to 1 m was extremely difficult to differentiate, and much had to be dug in spits. The damage caused to the rampart and the rear revetment wall on the western side by the late ditch was also revealed at this time, and investigation of the late Roman/post-Roman ditch began. As this was excavated with numerous cuttings, and with some linear sections, this was a slow process that took many years to complete.

The area stripping also extended out through the entrance in 1988, allowing work to begin on this complex in 1990, with the latest phase exposed in 1991. The whole of the entrance complex could be examined at once, though this slowed the exposure of any one phase. It also allowed where possible the integration of the excavation of interior deposits immediately either side of the gateway, joining up with those areas already excavated to the east and south. It also facilitated investigation of the relationship between the entrance structures and the rampart phases. The public was directed around this excavation area but had a viewing platform down onto the dig. At this stage of the project, the National Park enhanced the camp site facilities, allowing a larger excavation crew to work on the site. This allowed more aspects of the site to be investigated at any one time.

During the 1992 season, the late Roman/post-Roman gateway was also removed and work began on the second phase of the drystone-walled entrance. Whilst elements of the earlier phases were visible, the extensive layers of rubble, both tumble and possible road surfaces, required considerable care in excavation and recording, and in the process the late timber gateway revealed. Investigation of the ditch terminals at the entrance also commenced, though their excavation took several seasons to complete and, in hindsight, the eastern terminal was probably not fully excavated.

By 1992, the earlier drystone gateway phase became visible, and work on the two phases of inner revetment to the west of the gateway allowed some phasing of the build-up of deposits in this area in

Fig. 2.9 *Top*: stripping topsoil from central area of the promontory. *Bottom*: entrance area after all walling has been removed

relation to the defensive sequence to be understood. The exposure of a large hoard of slingshots beneath the later phase of revetment indicated that the social-symbolic interpretations of hillfort earthworks becoming popular at that time could be too simplistic. There was also a growing appreciation of the extensive nature of the late Roman/post-Roman ditch along the western side of the site, even though portions had been identified earlier.

The interior areas around the entrance were now being extensively excavated, and in 1993 the first and most impressive stone phase of the gateway was revealed. The nature of the massive gateposts, and the slots for timbers within the ramparts, was also found. The pre-rampart gateways and the early palisade were revealed west of the entrance during 1995 and 1996, and excavation of the rampart to the east of the entrance exposed a ditch that had been over-dug and re-filled during the Iron Age when the first stone gateway was constructed (Fig. 2.9). This led to a realisation that further investigation in a more extensive manner of the rampart would be worthwhile. An Easter 1996 season removed the experimental earthwork and stripped an area that joined together the annexe and the fort entrance excavations, allowing the outer elements of the entranceway to be investigated that summer. Although there was limited stratigraphy, this was important in revealing the extent of the entrance complex, and some elements of the sequence could be linked to the main gateway chronology. The outer gateway to the annexe, with its ditch terminals, was investigated in 1998.

The defences on the eastern side of the promontory were examined in a narrow but precipitous trench that revealed the loss of the rampart on this side, but the survival of the rock-cut ditch beneath much later slumping and hill wash. This encouraged further investigation of the ditch on the southern tip of the promontory in 1997 and on western side from 1999. The construction of the southern rampart was only extensively investigated after all the interior deposits had been removed from that area from 2000, when a significant length of the earlier palisade was also exposed.

The main rampart excavations commenced in earnest in 1998, revealing pre-rampart activity and encouraging a co-ordinated large-scale investigation that was to take place over the following 7 years, with the probable grave pit being investigated in 2000, and other votive deposits being located in 2002 when the original cutting through the rampart was widened, and more of the rear of the rampart with its drystone revetment was exposed. Further work on this area continued in 2003. A large-scale investigation of the rampart took place during 2001 and 2002, extending northwards from the already investigated interior, leaving regular balks. The western end was also excavated beginning at the entrance, working eastwards, creating a coherent excavation and recording strategy.

The eastern terminal of the inner rampart was investigated from 2001, revealing a similar constructional sequence to that found to the west. Beneath the rampart were extensive craft-working activities of the palisade phase, which led to the extension of excavations further to the south in subsequent seasons. These exposed a length of the palisade, and a scoop itself earlier than the palisade and thus the beginning of Iron Age activity on the site was identified in 2005, the last season of work on the main fort, with work continuing thereafter only on the outworks and annexe area.

The outer rampart of the northern main fort defences was further examined in 2001 by expanding the original cutting to the west, revealing the palisade trench atop this rampart in plan as well as section. The junction of this rampart and the entrance was investigated in 2002, clarifying that it was at this point very low, and largely formed by scarping the slope in front of the rampart.

Investigations of the outworks resumed in 1991 after a gap of several seasons, with a widening of the original trench across the northern outer rampart and ditch. The ditches that linked the main fort to the outworks were investigated further in 1994, and work continued for several seasons on the annexe ditches.

Excavations at the entrance had revealed the terminal of a ditch that ran in a westerly direction down the slope, and in 1997 the direction of this and its associated substantial though heavily eroded rampart was located in a long trench that also confirmed the position of the rampart on the western side of the annexe entrance. Both sets of earthworks ran down the upper slopes of the promontory but stopped at a change of slope when the side of the promontory became much steeper. One further outwork down the slope was identified in 2000, where a small spur of rock was adapted with a shallow ditch behind it. There may have been deliberate scarping downslope, and elsewhere modifications of the scarp slopes could have been achieved either by quarrying or the construction of earthworks that have subsequently been buried under wash down the steep slopes, but given the natural topography it is unlikely that these would have been substantial.

In Easter 1995 the western extremity of the *chevaux-de-frise* was exposed with careful machining off of the overlying rampart, followed by excavation down to the buried soil during the summer season. The eastern portion was examined in 1998, leaving a central section untouched.

The outer northwestern entrance into the annexe area was located in an extensively machined area west of the *chevaux-de-frise* in 1998, and work proceeded in this area during 1999. In the centre of the annexe area, small ditches associated with the Roman period use of the site were found to mirror an earlier, larger north–south ditch which was investigated at several points along its length. In subsequent seasons, several cuttings were placed across the outer bank and ditch, identifying the course of this feature to the east and locating in 2004 a possible field system running north from the fort. The complex intercutting of ditches in the central stretch of the outer earthwork was finally resolved in 2006, whilst the probable location of a small entrance close to the outer ditch of the main fort defences was only finally confirmed in the last season in 2008.

2.4 The Chronology of Settlement

Very few artefacts have been recovered from the fort interior, and of these the small number of glass beads and isolated sherds of pottery does little more than confirm an Iron Age date. A highly corroded La Tène fibula from the buried soil beneath the main northern rampart suggests a Middle Iron Age date, but this does not assist with a close absolute date, and the paucity of finds does not allow a site chronology to be elaborated. It is therefore necessary to use the stratigraphic sequence and radiocarbon dates to create some postulated chronology.

Radiocarbon dating is notoriously difficult for the Iron Age, and this is demonstrated at Castell Henllys. Some dates acquired during the excavation of the gateway using bulk samples of charcoal and the native Roman annexe with carbonised seeds and charcoal (Beta 71570–71575) largely revealed the limited role of such a method, except to demonstrate that this was indeed Iron Age activity and that a relatively late burning in the annexe was Roman and not a post-Roman event (Table 2.1). A series of AMS dates tightened the chronological range from 400–150 BC for all but one sample which belonged to the stratigraphically late ditch but does not greatly assist chronology within this range (Fig. 2.10). Nevertheless, the dates do suggest that the main promontory fort was occupied for little more than three centuries (no suitable samples came from the highest occupation deposits within the fort). Given the sequence of builds and collapses at the entrance, and the build-up of over 1 m of deposits against the rear revetment wall west of the entrance, some form of chronology can be proposed, even with the problems associated with radiocarbon dates in the Iron Age. Whilst the detailed evidence for all these changes, their sequence and their probable duration are given in the chapters that follow, it is worth setting out the sequence and assumptions behind its interpretation here. Although the sequence and chronology for it has been derived from the data, such assumptions generated by the chronological framework have themselves fed back into the interpretation of the relative sequences and their elucidation as presented in later chapters.

The two earliest radiocarbon dates, OXA-14668 and OXA-14670, both have very tight likely dates in the period 410–390 BC. However, both samples were retested as OXA-14669 and OXA-14671 and found to be statistically later, and so are questionable. The date of the start of the palisade phase cannot be ascertained because there are no suitable samples, but one, OxA-14664, relates directly to the palisaded phase activity but could have been deposited at the end of this. However, the commencement of the construction of the ramparts has produced a number of samples that have generated securely stratified, closed samples. One sample is of bone on the ground surface beneath the inner rampart 4040 (OxA-14561) and another came from a very low layer in the rampart (OxA-14666); two dates (OxA-14674, OxA-14698) are derived from the outer rampart that sealed the *chevaux-de-frise*.

Many of the dates from stratigraphically early contexts have their first peak only slightly after the rejected samples, and have a relatively small later peak, making the earlier date more likely. The most impressive of these is OxA-14666, derived from the lowest layer 4578 in the northern rampart, and this has a most likely range of 400–360 BC. And with a very small later tail, the same pattern can be

Table 2.1 Radiocarbon dates and sample details

Sample no.	Date	Context no.	Description	Nature of sample
Beta-71570	1850 ± 70 BP	1291	Layer stratigraphically relatively late in annexe sequence	Bulk charcoal
Beta-71571	2230 ± 70 BP	3528	Gully of possible roundhouse	Charcoal twigs
Beta-71572	2150 ± 60 BP	2754	Burnt gatepost from later stone phase entrance	Charcoal, structural timber
Beta-71573	2190 ± 60 BP	3539	Layer against walling of first phase stone entrance but over rubble probably from that wall	Bulk charcoal
Beta-71574	2270 ± 60 BP	3380	Layer against wall face from later stone phase entrance	Bulk charcoal
Beta-71575	2130 ± 60 BP	3549	Posthole probably associated with later stone phase entrance	Charcoal, structural timber
OxA-14561	2270 ± 30 BP	544	On buried soil surface prior to construction of northern rampart 4040	Bone (cattle, *Bos*, proximal right metacarpal)
OxA-14664	2224 ± 30 BP	4268	Roundhouse floor partially buried beneath the northern rampart 4040	Carbonised nutshell, (hazel, *Corylus*) from flotation of floor make-up
OxA-14665	2208 ± 30 BP	4490	Layer around iron smithing hearth	Charcoal (hazel, *Corylus*) from layer
OxA-14666	2289 ± 29 BP	4578	In lowest clay layer of bank with many bone fragments, charcoal, and a complete stone bowl	Bone (cattle, *Bos*, 1st phalanx)
OxA-14667	2052 ± 28 BP	2684	Ditch fill, rapidly dumped, mainly with rubble	Bone (?human, *Homo*), mid-shaft, probably tibia
OxA-14668	2340 ± 29 BP	1473	Layer with much charcoal near the base of the ditch on the western side of the metalled roadway from the outer to inner gateways	Charcoal (hazel, *Corylus*) roundwood
OxA-14669	2244 ± 30 BP			
	Dates not statistically compatible			
OxA-14670	2337 ± 29 BP	2246	Burnt wall (with wattle and daub base) of small roundhouse in scoop	Charcoal (wattle twigs of hazel, *Corylus* to ~7 years in age)
OxA-14671	2231 ± 31BP			
	Dates not statistically compatible			
OxA-14672	2239 ± 29 BP	2209	Pit with much burnt clay and charcoal, but no slag	Charcoal (hazel, *Corylus*)

OxA-14673	2267 ± 30 BP	2480	Pit, one of several along the central spine of the site, containing burnt clay, fire-cracked rock but no slag. This pit was cut by several later postholes	Charcoal (hazel, *Corylus*)
OxA-14674	2273 ± 28 BP	1498	Outwork rampart that seals the *chevaux-de-frise*	Bone (cow, *Bos*) femur
OxA-14698	2260 ± 30 BP	1498	Outwork rampart that seals the *chevaux-de-frise*	Bone (cow, *Bos*) scapula
No date obtained		3592	Post pipe of gateway posthole	Bone (large mammal, rib)
No date obtained		3555	Drystone wall of the guard chamber walls from the first stone gateway phase, intentionally laid between courses of walling	Tooth (pig, *Sus*, molar)
No date obtained		3550	Roadway surface through the first phase stone gateway	Tooth (cattle, *Bos*)
No date obtained		4222	Layer associated with smithing debris, hearth, and anvil stone	Tooth (cattle, *Bos*, molar)
No date obtained		3592	Post pipe of first stone phase gateway posthole	Bone (large mammal, rib)

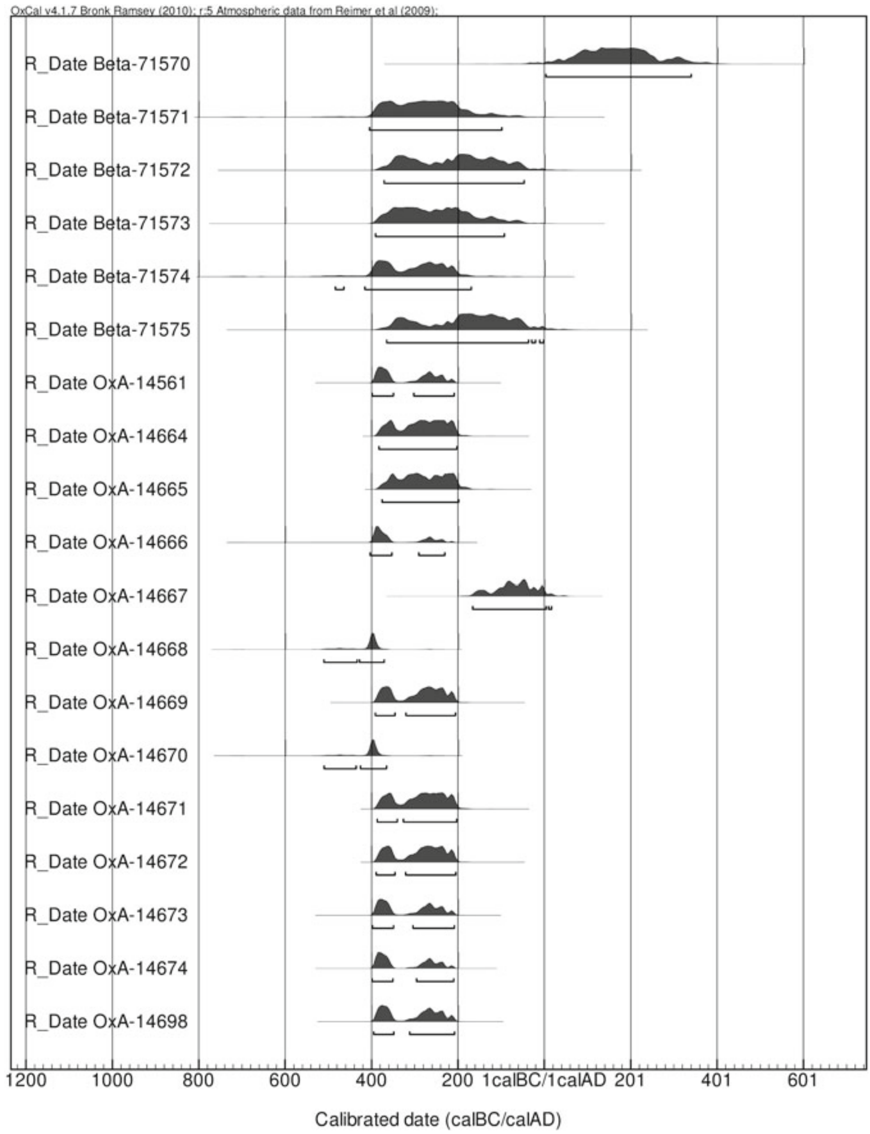

Fig. 2.10 Radiocarbon dates from Castell Henllys

seen for OxA-4561. On their own these would be insufficient to argue for a start for the earthworks of c. 370 BC, but the sequence of activities that has to completed within a period of certainly less than 400 years, and probably in as little as 250–300 years, such a start date is highly probable. It is not credible to imagine that all the phases of building, decay and rebuilding could have taken place only starting at the next peak on the graphs for those samples of c. 250 BC. Moreover, typologically similar gateways elsewhere all belong to the middle Iron Age (Cunliffe 2005: 372) and so such a late date would need special explanation. Given the bimodal distribution of likely dates for all these graphs, the start of occupation must be linked to the earlier peak.

Whilst the start of the earthwork phase must date to around 370 BC on archaeological grounds, the whole of the palisade phase needs to be placed before this to identify the start date of the settlement on the promontory. The palisaded phase of the site has only one generation of timber uprights used in the perimeter, and this was still standing when the gravel rampart west of the entrance was first built. After 25 years of experimental archaeology on the site, it is clear that the small uprights used in the construction of the palisade would have reached the end of their functional lives after about a quarter of a century.

Given that some activity began on the site just before the palisade was erected, and that some of the craft activity and layer formation continued after the palisade was removed on the eastern side, before being partially sealed by the main northern rampart, allowing 25 years as a minimum and 40 years as a maximum for the whole pre-rampart activity would seem reasonable. Considering the number of changes to the gateway and outer structures before the construction of any rampart, it is more likely that the length of the earliest phase is nearer the latter figure.

It is thus suggested that settlement began on the promontory c. 410 BC, with the palisade erected within a few years, and being is a state of decay by c. 370 BC when the gravel rampart was constructed and some of the palisade was removed. The *chevaux-de-frise* most probably dates from time of the palisaded pre-earthwork phase, and so is presumably late fourth century BC, probably c. 400-370 BC. Certainly OxA-14674 has only a small second peak, and it does seem unlikely that if the main ramparts were constructed c. 370, the outer definition of the site had to wait well over a century by which time it is likely that the second stone gateway was in decay (see Chap. 12). The logic of the *chevaux-de-frise* being part of the palisaded phase is discussed in Chap. 5, and as there is no evidence for it having existed for long (like the palisade fence), the various elements of evidence all point in the same direction.

The main northern rampart east of the entrance was constructed c. 370 BC and sealed the earlier features. The first and most elaborate stone gateway was erected at this time, together with the outwork rampart 1498 that sealed the *chevaux-de-frise* (OXA-14674, OXA-14698, both with a date range 400–350 BC). It is at this stage that ditch 1473 would probably have been dug linking the inner and outer earthworks, and the burnt layer near the bottom of the ditch could represent burnt palisade phase timbers cleared away with the major remodelling, though may be part of debris from a later event.

Most of the other dates provide little help in creating a chronology, but OxA-14667, a human bone from the fill of the late ditch thought to be later Roman or immediately post-Roman, provides a date 110 BC–0 AD. This suggests that human remains may have been scattered in the fort following the late Iron Age shift outside to the annexe area, and it was a residual item that entered the ditch with the fill. The earliest phases of the annexe settlement are before the arrival of late first and early second century AD Roman ceramics, and there are some examples of late Iron Age metalwork from this area, though these items could have been heirlooms removed from the fort when the settlement shifted outside to the north. Nevertheless, other excavations at Llawhaden and elsewhere demonstrate that the farmsteads represented by the annexe were established in the first and second century BC and then used through the Roman period. It is therefore possible to suggest that the fort itself had been abandoned by c. 100 BC, and probably several decades earlier, though movement out to other settlements may have been slow and over more than a generation, so this may have started c. 150 BC. It is therefore necessary to subdivide the remaining structural phases at the entrance (where the sequence is most visible) into slightly more than about 200 years.

The first phase gateway collapsed slowly, eventually leading to an ad hoc forward gate structure to control access. The collapse would not happen immediately (nothing suggests a rapid structural failure), so substantial collapse would only probably appear after a generation, and take another to build up to make the gateway unworkable. Moreover, some of the major posts on the gateway entrance were replaced, and 25 year lives for these would seem reasonable. This may take the date to c. 320 BC when the temporary forward gate was constructed. The second, reworked walling was of a very different design to the first but still had the concept of guard chambers. By this time the outer ditch had so filled up that the outer revetment wall to the west had to be set on a shelf dug in the highest ditch infill. This again suggests a considerable period to have the ditch so full. This suggests c. 300 BC for the second stone entrance phase. This again gradually collapsed, and though the wooden posts could not be easily replaced, their very structural linking to the wall may have allowed them to remain effective even if rotted at ground level, as the whole structure was partly self-supporting. This eventually failed, however, probably partly because of collapsing walling and also rotting superstructure. This might take the sequence to c. 250 BC. A largely invisible gate phase may have lasted to c. 225 BC if of only one build, but thereafter there was limited revetting of collapsing bank perhaps to c. 200 BC, and then as the earthwork stabilised, nothing at all was constructed at the still-used entranceway. It would seem that by the time that settlement shifted out onto the annexe area in the late second or early first century BC, the ditch outside the main northern ramparts had completely filled up along its length. A roundhouse was built over the ditch, and there had been no deliberate infilling to level up the ground. This suggests that the earthworks had not been maintained for some time, and it is likely that the gateway had had no clear structural form for at least 50 years and perhaps as much as a century.

The sequence outlined above is supported but not created by the radiocarbon dates and is built around the stratigraphic sequence at the entrance and other relevant data from other parts of the site. The interior house sites show several phases of rebuilding of wall lines. The roundhouses at Castell Henllys have stood for 30 years and have no need to have their walls replaced. It is likely that such walls, if properly maintained, could last 50 or even 100 years. Therefore finding on average three phases of roundhouses on any location also fits into this overall chronology. In some places there were many more phases, in others fewer phases survive, but generally the evidence strongly supports the idea of a fully occupied fort throughout its occupation that lasted through the fourth, third, and probably the second century BC.

2.5 Methodologies of Excavation and Recording

Excavation consisted of topsoil clearance by machine followed by surface cleaning. Packing stones for postholes often protruded from the subsoil, so machine clearance was if possible at a level that just exposed the top of such stones. Mattock and shovel clearance of the remaining topsoil around packing stones then took place, followed by finer cleaning by hoe and trowel. In dry conditions brushing was also found to be effective in creating a surface that, once dampened by rain or spraying from a hose, could allow the definition of many features. As much of the site drained rapidly, and was further dried by western breezes, dampening down was often undertaken in the evening or early morning and features were then immediately marked. Localised damping with watering cans was also necessary. Different features could show in varied weather conditions, and often a significant number of structural elements would only be revealed over a winter after the topsoil had been removed, even if covered with plastic. All structural features were excavated with a trowel and were normally recorded with a section and were planned. All small features were excavated with trowels and if necessary smaller tools such as spoons.

Ramparts and ditches were excavated largely with mattock, pick, and shovel, with trowelling at stages when definition of contexts and edges were necessary. Where possible ditch fills were excavated stratigraphically, though this was not always possible. Over the seasons it became apparent that ditches suffered a great deal of slumping from the sides, and it was only too easy to consider that the full profile of the ditch had been revealed when it was only one stage of slumping that had been defined. Even to the very end of the excavation such decisions remained difficult, and were often only resolved by over-digging a profile well into the subsoil. It is therefore almost certain that the earlier ditch profiles that were excavated and recorded, particularly those dug into clay, do not represent the full ditch profiles. These matters are considered at the relevant places within the report. The problems of excavating on a mixed glacial deposit of interleaved bands of gravels and clay should not be underestimated; certainly any contract or single-season research excavation on a subsoil such as Castell

Henllys would undoubtedly miss a great number of cut structural features and would probably under-excavate many of the ditches.

Few deposits were dry sieved, though this was undertaken for quadrats of the subsoil sampled beneath the rampart. In contrast, large numbers of samples were taken for flotation and wet sieving. The effectiveness of these recovery methods relates mainly to artefacts and ecofacts and so will be discussed in the volume where they are described and discussed. The ramparts were excavated by hand, using the same methods employed in the ditches. Where possible layers were followed, but often spits were employed and layers only easily identified in section. The large-scale excavation of the ramparts would have been very slow if excavated layer by layer, but the placing of longitudinal and cross sections has allowed the three-dimensional reconstruction of the deposits.

All cut features were sectioned at least once, unless very small (such as stakeholes). Some ditches had repeated cross sections made, and the same applied to the ramparts. For some ditches, and also the inner rampart, longitudinal sections were also obtained, creating the best effort at a three-dimensional record of their form. Sections were normally at 1:10 though some large sections, and some wall elevations, were only drawn at 1:20. These smaller-scale drawings were always augmented with photography, and photography with measuring scales and with human scales was frequently taken throughout the whole project. Plans at 1:10 were produced by 10 m square across large parts of the site and as smaller plans as necessary. There was no single context planning, and some areas had pre-excavation plans where these were considered worth the effort. Given the difficulty of identifying the edges of some layers in those parts of the site with considerable build-up of deposits, most layers are not depicted on the published plans. Where edges could be defined, they were recorded on site plans, but variable soil conditions combined with earthworm and root disturbance meant that many distinctions visible in sections were not identifiable in plan. Where thick deposits could not be differentiated stratigraphically, they were excavated and recorded in spits, usually c. 0.1 m thick. Additional plans made at the end of one season allowed excavation and recording in the same areas to begin from an informed position once more at the beginning of the next.

Bound hardback context books were used, with each context having a lined page marked up with headings seen on context sheets and with a graph paper page opposite for sections, detailed plans, etc. This method of recording ensured that loose sheets did not blow away from ring binder files and that the integrity of the record was maintained. The system was not changed over the course of the project, though more electronic methods of recording would ideally have been introduced. The advantage has been, however, that the record has been of a uniform character that has aided the final writing up process.

Records have been made by supervisory staff or by students and then checked by supervisors. Some of the drawn record in particular was recognised as unsuitable and further drawings were made. The construction of the archive has therefore involved the selection of appropriate records that can be taken to accurately represent the evidence as perceived by the more experienced members of the excavation team. Issues of perception and the range of contributions made by those with varied backgrounds, experience, interest, and ability will be discussed in a subsequent volume, as these are important issues rarely discussed within excavation reports or indeed anywhere in print.

2.6 Taphonomy, Survival, and the Limits of the Evidence

The nature of the archaeological evidence recovered during excavations is dependent on the methodologies employed on the one hand and on the past behaviours and subsequent post-depositional processes on the other. Castell Henllys exhibits a range of depositional contexts that have been modified to varying degrees by subsequent natural and human agencies. The result is that the site contains diverse qualities of preservation of material, notably copper-alloy artefacts and faunal remains, and differing integrity of deposits. These have affected research design and recovery methods, and also influence the types of interpretation possible within particular parts of the site, and the nature of comparisons drawn between one area of the site and another.

Given the opportunity for intra-site comparison and interpretation that the large-scale excavation allows, it is particularly important to identify sources of bias so that patterns produced by variation in natural forces of decay can be differentiated from those produced by past human behaviour. Moreover, there is a relative paucity of features that acted as “artefact traps” from accidental or deliberate locations of deposition, such as the pits so frequently encountered on southern British sites. This creates an illusion of a poor material culture in the past. It is therefore particularly important to understand the potential significance of the distribution, rarity, or the absence of artefact categories on the site. The potential for gaining insight even from limited densities has been demonstrated (Mytum 1989) but is enhanced when the various factors acting on the creation of those densities can be considered. Discussion will separate survival of artefacts and ecofacts due to variation in soil acidity from the survival of deposits and so the objects within them.

2.6.1 Artefacts and Ecofacts

The subsoil of the site is a mixture of glacial gravels and clays which are all acidic, but the former are particularly so. This has led to differing survival of faunal remains, with only burnt bone surviving in most contexts. In some unusual circumstances, notably associated with clay deposits or on the surface of clay subsoil, some bones and teeth survive, and copper-alloy objects can be identified though often in a very poor condition. Iron objects have suffered badly from corrosion, though identification from X-rays and selective cleaning has proved very successful. The small ceramic assemblage has been recovered from all parts of the site, suggesting no taphonomic processes influencing its survival. Rather, this probably reflects a culture largely relying on wooden, leather, and basket vessels, together perhaps with some of metal. In contrast, the iron and copper alloys are more difficult to interpret. Not only may some have been lost completely through corrosion (certainly green and brown stains that may have represented such artefacts have been noted), but the pattern of deposition may not reflect the intensity of use.

Thick refuse deposits were laid down on the inner rear of the northeastern rampart, and on the north-west over 1 m of deposits were accumulated. Containing much charcoal and small fragments of burnt bone and clay, the density of metal objects was low. This may indicate a very impoverished culture, but is more likely to indicate a tradition of recycling and reuse. It is notable that in the Roman period when access to replacement goods becomes easier for the site inhabitants, deposition rates for all classes of find increase rapidly. This could be because there was more material culture in use, but may well reflect that the turnover and discard pattern changing dramatically. This is suggested by the relatively large numbers of late Iron Age artefacts deposited in the farmstead, thrown out as a more consumption-based ethic took over.

Faunal remains have also been recovered within rubble deposits where the shale rock seems to have encouraged survival. Where there has been survival of faunal remains, it is likely that even these are partial, with certain elements of the skeleton being preferentially preserved. Most unburnt bone has been of teeth and jaws, except for under the length of rampart where the lowest layer was formed from a thick dump of clay; here a wider range of bone was recovered. The teeth survived in a variety of deposits that contained more clay or a high density of shale fragments. Many probably represent just the most resilient elements of the faunal assemblage, largely decayed. It is possible, however, that the teeth reflect jaws that no longer survive. With the exception of the teeth found on the gateway entrance roadway surface(s), that may have fallen out of skulls displayed on the entrance superstructure, teeth may have been attached to jaws. On occasion, adjacent teeth were excavated, further suggesting decayed jaw bones. Within the drystone walling, jaws were more likely to survive. This reflects taphonomy, but there is no reason to assume that other faunal elements would not have survived at least sufficiently to produce a clear stain. This did not occur, suggesting that the use of jaws, laid flat between stones in the drystone walling, was a deliberate depositional policy. It is possible that jaws were also used in other contexts than walls, and this may also account for some of the teeth finds.

2.6.2 Deposits

During the course of the excavations, the assumptions about the amount of post-depositional disturbance, damage, and erosion of contexts have changed. Early assumptions were that there had been considerable erosion on many parts of the site, and only those lower deposits near to the major earthworks had survived. Further examination of the archaeological remains partially confirms this view, but reveals far more complete deposit survival.

Within the hillfort the vertical measurement between the surface prior to excavation and the surface of the subsoil does not reveal an even depth of archaeological deposit. Rather, there has been the expected build-up of human dumping against the main ramparts, combined with post-depositional erosion during the occupation of the site that included the slumping and collapse of drystone walls (see Sect. 9.6). In general, however, erosion was low. The southern rampart lies at the lowest point of the promontory, yet the amount of wash that accumulated against it, both during occupation and subsequently, was not great. Most of the build-up of deposits in this area was the result of human activity there, such as ironworking, discussed in the subsequent volume examining the interior. Moreover, the inner faces of the ramparts show little evidence of erosion beyond slumping of drystone walls (see Sect. 10.1); this would have led to some erosion, but not on a large scale, and unevenly around the earthwork perimeter. The outer, front faces of the main northern ramparts would seem to have suffered some loss, though this was mainly with the gravel rampart to the west of the entrance. Here, throughout its use, attempts at holding back the gravel core with front revetments of timber and stone were of limited success. In contrast elsewhere, only slumping of steep ditch and hill scarp sides has led to major movements of material (see Sects. 8.1.4.2 and 10.1.1.2). In general, the earthworks have been stable and there is little reason to assume large-scale erosion from the tops of the ramparts (features such as postholes and palisades have been located in such positions). This was confirmed by the experimental earthwork that remained remarkably stable over a decade (see Sect. 10.3).

The ditches have filled considerably, and a few with adjacent gravel ramparts may have been largely filled by collapse. The majority, however, have some tumbled rocks and small amounts of wash but would appear to be largely filled with deposits that accumulated there naturally. Only in the lower levels of the ditches is there repeated evidence of rapid natural fill, suggesting that in a short period following regular cleaning the ditches eroded back to form stable profiles. The lowest ditch fills are therefore usually very clean and difficult to differentiate from natural subsoil, but this only emphasises the very different processes operating to create the rest of the ditch fills.

Small amounts of charcoal and burnt bone and clay suggest that the ditches were not used for refuse disposal, but the fill should not be seen primarily as slumped rampart either. This can be indicated by the symmetrical filling of the ditches, rather than asymmetrical fills largely derived from the rampart sides of the ditches. The stability of the earthworks may be due to a combination of skill in construction, the maintenance of vegetation cover, and the nature of the geology.

A small amount of erosion took place between the end of the main, Iron Age, occupation of the site, and the brief refortification in the late Roman/post-Roman period. Thereafter very limited erosion took place. It is likely that the earthworks have not lost very much material from the top of the ramparts as these are relatively flat, and the cut features suggest that little has been lost. The front and possibly rear faces of the ramparts have eroded back to a more stable angle of slope (e.g. some evidence for front stone revetting has come from a range of locations), but even this is relatively modest in volume.

An indication of the stability of the bank profiles and the angle of slope to which the natural hill slope was cut can be demonstrated on the southern defences. Here, the ditch was deliberately infilled (and not with bank material) to create a flat terrace running round the hill. At the southern extremity of the site, this terrace has remained particularly crisp and fresh, with no talus of eroded material from the scarp and bank above (see Sect. 10.1.2). This also demonstrates that human deposition of refuse on the terrace also did not take place. On the western slopes there has been some erosion of the outer face of the rampart, but even here there has been little erosion subsequent to the slumping which took place during the period of Iron Age occupation on the site (see Sect. 8.1.4.2). Experimental archaeology in the form of a small earthwork which was constructed by hand and then partially excavated prior to removal after 10 years (see Sect. 10.3) indicated methods of site management which were effective in creating minimal erosion (Mytum 1991b). This provides a contrast with experiments that have emphasised the scale of erosion on earthworks on chalk and sand (Reynolds 1989; Bell et al. 1996).

Around the periphery of the site, patterns of activity producing in situ deposits in some locations, and refuse dumping behaviour in others, led to the raising of the ground surface over time. This was most noticeable in the north-west portion of the site where the rear revetment wall survived to a height of 1 m because it was protected by the gradual accumulation of refuse in this part of the site. These deposits may have been even higher but have been truncated by erosion, though there is no reason to argue for any significant disturbance. Most activity surfaces have been lost, however, and the central part of the site retains only cut features. On some areas such as immediately behind the northeastern rampart, the natural hill was cut away at some stage during occupation, and any earlier evidence there would have been lost at this time. The level of surviving buried soil around the perimeter of the fort suggests, however, that the ground level from which the surviving features were cut was probably 0.1–0.3 m above that of the subsoil. The ground surface as present on the site before excavation would therefore have been similar to that in prehistory. Thus, the deposits on the top of the promontory have been largely been reworked in the last two and a half millennia rather than eroded away and replaced with newly accumulated soils.

Perhaps due to the presence of many shale fragments in most deposits, there was little sign of animal disturbance in most deposits within the fort. The exceptions were associated with the remains of two roundhouses where patches of particularly fine gravel were attractive for burrowing, and one area of disturbance was of a size to suggest that it had once been a badger sett. The scale of disturbance at Castell Henllys is therefore minor compared with that of the nearby inland promontory fort at Cwm Gloyne (Mytum and Webster 2001).

There has been very limited erosion following the abandonment of the site. There is very slight evidence for ploughing within the fort, but this must have been of very limited duration as there is no significant build-up of soil wash against the post-medieval Enclosure phase bank. This runs around the southern and parts of the eastern and western sides of the site, and even on the steeper slopes shows no evidence of significant deposition of silts. In contrast, the annexe had a developed plough soil because this area of the site had been ploughed a number of times.

2.6.3 The Ditches

Most of the infilling of the ditches after initial slumping and stabilising of profiles (often linked to period of cleaning and recutting) must have been through the erosion of the topsoil and vegetation forming on the bank and ditch surfaces. There are three exceptions to this, which only highlight the more widespread stability of these features.

The first is the ditch 4196 around the southeastern side of the site. Unlike elsewhere a terrace was not created on this side of the promontory, but the ditch was infilled and all trace of its presence disappeared under the deposits which slumped down the hillside (see Sect. 10.1.1.2). The material was largely derived from the small rampart which hardly survived along this side of the fort, unlike elsewhere. It would seem that this must have occurred during the latter part of the Iron Age occupation by the time the historic period field bank was constructed over the remains, only the slightest trace of the rampart survived. The second example is similar, but on the western side, where the ditch 4230, already largely infilled through slow soil creep and soil formation, was buried under a slumping scarp (see Sect. 8.3). The third example is a deliberate, human, infilling of ditches 3306 and 4477 on both the western and eastern sides of the site, following the short refortification of the site in the late Roman/post-Roman period, when the ditches were dug and then soon after filled in again (see Sect. 14.3).

2.7 Perceptions, Experience, Knowledge, and Interpretation

In recent years there has been much reflection on the excavation experience and the ways in which our contemporary cultural context affects the way we work and feel (Barrett et al. 2000; Hodder 1999, 2000). The awareness of this has grown in the author over the years of carrying out the training excavation every summer, with some Easter vacation short campaigns with small teams. The group dynamics have varied greatly, and factors such as personalities, weather, quality of the food, and archaeology have all affected the experience of those involved. To what extent these factors have influenced what archaeology has been undertaken, and its quality, is more difficult to determine. Whilst morale and motivation will have affected work rates and commitment to accurate recording, this may not be such that the archive is greatly affected, given the various checks and duplications engendered by a training programme. Thus the nature of the archaeology as experience has varied greatly over shorter and longer periods, and this is important when considering the excavation as a social activity. It also has archaeological consequences, encouraging or discouraging participants to pursue further education or careers in the subject.

The effects of all these factors on the archive and the data presented here are less obvious. What has become clear, however, is that the on-site training, combined with students' perceptions and levels of commitment, has produced a wide diversity of records for the same archaeological phenomena. This highlights the problems and the potential of archaeological field training, and these are worth exploring briefly as they may contribute to a wider debate concerning fieldwork in education and in the records created by such projects. It may also act as a concrete example in the debate regarding whether field data is more about perceptions than accuracy. In presenting this, some may consider that some of the weaknesses of this training excavation, or all such excavations are being revealed. There clearly are weaknesses, and the ongoing process of improving training has been heightened by recent developments in university education, where a more reflexive and self-critical approach is now widely undertaken (Aitchison 2004; Perry 2004). Moreover, quality control may not prevent the creation of non-standard records, but it can augment them with more appropriate and traditional archives. The non-standard material highlighted here needs to be separately considered elsewhere; does it provide information on lack of understanding, an experiment that may not have been fully successful, or an alternative way of seeing that should be given its place? The very fact that such material is even mentioned here gives it some legitimacy, though such records have not been used in the creation of the rest of the report; they have been edited out, and many if not all will not enter the permanent archive or if so will be suitably annotated.

2.8 The Purpose of This Book

This report is designed to provide detailed evidence from the excavation of the earthworks at Castell Henllys. This is presented here, along with interpretations that start at a basic phasing level and move onto attempts at understanding the significance of the actions of those involved in the construction and use of these earthworks. Whilst some comparative discussion of the form and use of the earthworks and the entrance is offered here, other elements of discussion, including reconstruction (physical and on paper), are postponed to sit alongside discussion of the internal building reconstructions. Issues of technology, techniques, cultural norms and values all apply equally to the discussions around reconstructions of houses and the entrance and so will be considered together. Comparisons of entrance ground plans and earthwork sequences are therefore considered here, but the three-dimensional forms that they took, and the implications of these, will form part of the second monograph.

The author believes that this published presentation of the excavated data was constrained by the expectations and expertise of those revealing, recording, and finally ordering it. However, it was also constrained by the physical nature of its form in the ground and as such is not completely arbitrary. The evidence is presented within the various chapters prior to the interpretations of such data because the relegation of such data to an archive would prejudice the reader in their assessment of the arguments and the easy opportunity to question the interpretive choices made here. Because the data is itself a construct based on observations, records, and post-excavation analysis informed by perceived interpretive possibilities, it cannot be divorced into an empirical archive. That the interpretations selected here are clearly chosen from several alternatives (and no doubt more than those outlined below) makes the link between what can be considered data and that which is of a higher level of interpretation even more necessary. Hierarchical headings may disrupt the flow of the text, but they do make it possible for readers to find the sections at the level of description and detail required or concentrate only on the interpretive sections. The primary archive will be deposited in physical form, but parts will be available electronically from a range of sources for those requiring even more fine-grained information (see below).

2.9 Other Modes of Dissemination

The results of research can be communicated through powerful though transient forms such as lectures and tours, through temporary features such as museum and site displays, and through (relatively) permanent reconstructions, publications, and archives. Some of these alternative forms, their effectiveness and impact, will be discussed in a subsequent monograph.

2.9.1 Dissemination to Archaeologists

This report is primarily designed to communicate with other archaeologists. This constituency has an interest in theory, methodology, the details of the evidence, the arguments regarding interpretation, and conclusions. Different archaeologists will find a diverse set of elements within the monograph of interest; few if any will read the whole, but many, it is hoped, will use elements in their own work. The physical and digital archive created by this project will be deposited at the Royal Commission on the Ancient and Historical Monuments of Wales, with digital copies with the National Museum of Wales, the Pembrokeshire Coast National Park, and Dyfed Archaeological Trust. Many forms of image will be available within the archive, including the digitised plans that formed the basis for creating the line drawings in this volume. A selective element of the digital archive will also be deposited with the Archaeology Data Service.

Some artefacts are already deposited at the National Museum of Wales and aspects of the Castell Henllys project are already used in the museum displays, though these will change over time. Other public interpretations are discussed below.

Research continues at Castell Henllys, and further publication will continue. The study of public interpretation, and the role of the site in education, has already been under way (Mytum 2000, 2003, 2004; forthcoming), and this work will continue to be reported alongside an analysis of the internal structural evidence. Longitudinal study of public perceptions and experiences can provide important comparanda for shorter-term studies undertaken elsewhere. A subsequent monograph will examine the Late Iron Age and Roman period farmstead and set it in its regional context of small enclosed settlement in West Wales.

Undoubtedly the site of Castell Henllys is itself also an important medium of communication to archaeologists as well as the public (see below). Archaeologists can observe and consider the experimental reconstructions and the site in its landscape; they can critically absorb and reinterpret the panels and leaflets and interrogate the guide staff. Many archaeologists have visited the sites with their families, obtaining a combined public and professional experience. Others have come as single or group visitors, and this will undoubtedly continue.

2.9.2 Dissemination to Other Interested Parties

The most obvious form of dissemination that has already been under way for over 30 years has been through site interpretation for visitors. This commitment has involved the design and placing of signs and interpretation panels, the laying out of carefully planned routes to allow observation of the excavations, use of students to explain the archaeological work and results, and the employment of guides and interpreters by the Pembrokeshire Coast National Park. Within this context, the ongoing and completed building reconstructions have been particularly important and stimulating for the visitors. The physical, on-site, experience of the fort set within its modern but still rural landscape provides one of the most effective ways of communicating with the public. Results from the excavations are communicated to site staff to ensure up to date and accurate information; some volunteers have in return shared their considerable expertise, such as in weaving and spinning.

Public interpretation also involved the production of a booklet, translated into a range of languages (Mytum 1984) that was available in the early years of the project, replaced by a self-guided trail leaflet produced by the Pembrokeshire Coast National Park. In recent years the Education Centre building has been used to provide interpretative displays to enhance the visitor experience and has included some artefacts that are stable and can be reasonably kept in this environment. An important innovation was to provide a guide and interpretation of the site in the Iron Age from children's perspective, available in both English and Welsh (Mytum 1996b). This was a surprisingly challenging commission to write, as it highlighted the importance of beliefs, social relations, and emotions in the past against the physical background about which we as archaeologists were more confident.

The Pembrokeshire Coast National Park has laid particular emphasis on school education, particularly as the Celts form an element of the Keystage 2 (ages 7–11) History curriculum for Wales (Mytum 2000). A specially designed Education Centre was built, and a permanent school officer, Rhonwyn Owen, has designed and led the programme for a number of years, ably supported by a committed team of part-time interpreters and educators. Education packs (D.C.C.E.D 1993) and now a CD (Bennett and Owen 2004) have been produced to support teachers in their use of the site. Castell Henllys has also been used in other educational media, such as being a case study in the A level Archaeology text book (Grant et al. 2001).

Alternative interpretations of Castell Henllys have also been offered by the Pembrokeshire Coast National Park, ones where the archaeology has been ignored or even subverted. These have included story-telling sessions, in which the archaeological workers have been explained away as slaves (a view only occasionally shared by the students themselves) and where magic and myth form a major component. These were not always successful with the public, when the "scientific" archaeology was ignored or even apparently contradicted. However, the mind-sets revealed by the storyteller may have been closer to past reality than the modern logical structures of cause and effect presented by the display panels and literature derived from academic archaeological discourse. Most consumers enjoyed the story-telling, seeing it as just that—entertainment. Fewer saw it as another way of seeing a/the past. A way of resolving the live adult fictional accounts with the factual messages has not yet been found, but drama is still a key part of the children's experience at Castell Henllys where role-playing is an integral part of the programme. This creates problems with explicit reference to archaeological data on-site as that is a conflict between Iron Age role-playing and the twenty-first-century knowledge base (Mytum 2013).

The first person approach has not been fully abandoned for the general public, however. A series of listening posts, each powered by rotating a handle, have been placed at a series of points along the path from car park to hill top. At each a different person, from the present or the past, says something about the site or the environment. This gives the Pembrokeshire Coast National Park control and consistency on what is communicated but allows in a small way different (carefully selected) voices to have their (brief) say.

Television also uses the site, particularly the reconstructed buildings, in a number of productions, the most ambitious being the BBC *Surviving the Iron Age* series that managed to display, if nothing else, how culturally different Iron Age life must have been compared with that of the early twenty-first century (Firstbrook 2001). The extent to which television communicates messages derived from archaeological research varies, but the setting and nature of the physical remains allow that opportunity.

Alternative, independent interpretation of Castell Henllys is relatively easy because of its public accessibility. The result is that many websites have information about the site. Some take a simple tourist information perspective; others give personal views of their experience there. It is likely that Castell Henllys also appears within other accounts of the past that neither the archaeologists nor the Pembrokeshire Coast National Park would immediately recognise. Castell Henllys is already in the public domain, and the results of the archaeological research are already permeating the wider community. There is no doubt that the experimental reconstructed buildings, given particular legitimacy because of their location on the original foundations on an authentic site and constructed using archaeological knowledge, have fuelled this attraction. The use of Castell Henllys cannot now be controlled by any one party. The evidence in this published monograph may yet add to the data manipulated in many diverse and unforeseen ways.

Published dissemination by the author for the general public will follow this monograph. The Pembrokeshire Coast National Park has been considering the production of a guide book, and popular accounts of the fieldwork and the results will in due course be produced. Further excavation will reveal new information at the site itself, but more importantly for the Iron Age phase will be fieldwork elsewhere and changes in our perceptions and understandings of the Iron Age. These should not remain trapped in an academic cul-de-sac but can, through popular publication and site interpretation, be communicated through the already developing icon of Castell Henllys to a wider audience.

The importance and excitement of later prehistory, a period difficult to explain to the public, can be communicated through vehicles such as Castell Henllys. Many contentious issues, such as the meaning of the term Celts, the role of reconstructions, the link between past and present (particularly relevant within the context of Welsh nationalism), and the role of archaeologists in the interpretative process, can all be laid bare. The public, better informed than ever by publications such *as Current Archaeology* and *British Archaeology* and television series such as *Time Team* and *Meet the Ancestors*, frequently repeated on satellite channels, can now appreciate and participate in these debates. Whilst some people are still woefully ignorant about the past—and for them the reconstructions and physical setting of Castell Henllys itself are important stimuli—many are knowledgeable about techniques and some of the assumptions employed by archaeologists. The multi-level presentation of data and interpretation now necessary at Castell Henllys and within popular publications are both challenging and encouraging.

2.10 Conclusions

Unlike most excavations, for research or rescue purposes, Castell Henllys lives on. Though excavation is indeed destruction, here much has been created out of that loss—elements that are physical, intellectual, and emotional. These have been examined above, and they affect what public dissemination will be produced in the future, both responding to and creating public demand. They will be further explored in the subsequent monograph that examines the excavation of the buildings, and their reconstruction and interpretation, but it is important to appreciate that this investigation of monumentality sits within a vibrant and ongoing set of relationships within the academy and well beyond.

Part II
The Palisaded Settlement

Chapter 3
The Palisade and Entrance

Abstract The first phase of settlement on the promontory was rapidly enclosed by a palisade with uprights set in a continuous stone-packed trench. The route of the palisade is well defined on the east, south, and west, but not on the north. In the northwest, a complex series of five entrance gateways rapidly replaced each other over c. 40 years, and a rampart was constructed but only on the western side of the entrance.

3.1 Introduction (Fig. 3.1)

The origin of permanent settlement on the inland promontory was thought, for the first decade of the project, to be the first phase of the earthworks. Although a palisade had been identified in several places, its stratigraphic relationship to the earthworks was ambiguous in narrow cuttings. Only with more extensive excavation of the ramparts was the alignment shown to be different, and indeed in places the rampart overlay the palisade. The removal of large segments of the ramparts also allowed for the recovery of structural evidence and the identification of discrete activity areas associated with this phase.

Evidence that can certainly be associated with the palisaded settlement is unevenly identified over the site. Given the variable taphonomic processes on the promontory, and the lack of stratigraphy in the centre of the site, no features there can be certainly associated with the palisaded settlement. Moreover, the excavation of later ditches, the scarping of the hillsides, and intensity of later activity in some areas mean that large areas are blank but may not have been so at the time. This is particularly important with regard to the possible line of the palisade on the north, where it is likely to have been badly damaged by such forces, and therefore its position can only be estimated. Detailed descriptions here are therefore restricted to the periphery of the site, where evidence of one timber roundhouse and several activity areas was found (Fig. 3.1). Some of these were on scoops dug into the hill slope, some of which may have been covered by at least temporary structures. In 2004 one scoop, 4524, was located that underlay the palisade on the eastern side of the site (see Sect. 4.3.7), but this is still seen as part of a settlement that was eventually enclosed on the east by the palisade, rather than being an earlier and separate phase worthy of separate definition. This is not to assume that the centre of the site was not used or occupied, just that this phase cannot be ascertained in this area. This chapter provides the evidence for the palisade, identified at many different locations around the perimeter of the site. An assessment of the overall nature of the palisaded settlement is provided in the discussion in Chap. 6 where the issues of site boundaries and enclosure are discussed in relation to both practical issues such as resource implications and theoretical issues such as boundedness, enclosure, monumentality, and function and meaning of palisades in this context.

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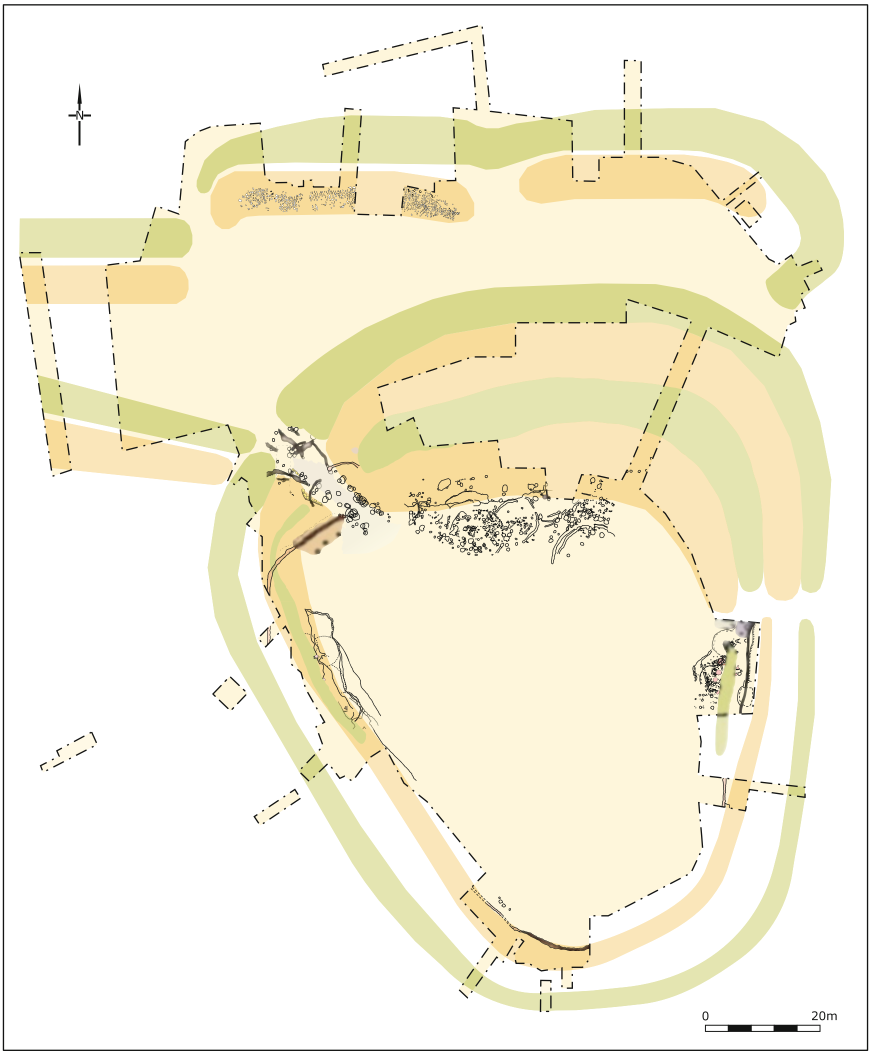

Fig. 3.1 Plan of Castell Henllys with all probable palisade phase features marked, set against the background of the later earthworks

3.2 The Palisade and Entrance

The palisade has been located on the south, east, and north-west parts of the site, with some tentative evidence from the west. It has so far proved to be absent on the north and north-west, however, and this is the subject of discussion below (see Sect. 6.1). The evidence from each area will be described and assessed in turn, beginning with the south. The entrance to the site lay in the north-west, as it was to do in the subsequent earthwork phases. It is highly probable that the *chevaux-de-frise* belongs to the palisaded phase, but this cannot be demonstrated with absolute certainty; there is no stratigraphic relationship of association (apart from the fact that the *chevaux-de-frise* lies beneath a rampart that can be argued makes most sense with the initiation of the earthwork phase) and the two radiocarbon determinations of bone found within the rampart fit this sequence but could indicate a later date for

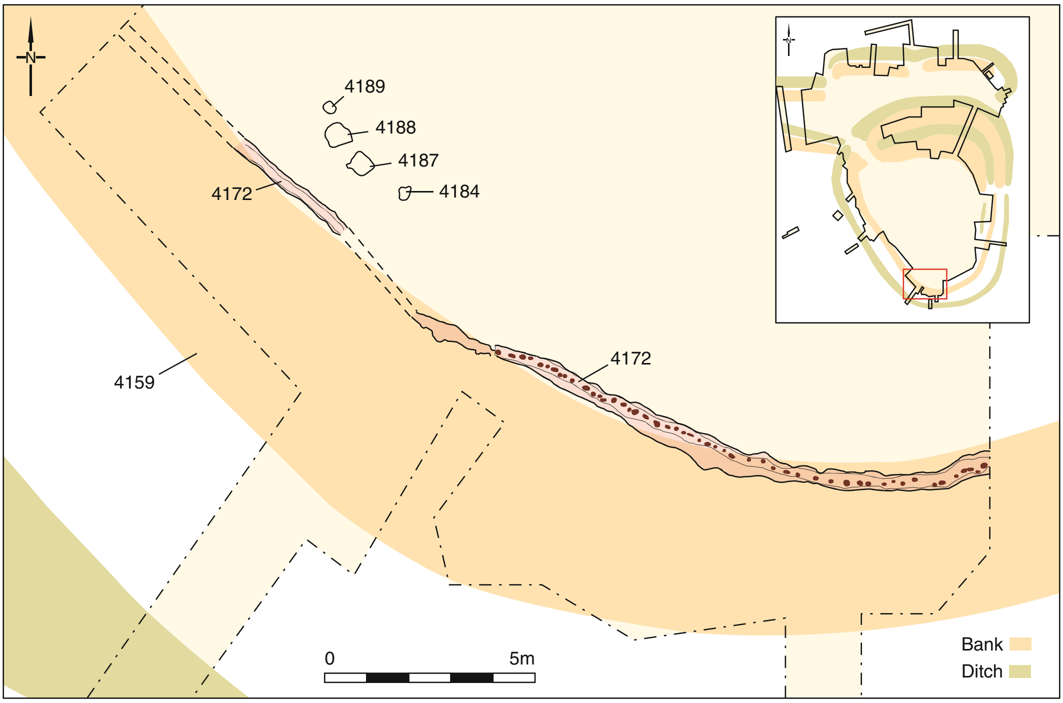

Fig. 3.2 Plan of the palisade to the south

the rampart also. Nevertheless, the description of the *chevaux-de-frise* has been placed in Chap. 5, so that discussion of its role in the settlement design for the palisade phase is retained in this part of the report. The possibility of it belonging to the earliest inner earthwork phase is considered in Chap. 6.

3.2.1 The Southern Evidence (Figs. 3.2 and 3.3)

The initial trench through the southern earthworks identified a palisade with shale packing stones at the rear of the rampart. In this cutting it was unclear whether the palisade was an earlier feature or acted as a rear revetment for the rampart during the early period of use. It was clearly overlain by thick deposits of charcoal-rich deposits that had resulted from smithing activity. More extensive excavation first to the west of the initial cutting, and then to the east, resulted in a much clearer understanding of this feature.

A small amount of evidence was recovered in this area that indicated activity prior to the construction of the palisade. The buried soil 4186 rose up over a small mound of shattered shale fragments 4194, only 1.5 m wide and 0.3 m high; below lay another thin buried soil 4195, which itself contained some small charcoal flecks (Fig. 10.2). This mound and earlier soil were only noted in the section, but they suggest some small-scale activity on the promontory sufficiently before the palisade was built for a thin soil covering to develop, though the character of this activity remains unknown, and may have been linked to initial scoop construction for temporary structures at the initial arrival to construct the settlement. The two buried soils merge at the rear of mound 4194, the later buried soil being thicker and better developed. The lower buried soil was very thin, but it was formed on a steeper part of the hill, and lower down present-day soils can be patchy due to the slope and rock outcrops.

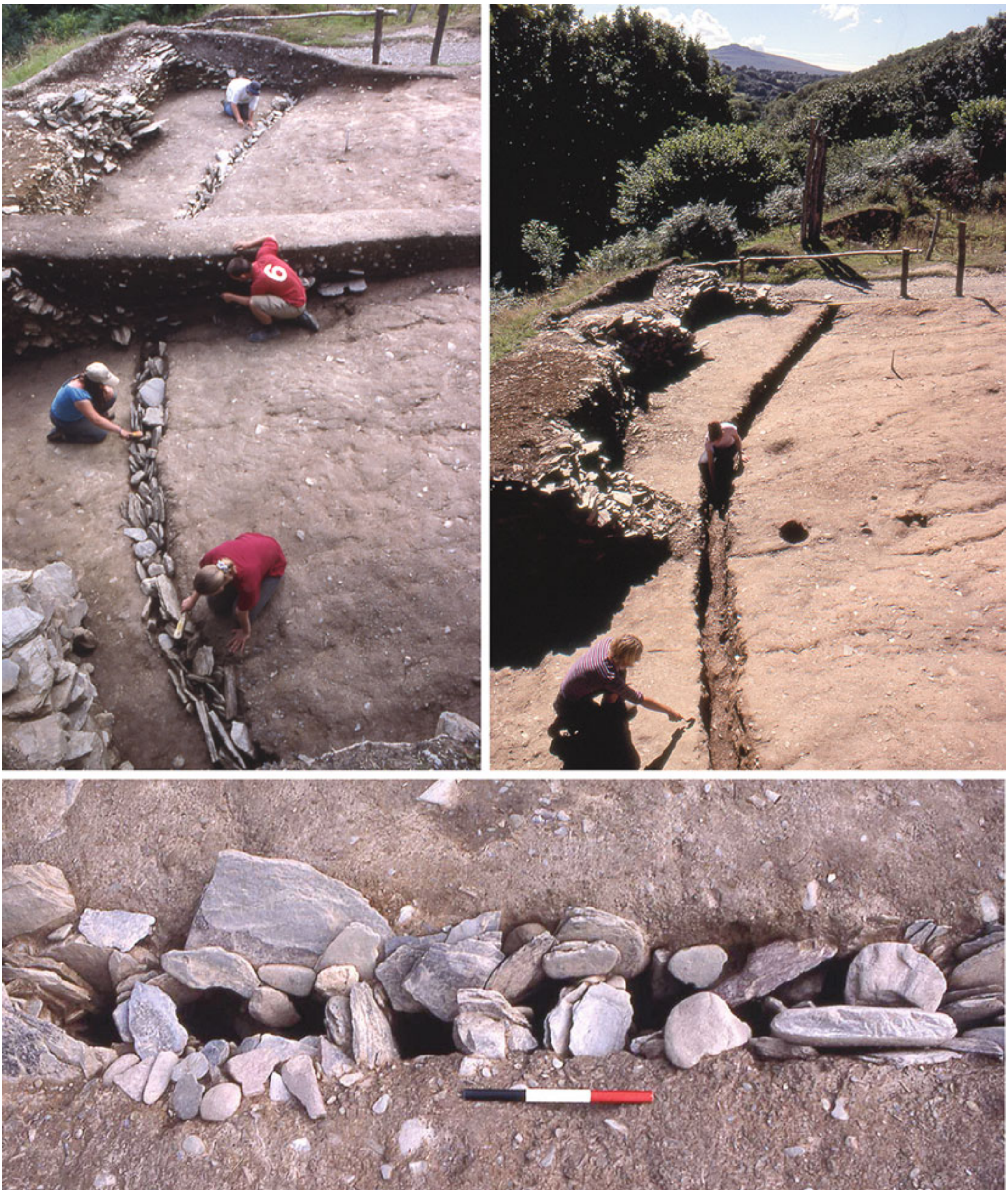

Fig. 3.3 Palisade to the south. *Top left*: General view from the east of the palisade at the south, with packing stones. *Top right*: General view from the east of the palisade to the south, with packing removed. Note Carningli Mountain in the distance. *Bottom*: Detailed packing showing post voids

Some other evidence may also belong to the activity before the construction of the palisade, though this is less certain. A line of postholes 4184, 4187, 4188, and 4189 all lay under clayey wash that had eroded downslope. However, the buried soil did not survive well uphill from the palisade trench, so it is possible that these features relate either to the palisaded settlement or the earliest phase once the rampart was constructed.

The palisade was set in a vertical-sided, flat-bottomed trench 0.25 m wide and up to 0.40 m deep, cut in this part of the site into the orange-brown clay subsoil. The trench was very neatly dug, and it only was irregular where large packing stones had been wedged in against the sides of the trench. It was placed on the sloping ground at the southern edge of the promontory, but not on a break of slope. The posts of the palisade were clearly identifiable in the stretch east of the original trial trench; here they had not been pushed out of position by later activity and slight downslope movement of deposits after the palisade timbers had rotted. Here, 4172 was filled with packing stones that clearly indicated the size and spacing of the palisade timbers. The posts were c. 0.1 m in diameter; the packing stones were mainly shale, but some were of quartz and igneous rock. Within the silty loam fill of the palisade trench, there was a small amount of burnt rock and slag, and charcoal was recovered from some of the postholes. In the length of palisade trench west of the trial trench, there was limited use of packing stones, though the trench was still neatly excavated.

The palisade trench was not laid out in plan on a smooth curve where it ran round the end of the promontory, but rather consisted of a number of straight sections. This was most noticeable to the west, where the trench followed a straight line across the whole of the excavated area and must have then turned a short distance under the balk to swing along the western side of the promontory. The curve at the southern tip was formed by a series of fairly straight sections, rather than on a continuous curve, though no larger posts were present at the changes in direction. Indeed, no deeper postholes were located anywhere to suggest any strengthening of the palisade. The palisade trench cut through the buried soil 4186 (Fig. 10.2). This survived outside the palisade to the south, preserved under the later rampart 4159, and in the buried soil were unburnt bone and fragments of baked clay; these were probably derived from activities within the palisade. The palisade seems to have been still standing at least in places when the rampart 3693 was constructed (see Sect. 8.1).

3.2.2 The Eastern Evidence (Figs. 3.4 and 10.7)

Excavation on the eastern perimeter of the site revealed limited evidence of the rampart 4169 which succeeded the palisade, but nevertheless some evidence of the palisade still survived. The palisade trench 4175 on this part of the circuit had a width of 0.3 m and a depth of 0.35 m. It ran in a straight line across the trench, vertical-sided and flat-bottomed, with few packing stones. In this respect it was more similar to that found in the southern area west of the trial trench than that to the east or to the north under the main defensive rampart. The palisade trench underlay the remnants of a midden deposit 4169 (not marked on the plan) which must have run up against the rear of the rampart 4182. The rampart only survives as a remnant to the east as a result of erosion and slumping and at the section was also truncated by the outer ditch associated with activity prior to the buried soil that formed prior to the erection of the post-medieval field bank (Fig. 10.7). The palisade trench cuts the buried soil 4185 to the east, but the buried soil does not survive to the west. As the midden deposit 4169 directly overlies the buried soil east of the palisade trench, the rampart at this point could never have sealed the palisade trench. As the rampart has mainly eroded from its outer, eastern face, the surviving remnant probably represents its most westerly extent into the fort. Therefore in this location the rampart was constructed about 1.5 m to the east of the palisade. Packing stones survived in position along the eastern edge of the trench, with others more jumbled. The lack of clear evidence for posts left in situ on this stretch of palisade suggests that the palisade would probably have been removed by or at the time that the rampart was built along this part of the promontory.

At the southern end of the excavated area, a much deeper slot with shale packing, 4183, was found which ran parallel with the palisade trench for a short distance from the southern edge of the excavation. This was at first thought to be an evidence of recutting for the palisade, as this was cut by 4175. However, given the presence of only one phase at all other points where the palisade has

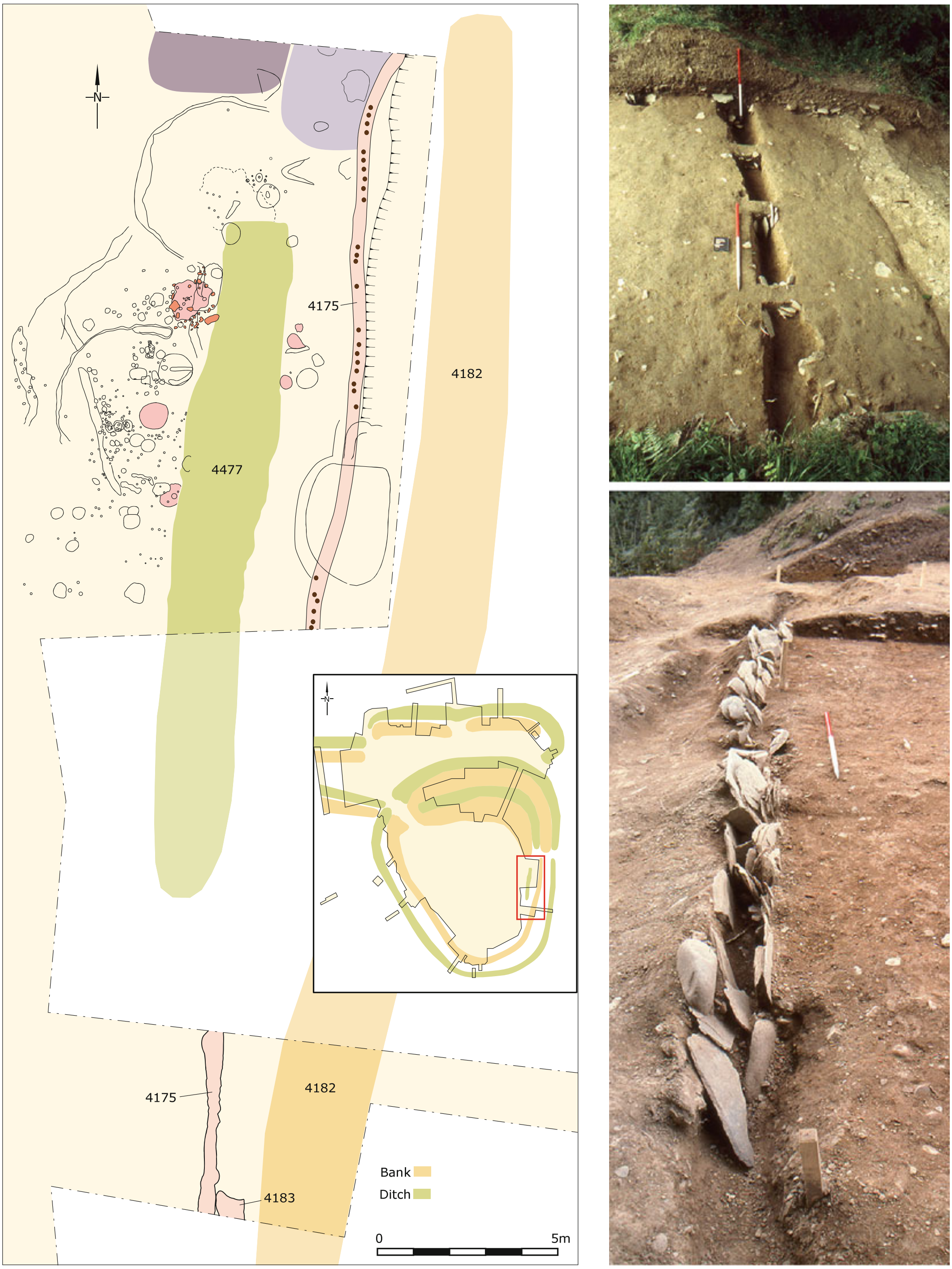

Fig. 3.4 *Left*: Plan of the palisade on the east and north-east. *Right top*: View of eastern palisade looking north; traces of later rampart 4182 can be seen on the right. *Right bottom*: View of northeastern palisade looking south, with packing stones in place

been excavated, and the excellent state of preservation in all these areas, it is more likely that this slight intercutting represents a redesign and slight realignment of the palisade. A shallow scoop to the east of the earlier palisade possibly reflects the removal of the posts at this point and the resetting in the later trench. This overlap point may suggest where two groups of workers met, one having worked round the southern tip of the promontory and up the northern side and the other coming down from the north.

3.2.3 The Northeastern Evidence (Fig. 3.4)

Under the southeastern terminal of the inner northern defensive rampart that was constructed around the easily approached side of the promontory, evidence was found of the palisade. The palisade trench was uncovered near the front edge of the large rampart. This is in contrast to its location to the rear of the small defensive rampart, as had been the case around the southern part of the site (see Sects. 3.2.1, 10.1). It just survived being cut away as part of the scarping for the ditch, and it is likely that the palisade trench further north suffered that fate. This part of its circuit lies only c. 11 m north of that described above, but in form and detail it more closely resembled that from the southern end of the site, though with larger shale slabs. The trench 4492 was straight for most of its length, as elsewhere, with vertical sides though with a slightly rounded bottom. The trench was c. 0.30 m wide for most of its length, but the depth increased towards the north, from 0.25 to 0.5 m as the subsoil was also very soft.

The trench was packed with shale, and the voids in the packing were sufficiently well preserved in some places to allow the location of the upright posts to be detected, though there was little charcoal from the feature. The uprights would seem to have been c. 0.10–0.15 m in diameter, at intervals between the centres of the posts of 0.2–0.3 m. Although the locations and size of the timbers could be estimated because of the packing stones, the timbers had been removed. The fill around the packing stones in palisade trench 4492 was mainly redeposited subsoil 4511, presumably derived from the digging of the trench. It also contained a few fragments of burnt bone and some slag, presumably derived from the craft activity that began before the time of the palisade (see Sect. 4.3.8).

The posts were removed from this stretch of palisade some time before the rampart was built. A very dark silty clay layer, 4473, containing iron slag and charcoal, formed in the top of the palisade trench after the posts were removed. The layer extended over the whole of the area later covered by the rampart (see Sect. 9.4) but within the palisade trench was thickest at the southern end and faded out c. 1.5 m from the northern edge of the excavation. That it sealed the palisade trench after the posts had been removed shows that there was a period before the rampart was built when the palisade had been removed and there was still craft activity in the immediate vicinity. Given that the excavated evidence suggests that most of the northern inner rampart was constructed from west to east, this rampart terminal may have been the last part to be constructed. If the palisade had been completely removed to allow the earthwork construction to proceed, this would give time for these deposits to form over the palisade and still be sealed by the rampart.

A significant feature of the palisade in this area is that its northernmost part curves off to the east. Given that the palisade would need to turn to the west at some point to join up with the entrance to the northwest (whichever line it may have actually followed), it is likely that the palisade was swinging out to the east to run round a natural gravel knoll on the promontory. Rather than run up the slope of this feature, it was enclosed within the settlement at this stage. When the earthworks were constructed, however, the knoll was incorporated within the rampart, helping to create the highest point of the defensive circuit. It was scarped at the front (on the northeast) to provide a steep slope into the ditch (see Sect. 9.4) and to the rear (on the southwest) to create additional horizontal surfaces for structures. This also acted as the point where the rampart swung from an east–west direction to one running north-west–south-east. The importance of this knoll is also discussed in Chap. 6.

As the palisade ran south, excavation revealed a long, straight length built with some large packing stones. This may have been necessary because the subsoil was extremely soft in this area of the site, and it would have been difficult to ensure the stability of such a straight length of fencing. The posts had been removed from the palisade, though no evidence survived of an overlying rampart; this may have been present but had eroded away or may have been further to the east and slipped down the hill, as suggested on the eastern side c. 11 m to the south (see Sect. 3.2.4). Alternatively, there may have been a side entrance to the fort here that ran over the dismantled palisade. Though no road surfaces survived, some maintenance would have been necessary if such an entrance had been here to prevent the creation of a hollow way and the destruction of the deposits that were excavated intact. The main entrance gained in height as road surfaces and rubble from the walls collapsed onto the approach. It is certainly possible that the preservation of the early deposits away from the rampart was because of extensive road surfaces, as found from the palisade phase onwards at the main entrance. That these have subsequently been lost is not surprising given the poor survival of surface deposits elsewhere, but may mean that the build-up of deposits in this part of the site had never been great, but sufficient to protect the earliest phases as cut features and truncated layers.

The palisade 4492 contained slag in the construction trench, again indicating that metalworking had begun in the adjacent area by the time this stretch of the palisade was being constructed. The palisade 4492 ran across the top of the infilled scoop 4524 (see Sect. 4.3.7), but due to its unconsolidated soft fill, this did not produce a solid foundation that could withstand erosion, and for much of the width of the scoop it has been lost. It is thus not possible to assess the effectiveness of the palisade in this location once constructed; the surviving traces of the packing suggest no greater effort was applied here to maintain stability than elsewhere, but additional supports may have been used in the section now eroded away. The dismantling of the palisade in this sector for a while before the rampart construction may have been because it was unstable here, and so it was easier to leave a gap, or because after construction the value of having a side entrance at this point was appreciated. This may then explain why when the earthworks were constructed it was at this point that the large northern bank terminated and the smaller southern bank began, with a probable undefended side entrance between their terminals (see Sect. 13.2.2).

3.2.4 The Western Evidence (Figs. 3.5 and 8.6)

Excavations across the line of the earthworks where the later western side entrance lay produced no evidence of the palisade. All evidence may have been lost on the western slope, as there had been slumping of the later bank and the underlying subsoil at this point, but there may have already have been an entrance left through the palisade at this location. The reason for this interpretation is that the excavation of a narrow cutting through the western rampart slightly to the north located the palisade at the westernmost extent of the trench; it was fortunate that any evidence survived, given the erosion and animal disturbance at this point, but it was detected here.

The palisade trench 3803 ran across the excavation cutting at a slight angle, suggesting that the palisade was beginning to turn eastwards towards the entrance (see Sect. 3.2.5). It was wider than elsewhere, up to 0.45 m wide, with vertical or slightly undercutting sides. A possible posthole was noted in the palisade trench, and despite the presence of animal burrows this may have been an ancient feature as there were packing stones around it. The palisade trench did have stone packing in this stretch, but there was no clear evidence of post positions. The palisade was sealed by the clay rampart 3693, but the buried soil had petered out on the slope before reaching the palisade trench. A charcoal-rich occupation deposit was set on the buried soil uphill and buried beneath the rampart 3693. Although these deposits did not reach quite to the palisade, their burial beneath the rampart suggests that they were contemporary with its use. This suggests that occupation and activities were taking place at this point within the palisade in a similar way to those found to the north and east. Further south they changed in character to the scooped features discussed below (see Sect. 4.3.10).

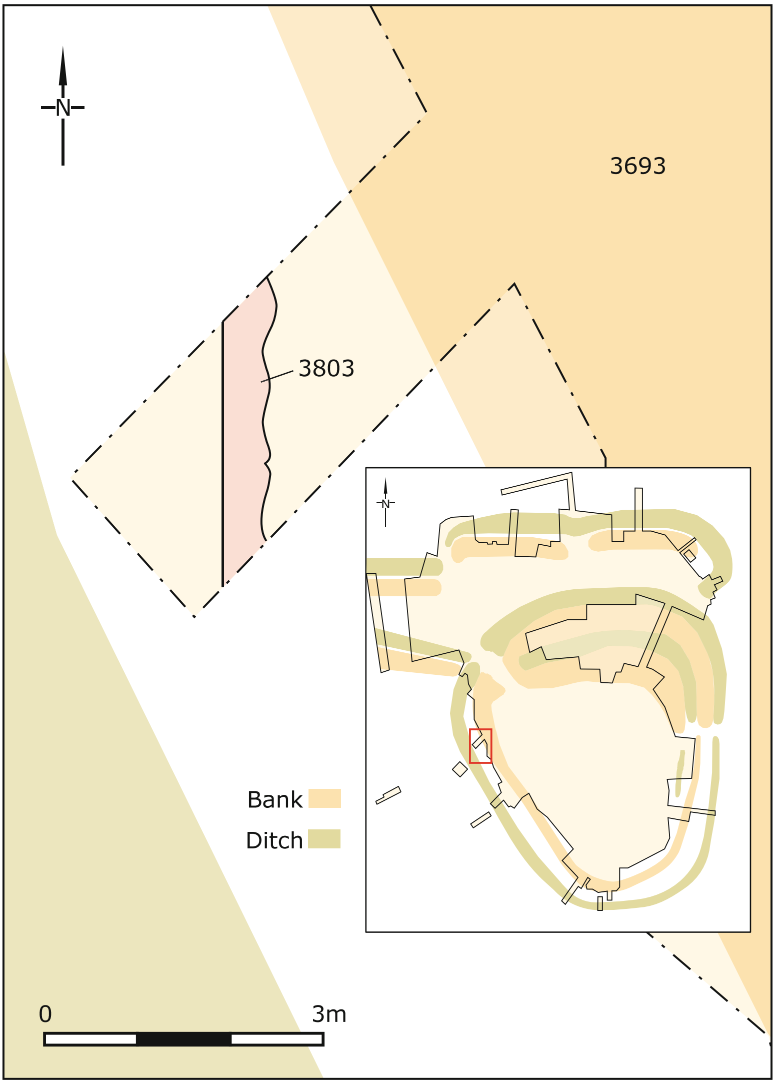

Fig. 3.5 Plan of the palisade on the west

3.2.5 The Northwestern Evidence (Figs. 3.6 and 3.7)

Excavations beneath the large gravel rampart 3693 west of the fort entrance produced the best-preserved evidence for the palisade from any part of the site (Fig. 3.7). The palisade 3751 ran for most of its length in an almost straight line, though it began to turn south to run along the western side of the promontory. Even though some animal disturbance disrupted the surviving line of the trench at its southwesternmost point, the feature survived complete with packing stones throughout its length in this area. The palisade trench varied in depth from 0.3 to 0.5 m deep, with steep sides and a flat base. Throughout, shale packing slabs predominated, though quartz and igneous rocks were also present. The last suggest that fieldstones were used, and if this had been the first part of the palisade to be constructed, such a source may have been available. By the time other excavated stretches were being constructed, specially quarried shale and occasional quartz were required.

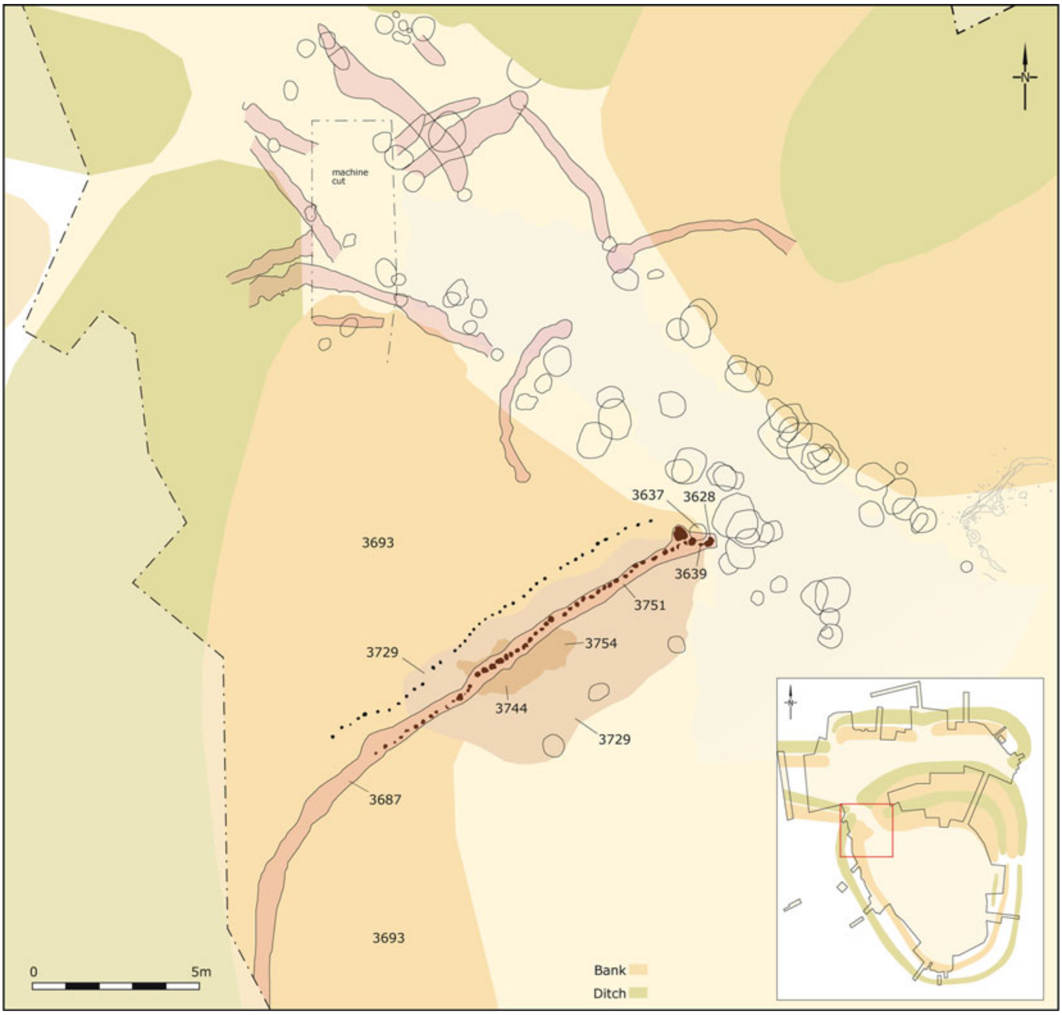

Fig. 3.6 The palisade to the northwest. Entrance features of all palisade phases are also shown

Fig. 3.7 *Left*: Photograph from the east of the post voids of the palisade on the north-west. *Right*: Photograph from the east of the palisade trench on the north-west

Along much of the length of the palisade trench the packing remained in situ and the individual posts could be identified. Moreover, the posts were still standing when the massive gravel rampart 3693 was built, and the post line survived as voids in the lower part of the rampart. The importance of this survival of timbers for understanding the tight and limited chronology for this phase cannot be underestimated and will be discussed further below.

The length of the palisade trench here demonstrated a more complex set of stratigraphic relationships than those encountered elsewhere. The palisade trench 3751 cut through a small lens of dark reddish-brown silty clay, 3754, on the surface of which were charcoal and fire-cracked rock. Although this may have been an in situ hearth base, it is possible that it represents a small dump of material from elsewhere. An extensive dark yellowish-brown clay loam, 3608, built up in the area immediately south of the palisade 3687 to the west of the entrance and indeed accumulated against the voids of this structure. A small amount of charcoal and burnt bone was recovered from this layer, but it did not suggest intense activity in the immediate vicinity. Layer 3608 merged into 3607 to the south (not marked on plan), and this was the lowest layer in this area and was found in a leached state as 3812 in the various scoops there (see Sect. 4.3.10). Above this basal layer was found a charcoal-rich layer 3744, containing flecks of burnt bone, which spread either side of the palisade posts and so indicated that the walling was not solid here.

The base of the palisade was supported by a small gravel rampart, 3729, for a length of c. 9 m. This encased the posts (and preserved the voids) of 3687. It was piled up to a maximum height of 0.3 m on the interior, though a small amount seems to have trickled out between the posts on the northern side. The post voids 3687 survived in this material also. The rampart had a maximum spread of 1.4 m behind the palisade but was c. 1 m wide for most of its length. No more debris accumulated on this rampart and against the palisade until they were buried beneath the massive gravel rampart 3693.

The eastern terminal of the palisade trench was clearly identifiable. The last typical post void in the palisade was 3639, which for the upper part of its length joined onto the larger end void of 3628, which would seem to be the last post of the palisade. This evidence suggests that a larger post, half of a tree 0.20 m in diameter, was used to fix the end of the palisade made up of circular posts that were generally 0.15–0.20 m in diameter. It may not have held the gate structure itself, however. A stone-packed posthole 3637 lay just to the north and may have been related to the gate, though the exact phasing of this posthole is uncertain. No void survived, though a charcoal post fragment was found in situ at the base of the posthole.

The palisade seems to have been retained on this part of the circuit despite all the changes in the entrance plan immediately to the east. The northwestern part of the palisade was located where the first attempt at earthwork construction took place at the entrance and within which it was buried, though elsewhere it seems that the palisade had either collapsed or been removed prior to the rampart construction.

3.2.6 The Northern Evidence (Fig. 3.8)

On the northern side of the promontory no evidence of the continuous palisade trench has been found, despite extensive areas of buried soil being uncovered. There are various explanations for this, including that the palisade lay to the north, in the area later cut away for the ditch, or that the perimeter fence was not constructed within a continuous trench but on this side of the fort was a post and rail construction utilising a series of postholes that were dug at roughly regular intervals and have been found beneath the rampart. These and other possibilities deserve detailed consideration (see Sect. 6.1) after the entrance evidence is also described (see Sect. 3.4), but the posthole evidence preserved beneath the rampart will be discussed here, as these features certainly belong to the palisaded period.

The postholes form a straight line, though the intervals between the posts are not exactly the same. The most easterly posthole beneath the completely removed rampart is that of 4554, though there are

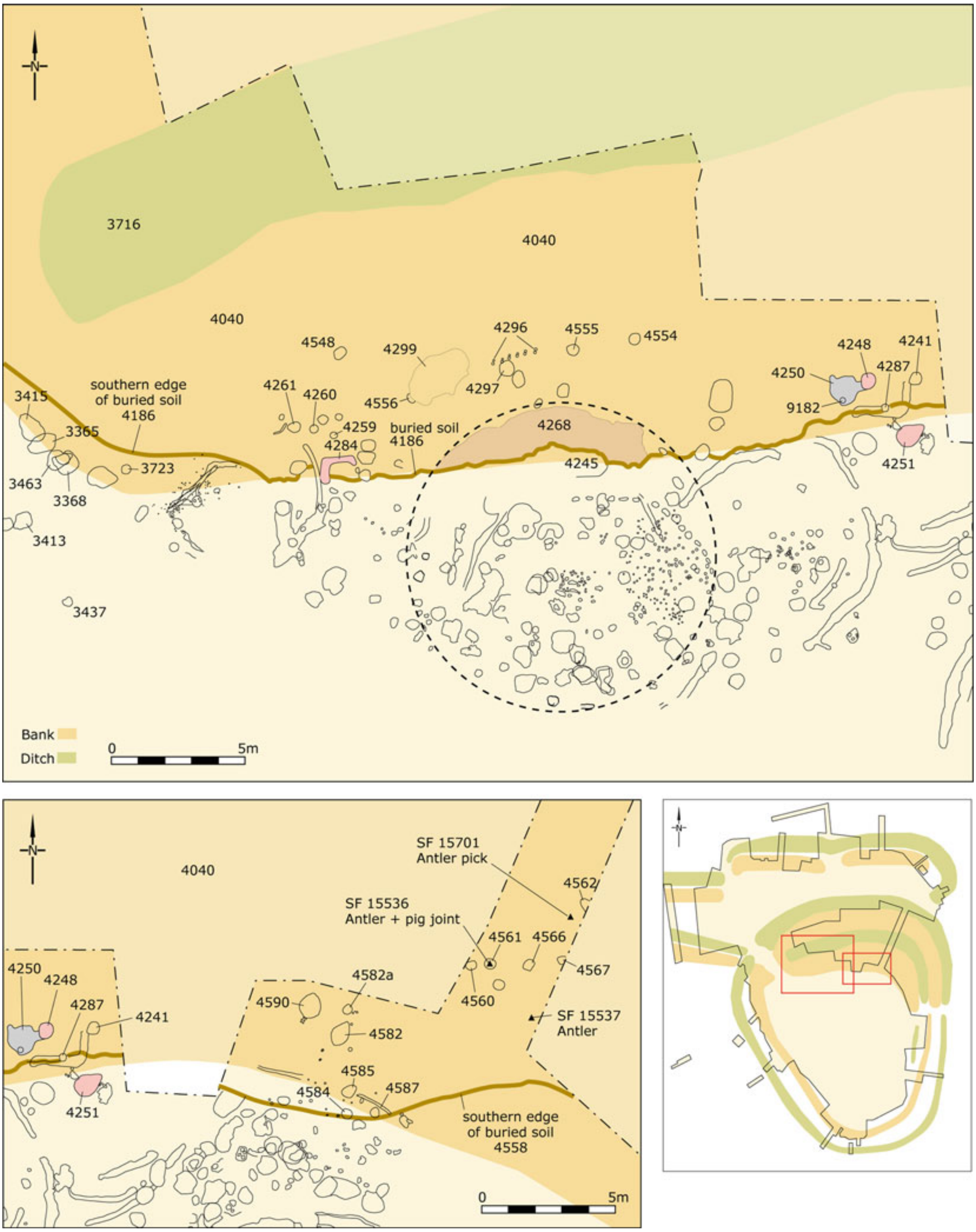

Fig. 3.8 Plan of northern area beneath later rampart

slight indications in the section to the east that another posthole lies just beyond. The two postholes to the west of 4554–4555, and 9180– create a fence line with posts at c. 2.5 m intervals. The next posthole, 4556, was uncovered under a narrow balk that provided sections through the rampart 4040 and also, fortuitously, the western end of grave pit 4299 (Sect. 9.1.1). The posthole was not visible in this section when drawn in 2000, being completely enclosed within the balk. However, weathering over the winter, despite covering both the grave pit and balk with plastic, led to some collapse along the cut of the grave. On removal of the remains of the balk, the posthole was found. The relationship between the posthole and the grave was complex. Extrapolating the shape of the posthole, and bearing in mind the size of the others in the line, if the posthole had cut the grave fill, it would have been visible in its recorded section (Figs. 9.2, 9.3 and 9.4). As it was not, this demonstrates that the grave cut came later. However, rampart cross section C (Fig. 9.4) clearly shows that the post was still standing within the posthole when the first layers of the rampart were laid down, at which point it was removed and filled with [41] (see Fig. 9.4), indicating that the post was still standing at the time the pit was dug, very close to the post itself. It is notable also that the pit's alignment followed the line of the postholes.

To the west, two postholes close together lie on the fence line. The easterly one of the pair, 4261, was sealed by occupation layer 4252, whilst 9181 cut through it. This suggests that that one post may have replaced the other; the gap between these posts and the ones to the east and west is greater than elsewhere along the fence line.

To the east, widening in 2004 of the original 1981 excavation trench through the inner rampart located further important evidence (Fig. 3.8). Posthole 4560 was found to cut through occupation layer 4557 which directly overlay the buried soil 4558. Only c. 0.5 m to the east was another posthole, 4561, though this had votive deposits placed in the top fill (see below) and was of an earlier phase, being beneath a clay mound cut by 4560. It is possible, therefore, that 4560 and 4561 represent a pair of replacements like 4261 and 9181.

Further postholes can be identified on the fence line to the west, though beyond the buried soil under the rampart the stratigraphic relationship of some of the features is less secure. For example, posthole 3723 lies on the correct line and was stone-packed and 0.35 m deep, but it lies beyond the buried soil and its phasing is uncertain, though must be relatively early. It lies c. 2 m south of the suggested gateway. The fence either turned towards the gate further east, and 3723 is not part of the fence, or continued to this posthole and then was joined from there to the rear of the gate, which seems more likely.

Whilst occupation layer 4252 spreads slightly beyond the fence line formed by the posts, the buried soil to the north was very clean, suggesting that the fence in effect prevented much spread of material to the north. The only feature found north of the fence line was stone-lined posthole 4548. There was evidence that the post was still in place when the rampart was constructed, as the rampart fill dipped down into a probable post pipe. As this post lies at the centre of the rampart cross section, it may be related to the laying out of the rampart and its early construction.

3.3 Modifications to the Topography and Structured Deposition (Figs. 3.8 and 3.9)

There was some ritual activity and modification of the topography during the palisade period in the northern area, and this should be discussed before the alternative models for the definition of the northern perimeter of the site are outlined.

In the original trench through the earthworks, the buried soil was covered with a dirty layer that contained many fragments of animal bone. This was in contrast to the buried soil found at a later stage under a large area of the rampart to the west where there was no deposition at the surface prior to the earthwork. In the eastern side of the trench, on the west-facing section, what was thought to be the buried soil was drawn in 1983 as if rising and falling over a small mound, though this was taken as unevenness in the subsoil and was not excavated. When the trench was widened and re-examined from 2002 to 2004, the cutting back of the eastern side revealed that it was a more substantial mound, 4414, the full depth of which had not been excavated when the first section face was removed and drawn. It was now clear that mound 4414 was a significant cultural feature and consisted of bands of

Fig. 3.9 Structured depositions. *Top left*: Antler on stones, 4562, beneath rampart. *Top right*: Pig bone beneath rampart. *Bottom*: Antler found in initial rampart trench

gravel and clay. In the new section face, it measured 3.4 m in length and 0.4 m high. The buried soil continued beneath 4414, and what had been interpreted as a thin buried soil over it was in fact the layer 4557 that lay on top of the buried soil elsewhere in the trench. On the new west-facing section, the buried soil was covered by layer 4557 under the whole length of the later rampart, except again where it was stratigraphically separated by the mound. The mound 4414 had probably been piled against the western side of the natural gravel knoll that lay just to the east of this trench.

Mound 4414 stretched across the trench, recorded in the east-facing section as 4.5 m wide and 0.4 m high (Fig. 9.4), and so could have been a short length of low bank. However, it certainly does not appear under the rampart as far west as cross section G (Fig. 9.5), and so if it were a bank it must have ended before that point. It was cut by posthole 4560, which lay on the 2003 western section line and by postholes 4566 and 4567 to the east. The stratigraphic evidence for this posthole phase demonstrates that mound 4414 was not the first phase of the later rampart. The two phases of posthole, the mound, and layer 4557 all belong to the palisaded phase, prior to the main rampart construction.

The piling up of a small mound or low bank is similar to but slightly more substantial than the mounding round the palisade west of the entrance (see Sect. 3.4.2). In that case the palisade was already in place and remained in use. In this area it is less clear; certainly posthole 4560 was placed into the mound after it was constructed, but posthole 4561 was earlier than the mound.

During the widening of the eastern face of the original excavation trench through the rampart in 2004, posthole 4561 was found cut through the buried soil 4557 and sealed by mound 4414 described above (Fig. 3.8). An antler [SF 15536] was located in the top fill of posthole 4561 and within the feature was also found another bone (pig joint of some kind). Both suggest a structured deposition, being placed within the posthole after the removal of the post and the infilling of the void (Fig. 3.9). The displaced shale packing beneath the faunal remains was stained green, perhaps suggesting decay of flesh on the bone or some other offerings that produced this staining, which is unusual for this site. This structured deposition clearly took place after the posthole role of the feature was ended and just as the mound 4414 was constructed on top of it. An antler [SF15537] was found within the surface of layer 4557 (Fig. 3.9). This deposition lay close to the northern edge of the mound, north of but close to the earlier structured deposition in the top of posthole 4561. It had clearly been deliberately placed upon some shale stones 4562 that had themselves been set down for the purpose on this surface above the buried soil 4558 (Fig. 9.3). Another structured deposition also occurred under 4414, with an antler pick placed on a stone setting 4562.

Varying sizes of quartz pebble were found around and above the antler; such rock does occur in the clay bank, but not in such a density, suggesting deliberate selection and placement of these items to complement the faunal remains. Further structured depositions such as another antler pick [SF 15637] took place close to this location when the main rampart was built (see Sect. 9.1.2, but included on Fig. 3.8). This may suggest that this location, adjacent to the natural gravel knoll, had a particular significance.

To the north of mound 4414 a small scarp was cut, but its stratigraphic relationship to the mound is unclear. It could have been dug to provide the material for the mound, but it may have been a terrace or scoop along the northern side of the promontory. Indeed, its profile and depth would be consistent with other scoops and may suggest that on this northern side of the promontory such features were dug either before the boundary of the site was defined, as with scoop 4524 on the east (see Sect. 4.3.7) or within the palisade that may have been further north within the band later excavated for the ditch.

The steeper cut in the section may be the first phase of the ditch cutting associated with the main rampart construction phase; given the overcutting of the ditch to the south elsewhere, this is also a reasonable explanation; for a fuller discussion, see Sect. 9.3.2.1.

3.4 The Entrance

The gateway in the northwestern part of the site was an important part of the palisaded settlement design, as a number of changes were made during this period. As there is no evidence of post replacement despite good preservation of the palisade and packing in several locations, the palisade only had the life of one generation of timbers. The length of time that the palisade posts would survive in this soil can be estimated from the experimental work on the site; this suggests a life for the palisade of only a few decades. Within this time, numerous changes were made at the entrance. This indicates that these changes were not forced on the builders by the decay of posts and need for rebuilding, but rather they were part of an evolution of design and suggest a period of experimentation, perhaps all preparatory to the commissioning of the impressive entrance that was to be erected with the construction of the ramparts and ditches. The stratigraphic evidence for the sequence, and the discussion of the various possible associations, is provided here. The wider implications of this evolution (or possible evolutions) are aired in the general discussion in Chap. 6.

It should be noted that the inner features associated with the various phases described below are well stratified, though may only partially survive because of later posthole cuts and clearing episodes when later walling and roadways were laid down. In contrast those features described as outer features had poor stratigraphy, and although many are in some relative sequences, these cannot usually be linked to the inner features. Moreover, survival in the outer entrance is poor because of ditch digging, the wearing away of surface, truncation from erosion downslope, and from the unfortunate positioning of a trial trench dug by machine to locate the outer ditch. This trench was largely through what was subsequently revealed as the terminals of two ditches, but it clipped some features on its eastern side, though many of the features would have been previously truncated by these ditches. Despite all these impediments, a significant amount of information was recovered from this area that is relevant to the palisade phases. The association of inner and outer entrance features has been made on the basis of known sequences, minimising the number of phases, and in creating plausible (or at least possible) arrangements of features. Given the short period of a couple of decades based on the rate of decay of the palisade to the west of the entrance, the four phases represented still suggest rapid changes in plan, a matter that will be further considered in the discussion (see Chap. 6).

3.4.1 Palisade Entrance 1 (Fig. 3.10)

The first phase of the inner entrance was most obviously represented by a pair of large postholes 3730 and 3757. These were both substantial features, though both had been badly damaged by later postholes in the same location. The eastern side of the cut of 3730 survived to its original surface, though more of the posthole survived below later cuts. It would probably have been c. 1.5 m in diameter and contained shale and some quartz packing stones, up to 0.45 m long. It was at least 0.7 m deep but would have been more in the centre of the feature. Posthole 3757 had no cut surviving at the surface, but the lower part of the feature survived below later cuts, giving a total depth of c. 0.85 m. It had an estimated diameter when projected to the surface of c. 1.5 m; packing of shale, quartz, and igneous rock survived in the feature. These two postholes would have supported massive timbers on which the gate would have hung.

Cobbled surface 3696 was the lowest level of surface in the entrance area and was very extensive from the entrance itself and extending into the interior of the fort. It consisted of rounded stones all of a similar size and set into the subsoil. Beyond the entrance it was less coherent and had undergone many more alterations and resurfacing. It was therefore given a separate number of 3706, as stratigraphic relationships within this outer surface are more problematic as it does not represent a single depositional event. Surface 3696 ran up to and round the easternmost post void in palisade 3687 on the western side of the gateway. It also sealed the surviving fragment of posthole 3730, suggesting that the surface was laid down after both the gateposts and the palisade were erected. That the surface runs between the gatepost in 3730 and the end post of palisade 3687 may suggest that a small side gate was in this position or that the surface was laid down before the decision on how to join the palisade to the gate was made. Cobbled surface 3696 may also have extended further into the interior as 3796, but further to the northeast, it covers some early features whose stratigraphic sequences are demonstrated through cuts suggesting that it is not all of one date and was presumably repaired in patches as the various early changes to the gateway were made. Indeed, at times the surviving axis of the cobbled surface 3696 does not lead to some of the clusters of outer gate features, indicating that surfaces in these areas were removed through later wear through the entranceway.

On the eastern side of the gateway there was no continuous palisade trench, but a line of timbers in postholes that ended, probably, with postholes 3723 and 3745. The latter only survived as a small arc as most of its fill had been cut away by posthole 3784 of the following phase. Postholes 3723 and 3745 lay beyond the extent of the cobbling 3696, southeast of the gatepost set in 3757, but this was still a short distance of only 1.7 m which could be easily filled with timbering. It is possible that 3723 and/or 3745 may have been linked to 3482/3462 and 3755 to form an eastern edge to the interior entrance into the fort, protecting the rear of structures to the east.

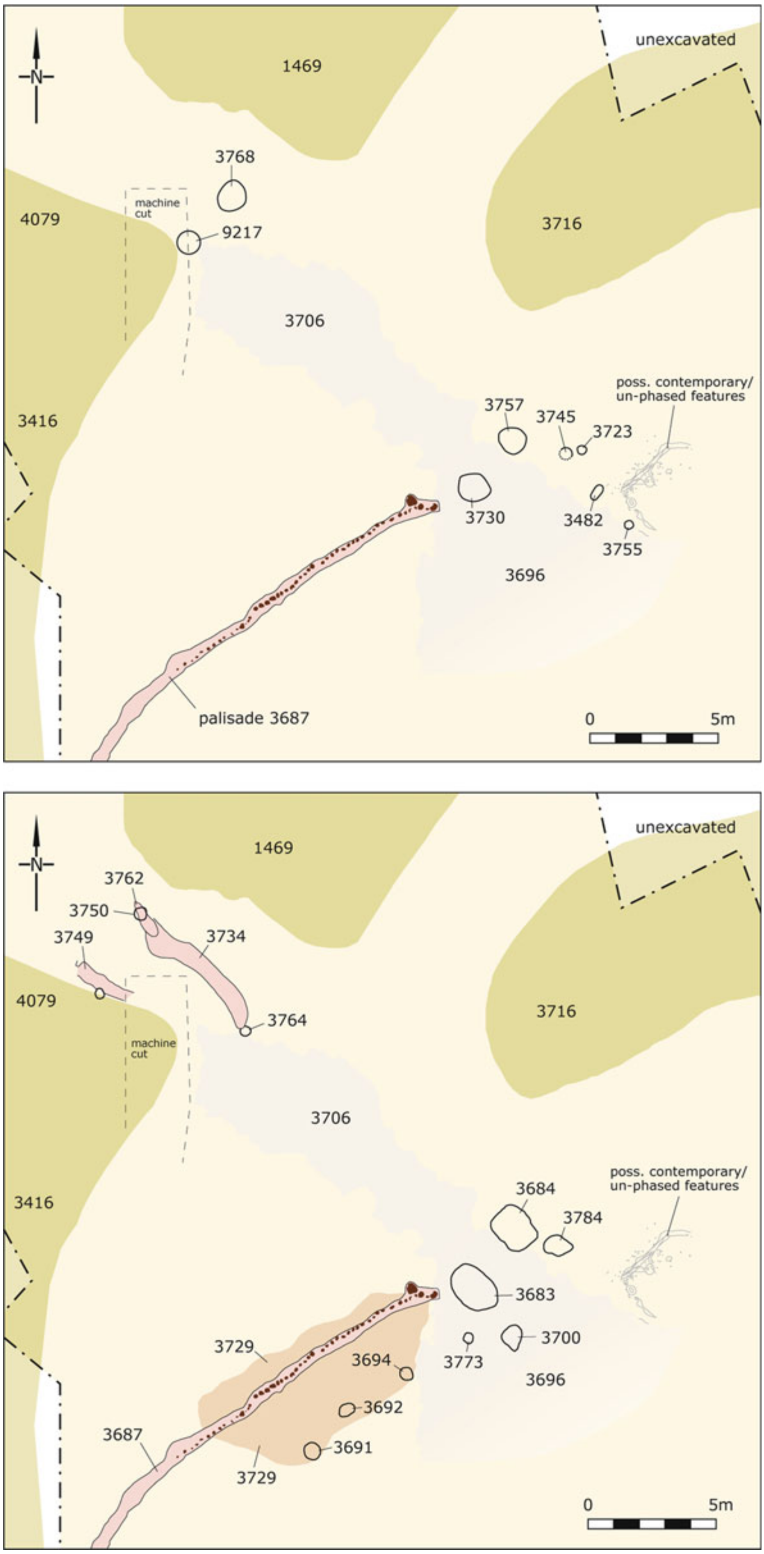

Fig. 3.10 Palisade entrance. *Top*: Period 1a, palisade entrance 1. *Bottom*: Period 1b, palisade entrance 2. Later ditches are marked to show where any evidence for these periods would have been lost

The outer entrance was located largely beyond the extent of surface 3706. One of the earliest features is a substantial posthole, 3768, which contained very large slabs of shale and quartz packing. It was c. 1.1 m in diameter, and survived to a depth of 0.6 m though would originally have been more, perhaps 1.2 m. To the west of this posthole lay 9217, a posthole partly cut away in the machine trench but surviving in the eastern section to a depth of c. 0.5 m. The posthole would originally have been c. 1 m in diameter and much deeper and probably was paired with 3768, though this cannot be confirmed stratigraphically. These two postholes suggest an outer gate structure, an arrangement that would not seem likely except for the repeated pattern of activity this far beyond the main entrance over many phases. In many less extensive excavations, such outer features would ever be identified. These matters are further explored in the discussion.

3.4.2 Palisade Entrance 2 (Fig. 3.10)

The first inner gate did not stand for long, and a more substantial structure with massive front postholes was instead erected slightly further back into the site. Despite later damage, posthole 3683 survived sufficiently to indicate a 1.5 m diameter hole 0.75 m deep, with blocks of quartz 0.4 m across and some shale for packing. Posthole 3684 had the same depth and packing, with a diameter of c. 1.3 m. These postholes had been much cut away by postholes for later gateposts, so their packing was disturbed and their post pipes did not survive. They must, however, have been massive timbers set to a depth of 0.75 m in each hole. This suggests a timber gate of some grandeur.

It is possible but by no means certain that postholes 3700 and 3784 were dug at this time, surviving to a depth of 0.8 and 0.5 m, respectively. Posthole 3700 cuts through pebble surface 3696, and 3784 was buried beneath the first stone phase gateway. If this were the case, it would suggest that a timber tower were erected for the first time at the entrance that later was the location of the main entrance. The gates would have been hung on the larger posts at the front, with other substantial posts splayed slightly outwards to the rear. With such an arrangement, the fence and palisade would join the sides of the tower halfway along the sides, making the timber tower slightly projecting. The splayed rear timbers would have the advantage of allowing inward-swinging doors to be swung completely out of the way of the entrance passage. It is likely that this tower had a floor level over the entrance passage, given the size and depth of all the postholes.

After the palisade 3687 was erected and a small gravel rampart 3729 was built against it, this rampart was cut by a line of postholes 3691, 3692, and 3694, varying slightly in diameter but all c.0.45 m in diameter and depth, containing stone packing. They formed a line to the west and can be linked to posthole 3773. It would seem that these form a series of uprights to support a fence or palisade that joined onto the western side wall of the entrance gate tower. Although the palisade in front of the line of posts was still standing, it would seem that these posts were added to make a double line of fencing.

New structures were erected at the outer gateway. Gully 3734 ran over the top of the earlier gate posthole 3768 and so gives the main stratigraphic relationship for this phasing. This linear gully had a width of c. 0.8 m and a surviving depth varying from 0.45 to 0.3 m and contained many packing stones no longer in position. At the southern end of the gully, posthole 3764, 0.3 m deep, provided a terminal for the palisade, and it is likely that the shallow (0.16 m) feature 3750 represents an eroded posthole at the other end. This was not the first gully on this alignment and is a better-preserved replacement for one which survived only as a short length 3762 on the same alignment. On the western side of the entranceway, a short length of palisade trench 3749 which runs parallel with 3734 may well represent the other side of the approach route, though badly affected by erosion and the damage caused by the cutting of later ditches 3416 (see Sect. 8.1.2) and 4079 (see Sect. 12.1.3).

3.4.3 Palisade and Western Rampart 1 (Fig. 3.11)

The next stage in development of the defences was the construction of the large gravel rampart 3693. This rampart enclosed the palisade trench 3687 whilst the timbers were still intact, and they survived as voids to a height of 0.2 m in the rampart. The rampart measured 12 m wide near the entrance and survived to a height of c. 0.8 m though would presumably have been taller originally. The material for the rampart was derived from a large ditch 3416, excavated in front of the rampart (see Sect. 8.1.2), but at the rear also incorporated occupation or midden deposits that interleaved with the layers of gravel. This marks the beginnings of earthworks on the site, but as most of the perimeter was still marked in timber, it can be considered as part of the palisaded period. This evolution and gradual development of earthworks with timber further emphasises the continuous piecemeal evolution of site plans that the discrete form of archaeological phasing often cannot easily encapsulate.

The first gateway associated with the building of the gravel rampart 3693 was set further forward than that of the previous phase tower, which may indeed have continued in use. The evidence for the new gate structure consisted of posthole 3791, 0.75 m deep, and posthole 3789, 0.97 m deep. Two postholes have been identified south of posthole 3789 that may belong to this phase. 3711 and the largely cut away 3705 could either or both represent the rear of one side of the tower; the equivalent (nominally given context 9120) could have been completely removed by the mass of later postholes southeast of 3791. This made a gate with a width of 2.4 m, the inner tower may well have continued to function also at this time; indeed, this double design may be a precursor of the double gates that appeared with stone guard chambers in the first rampart period (see Sect. 12.1).

The outer gateway was further modified in this phase. Palisade 3756, terminating in posthole 3316 near the gate posthole 3791, was a substantial feature up to 0.6 m deep, though for much of its length it was much shallower. It was up to 0.45 m wide with stone packing and a base that suggested posts 0.1 m in diameter used along its length. An equivalent cannot be traced on the west, though the most likely line would have been down the later trackway and would probably have been lost through later activity. To the north of the palisade lay further features. Posthole 3761, which is stratigraphically earlier than the gully 3748 belonging to palisade and western rampart 3 (see Sect. 3.4.5), suggests a gate feature on the approach to the entrance. Postholes 3759 and 3761 may all indicate repeated positioning of this post. Posthole 3769, cut by the eastern ditch 1469 terminal, survived to a depth of 0.4 m and was 0.8 m in diameter, with some packing stones still in place. This is not stratigraphically phased, but is well positioned to match the postholes above on the eastern side of the gateway approach. It is possible that postholes 3704 and 3737 on the west and 3620 and 3635 on the east are also related. These features are too dispersed to suggest a gate tower but may indicate some form of control at the same point as the previous structures.

3.4.4 Palisade and Western Rampart 2 (Fig. 3.11)

The next phase of the gateway was also associated with the early phase of the gravel rampart 3693. It was probably was created because the digging of ditch 3716 to the east had begun, and the need for an outer tower was deemed unnecessary. Instead, two convex curved palisades 3717 and 3718 were dug, each terminating in a posthole little larger than the palisade, which would have created a gap of c. 2.2 m between the gateposts. The western palisade 3717 was dug into the gravel rampart 3693, the palisade running into the side of the rampart for a distance preventing any person or animal attempting to circumvent the gate on the west. The curved palisade 3718 on the east ran round and stopped very close to the almost vertically cut terminal of ditch 3716. This again prevented any easy access to the site, though the form of barrier was quite different. The way in which they complement each other

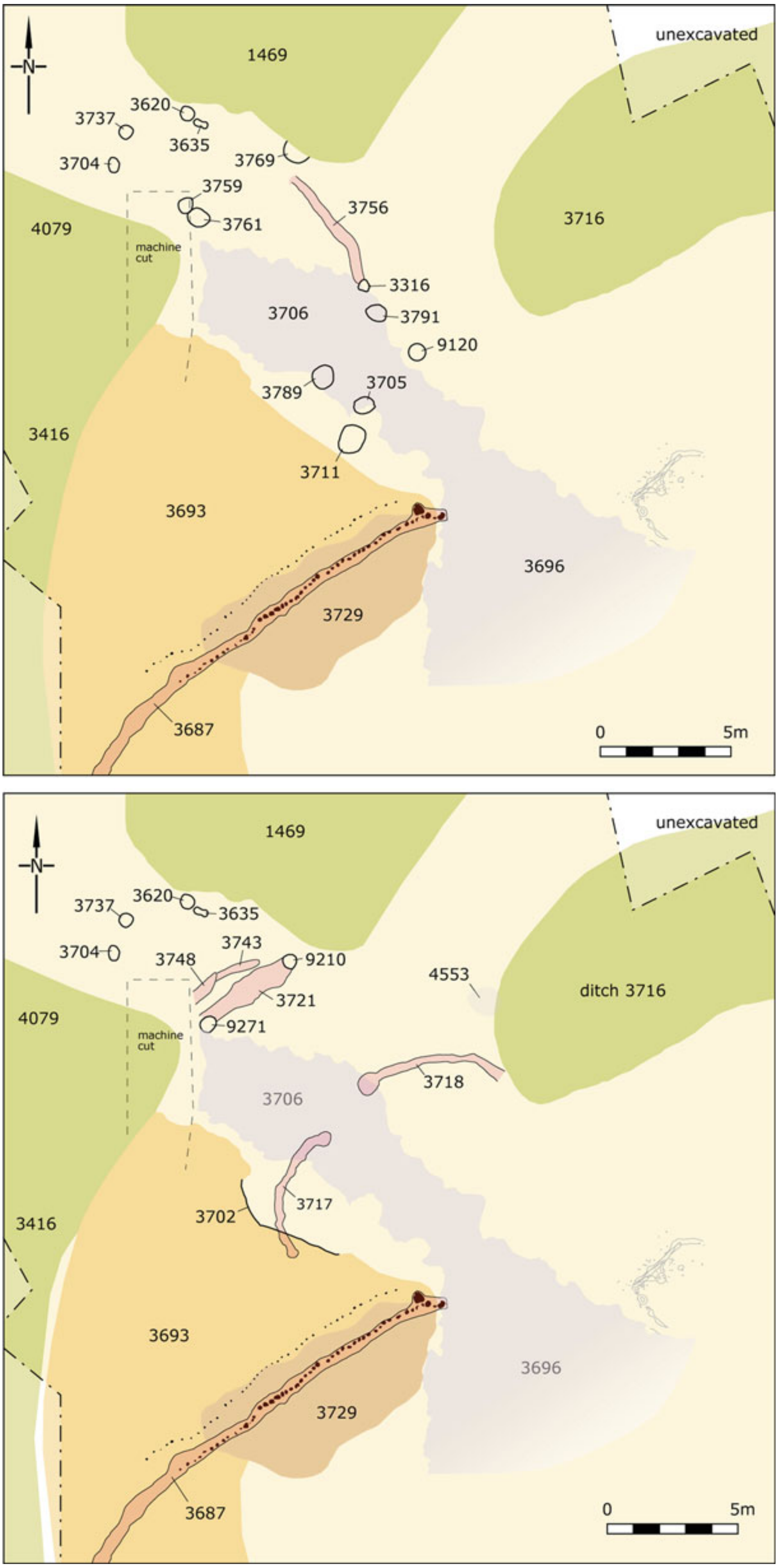

Fig. 3.11 Palisade entrance. *Top*: Period 1c, palisade and western rampart entrance 1. *Bottom*: Period 1 d, palisade and western rampart entrance 2. Ditch 3416 existed in Period 1c, and dicth 3716 may have been dug during Period 1d

suggests that they were contemporary, and it is most likely that the ditch was dug to its full extent whilst the palisade in trench 3718 was standing.

Just outside the palisade to the north, preserved beneath later rampart 3714, was a pebble surface 4553 that was of this phase. Its purpose was unclear, as it was placed out of the way of the main thoroughfare through the gate itself. This may suggest that a wider area was provided with a surface in front of the gate and only this fragment survives or that this was an access point into the ditch as it was being dug. That the ditch now has a very steep-sided terminal does not mean that for most of the time that it was being excavated this was the case, and some of the pebble surface seems to lie on the gently sloping top outer edge of the ditch. It is possible that the ditch terminal may have been one point of entry and egress for those digging and moving the spoil, though it is likely that the main route was up out of the ditch at the other end from the terminal where excavation had only just begun. The ways in which the ditch may have been dug and the rampart constructed are discussed in Chap. 11.

Both palisades were substantial, though this may in part have been because they were dug into soft gravel subsoil. Palisade 3717 was c. 0.35 m wide, flat-bottomed and with vertical sides. It contained much upright shale and quartz packing. The posthole at the end of the palisade trench expanded to a diameter of 0.45 m and was 0.35 m deep. This and the palisade trench had been truncated by cut 3702, and the southern end of the feature had been lost (see Sect. 3.4.5). Palisade 3718 survived more completely, particularly where it is buried under the rampart 3714, and had a similar profile to that of 3717 and with a nearly identical posthole for the gate. At the southern end of the palisade, the trench had a vertical end but there was no larger post here.

Whilst ditch terminal 3716 was open, the outer rampart 1687 on the eastern side of the entrance was constructed, respecting the ditch terminal to the south but covering the pebble surface 4553 already described above (see Sect. 9.7.2). This would have provided an earthwork on the eastern side of the convex gateway partly matching the gravel rampart 3693 on the west.

The outer gateway features were once again modified at this phase. Gully 3721, with postholes 9210 and 9300, suggests gateposts with a timber sill beam between them. Different arrangements of this feature are indicated by narrower recut slots 3743 and 3748 immediately to the north. Although 3721 and 9210 cut palisade 3756 of the previous phase, it is possible that some of this line was replicated using either the same trench or one that does not survive. It is possible that some of the outermost postholes either belong to this phase or remained in use, so 3704, 3737, 3620, and 3635 are also shown on this phase plan.

3.4.5 Palisade and Western Rampart 3 (Figs. 3.12 and 3.13)

The final phase of the gateway before the construction of the drystone phase associated with the earthen ramparts involved the demolition of at least the western side of the palisaded gate described above. Part of the lower western deposits of the gravel rampart 3693 were dug away by cut 3702, this cut creating a step in the rampart onto which a revetment of mainly large quartz blocks 2752 was placed. The largest quartz blocks formed a single course, but the smaller stones were stacked up, resting on each other up to three courses high. A few large shale slabs, 0.5 m long, were also used in the revetment. The shape of the cut and the placement of the quartz blocks formed a slight but definite concave revetment of the rampart. The pebble track surface 3706, made of many patched and renovated elements and so reflecting a long period of use that probably stretches over several structural phases, butted up against the quartz blocks.

The quartz blocks used in this wall include the largest that have been found at any part of the Castell Henllys site, being up to 1 m across. It would seem that they had been carefully selected to be both impressive and effective in holding back the gravel rampart. This was of relatively soft material,

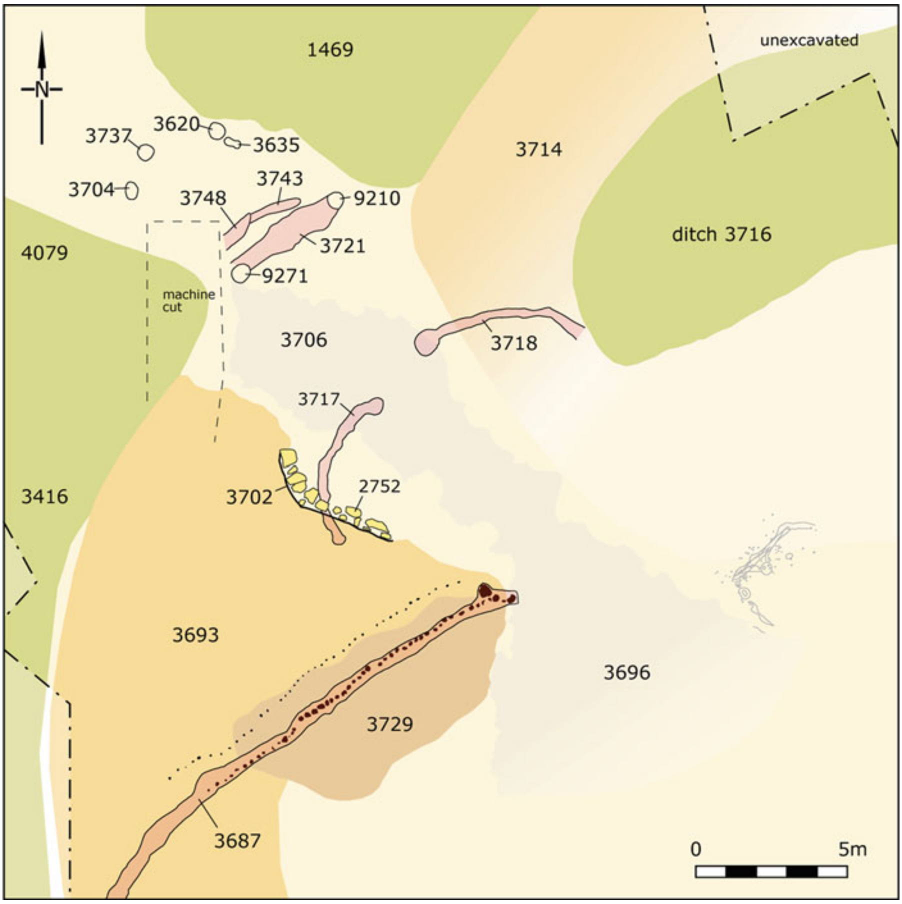

Fig. 3.12 Palisade entrance. Period 1e, palisade and western rampart entrance 3

and erosion may have been a problem on the sloping entrance approach. No wash deposits of this early date survive, but they may have been removed as part of the process of preparing for the quartz blocks and were lost by the digging of cut 3702. The effectiveness of the quartz blocks is demonstrated by the fact that they were retained in position for many subsequent phases. A wash layer of dark silty loam, 3690 (not marked on plan), formed against the base of the blocks and over the edge of trackway surface 3706 over time, but did not hide the quartz blocks completely.

On the eastern side of the entrance, it is likely that the convex timber gateway was removed whilst rampart 3714 was being constructed. Rampart 3714 was the outer rampart of the northern defences and also the eastern side to the earthwork entrance, joining onto the inner bank once that was constructed. At what stage rampart 3714 was joined to the inner rampart is unclear, as this was constructed starting from near pit 4299 (Fig. 9.2) and would have taken some time to reach the entrance. It is difficult to therefore convey in fixed phase plans the fluid and evolving layout of the site during the time of its construction, and so the full extent of rampart 3714 is given on Fig. 3.12. Given the lack of erosion in ditch 3716, there was only a short period before this ditch was infilled. As even the earliest of the identified layers in the ditch infilling ran up over the fort's inner rampart and so were extensive outside the confines of the ditch, convex entrance palisade 3717 would have been dismantled at

Fig. 3.13 Quartz blocks retaining rampart 3693, from the south

this stage, and the posts removed for reuse before the construction trench was buried. The fate of the outer gateway features, if still in use by this time, is unknown, but it may be that the phase is merely the precursor to the fuller rampart with stone gateway, and everything not part of that design was cleared.

3.5 Destruction at the Entrance

Very limited stonework could be identified with the palisade entrance phases, and there was no evidence that the timbers of the gates or palisades were burnt. However, the terminal of ditch 3716 was over-dug towards the entrance and was infilled as part of the construction of the first stone entrance phase, and much of this infill consisted of a rubble layer with much burning (Fig. 9.13). The most likely source for this material would be the previous entrance, but there is no suggestion that any burning took place as there are no charred posts in any of the structural features and the surface of the buried soil shows no evidence of great heat. Nevertheless, the stratigraphic sequence indicates that this material must have been in use and burnt before being dumped, and so it is possible that some elements of stone revetment were burnt and then removed with the remodelled entrance discussed in Chap. 12. Where any walling may have been placed is unclear, but the entrance complex is by far the most likely location.

Chapter 4
The Interior: Roundhouses, Scoops, and Activity Areas

Abstract The evidence for the settlement of the palisade phase comes from around the perimeter of the site where the stratigraphy demonstrates that features were earlier than the later ramparts. The earliest feature was a scoop later infilled and over which the palisade ran. Other scoops continued in use for temporary structures and craft activity, located on the western and eastern sides of the promontory top. A number of hearths were found, together with the remains of one roundhouse which had to be demolished prior to the construction of the rampart. There were other roundhouses over the rest of the promontory, but they cannot be certainly ascribed to the palisade phase, but it is likely that some were already standing at this time.

Evidence in the form of structures, hearths, and occupation layers all can be identified with the palisaded phase of settlement. Some activity even pre-dates the palisade, but as this would have taken some time to lay out, obtain supplies and construct, it would seem that all the evidence can be treated as one. There are sufficient changes within the material to suggest that the phase lasted years, possibly a generation, as is supported by the entrance changes, but the survival of the palisade posts in the northwestern part of the perimeter through to a late phase in the palisade gateway (when the western rampart was constructed) suggests a duration of no longer than c. 25 years for the of the palisade once erected and perhaps 40 years for the period in total.

4.1 Roundhouse 4268 (Figs. 4.1 and 4.3)

One definite roundhouse has been identified from the palisaded settlement phase. This lay partially beneath the northeastern rampart, and only that section buried beneath this earthwork remained later activity on the site. This is not surprising given the slight traces of the structure that survived even in these ideal conditions.

The roundhouse was primarily identified by the presence of a carefully made up floor 4268 that was laid down directly onto the soil surface. It contained few stones and consisted of three distinct layers, a charcoal layer overlain by pure red-orange clay, itself covered by a further charcoal layer. Identifiable fragments of burnt bone were recovered from these layers. The wall line of the house was marked by an almost imperceptible narrow depression, only 10 mm deep, in which were set some small stones. The clear edge to the floor as it finished against the gully provides a length of c. 8 m of wall line. This is sufficient to suggest that the roundhouse was larger than average when compared with the size of houses erected during the main fort occupation, being possibly c.11–12 m in diameter.

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Fig. 4.1 Roundhouse floor 4268, with its wall line surviving to the *right*, but lost to the *left* when no longer protected by the rampart

4.2 Pre-palisade or Early Palisade Phase Roundhouses

Several features were located sealed beneath the pebble surface 3696 at the entrance and therefore could be related to activity either before the construction of the palisade 3687 or when it was newly established. The most coherent and easily interpretable is that of gully 9182, an arc of roundhouse foundation trench for a roughly circular structure c. 5 m in diameter. Another gully, 4605, surviving for only a short length, suggests that the roundhouse was rebuilt in a different place, though the fills were too similar to allow the sequence to be ascertained.

Other structural features include gully 3746 with shale and quartz packing that underlay the surface 3696 and gully 3758 with upright shale packing, which in turn cut stone-packed posthole 4007, c. 0.7 m in diameter and 0.35 m deep. These features suggest a sequence of structures in this area; they may not have overlapped with 9182 but would have done with 4605. Small patches of charcoal-rich deposits, 3726 and 3739, each c. 0.25 m across, were also noted beneath surface 3696. The remains do not form sufficiently clear plans to suggest the type of structures, but they indicate a number of changes in plan with post-built structures in use.

4.3 External Activity Areas

Under the northern defensive rampart several activity areas were preserved, some with structural features and scatters of craft-working debris. These did not spread close to roundhouse 4268, but lay at a slight distance to both east and west. All were south of the line of postholes 4554, 4555, and 9180 discussed in Chap. 3 (see Fig. 3.8).

4.3.1 East of Roundhouse 4268 (Figs. 3.8 and 4.2)

To the east of roundhouse 4268 lay an area of craft activity marked by an extensive sandy loam layer 4252 containing much charcoal (not marked on plan). The colour and density of inclusions varied greatly across c.10 m stretching east-west, protected by the later clay of the rampart 4040, though it also survived in places to the south, extending up to c. 1.5 m into the fort interior. The activity area may have extended north, but excavation was not carried out there because of trees growing on top of the rampart, but the western extent was identified. The excavation of this layer revealed a hearth 4248, one very well-defined charcoal deposit and several other features. Hearth 4248 consisted of an arrangement of shale stones, with some large slabs set vertically on the south, and some smaller stones on the west. The base was made from slabs set flat onto the buried soil, which was reddened north of the hearth. The hearth did not contain charcoal, though some was found between the stones. It would seem that the hearth had been cleaned out, as a dump of charcoal 4250, up to 0.01 m thick and containing metalworking debris, lay to the west. A stake hole was sealed by this dump.

A concentration of slag was recovered from layer 4252 on the surface of the buried soil, particularly around 990/1,000, though no feature was identified there. To the east, a well-preserved hearth, 4251, was found beyond the area sealed by rampart 4040, but it would seem that it had been covered by layer 4252. It first appeared as two oval rings of burnt clay, but on further excavation it was defined at an oval hearth; the higher burnt clay material must have been derived from part of the superstructure. The feature measured 1.5 by 1.0 m, forming a shallow, saucer-shaped depression. A few stake holes were associated with the hearth.

A stone-packed posthole 4241 was found 1.5 m north of hearth 4251. It was cut through layer 4047, and the packing stones protruded into the base of a clay layer in rampart 4040, which also filled the void in the centre of the stones. Whilst this posthole may have been cut through the clay rampart 4040, it is more likely that its post was removed as the rampart was to be constructed and it was filled in and overlain by the clay, with a crucible carefully placed at the level of the buried soil (Fig. 9.3). It is possible that the crucible was derived from the activity associated with hearth 4251. Another stone-packed posthole, 4287, lay beneath layer 4252 and north-west of the hearth 4251.

The copper-alloy working area could have been more extensive, but excavation could not be extended immediately to the east because of access routes into the fort. Craft working may have extended further south beyond the area covered by the rampart, but did not survive later occupation. Early activity with extensive burning was identified in the lowest levels behind the rampart at the point where excavations were possible to the east, but the stratigraphy does not make it clear whether this was in the palisade or earliest rampart phase.

Under the rampart to the east, and adjacent to the long excavation trench through the earthworks, the buried soil was largely intact, with a small number of shallow features indicating some indeterminate activity in this phase (see Fig. 2.8). These included shallow depressions 4582, 4590, and 4582, with fills that contained a quantity of charcoal and burnt bone. A shallow linear gully 4587, possibly the base of a wattle fence, was cut by posthole 4585, but this and other nearby postholes made no clear pattern. The southern boundary to features of this phase is merely defined by the later covering by the rampart, and some other postholes to the south may belong to this early phase. The apparent line between postholes 4584 and 823 may therefore be illusory. Although the role of this part of the site remains uncertain, it is clear that the craft activity found to the west did not extend this far, and no other roundhouse lay within the area sealed by the rampart.

4.3.2 West of Roundhouse 4268 (see Figs. 3.8 and 4.2)

Features in this area were sealed beneath clay rampart 3714, which was an addition to the main northern rampart 4040 and was joined onto it when the first stone phase gateway was constructed. As such, the

Fig. 4.2 *Top*: Hearth 4251 under excavation. *Bottom*: Features west of roundhouse 4268, from the south

features represent a slightly longer period than those to the east, and some may be contemporary with the building of the rampart 4040 to the east. Thus, the features discussed here mainly represent the palisade period, though some of the latest may be contemporary with the building of the rampart 4040 and so could be after the ritual features and structured depositions associated with the construction of that rampart (see Sect. 9.1). Nevertheless, they all reflect continuing domestic and craft activities as begun within the palisade phase and so are all included here.

Immediately on the surface of the buried soil 3719 some charcoal formed a distinct sub-rectangular feature 4284, its extent clearest on the west, north, and in part on the east; burnt clay was incorporated in the north-east corner. Immediately to the east was a shallow feature 4275, 0.01 m deep, with a silty clay loam fill. To its north lay a hearth 4274 with a similar fill though with much charcoal and some burnt rock and bone, fired clay, and a fragment of saddle quern.

A curved length of wall gully 3219 was located immediately west of the clay and charcoal feature 4284. This narrow trench contained small upright shale packing stones still in situ and very distinct ends. The feature was most clear after removal of occupation layer 4252, though it may have been cut from a higher level as many of the packing stones were visible through the surface of occupation layer 4252. It may have acted as a windbreak for the activities indicated by the features described above; though given the prevailing south-westerly winds, one might have expected the curve to have been the opposite to that found. It could have been part of a larger structure for which no other evidence survives, though no floor surfaces were associated with the feature.

A scatter of postholes and other cut features, making no clear pattern, also belongs to this phase, though not all are exactly contemporary. Some, such as postholes 4258 and 4259, cut occupation layer 4252. Others such as posthole 4261 and shallow, flat-bottomed pit 4260, filled with fire-cracked rock, may have been sealed by this layer. However, stones in the fills of these features protruded through layer 4252 and it may be that their cuts could not be discerned until a lower level. In the case of posthole 4283, the relationship was uncertain. Posthole 4273 had clay packing as its upper fill, suggesting that the post had been removed at the time of the construction of rampart and filled at that time and so is late in the phase. All the features lay south of the possible fence line (see Sect. 6.1.1) and so were within the enclosure, though some such as pit 4260 would have been dug close to it.

The lack of visible pieces of slag and the presence of the quern fragment may suggest that this was a more domestic processing area of the site, lying between the roundhouse and the entrance gate.

4.3.3 Scooped Hollows and Metalworking on the East (Figs. 4.3 and 4.4)

The excavations beneath and immediately behind rampart 4470 uncovered evidence of intense activity prior to its construction. It would seem that this activity was during the life of the palisade and ceased with its demolition. The excavation of the features described here took place in several seasons, sometimes separated by a considerable break. In 1988 and 1989, some of the scoops were investigated; then the area beneath rampart 4470 was examined in 2001 and 2002, with the area to the south of this was excavated in 2004. Despite the damage caused to features of this phase by the cutting of late ditch 4477 (see Sect. 14.3.2), the activity in this sector of the site was both extensive and well preserved.

4.3.4 Scoop 4517 and Activities Within It

It is likely that the scoop 4517 was the first feature to be constructed in this area, though it is possible that it was cut after some of the early lenses of yellow-orange gravel, redeposited subsoil, were laid down. They were found within the build-up of occupation material within the area enclosed by the palisade, but they could have come from other modifications of the hill slope. It is possible that a tree was removed from the area at this time; an irregular hole, 4491, similar to that produced by tree roots, was excavated on the eastern edge of the circular area that the scoop would have created. These activities may have been associated with preliminary clearance to make the area ready for scoop 4517.

Onto scoop 4517, which created a flat, horizontal surface on which to work, several features were constructed. The earliest was a small stone-lined gully 4514, and on top of this were placed patches of red clay. This would seem to have been an early hearth, above which accumulated a charcoal-rich layer 4490. This had a mounded appearance and consisted of a series of discrete layers representing a series of events, and 4490 may well consist of the material raked away from the iron working area immediately to the east. Here were found a depression 4501, interpreted as the base of a furnace, a ring of stake holes 4500 and an associated pit 4516.

Depression 4501 was a small oval feature, 0.20 by 0.25 m but only 0.03 m deep. It had bright orange burnt clay with a charcoal-rich surface surviving on its edge at one point, and its fill was dark brown silty clay with much charcoal. At the northern end of the depression, a stake hole 4512, 0.20 m deep, lay beneath the depression and may have been sealed by it, though slag was found in the fill of 4512. Around depression 4501 was an arc of stake holes 4500, fairly evenly spaced and creating a circle c. 0.45 m in diameter. A few other nearby stake hole groups 4494 and 4498 may also have been associated with the structure. It is possible that the stake holes are all that survive of a small iron smelting furnace, its base set in the depression 4501 and its clay walls supported in a wattle framework built around the stake holes 4500. Excavation in 2002 of an experimental iron smelting furnace that had been constructed and used in 2000 demonstrated how limited the surface and subsurface evidence for such a structure could be. The purpose of the adjacent pit 4516 is also relevant here.

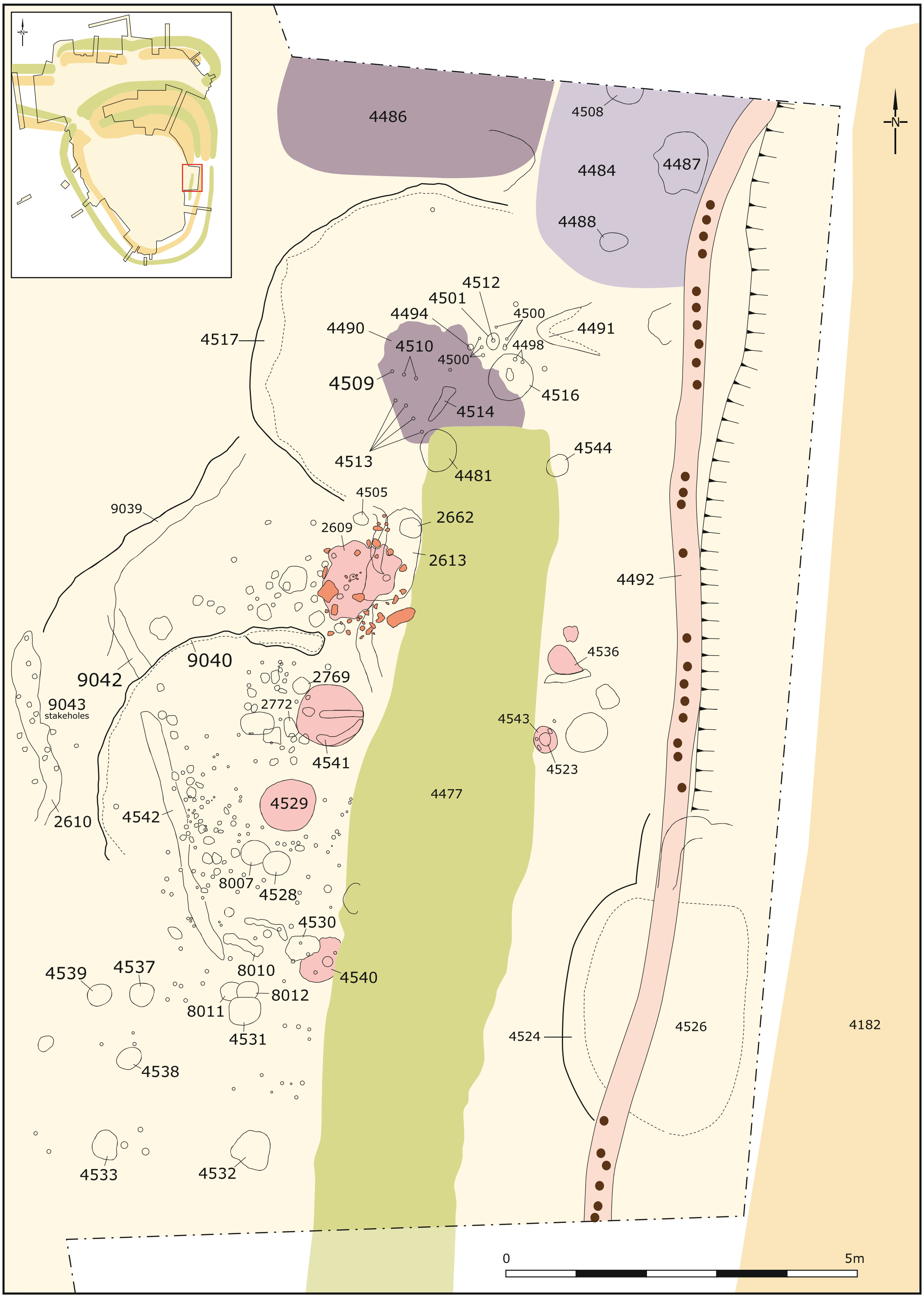

Fig. 4.3 Plan of scooped hollows on the east. Much later ditch 4477 is marked to show area of destruction

Fig. 4.4 *Top*: Scoop 4517. *Bottom*: Layer 4473 sealing scoop 4517 and underlying rampart terminal

This was another shallow feature, 0.15 m deep and 0.65 m in diameter, lined with shale stones and filled with thin alternating deposits rich in burnt clay or charcoal. This may have been the base for bellows to heat the furnace and where debris was raked out of the small furnace; some of this material was later heaped up to the west on the low mound 4490 described above.

Many other stake holes were identified within the area of the scoop 4517. Some form rough lines, such as groups 4513 and 4509 with the pair numbered 4510. The function of such stake holes is unclear, though they may have helped to support temporary shelters or windbreaks or subdivisions within a building. Only one more substantial posthole was found within the scoop 4517, that of 4481. This survived at the edge of the cut of later ditch 4477 from the late Roman/post-Roman phase or reoccupation, and so more may have existed where this feature has cut away all earlier deposits. Posthole 4481 probably held a post to a depth of 0.4 m and measuring 0.20 by 0.10 m.

No evidence survived for any walling around the edge of scoop 4517, and it is possible that there was not a roofed structure. However, there are two pieces of evidence that suggest that it may have been roofed before layer 4473 formed over the whole of the area. The first is the clean cut of the edge of the scoop. The subsoil is a yellow clay with gravel, and although the excavated scoops have remained moderately stable over several years, they have weathered to a smooth, rounded profile. The excavated cuts were sharp, suggesting little erosion and exposure. The second piece of evidence is the position of postholes 4505, 4507, and 4544, all on the line of the scoop edge and any one possibly marking the position of one of two doorposts. The other would have been where the ditch 4477 had been later dug and so has been lost.

4.3.5 Beyond the Scoop 4517

Outside the area of the scoop, a charcoal-rich layer, 4485, covered all the area to the east and north. This was a mixed deposit, with some roughly circular patches of dense charcoal, and some lenses of orange gravel. On top of this layer one dump, 4487, could be isolated as a specific event. The black deposit contained much charcoal and burnt stone, with some burnt bone and slag. Over a considerable area east of the scoop, a layer of orange gravel 4484 was spread, similar to the smaller lenses in layer 4485 below, but more extensive and contiguous. It would seem that this was the last in a series of layers building up this area of sloping ground. Most of the deposits comprised of debris from nearby craft activity and the creation of scoops on which such working took place. To the north of the scoop, a very dense charcoal layer 4486 lay to the west of gravel 4484. It contained many fragments of burnt rock, but was spread to form a fairly flat surface.

Only two cut features were found beyond the scoop to its north and east. They were very similar stone-packed postholes, 4488 and 4508, both cut through gravel layer 4484. They were sealed by layer 4473 which dipped into the tops of the postholes, suggesting that the posts had only recently been removed. They may have been for posts to support fencing similar to that suggested for the same main rampart to the north. Since these postholes and the palisade 4492 are all sealed by 4473 (see below), it is not possible to decide whether all were in use at the same time. The postholes, however, were certainly cut relatively late in the sequence beneath the rampart.

4.3.6 Last Phases Before Rampart 4470

After all the previous activity, layer 4473 was formed over the scoop 4517 and beyond it to the north and east. This was a very dark greyish brown silty loam, with much debris derived from lower layers including burnt rock and bone, charcoal, and slag. Layer 4473 spread over the postholes 4488 and 4508, creating a smooth but undulating surface, following the topography of the infilled palisade and scoop. Indeed, layer 4473 survived along the length of the trench even where there had been more erosion on the surface, indicating that 4473 had once been even more extensive.

The uniform layer 4473 sealed all the earlier evidence and then perhaps had turf developing on it. It suggests that by this time, there was no formal activity in this area, though the dirty nature of the layer suggests that it may have been formed partly through trampling. However, no artefacts were found on the surface of layer 4473, and no layers of any kind were dumped on it prior to the construction of the rampart 4470. The numerous finds all derive from the activities represented in the layers below, from which in part layer 4473 must have formed.

4.3.7 Scoop 4524 (Fig. 4.5)

The earliest certain structural activity on the whole promontory can be identified in the area south of scoop 4517 and at the eastern edge of the site. Stratigraphically earlier than palisade 4492 was the cut and subsequent fill of scoop 4524. This scoop survived as a D-shaped feature on the extreme eastern edge of the site, and it has been truncated possibly by scarping of the hill slope when the earthworks were constructed and certainly through subsequent erosion. Whether it was originally a complete ovoid feature cannot now be discovered. The scoop had a steep rear edge, rising vertically 0.5 m from a gently sloping but roughly flat surface, into which one large shale slab was impressed. There was no evidence of a floor, though the shale slab was similar to others used in later phases to form the base of a hearth, and some intermixing of charcoal and other deposits into the clay surface suggest some

Fig. 4.5 Scoop 4524 from the southwest

trampling. A layer of olive yellow redeposited silty subsoil 4525 accumulated within the scoop, and this contained only a small amount of charcoal. Most of the scoop, however, was filled with a loose black layer 4526, a silty loam with many small angular rocks, some shale, much charcoal, some fragments of burnt bone, and significant amounts of ironworking debris and fragments of crucible. The fill was relatively loose and unconsolidated, despite its antiquity, and as a result the palisade 4492 that had run across the top of the feature had eroded away. It did nevertheless survive overlying the scoop fill at both its northern and southern edges, and there is no doubt that the palisade was later than the scoop, rather than being cut by it. Indeed, it would seem likely that the scoop was rapidly infilled with locally available midden material so that the palisade could be constructed on its determined line across this feature. In places a later silty loam layer with small fragments of stone had accumulated, indicating later erosion off the hill, sealing the scoop and its fill.

It is notable that the deliberate upper fill contained slag, demonstrating that the craft activity in the area began before the infilling of the scoop, though none came from the surface of the scoop itself. Slag was also recovered from the lowest construction layer 4527 of the palisade trench 4492, indicating that craft activity was under way immediately prior to the enclosure of the settlement. This suggests that initial activity in this area was only domestic, perhaps associated with preliminary clearing the area of undergrowth and making charcoal ready for craft working. Then metalworking began, associated with manufacture and repair of tools used in the construction of timber buildings and the palisade, and subsequently the building of the earthworks. From this time craft activity seems to have reduced in scale and may have been abandoned completely in this area of the site.

The importance of this scoop is considerable; it indicates not only activity on the periphery of the promontory immediately prior to the palisade construction, thus suggesting that the settlement of the hill top began before any form of enclosure, but it also suggests a sufficient duration or intensity of activity to have produced middens of a size that when infilling the scoop the material should be uniformly dark. The scoop may be one of several dug by the first settlers on the hill who in effect bivouacked in the scoops, perhaps with hide or vegetation covering them, whilst the preliminary work was done. Unfortunately erosion means that the scoop and its fill cannot be stratigraphically associated with any of the intense activity excavated only metres away to the west and described below, but it is probable that some of these features also represent the earliest phase of settlement on the hill, as they are at a similar level and provide a contiguous spread of similar activities to the south, beyond the later rampart terminal of the earthwork phase.

Fig. 4.6 Palisade phase features south of the later rampart terminal, truncated down the centre by late ditch 4477. View from the north

4.3.8 Activity South of Rampart Terminal (Figs. 4.3, 4.6, and 4.7)

The late ditch 4477 (see Sect. 14.3.2) truncated the otherwise well-preserved deposits that lay south of scoop 4517 and stretched to the palisade 4492 and the surviving eastern edge of the site. In the northernmost part of this area, the southern tip of rampart 4470 gave a stratigraphic link to the later site phases, but otherwise the stratigraphy was linked to the rest of the site by inference and relationships with the palisade 4492. Some significant internal relative stratigraphy survived, though some of the deposits were of a character that meant that cuts were hard to distinguish.

Beneath the terminal of rampart 4470 was a black layer 4473 that had overlain scoop 4517 and covered the whole of the excavated area beneath the rampart further to the north (see Sect. 4.3.6). This survived only east of the late ditch 4477 and only for less than 2 m in any direction from the rampart terminal; it may originally have extended further but has been lost to erosion. Further south a now separate spread of dark brown material, 4520, contained large amounts of charcoal. This may have been an extension of 4473, but given the density of charcoal it is likely that this is earlier and represents deposits associated with the craft working in this area, rather than 4473 to the north that was certainly overlying such activity.

The extensive layer of dark greyish brown material west of late ditch 4477 was 4521, and its character matches that of 4520, as it also contained large amounts of charcoal as well as fragments of crucible and considerable quantities of slag. It would seem that this layer accumulated around and over a number of hearths, of which 4529 was still visible when the uppermost surviving surface of the layer was cleaned after the removal of the topsoil.

It is surprising that this early layer, and that of 4520, survived without the protection of an overlying rampart. It is likely that other subsequent deposits were laid down over these and erosion had subsequently truncated the deposits back to this early phase; further to the west and south, this erosion had continued to the extent that only cut features survived.

Numerous stake holes, several postholes, a stone-packed wall trench, and some hearths were excavated in this area. Some of the hearths, which will each be described in turn, were certainly sealed

Fig. 4.7 *Top*: Hearth 4529. *Bottom*: Anvil stones

during the build-up of 4521. Postholes having no black fill were probably earlier than 4521, but others had some dark material and their packing stones could be seen protruding from the layer's upper surface. It was rarely possible, however, to identify any cuts and so it is uncertain whether these postholes were dug and abandoned with upstanding packing stones before the deposit formed, or whether the posts were present during or even throughout the accumulation of 4521. It is possible that they could have been cut during the build-up of the layer, or even later, though the packing stones were never more than 0.05 m above the surface of 4521, and so were unlikely to belong to a much later period that has since been removed by truncation of deposits.

The earliest posthole is probably that of 4538, as this had relatively clean fill and had therefore probably been infilled by the time that the black layer 4521 began to accumulate. It was c. 0.17 m in diameter, and the post had been removed for reuse and the packing disturbed. Some of the other postholes in this area may have been associated to form a rough square of posts, though their size would not suggest the form of four-post granaries seen elsewhere on the site at a later phase. Postholes 4531, 4532, 4533, and 4539 may all be related, and all had dark brown silty loam fills. Posthole 4532 was well enough preserved for the location of the circular timber 0.35 m in diameter to be identifiable within the shale stone packing. 4531 had two recuts, 8011 and 8012, visible, the last post being similar in size to 4532, though the earlier ones were more similar in size to the other postholes in this group, with bases suggesting timbers c. 0.2 m in diameter. It is possible that postholes 4539 and 4537 represent different locations for the same structural feature.

Other postholes were excavated north of the possible four-post feature. Limited stratigraphic evidence demonstrates several phases, but coherent structures cannot be identified. Posthole 8007 had been recut by 4528, and its proximity to hearth 4529 suggests that they were not contemporary; the same could be argued for postholes 2769 and 2772 west of hearth 4541. Posthole 4530 cut through hearth 4540 and was definitely after it had gone out of use; its packing stones were first revealed at a higher level than those for any other postholes in this area, which could indicate that it was cut from a later phase. It is possible that all the postholes reflect a phase after the ending of craft production in this area, though as the hearths may not be exactly contemporary, they could reflect timber structures erected near any hearth in use, overlying an abandoned craft-working location.

Four hearths were identified, though more may have been in the area lost by the digging of late ditch 4477.

Hearth 4540 was composed of a shallow, oval bowl-shaped hollow up to 0.2 m deep which was filled with patches of yellow redeposited subsoil and brown clay loam with some charcoal flecks. This was sealed with a clay layer up to 0.04 m thick that had been fired to a bright red colour. A possible stake hole cut through the edge of the clay and may have been associated with a superstructure; no other stake holes were noted, but lack of time prevented the complete excavation of this hearth. The hearth must have been constructed as layer 4521 was forming and so is one of the earlier features in this area; a stone-packed posthole, 4530, cut through the hearth and layer 4521.

Hearth 4529 was c. 0.8 m in diameter and was of at least two phases. A black layer with charcoal overlays a lower burnt clay layer c. 0.4 m in diameter. This was sealed with a larger spread of yellow clay 0.8 m in diameter, the upper surface of which had been heated to an orange colour. Numerous stake holes were identified around the hearth, particularly on the south and west. Some of the stake holes close to hearth 4529 may have supported its superstructure, though this is uncertain; one stake hole within the hearth would not have functioned once the hearth was in use and was either earlier in date or part of the initial construction of a wattle and daub superstructure. Many stake holes may have been associated with providing protection from the elements, and indeed many on the west may have been providing a similar windbreak to that of the stone-packed fence line 4542 that ran past hearth 4529 at a distance of 1.2 m away. This would suggest at least two phases of protection on this side of the craft-working area, the stone-packed phase representing considerable effort in providing a well-founded barrier. The fence line packing consisted of small shale slabs wedged into the subsoil; individual uprights could not be identified, but it would seem that they were probably no more than 0.06 m in diameter and were possibly c. 0.3 m apart as the packing widened at about this interval. The slight turning of the packing stones to the east at the southern end of the feature, and a small length of gully, 8010, adjacent to this may suggest that the area around the hearth was protected. Hearth 4529 was already visible on the first cleaning of layer 4521 after the removal of the topsoil, though it was set within the uppermost part of this layer. This suggests that this hearth may have been the latest in the sequence in this area, in use during the last stage in the formation of 4521.

The remains of two other hearths survived to the east, close to the present steeply scarped hillside. Hearth 4536 was the most substantial, being formed in a bowl-shaped scoop c. 1.0 m in diameter and up to 0.2 m deep. A base of shale stones was covered with deposits, some yellow, others black or mixed black and brown material, suggesting an infilling from a variety of sources. This was then sealed with a yellow clay layer that in places was reddened by heat. The limited evidence of high temperatures may indicate that the hearth was little used, or that the higher and more fired deposits have eroded away. It was set within the layer 4520 and so is contemporary with its accumulation.

Hearth 4543 consisted of burnt clay surviving to an extent of 0.8 by 0.3, but was probably originally larger. It had been cut by a shallow bowl-shaped hollow, 4523, with a brown silty loam fill

Fig. 4.8 Scoops 9040 and 9039 from the south; excavations later extended to the east

containing little charcoal. The black layer 4520 which formed around the hearth also continued to accumulate after 4523 was infilled. Slightly to the north was hearth 4536, an oval feature c. 0.6 by 0.4 m cut into the subsoil and beneath 4520. Hearths 4536 and 4543 probably represent one activity area that slightly shifted over time.

The density and arrangement of the postholes suggest an occupation of sufficient duration for several arrangements of hearths and structures to have been in place, so although there is little firm sequence within this phase it can be assumed that it lasted a number of years.

4.3.9 Scoops 9040 and 9039 South of Scoop 4517 (Figs. 4.3, 4.7, and 4.8)

The earliest excavations to reveal the craft-working debris in this sector of the site took place in 1988 and 1989, but it is only following the results described above that the context for these could be comprehended.

An irregular cut 9039 created a small terrace on the sloping eastern side of the promontory and on this was found important traces of metalworking. A shallow pit 2613, partially cut away by late ditch 4477, was filled with burnt clay loam containing burnt clay, fire-cracked rock, charcoal, furnace debris, and iron objects. It had cut away the top of posthole 2662, and there were many other cut features to the west that may have been contemporary with posthole 2662, pit 2613 or the subsequent hearth 2609. Most had no clear stratigraphic relationship, though some were definitely beneath 2609.

Pit 2613 was in turn partially overlain by a spread of yellow clay 2609. This feature was 1 m in diameter and up to 0.12 m thick, with a large rock set in its northern edge, and another just to the west. The clay contained charcoal but was not heavily burnt and so was probably the base for a hearth that has been eroded away. The large stones were both deliberately firmly set into the subsoil, the one to the west a rounded shape, that to the north more a flat-topped rectangular block. These were interpreted during excavation as anvil stones (Fig. 4.7), and this seems to be the most likely explanation for them.

They were both set next to the hearth that would have heated the materials worked on the anvils. The flat-topped anvil may also have been used as a base on which to place moulds, as fragments of crucible and copper-alloy artefact pieces were recovered from the deposits surrounding the hearth. Unfortunately, no moulds were recovered, though slag was found.

Where the cut 9039 ran out into the natural hill slope, a gully 2610 with stake holes 9043 within and either side of it continued to the south. The gully fill was a mid-brown loamy fine gravel, with some burnt bone and charcoal. The stake holes varied greatly in depth, from 0.15 cm to over 10 cm, with most in the region of 5 cm. They may have been used to support a windbreak, the base of which was set in the gully. Another gully 9042, even shallower, also ran north–south to the east of 9039, but this only survived for a length of 1 m before it was cut away by scoop 9040. It is likely that this was a different phase of windbreak.

Scoop 9040 formed a neat semi-circle, with a 1.1 m length of gully on its eastern line. This scoop cut away evidence of activity south of hearth 2609 described above and formed a new metalworking area, though the hearth and anvils may have remained in use. A cluster of small postholes and stake holes, making no clear pattern, lies in the vicinity of the gully and hearth. To the west a group of stake holes form a north–south line, perpetuating that taken by gully 9042 and roughly parallel with gully 2610. This would again seem to be a windbreak, here completely ignoring the shape formed by the scoop. Why a curved windbreak was not constructed at the base of the scoop scarp is unclear, but in this part of the site linear stake hole alignments or gullies running north–south seem to have been required.

4.3.10 Scooped Hollows on the West (Figs. 4.9 and 4.10)

Evidence for early activity was preserved on the western side of the promontory under the clay rampart 3693 and under a thick build-up of midden deposits that had built up against the rear of the rampart. The earliest feature was a long, shallow terrace, 3820, which was dug into the slope of the hill to provide a gently sloping surface in a band running along the western side of the promontory.

Into this terrace was cut a series of four scoops, 3822, 3823, 3824, and 3825, creating a series of overlapping roughly circular areas, with two subsequently cut by a fifth scoop 3821. All had been cut by the late ditch 3306 (see Sect. 14.3.1), but in some cases evidence of them survived under the clay rampart 3693. The lowest layer across the terrace and in the scoops was a grey leached layer of variable thickness, 3812, which contained charcoal flecks that may have been trampled into the layer during occupation. This layer was identified running under the clay rampart 3693.

Scoop 3822 was the southernmost example and contained evidence of a small hearth 3813 with a patch of burnt clay within. Two stake holes, 3815, were associated with the hearth on the western side; they contained charcoal and fragments of burnt bone. It is possible that there may have been more stake holes to the west, but they would have been cut away by ditch 3306. Under 0.04 m of wash, a smaller patch of burning on the clay subsoil was found beneath hearth 3813, suggesting that there were two phases of use, separated by a period when soil wash or trampling had taken place. These features would have been in the centre of a circular scoop and could perhaps suggest temporary structures on the site. The wash between the two phases of burning suggests that the scoop was open to the elements at least some of the time.

Between scoops 3822 and 3824 lies scoop 3823, and this also had evidence of a burnt area 3817. This was a black silty loam with charcoal, again with stake holes, though these were very shallow. The rear cut of scoop 3823 is less concave than those either side, which may suggest that this is the least likely to have had a circular structure.

Scoop 3824 lies between scoops 3823 and 3825, and it has a well-defined curvilinear rear edge. Two features survived at what would have been near the centre of the circular area of 3821. A thin

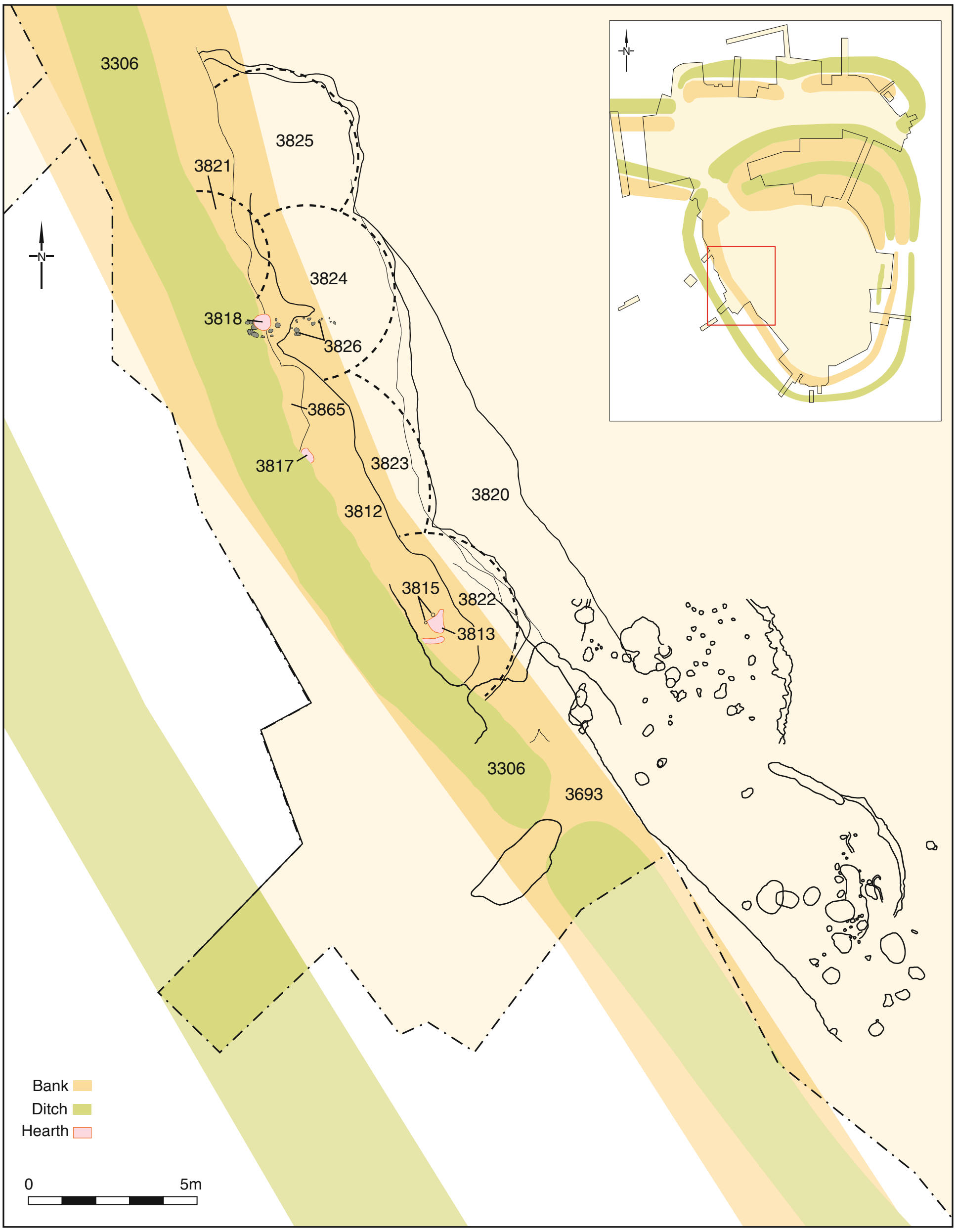

Fig. 4.9 Plan of hollows on the west

layer 3818 of burning probably represents the spread of material from a hearth; the layer was becoming thicker towards the west, but was truncated by ditch 3306 that presumably had removed any central feature. Above this burnt area and extending over a larger area was a scatter of stones 3826, many c. 0.25 m by 0.15 m, with some even larger. These shale stones were most concentrated in the area above the burnt layer, but they were more extensive. The stones may represent paving and was a probable pivot stone that would have been placed in a doorjamb. It is possible that the stone scatter

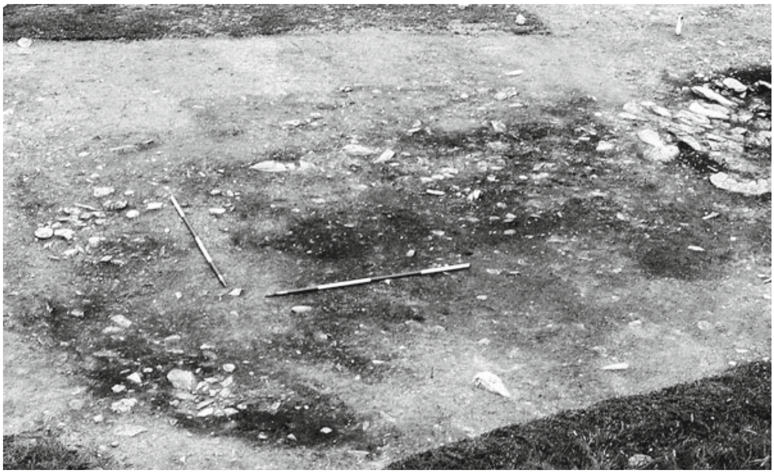

Fig. 4.10 Scoops on the west during excavation

3824 could be paving outside scoop 3821, as a few stones seemed to spread across into this feature. Part of the area of 3828 was cut by another scoop 3821, indicating a shift in activity down the slope.

Scoop 3825 was cut away on its northern side by scoop 3821 but contained no features. It may never have had the same integrity as the base for a structure or activity as the other scoops, and instead could have served as an external area adjacent to 3824 and 3821. In effect it may be a more deeply dug part of the terrace 3820 into which the scoops are cut.

4.3.11 The Buried Soil

The buried soil on which the palisaded settlement was constructed was sampled to ascertain whether it contained artefacts suggesting earlier occupation or at least use of the promontory prior to the Iron Age settlement. The buried soil under the north-west rampart was sampled on a 1 m grid, with the deposit sieved to maximise recovery. Although a slight concentration of worked flint was found in a small cluster of 1 m squares, the density was not great and would only suggest intermittent, short-term use of this location on the promontory. Some other areas of buried soil, such as those to the east of the entrance, lacked any flint work, and generally very little was recovered from the sampling of the buried soil under the north-east rampart. This suggests that only a few locations on the promontory were deemed suitable for short stops at the site. The range of flint work includes blades, scrapers, and cores and includes possible Mesolithic and definite Neolithic and Bronze Age material, suggesting low-intensity use over a long period of time. No structural features were found within or below the buried soil. The only ceramics found within the buried soil were some sherds that may have been part of a Bronze Age vessel such as a cordoned urn. Whether these represent a vessel discarded in the same manner as the flint, or suggest a disturbed burial, is uncertain.

Excavation of the buried soils elsewhere around the edge of the promontory has not produced any evidence of activity, apart from at the southernmost point of the site (Fig. 10.2). Here a small pile of soil 4194 was located, burying an earlier buried soil 4195 at the southern edge of the site (see Sect. 3.2.1). This small scale mounding of material is similar to that found elsewhere under the northern rampart.

4.4 Conclusions

There is evidence for some activity prior to the construction of the palisade with scoop 4524, and the other scoops could have been cut before the palisade was erected. Indeed, the presence of slag within the palisade on the eastern side of the site suggests that some craft activity had begun in that area before that stretch of palisade was erected. Some scoops were certainly in use during the life of the palisade, however, and suggest extensive settlement and activity on the promontory. To what extent there were roundhouses on the site is more difficult to ascertain. The one definite example, 4268, was erected using with a wattle wall construction method that left almost no trace even on the perfectly preserved ground surface beneath rampart 4040, so any equivalent structures elsewhere on the site would have been rapidly eroded or damaged by later occupation. A number of early postholes and lengths of gully suggest that a range of constructional methods was employed in this phase, but what forms these buildings took is unclear. Nevertheless, there can be little doubt that the settlement was established and developed during the palisade phase such that it moved from a pioneer and possibly very small group to a full population that was in a position to then develop the settlement further. If, as is likely, this phase represents a period of between 25 and 40 years based on the palisade evidence itself, this would explain most of the structures such as roundhouse 4268 having only one phase, but the shifting craft activity to the east representing the building and rebuilding of hearths and furnaces over a number of years.

Chapter 5
A Boundary in Stones: The *Chevaux-de-Frise*

Abstract The *chevaux-de-frise*, an arrangement of small standing stones set in the original ground surface, is found outside later prehistoric forts across much of Atlantic Europe, and has been interpreted in military, defensive, and symbolic terms. The *chevaux-de-frise* at Castell Henllys is one of the best preserved excavated examples because it was found beneath a later rampart which formed part of the fort's annexe outworks. The Castell Henllys *chevaux-de-frise* was c. 38 m long and up to 3 m wide, placed across the saddle of the promontory. It was constructed from field stones with a greater concentration of quartz at its terminals and more shale and igneous rocks in the centre.

A *chevaux-de-frise* is a term used in a variety of military contexts as a form of defence against cavalry (Murray 2008: 225; Nolan 2006: 148–49). Within European later prehistoric studies, it has become firmly associated with a distinctive arrangement of upright stones or timbers placed outside a settlement, and it is within this usage that is applied here. Examples are known in the Iberian Peninsula, central Europe, Britain, and Ireland (Harbison 1971; Alonso et al. 2003). Almost all examples of *chevaux-de-frise* are known from field survey of stone examples, and given the nature of the evidence this tends to bias the sample towards those with larger stones and rocky, often relatively isolated, locations where robbing of the stones for other uses or clearance of the land for agriculture has not taken place. That smaller stones may have been used more often than appears is supported not only by the Castell Henllys evidence discussed below but also by that identified in extensive excavations at Pech Maho, Languedoc, France (Gailledrat and Moret 2003). The use of the term *chevaux-de-frise* carries with it a military implication, largely linked to cavalry though possibly also an infantry charge. When hill forts were seen in purely military terms, this was logical and consistent. Now that monumental earthworks of the Iron Age are being reconsidered, the same applies to *chevaux-de-frise*, hence the suggestion of the more neutral descriptive term of *pierres plantées* (Gailledrat and Moret 2003). Here the traditional term is used, but the discussion at the end of this chapter considers the form, function, and meaning of this most distinctive feature where the military element is but one possible component.

Given their recovery by field survey and the lack of stratigraphy associated with *chevaux-de-frise*, these features present problems of both of chronology and interpretation, as well as concerns over partial preservation. This is a widespread problem, and British and Irish examples have no firm dating, despite considerable fieldwork on some of the examples in western Ireland (Cotter 2000, 2003). It is in this context that the Castell Henllys *chevaux-de-frise* has more than local significance.

The Castell Henllys *chevaux-de-frise* was set into the buried soil preserved under the rampart which ran across the spine of the promontory (Fig. 2.1), and it only survived because this bank covered and protected it from later damage. It is the first stone *chevaux-de-frise* in Britain to be discovered by excavation, though evidence of several timber *chevaux-de-frise* has been noted by Harbison (1971) (Fig. 5.1).

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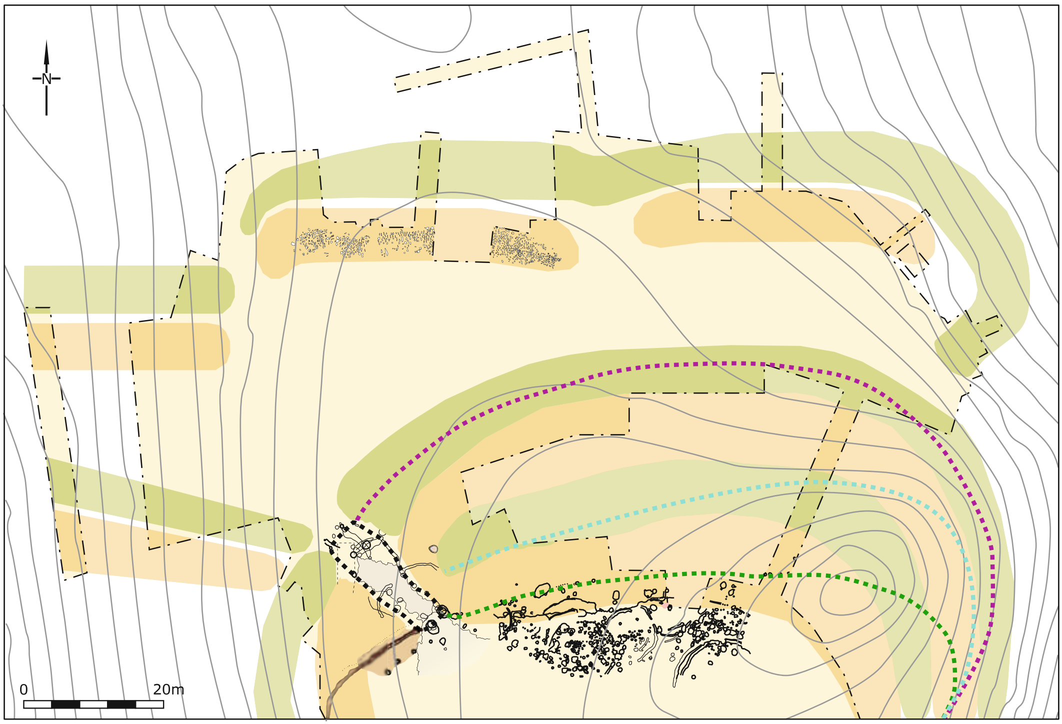

Fig. 5.1 Location of the *chevaux-de-frise* in relation to the topography of the promontory. Also marked are the possible palisade lines. The later earthworks are also shown, indicating the preservation of the *chevaux-de-frise* under the later rampart

The *chevaux-de-frise* consisted of many small stones placed on edge and set in the original ground surface. The front, northern, edge of the *chevaux-de-frise* was extremely clear, with no scatter of stones beyond it. The rear of the feature is less certain, however, as it may have extended further to the south and beyond the protection of the later bank; any stones in this area would have been removed during the long occupation of the site. However, it can be argued that both the terminals of the *chevaux-de-frise* have been found and that the width of the feature can be defined and it is likely that little or none has been lost. Unfortunately ditches 1430 and 1431, which cut through the overlying bank, removed a section of the *chevaux-de-frise* and the buried soil, but these do not obscure the patterns in those parts of the *chevaux-de-frise*.

There has been much discussion about whether the whole of the *chevaux-de-frise* should be exposed, and the remaining wide balk across the centre of the structure removed. After careful consideration, it was decided to leave this in place at least for the present, as the management plan for the *chevaux-de-frise* was not well developed, and it did not seem sensible to risk the whole feature with decay. Sufficient has been revealed for the overall character of the feature to be discussed, though the different portions do not reflect homogeneity, and therefore the missing section could provide further variation and certainly identify when the character changed along its length. Following publication of the discovery, and discussion regarding its significance, a further programme of excavation could take place with specific research aims.

5.1 Description

The central part of the *chevaux-de-frise* was excavated first, and it is easiest to begin with a description of this section, before moving on to those parts that can be argued are the terminals.

A small segment of the central part of the *chevaux-de-frise* was uncovered in the 1982 trial trench excavated by hand across the annexe area and into the outer rampart (Fig. 2.7). This was subsequently widened to reveal a stretch of the feature, and its structure could be understood. The *chevaux-de-frise* was composed mainly of shale but also with some igneous and quartz stones, set into the buried soil. This soil will have been compressed by being covered by the clay rampart, whilst the stones may have been held firm by the clay matrix, indicating that they were even more shallowly set that in reality. Nevertheless, they were only bedded in by a few centimetres, and their stone holes did not reach to the subsoil beneath. If the stones had been cleared when no longer required, no trace of their presence would have survived in the archaeological record (Fig. 5.2).

The shale slabs were generally 0.2–0.3 m long and under 0.1 m thick, though some were larger and a few reached 0.5 m long. The stones of other geology occur naturally as more rounded nodules, but these had dimensions similar to the shale stone lengths. Almost all stones were still standing upright, having been surrounded by the clay bank which held them in position, though a few lay flat. Whether these had fallen during the time that the *chevaux-de-frise* was in use, or when the clay rampart was constructed, is uncertain, but none lay on any clay material so if they had been dislodged at that point it must have been at the very beginning of rampart building.

The stones within the *chevaux-de-frise* were carefully set so that they had their narrow edges on the north–south axis, making them an obstruction for those approaching from the north. They were fairly regularly laid out, with a very straight and clear front, northern, edge with just a few displaced stones disturbing the clarity on the plan. The stones are not set in carefully measured out rows, but the effect is to provide roughly alternating rows of stones that prevent easy routes between the narrow upright slabs. The stones were sometimes set slightly at an angle, and in some cases lines of stones seem to run back behind each other, the angle meaning that the effect is the alternating one. Some of the lines seem to have been erected by the digging of a slight trench into which the stones were set and the soil and turf than packed back round them. In many cases, a spade could have easily made a slot in the turf, into which the stones could have been set. Even the larger stones would have been placed into a slot made by cutting out a small segment of turf. The erection of the *chevaux-de-frise* does not of itself reflect a very great amount of labour.

The rear of the *chevaux-de-frise* is less clear than the front. This may in part because it extended in places, such as in this central stretch, to the south beyond the protection of the later rampart. However, the lack of evidence for more fallen stones to the rear, or any sign of stone removal as was found to the east, suggests that the rear was never a neatly finished edge, further emphasising the importance of the outer, northern aspect of the feature. The width of the *chevaux-de-frise* rarely was more than 3 m (Fig. 5.3).

The western part of the *chevaux-de-frise* was the second part to be examined. Two later ditches, 1430 and 1431, that cut into the clay rampart were sufficiently deep to remove parts of the *chevaux-de-frise* and the buried soil, but the overall pattern remains clear. Just to the west of the eastern of these ditches, the pattern of shale slabs in lines is abandoned. Thereafter, for a distance of c. 9 m, a more mixed arrangement is visible, and with a much higher proportion of quartz blocks. The western extremity of the *chevaux-de-frise* is slightly damaged, not because it had not been completely covered by the clay rampart, but because of subsequent ploughing in the modern period which reduced the height of the earthwork and denuded its terminal. A few quartz blocks were found in the upper fill of the ditch terminals at the northwestern annexe entrance; these may have been part of a rampart revetment but were probably been dislodged from the westernmost extent of the *chevaux-de-frise*. Nevertheless, the excavations beneath the rampart terminal are sufficiently extensive to indicate that

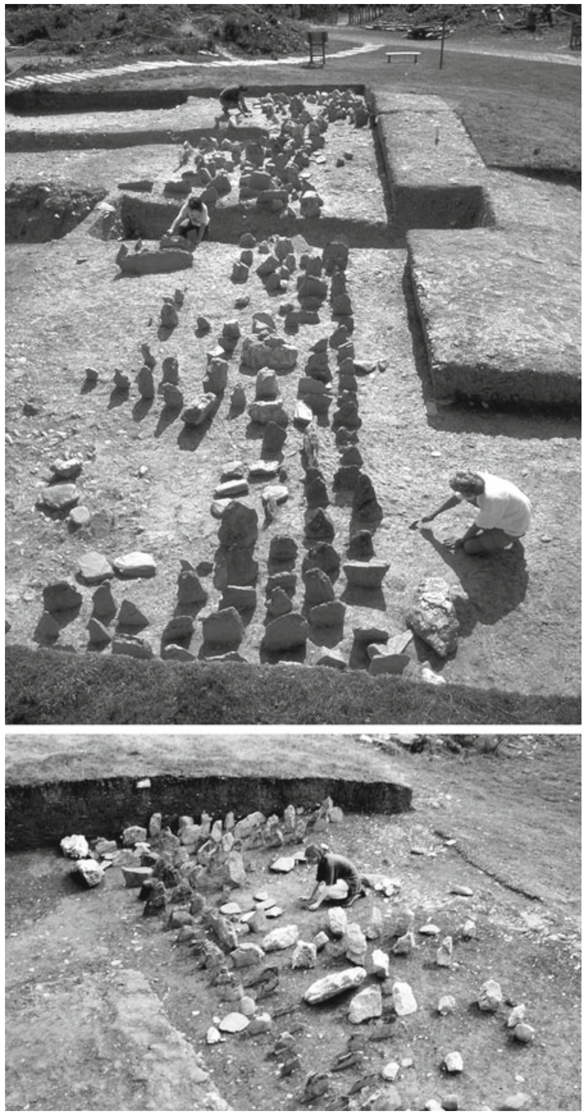

Fig. 5.2 The central portion of the *chevaux-de-frise*. *Top*: view from the east with the clear front edge of the *chevaux-de-frise* visible. *Bottom*: view from the northwest, showing the front edge, and use of shale in this part with more quartz behind

some of the westernmost parts of the feature remain, but this explains the slightly ragged edge of this feature as revealed.

The breakdown in the careful alignment of stones seen in the centre may be caused by one or more of three factors. The first is that it was easier to align and set the shale slabs in the turf, as described above, and this was less easy for the quartz. The second is that a different group of workers may have been responsible for this section of the *chevaux-de-frise*, and they may have made their contribution using different practices. The third factor may be that the terminal, being viewed from the west as well as from the north, required a different arrangement in order that the appropriate impact was made (Fig. 5.4).

It is possible that all three factors were in play. It is likely that the more extensive use of quartz is in part related to the construction of the *chevaux-de-frise* western terminal, but even so the arrangement used to construct the central section could have been adapted and applied to the west.

The variability in the character of the *chevaux-de-frise* is even more obvious when the eastern section is considered. Here the oblique lining of small shale slabs is even more obvious than in the central

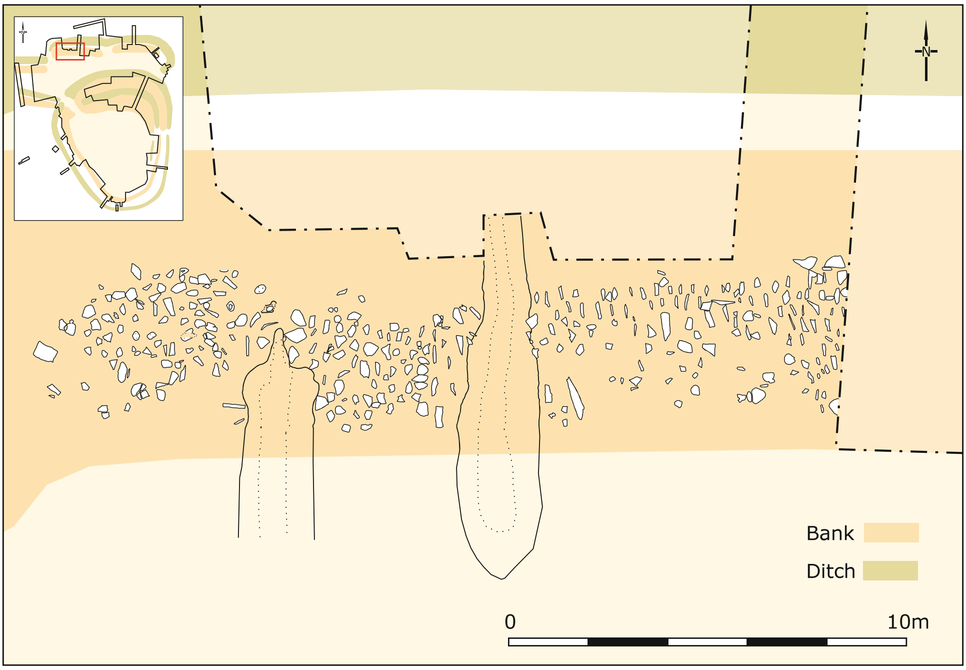

Fig. 5.3 Detailed plan of the central and eastern excavated portion of the *chevaux-de-frise*

section, but with even smaller slabs being used, and these lines contain more stones to cover the same width of 3 m (Fig. 5.5). Again the terminal itself is slightly ragged because of degradation of the rampart from recent agriculture, but as with the west here quartz predominates, albeit for a shorter stretch than to the west. The front face of the *chevaux-de-frise* is less clear on this stretch, though that is in part because here, unlike elsewhere, some of the stones were deliberately removed from their holes just before the rampart was constructed, and their stone holes filled with the clay of the rampart. If they had been removed much earlier, the turf and topsoil would have rapidly adjusted and filled in these clear depressions, but the rapidity of this sequence ensured their archaeological survival. Why these stones were removed is considered in this chapter as part of the discussion of the rampart construction within the arrangement of outworks to the fort.

The eastern section was formed of smaller stones than the centre or west, suggesting a different work group or phase in the construction (Fig. 5.6). The significance of the variations along its length is discussed further below. In no part of the *chevaux-de-frise* is there any indication of repair or replacement, though that could be difficult to identify. Stones could have been knocked out of position but easily reinserted into the turf, leaving no evidence of this. Likewise, any uprights damaged by animals or weathering such as frost action could have been replaced leaving little trace, though there is no positive sign or refurbishment. It is likely that the *chevaux-de-frise* had to a relatively short period of use, which would be commensurate with its design as part of the palisaded phase of the fort as a whole.

The positioning of the *chevaux-de-frise* beneath the later outer rampart is of considerable significance. It must be admitted that, if not so placed all evidence of it would not survive, but given that it has been this is unlikely to be coincidence. The section of rampart that sealed the *chevaux-de-frise* runs only a short distance to the east and west, and although it could be argued that if the *chevaux-de-frise* had run further it would not have survived, the discussions above are strongly suggestive that the excavated terminals are indeed the original limits of at least this stretch of *chevaux-*

Fig. 5.4 Western terminal of the *chevaux-de-frise*. *Top*: view from south, showing large proportion of quartz at the terminal. *Bottom*: view from northeast looking down to the later outer entrance and the excavated ditch terminals

de-frise. Many other hill forts have separate sections of *chevaux-de-frise* around their perimeters (Harbison 1971), but in the case of Castell Henllys no other part of the perimeter would be a likely candidate, given the steep slopes to the east, west, and south (Fig. 5.6).

The front edge of the *chevaux-de-frise* was about half way across the width of the later rampart, which ran on the same alignment as the *chevaux-de-frise*. This may itself be significant, both in terms of the rampart perpetuating a set amount of distance from the main site to the outer boundary, but also symbolically in burying this outer edge of the original settlement within the monumental earthworks. The significance of this is discussed further in relation to the outworks (see Sect. 10.3.2) and final discussion (Chap. 15).

5.2 Date and Place in the Site Layout

The placing of the *chevaux-de-frise* within the chronology of the site is problematic. Much depends on the phasing of the overlying rampart, but the date obtained by two radiocarbon samples of bone from within its clay layers are not conclusive because of the calibration curves for much of the Iron

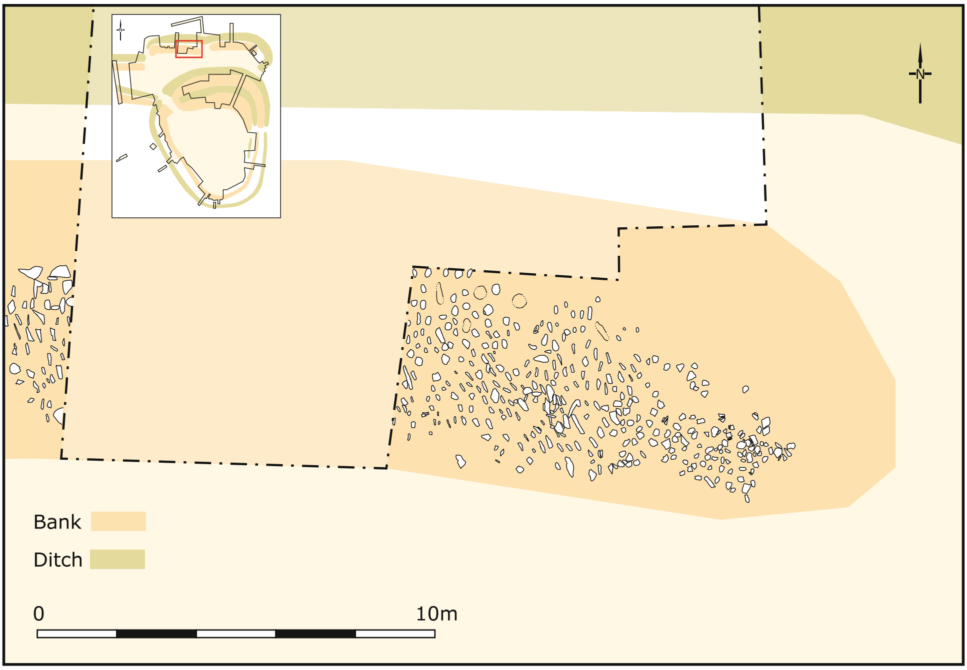

Fig. 5.5 Plan of eastern part of *chevaux-de-frise*

Fig. 5.6 Eastern terminal of the *chevaux-de-frise*. *Top*: view from the east showing small stones used, and the stone holes after excavation of the clay rampart that had filled them. *Bottom*: view from west; some of the stones in the concentration by the nearer figure are those taken from the stone holes and thrown down between the others

Age. The logical phase for investment in large ramparts and outer gate would have been when there was massive investment in the earthworks, when the first stone gateway was constructed. This would place the *chevaux-de-frise* in the earlier phase, with the palisaded settlement and perhaps the earliest earthen rampart 3693 on the west (see Sect. 8.1), and the first timber features at the entrance (see Sect. 3.4). In the discussion of the radiocarbon dates for the site (see Sect. 2.4), it was argued that the dates for these samples are not inconsistent with this, though they do not prove it. At present there is no obvious method by which this doubt can be removed. As it is likely that the palisaded phases did not last for a great deal of time, at most a generation, it would imply that the *chevaux-de-frise* was a single-phase structure. This has been supported by the detailed analysis given above.

The function and meaning of the *chevaux-de-frise* can be discussed considering its size and location on the promontory, the size, character, and distribution of the stones which comprise it, and its relationship with the wider topography and other contemporary features.

The *chevaux-de-frise* stretched across the highest part of the saddle of the promontory, and terminated to the west where the slope of the hill began to become steeper. Although the 69 m OD contour line crosses the westernmost part of the *chevaux-de-frise*, the variation in the height of the buried soil along the length of the feature varied little, from 69.12 OD at the lowest point to the east, rising to the highest point of 69.38 OD, with heights around 69.10 OD in the central section and as low as 68.95 OD to the west.

The length of the *chevaux-de-frise* clearly runs across the saddle of the promontory and makes perfect sense within the topography as found when the site was first occupied. The exact location of the western terminal point is easily explained as the ground begins to slope away more dramatically from that point. The eastern end of the feature is more problematic, however. The end matches the terminal of the overlying rampart, with its possible northern entrance into the annexe lying immediately to the east; there is certainly no surviving earthwork at this point. The ground begins to fall away, but not here as steeply as to the west. Where the later rampart begins again further to the east, it is extremely low, but there are no signs of any *chevaux-de-frise* stones standing up through the degraded rampart, and where excavation has exposed the buried soil there is no evidence of any *chevaux-de-frise* to the east. If the *chevaux-de-frise* had extended further, even after a gap which was later perpetuated in the northern entrance to the earthen ramparts, then it would have been buried under the albeit degraded eastern rampart and, after running for a further c. 15 m would have reached the point where the slope of the eastern side of the promontory began to fall away in a similar manner to that on the west where the *chevaux-de-frise* stops. If it had done this, then it would have mirrored the terminal point on the western side, and would have provided a feature that would have stretched across the whole of the flatter portion of the promontory's saddle. It is clear, however, that the *chevaux-de-frise* only ever ran across the western and highest part of the saddle, and that it did not extend across the whole promontory neck like the later earthworks did. Whether this was because of a shortage of suitable stone, as the material was much smaller at the eastern end and could not have even been used a symbolic markers if the stones had been any smaller, or whether this portion did not need any definition, is uncertain. These matters are discussed under interpretation (below); what can be confidently asserted is that the *chevaux-de-frise* did not extend across the saddle and was of a limited c. 38 m length.

5.3 Discussion of the *Chevaux-de-Frise* in its Castell Henllys Context

The pattern of stone selection within the *chevaux-de-frise* can be used to gauge its effectiveness as a barrier, whether physically defensive or as a symbolic marker. Whilst some of the upright stones were over 0.40 m tall, most were a little under 0.30 m high. As such they would have not have been highly visible except in shortly cropped grass, and so this area may have been used for the grazing of sheep. It is unlikely that such small stones, set in shallow holes in the topsoil, would have survived the more

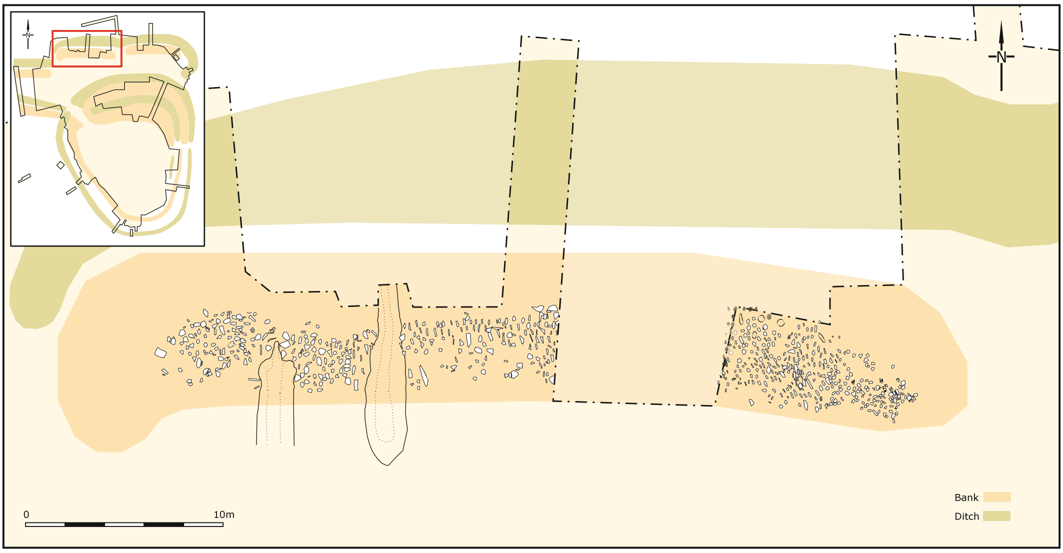

Fig. 5.7 Plan of the complete *chevaux-de-frise*

muscular attentions of cattle grazing in the vicinity. The larger stones were placed at the western end, with some diminution in size along the excavated western portion. The eastern terminal is formed of much smaller stones, with many under 0.20 m, which would have been little deterrent, and indeed hardly visible even in close-cropped grass (Fig. 5.6).

The width of the *chevaux-de-frise* would have been sufficient to slow a charging Iron Age horse (the size of a modern pony), which might have had difficulty in clearing such a spread of stones, but they were hardly a major deterrent (Fig. 5.7). Running warriors or ponies would probably have been merely inconvenienced by the *chevaux-de-frise*, and it was hardly sufficient to prevent progress of a charge. At best it may have slowed down the attackers as they picked their way between the stones, though this may have been sufficient for a volley of slingshots to rain down upon this particular zone, one that could have been perfected during practice. Not a single slingshot was found between the stones of the *chevaux-de-frise*, though any could have easily been collected for reuse if the grass was as close-cropped grass as has been suggested above. However, it is uncertain whether slingshots were in use at the time of the *chevaux-de-frise*, as none have been recovered from the early levels on any part of the site, though many were recovered from the following phase associated with the first stone gateway. The military role for the *chevaux-de-frise* therefore seems at best partial.

It is possible that the *chevaux-de-frise* primarily served a symbolic role, marking the boundary of the settlement and the approach to the fort. There are several reasons why this may have been the case. The first relates again to the size of the stones. The largest were placed at the western end, and it is this terminal that would have been passed by those heading for the main fort entrance in the north-western part of the fort. That this was the favoured route can be suggested by the positioning of the gap between the ramparts and the timber gateway that superseded the *chevaux-de-frise* (see Sect. 13.3.1). It is also noteworthy that the largest quartz blocks were placed at this terminal, stones which would have been highly visible. Although small, many of the stones used at the eastern terminal were also of quartz, suggesting that from amongst smaller stones the quartz was preferred for such a location. The ends of the *chevaux-de-frise* were therefore more visible than the centre, though the clear, crisp front edge, albeit largely of shale slabs, would also have been impressive.

The prehistoric use of quartz has often been seen as symbolically significant because of its whiteness (Darvil 2002) and similar associations run through later periods and into folklore. What the whiteness meant will have varied over space and time, but a symbolic association was frequently perpetuated or independently developed given the dramatic appearance of the material. A symbolic association cannot be completely excluded here, but its greater visibility may have been of more practical significance, though the selection of only quartz blocks 2752 (many more orange in colour) to revet the gravel rampart 3693 terminal at the entrance during phase western rampart and palisade 3 (see Sect. 3.4.5) may be significant and suggest some protective or other symbolic association with this material that whatever shade of white or yellow has a luminosity that is striking. During the subsequent gateway phases, some quartz was used but usually only in the basal layers of walling that were otherwise almost exclusively composed of shale, and there is no indication of particular purpose in selection of quartz. It also occurs as posthole packing, but much that is also shale.

The variety of rocks within the *chevaux-de-frise* does not suggest that material was specifically quarried for the feature. Rather, these rocks would have been found in the process of field clearance and gathered for use in the construction. The balance of shale, quartz, and igneous rocks is typical of field walls and stones still ploughed up today on the plateau north of the fort and in surrounding areas. Moreover, the rocks largely have rounded or eroded edges, suggesting that they were existing boulders rather than freshly quarried stones. This is in contrast to the stone used in the packing for the palisade which was quarried for this purpose.

It would seem that loads of rock (however transported) were brought in from field clearance and used, with the largest placed at the western end. It is likely that they were collected as fields were established and ploughed, and it may be that the length of the *chevaux-de-frise* was decided on the pragmatic basis of how many rocks were available, given the width required and the point on the west that seems to have been a fixed point from which the construction was designed. If more material had been available, the *chevaux-de-frise* may have continued further across the neck of the promontory, but instead it only covered the highest portion. However, the decision not to use quarried stone when this was easily available is noteworthy.

Whilst most of the promontory slopes are shale, bands of quartz occur within the shale beds. Thus the geology of most components of the *chevaux-de-frise* could have been augmented or even replaced by quarried stones, and these could have been larger and more consistent in shape and size. The use of field clearance stones was probably therefore significant. The extent of the *chevaux-de-frise* may have been dependent upon and representative of the scale of agricultural investment by the inhabitants of the fort and any subservient populations. Its placement at the edge of the settlement could thus indicate a link to the wider territory, and the level of power and control exercised by the inhabitants. As it is highly likely that the *chevaux-de-frise* was constructed at the time of the palisaded settlement, before the construction of the earthworks, this may have been the main way in which social structure was physically manifested, and the medium by which the wider modification of the landscape was signalled. The palisade itself indicated quarrying of the hill and the clearance of woodland; the *chevaux-de-frise* indicated the agricultural component.

The relatively short length of the *chevaux-de-frise* may have encouraged movement of people and stock around both ends of the feature. This then created patterns of communication that were perpetuated by the entrances into the annexe defined by the later earthen ramparts. Its protective role, perhaps both militarily and symbolically—a combination more separated in modern archaeological minds than perhaps those of the original constructors—also created patterns of avoidance that were through repeated daily practice of movement embedded into the mindsets of the inhabitants such that they were replicated in the later phases of site development, and indeed the main route to the west has been maintained to the present day.

The choice of rocks by material emphasised the terminals, by size the western portion, and by arrangement the northern, front edge. It was, despite its heterogeneous content by geology, shape, and size, a carefully constructed and designed feature. The *chevaux-de-frise* was therefore to be appreciated by those approaching the fort, most likely from the west and north, though with a clearly differentiated eastern terminal, even if this was less substantial.

The role of *chevaux-de-frise* is now a matter of some debate, with a military function now only one possibility. The Castell Henllys *chevaux-de-frise* contained small stones and could not have cut off a full frontal assault on the settlement and its gateway, but it may have deflected any attackers along specific routes. Alternatively, it may have functioned not as a defensive feature at all but as a boundary that encouraged those approaching the fort to move round to the western terminal and follow along the contours towards the main fort entrance, ensuring the appropriate route through the outer features and into the enclosure. It could also have symbolised the clearance of fields and the establishment of control and understanding of the wider environs, its creation signalling the improvement of the arable lands and possibly the obligations of a subservient population living around and managing these potentially scattered holdings. These meanings should not be seen as competing hypotheses, but probably part of a multiple combination of function and meaning, commemorating the setting up of settlement and farmed landscape, defining settlement size, and stating a determination to control and modify the landscape, something achieved to a more monumental degree in the earthwork phase to follow.

5.4 The Castell Henllys *Chevaux-de-Frise* in its Wider Context

Whilst Castell Henllys may be the only extensively excavated *chevaux-de-frise* in Britain, others are known from surface survey, and these can be compared with this example. Moreover recent research, including excavation, elsewhere in Europe can contribute to some comparative discussion of the role and significance of this feature. It also should be appreciated that Castell Henllys is not the only Pembrokeshire example of a *chevaux-de-frise*; a very extensive and well-preserved example can be seen in the Preseli mountains to the south at Carn Alw (Mytum and Webster 1989) and recently another example, preserved beneath a later rampart as at Castell Henllys, has been noted at Black Scar promontory fort (Murphy forthcoming)

The scale of *chevaux-de-frise* varies greatly, from the small stones of Castell Henllys to the major monoliths of Dún Aonghasa (Cotter 2000, 2003), but this is largely related to geology. Of more significance, perhaps, is the location of any *chevaux-de-frise* in relation to other enclosing features, assuming that they are contemporary. Most *chevaux-de-frise* occur from near the base of a rampart or wall, and stretch some distance from the linear earthworks. In many cases the areas where there are fragments of *chevaux-de-frise* are patchy, and it is rarely clear whether this intermittent presence represents the original design, or partial survival. Certainly the Castell Henllys evidence would have been eradicated very rapidly if the stones had been cleared, since the stone holes only penetrated the topsoil and so would have disappeared with vegetation regeneration and normal soil turbation processes within only a few years. Similar shallow sockets for small stones have also been noted at Doonamo, Co. Mayo (Cotter 2003: 114). The Iberian evidence includes some sites where the *chevaux-de-frise* elements come right up to the foot of stone walls, or to within only a few metres (Alonso et al. 2003). At the only other extensively excavated *chevaux-de-frise* at Pech Maho in Languedoc (Gailledrat and Moret 2003), the stones were small but placed at greater intervals and in rough lines, creating a barrier similar in scale but quite distinct in detailed character to that at Castell Henllys.

One of the interpretive challenges with *chevaux-de-frise* relates to the infrequent but geographically widespread occurrence of this feature (Harbison 1971). To what extent does the presence of such a distinctive monumental feature suggest some form of communication? Given that there is other evidence for long-distance contact, maintained in varying degrees of intensity over many centuries, along the western margins of Europe (Cunliffe 2001, 2005), to what extent does the Castell Henllys and indeed the other Pembrokeshire *chevaux-de-frise* reflect participation within this network? The alternative is that the idea of using stones on edge to form a feature, often manifested so differently in scale and extent in the various regions across western Europe where they are found, is due to independent invention within similar cultural and technological contexts.

The westerly distribution of *chevaux-de-frise* in Britain and Europe partly reflect where survival is most likely, but that there may have been more in other areas does not undermine the connections argument as it helps to explain the patchy nature of the current distribution. It would seem that the phenomenon was known across the western seaways, but was adapted and applied in regionally specific contexts and for local purposes. As part of a wider cultural repertoire, and perhaps with symbolic protective or communal associations which would not be denied by those cases where size and scale suggests to some archaeologists more military functions, the *chevaux-de-frise* marks a barrier that could be crossed, but not without being aware of it. Each *chevaux-de-frise* could be quickly and easily constructed and just as easily removed, possibly only a temporary feature in many cases and so only surviving in abandoned fragments for archaeologists to find. These survivors may originally have been part of a much more widely experienced phenomenon, placed in zones outside the main earthwork perimeters that are easily subject to agricultural and stone-robbing processes that would rarely allow their survival. The encasing of the Castell Henllys *chevaux-de-frise* within the rampart may have been fortuitous, or could have been a deliberate incorporation of its symbolic values within the later earthwork.

Chapter 6
The Palisaded Settlement: Its Size, Character and Environmental Impact

Abstract The topography of the original promontory can be reconstructed from the buried soil surfaces beneath the ramparts, and putative models for the northern palisade are proposed. The chronology of the palisade settlement is tight, limited to one lifetime of posts in the palisade as there was no replacement. The posts were still upright when the rampart construction began, and so the palisade has a maximum life of c. 40 years. This allows consideration of the resource implications of constructing the palisade and initial settlement, and suggests a landscape already managed with coppiced woodland, and the settlers quarrying for packing stones. The arguments for a defensive and a symbolic or psychological role of the palisade and *chevaux-de-frise* are discussed.

Several issues need to be addressed as part of the appreciation of the significance of the palisaded settlement, and for comparison to be made with other palisaded settlements elsewhere. These issues can be defined as overall site size and any possible entrance; chronology and contemporaneity; the original density of settlement; the resource implications of constructing the palisade and its settlement; comparisons with other archaeologically investigated palisaded settlements; and finally the possible functional and symbolic roles of the palisade.

6.1 Topography, Overall Site Size and Possible Entrances

The palisade has been located in the north-west, west, south, east and northeast. Some of the lengths of palisade uncovered have been considerable, and are all sufficiently similar in character to infer that they are all part of the same feature. This allows a confident identification of the palisade for three sides of the settlement, and these elements will be discussed first. Problems arise, however, on the northern side of the site, the one most easily approached on foot and where the later earthwork phase was most substantial. The various alternatives have been set out below, followed by consideration of but how they would work when integrated with the rest of the evidence is discussed here. Of particular relevance are the early posthole features in the entrance area that may relate to pre-earthwork activity, and so may be associated with this palisade phase and indicate a more impressive appearance for the settlement than otherwise implied by the limited range of structural features. The potential arrangements on the northern side are discussed second, and then they are followed by some overall conclusions regarding site size, relationship to the natural topography, and access to the site.

The line of the palisade can be placed on a contour plot of the proposed original topography of the hill. The hill slope has been modified by scarping and ditch digging, but a more rounded profile can be calculated from the buried soil levels beneath the ramparts and the level of the subsoil at the outer edge of the ditch and terrace. The palisade can be seen to lie on slightly sloping ground, but well back

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Fig. 6.1 Plan of palisade on contoured map of the promontory; note the knoll under the later line of the later rampart. The later earthworks are shown to aid orientation

from any steep slope, as can be postulated in the southernmost tip of the promontory. It would thus have been possible to enclose a larger area, as indeed the location of the later rampart largely forward of the palisade on the east and south suggests. On the west, however, the palisade probably closely followed the front of the rampart, and has been lost for part of this length (Fig. 6.1).

The consistent efforts undertaken to provide a palisade around three sides of the promontory can be contrasted with the unclear evidence on the easily approached north. This is not easily explained, and to our minds used to symmetrical solutions, and the coherence and internal consistency of markers of enclosure, no option appears fully satisfactory. The length of the occupation cannot allow the argument that it was unfinished to stand, especially given the numerous phases of entrance plan during this time, suggesting an interest and investment in the approach to the site, one side of which remains hard for us to comprehend. Partial destruction may explain some absences, as discussed below, but with all models there remain problems with linking the inner gateway features on their eastern sides. The extensive areas of buried soil revealed many features, but none adjacent to the gateway structures, despite very careful cleaning in many soil conditions, and the ease with which the other features cut through the buried soil could be identified. The models presented below thus offer

Fig. 6.2 Plan of possible lines of the palisade. *Green line*: possible fence line. *Light blue line*: possible inner palisade line. *Red line*: possible outer palisade line

some "best-fit" suggestions following years of consideration both on site and in post-excavation through intensive study of the records.

6.1.1 The Northern Post and Rail Fence Model (Figs. 3.8 and 6.2)

None of the excavations beneath the northeastern rampart has produced evidence for the palisade. Its nearest known location to the southeast was as it curved northeastwards at the edge of the excavations revealing the terminal of the rampart (see Sect. 3.2.3). In this model, it is proposed that the distance between the natural knoll on the northeast of the promontory and the entrance was demarcated by a post and rail fence, indicated by a series of postholes. These are marked with a green line on Fig. 6.2.

The postholes 4560, 4561, 4566 and 4567, albeit not all contemporary, form a line that points towards the entrance and other postholes to the west (Fig. 3.8). These, notably 4554, 4555, 4297 and 4261, may indicate the fence line, to which may have been fixed wattle hurdles if the stakeholes 4296 should be associated with this line. However, this line below the rampart does not exactly match up with the palisade side of the entrance, and given the flat topography it would have been easy to sight the line to meet the entrance. Moreover, the surface of the buried soil was very clean on both sides of the line made by the postholes, when one might have expected the area within the settlement to have been different to that outside if there had been a boundary across the area. It is also unclear why the palisade swung out round the natural knoll only to be replaced at some point on that part of the circuit with a post and rail fence.

A further significant problem with this model is the distance between the westernmost likely posthole, 4261, and the entrance features such as gate post 3757 and possible fence line marked by postholes 3745 and 3482 and 3755. The distance here is c. 6.5 m which, given the apparent spacing of the posts to the east, suggests one or two missing postholes in an area where the survival of early features is excellent. A span of 6.5 m is too great for the final section of fence, even if the wattle hurdles were replaced with rails or planking.

The postholes do not form a continuous, evenly spaced line, and this is one of the most problematic features of this model. It is possible that some postholes lie under the excavated rampart, but the putative line does suggest that the areas excavated partly into the rear of the rampart should have extended far enough northwards to reveal the postholes. The postholes that have been found are clearly not all contemporary, but replacements can be identified that would have allowed the line to be maintained on parts of its length. Though there is no evidence of maintenance and replacement along the palisade sections, it may be that a post and rail fence was less resilient.

The post and rail model is a viable one, even though it has some weaknesses such as the awkward alignment at the entrance, the uniformity of the buried soil, the paucity of postholes in some areas of buried soil and so an apparent large gap near the entrance, and no explanation for the change from the palisade used everywhere else on the circuit. However, if one of the other the palisade models (below) is followed, the postholes that have been uncovered still have to be explained.

6.1.2 The Inner Palisade Model (Fig. 6.2)

The inner palisade model places great stress on the similarity of the character of the palisade on all three other sides of the promontory apart from the north. The lack of palisade under the rampart can be explained by the line taken by the palisade. Last identified on the northeast swinging out to enclose the natural knoll, the palisade would have run round the contour of the promontory slightly downslope of the later rampart, and so would have been removed by the ditch digging. The exact line, marked in red on Fig. 6.2, is speculative for the whole of its length, and could have been as far south as along the southern edge of the ditch as first dug, and this could explain why the ditch had been dug too far to the south in places, and this edge of the ditch had to be refilled to support the front of the rampart (see Sect. 9.3.2). Alternatively, it could have swung even further north than marked, lost in the scarping and ditch digging for the outer rampart and ditch of the main defences.

In this model, the palisade would have approached the entrance route to the terminal of ditch 3716 that was later infilled for the earthworks of the entrance complex. This does not form a perfect mirror image with the palisade excavated on the western side of the entrance gate, but lies further to the north. This would offer a staggered, asymmetrical linkage to the inner entrance, but one not significantly more asymmetrical than that proposed with the post and rail model, and if the entrance corridor between the inner and outer gate features were lined with fencing, this would not be at all apparent. The gap between this fence line and the ditch terminal is less than 4 m, still a significant distance, but less than with the post and rail model. When the western palisade and rampart phase 2 was constructed, and two convex lengths of palisade marked the entrance point (Sect. 3.4.5), the eastern one, 3718, would have been adjacent to the end of the palisade if it had been in the ditch cut. Although by this stage the palisade may have gone out of use along the northern circuit, just as it had done in the excavated northeastern sector, it is possible that gully 3718 perpetuated the line of the infilling length of fencing from earlier times.

The palisade would completely encircle the settlement, and the line of postholes that made the fence line in the other model would lie within the settlement. Given the relatively easy approach on this side of the site, it is possible that the posts allowed a fence line parallel with the palisade, in which case the alignment of the posts could give an indication of the outer palisade line. It was notable how clean the ground around the posts was, so domestic or craft activity would be unlikely. In the palisade entrance phase 2 (see Sect. 3.4.2) a line of postholes was constructed on the western side of the entrance, and these may be the equivalent of these postholes to the east, though closer to the palisade there. These posts might mirror some of the post holes found to the rear of the palisade west of the entrance.

6.1.3 Outer Palisade Model (Fig. 6.2)

It is also possible that the palisade swung further to the north, and may have crossed the line of the outer rampart, though not within the part excavated down to the buried soil. Such a line, marked in light blue on Fig. 6.2, could have run round along the line of the outer scarping of the hill or the line of the outer ditch. It would have joined onto the outer entrance features, but this association has been cut away by the ditch terminal. Nevertheless, postholes 3620 and largely-lost 3769 could either have acted as terminals for the palisade. In this model it is possible to see how the palisade line could join onto the gate structure, here the outer one. This creates a spiral plan, which appears unsatisfactory to modern eyes. However, if the routeway between the inner and outer gates were in some way demarcated, as suggested in the inner palisade model (see Sect. 6.1.2), this would not have been seen as a problem for the inhabitants. Whilst it would assist understanding the function of the outer early postholes as gate features, it appears to make interpretation of the inner gate more difficult. However, if fencing set in shallow slots, of which early fragments survive at the outer gate, had been used up both sides but have not survived because of wear in the entrance way, then this model works well. The spiral is not so awkward when the promontory's topography is considered, with the steep western slopes creating an asymmetry at the entrance that is in effect perpetuated later with only one rampart on that side and two on the other. Indeed, this model may best explain the presence of outer gate features, and indeed the later double bank and ditch on the east and single on the west, again coping with the topography across the spine of the promontory to the east and the steep slopes to the west.

6.1.4 Discussion of the Models

The two palisade models are viable but have some weaknesses such as the awkward alignments at the entrance, the lack of even a small stretch of surviving palisade, and the not fully convincing purpose ascribed to the line of postholes within the settlement. One line explains the outer gate features, the other the inner ones. None of the models is fully satisfactory, and it is possible even that all are correct, with the continuous palisade augmented by the line of postholes that joined the inner gate features, and the outer palisade line joined the outer gate features.

The area enclosed by the palisaded settlement must have been a minimum of 5,400 m^2, following the post and rail model. Alternatively, it could have been 6,200 m^2 with the inner palisade enclosing the knoll, and as large as 7,750 m^2. If the outer palisade applies, given the location of the outer entrance postholes, the last seems most likely though perhaps combined with the inner palisade. The overall plan of a double palisade line on the north—each later mirrored by a ditch—would provide a precedent for the construction of a bivallate earthwork in this part of the site, with just a univallate earthwork elsewhere. From the beginning, it would seem that the entrance was relatively complex and impressive, and the numerous changes in design may reflect the resources invested in this aspect of the site that were to be most dramatically represented in the first stone phase that followed (see Chap. 12).

There certainly are several phases of activity represented during this phase west of the natural knoll, with postholes before and after the small clay mound (see Sect. 3.3). The cut in front of this may be yet another phase that could be earlier or later, or linked to the beginning of the main rampart construction phase. Within the changes taking place in this part of the site, some ritual activity as indicated by a structured deposition was taking place. There is clear continuity into the rampart phase, both in terms of posthole survival, and in ritual activity close to the previous deposition. Two of the postholes, 4556 and 4241, definitely showed evidence that they were still standing when the main rampart was constructed, though it would seem that they were removed before the rampart reached any great height. Other postholes were infilled prior to rampart depositions, though they could have been standing until that moment. This evidence further emphasises no clear break between the palisaded and earthwork phase, but rather continuing traditions and activities, with the gradual creation of the earthworks and the necessary modifications of the earlier settlement.

6.2 Chronology and Contemporaneity

The first assumption made in the following discussion is that all the features described above should be linked with the palisade. Whilst the palisaded phase undoubtedly includes most of the features described above, some were probably established prior to its construction, and a few features clearly postdate the palisade yet lie beneath the later rampart. Whilst parts of the palisade were still standing when the rampart was constructed, other sections had been removed or had rotted in situ.

It is clear that scoop 4524 was dug, used and backfilled prior to the palisade. It is also possible than many of the other structures and activity areas could have been established prior to the palisade construction. For example, the features sealed beneath pebble surface near the entrance that ran round the posts in the palisade may represent activity prior to or overlapping with the palisade phase. There could have been an open settlement before the palisade was erected, but its scale is impossible to ascertain. Nevertheless, only the one scoop, 4524, could not have been in use during the palisaded phase (see Sect. 4.3.7).

Only on the eastern side of the site is there clear evidence that the metalworking continued after the palisade was constructed, and indeed some deposits sealed the palisade trench. These may have been laid down during craft activity after the timbers of the palisade were removed, but it is possible that craft activity had by then ceased and the thin layer of black material washed down the slope and sealed the palisade.

All activity assigned to what has been termed the palisade phase is either at the lowest point of the sequence, as with the scoops on the west, or is overlain by the rampart that also seals the palisade. Given that the roundhouse and the craft activity area remains were not eroded, it is likely that they were sealed by the rampart immediately or very soon after their abandonment, but this again could be after the palisade had fallen into disrepair and been partially dismantled. The stone-packed voids in the southern portion of the palisade circuit indicate that here the posts had rotted in situ, and this is confirmed with the voids surviving in the gravel bank in the northwestern rampart. The evidence is less clear on the east, however, where it is possible that that the timbers were either removed or the palisade had rotted at the base and collapsed, allowing deposits to form over the trench before the construction of the northeastern rampart terminal, though the diverging alignment of the palisade and later earthworks at this part of the site may also account for the desire to dismantle this section of palisade, as could its relatively late stage in the rampart construction sequence.

The evidence as a whole strongly suggests that some structures and activity areas of the settlement were definitely in place when the palisade was standing, but it is not possible to ascertain how much was present prior to the palisade construction, nor what continued after at least parts of the palisade fell into disrepair. The size of posts used in the palisade would probably last only 1 or at most 2 decades as viable structural timbers, given their exposure to the elements (especially gale force winds), and the way they functioned in a linear feature with limited lateral support. Given that some posts were still standing when the rampart construction west of the entrance began, it suggests a short-lived palisade phase of one generation at the most. The lack of accumulation of domestic or other debris in the scoops not directly associated with craft activity again implies a limited length of use.

Other evidence suggests a longer sequence, though still perhaps only of decades. The craft areas indicate a complex sequence, and there is evidence elsewhere of some changes, such as with the mound 4414 beneath the northern rampart (see Sect. 3.3), and the one part of the palisade on the east that may have been rebuilt. A relatively long sequence of structural features near the entrance, including phases beneath pebble surface 3696, may indicate activity beginning before the palisade. Several phases of design at the entrance, some poorly understood because of the later building works but still nevertheless present at this early stratigraphic stage, indicate sufficient time for these various structures to be erected, tried out and modified.

Much of the evidence points to a relatively short occupation, starting in places before the palisade was constructed, and with other elements being added during and after palisade construction. As some of the earthworks, such as the western bank 3693 was built, occupation continued. With the building of the northern inner rampart some structures and activity areas had to be abandoned, and some were then relocated elsewhere. Some structures and activities away from the ramparts themselves may have continued in use from the palisade and into the earthwork phase. The absolute date of the palisaded settlement can be estimated from a number of radiocarbon dates provided from features sealed beneath the rampart (Table 2.1), and a date of 410 BC is the most likely. They do not assist with measuring the length of the phase, however, as this was relatively short and because of problems with radiocarbon calibration for this period, but likely survival life of timbers gives a duration of the whole pre-rampart activity of up to 40 years. Over this period there are many significant changes in the entrance, suggesting each phase lasted on average less than a decade and implying considerable experimentation regarding this architecture prior to the establishment of a more permanent arrangement in stone. Occupation on the promontory before the major earthworks was perhaps longer if a few years elapsed before the palisade and any formal entrance was constructed. It would be reasonable to imagine a whole generation experiencing a series of rapid settlement transformations, from arriving at a new site, through constructing a palisaded enclosure, and beginning to establish the earthwork form of settlement.

A discontinuity of occupation is not implied by the change from palisade to earthwork; rather, there was a gradual evolution from palisaded to earthwork settlement. Moreover, this transition would have been largely accomplished by people who had not been alive or were only children when the original site was chosen and occupation on the promontory began; only the elders would fully remember life at any previous settlement. By the time that the palisade phase came to an end, the occupants of the site would feel established and no other home would be known so well. The landscape would have been exploited over a range of years during which the inhabitants had both experienced seasonal variation over decades and established or modified the landscape components of woodland, arable and pasture. The learning process regarding interaction with neighbours, natural resources and the spiritual world around them would have been sufficiently completed for a confidence and sense of tradition to be in place. This may, then, have been the time to define the settlement in earthworks.

Only the extensive excavations, including of lengths of rampart, allowed the identification of the extent and complexity of the pre-rampart phase. Previously there has been no consideration of the logistical issues in establishing all aspects of settlement whilst also designing and constructing monumental defining earthworks. Here the preliminary phase of settlement has been identified, giving time for resource identification and mobilisation of labour necessary for the monumental construction.

6.3 Palisade Construction and its Resource and Landscape Implications

The well-preserved nature of the palisade at various points around the promontory allows some assessment of the form of the palisade, and calculation of the resources needed to construct it. This can be first viewed simply as the practical implications of social priorities; the reasons for a palisade are discussed below (see Sect. 6.5).

The palisade consists of a trench that varied in its surviving depth but was generally around 0.4 m. The stone packing in the trench was considerable, and the upright timbers held by the stones suggest a diameter of such timbers of around 0.07 m. The uprights were placed in the trench at intervals of c. 0.2 m, and from these measurements an estimate for the total number of uprights can be calculated.

The uprights leave direct archaeological indications, but their height needs to be estimated, and the materials used to tie these together are not certain, and need to be inferred. Given the trench depth of 0.4 m, it would be reasonable to assume a height above ground of 1.2 m, making the uprights 1.6 m long. It is highly unlikely that substantial elements were used to hold the uprights together; they would make the palisade fence very heavy, would require the use of large amounts of twine to hold the elements together, and would not provide any internal tension. In contrast, woven rods of hazel would require no other resources and would, at least whilst green, provide tension that would help hold the structure together. The palisade could be tightly woven with rods packed together, could be loosely but completely filled, or could be intermittently woven, the groups of rods being the equivalent of horizontal fence rails. The advantage of the last is that less resources are used, and also less wind resistance. Whilst wattling of a roundhouse has an intrinsic stability because of the circular shape, and the additional structural support of the daub walling and the integrated structure of the roof, this was not the case with the long lengths of the palisade. Moreover, no obvious additional supports have been found to brace the palisade, so one of the less substantial infill options between the uprights is likely. None of the packing or upright voids suggest movement caused by wind, though hurricane force winds can occur on the promontory during the winter. It is thus possible to suggest three quantities per metre depending on the form of palisade wattling, but the smallest figure is most likely for a number of reasons.

The palisade is known from west of the entrance round to the most northwesterly known location, but if it then ran round the inner ditch line this would suggest a total length of 305 m, and if to the outer gateway features, 340 m. If both may have been present, 440 m of palisade would have been required.

Some of the packing suggests that, rather than whole timbers wedges of larger trunks were used in some places, but generally the voids in the bank and the shape suggested by the packing would indicate unshaped elements. The nature of the surrounding landscape at the time of the settlement in the fifth century BC is unknown, but the number of similarly sized timbers suggests a managed woodland nearby, and one where coppicing on a longer cycle was available. The most likely woodland type, given the geology and topography, was that of both oak-hazel-ash and birch-oak woodlands (Peterken 1993). These woodlands, managed since the Middle Ages if even of this age, do not represent any natural forest, but have been culturally constructed. The same is likely to have been the case in the Iron Age, though in what ways they had been manipulated is impossible to be certain. The use of medieval data may carry with it assumptions that should not be pushed back into later prehistory, and it is important to consider the possible 'steady state' of management once the settlement was established, and the nature of the environment into which the settlers arrived.

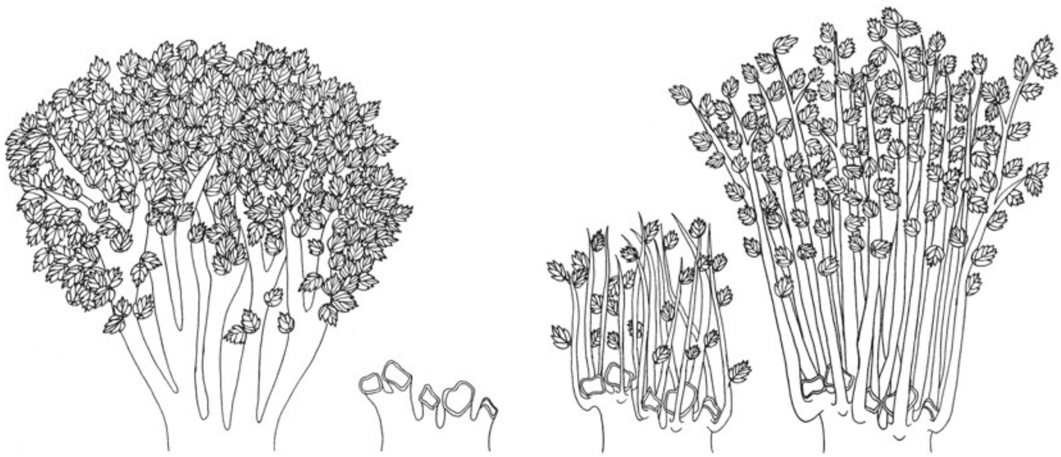

Fig. 6.3 Coppicing diagram

6.3.1 Historic Woodland Management and Production Figures (Figs. 6.3 and 6.4)

The most efficient, yet low-technology form of woodland management is that of coppicing, where trees are cut down close to the ground to recover timber, but their roots are left intact (Buckley 1992). Shoots sprout from the trunk, and these grow relatively straight and upright, and can indeed be further thinned and managed over time. After a number of years, timber can be harvested again, and the cycle repeated indefinitely (Fig. 6.3). Old coppiced woodland is recognisable as the stools, the repeatedly cut back trunks, grow into massive size, and in good woodland management these are allowed to grow in a spaced way to maximise light and growth (Fig. 6.4). Coppiced woodland can be managed in this way for centuries; after periods of neglect, it can be brought back into regular management relatively easily.

Although more recent coppicing has tended not to include Oak, this can be coppiced, and was used in the past to provide fencing as well as tanbark and charcoal (Evans 1992, 23). The cycle of rotation for Oak is 18–35 years, which is relatively long. Hazel coppicing, used for wattling, is on a cycle of only 6–10 years (Evans 1992, 22). In the Middle Ages cycles were short (4–8 years), but these were extended to 15 years by the nineteenth century (Rackham 2003, 140). This may reflect a change from faggot sticks to logs for firewood, though other factors may have been responsible. Strangely, little research seems to have been carried out on coppice yields, and studies of sweet chestnut (Ford and Newbould 1970) are difficult to translate to other species. Calculations have also been in volume and weight rather than amount and types of usable constructional timber.

A forester's table of 1269–70 gives some indications of production in a medieval context (Rackham 2003, 140–42), which may be a more useful parallel than some of the more recent, scientifically informed, commercially active forests. From 1 acre every 20 years could come 40–50 tons, a production of over 2 tons per acre per annum, though that is high by modern standards and may reflect a labour intensity more applicable to recovering this resource in the past. The relevant materials for the palisade are 500 bundles of 40 fencing rods, each 2 m long. Thus 1 acre generates 20,000 rods if completely cleared (this would be 1,000 a year on a sustainable basis). The uprights are not quantified in the medieval documentation, though they were produced for fencing. In addition, 200 faggots (bundles of small firewood) can be produced each year, and the equivalent of about 1,200 (1 m length and 3 cm diameter) firewood is generated each year, though these products were labour-intensive to collect (Rackham 2003, 140–42).

Modern commercial figures also help to quantify hazel coppice production, and what they imply for areas under managements. One estimate is that density of hazel stools may vary from 400 to 800

Fig. 6.4 Coppiced woodland. *Top*: Stools after cutting. *Bottom*: Stools after a few years' growth

per acre, and each with as many as 60 rods of at least 2 m to be harvested on rotation. Taking a conservative estimate of a production of only 4,000 rods per acre per year, but with 50 % of the material wasted, this would still produce about 200 m of hurdles. This is with about 12 rods used in the height of each hurdle. This would be roughly the density required for the palisade fence, and indicates the scale of management needed to produce the necessary supplies. Even for the most extensive palisaded arrangement, only 2/3 acres of dense hazel coppicing would be required; if this were on a rotation ensuring even production this would imply 15–20 acres, but given that the palisade probably represented an unusual demand that could be satisfied by cutting suitable rods from stools normally cut over 2 or 3 years, a steady state coppice hazel wood of under 10 acres would probably have been sufficient, if no other demands were made on it that year. If the coppicing was scattered amongst other trees in a mixed woodland the total acreage would be larger, but this could still have been in relatively few acres all within easy reach of the promontory.

The upright timbers do not appear in quantified form in the medieval documentation, it is necessary to estimate this on the basis of either coppiced Oak or as young timber standard trees. In both cases the diameter suggests an age of 10–15 years, though growth rates vary according to soil quality

(Nisbet 1905, 297). The density of suitable trees depends heavily on management linked to species variety, age structure in the woodland, other timber requirements and indeed other uses of the forest. Oak stools would be found at a lower density than that of hazel, and fewer uprights would be produced from each, but assuming a density of 100 per acre and 10 uprights per stool, each acre ready for cutting would produce sufficient uprights for 200 m at an interval of 5 per metre. Thus, the uprights could come from an acre of oak (though with its longer rotation this would require perhaps 25 acres to sustain this supply level annually), but could certainly could be selectively cut from up to five of the most mature year cycles of coppiced oak where the most suitable elements could be cut from all the stools. There is no indication that this level of annual hurdling was necessary, though if animal pens and elements of field boundaries were marked in this way then this may have been the necessary annual production. Consideration of wider uses of woodland for firewood, housing and agricultural purposes, will be further considered in the second volume.

It is possible to calculate the area of coppiced woodland necessary to generate the material for the palisade. Details would depend on the method of construction, but an approximate impact on the landscape can be estimated with some confidence. The amount required suggests that it is unlikely to have been brought from any great distance. A combination of coppice cutting and land clearance for settlement and agriculture would have provided the necessary resources, probably within 1 or 2 km from the settlement. Nevertheless, given the topography, this may have involved considerable human effort to cut, trim and transport the material to the settlement.

Other materials were needed to construct the temporary structures and indeed the roundhouses that began to be constructed during this phase. Moreover, the entrance features also utilised larger timbers, though the relatively small number could have been obtained from a few nearby trees and have had few resource implications. The resource implications for roundhouse construction and maintenance are to be discussed in subsequent volume.

6.3.2 Forms of Coppicing

Coppicing can be a simple coppice, all trees being cropped on the same basis, with different areas of the woodland cut each year on rotation. Whilst some recent coppicing may be of a single species, most older coppicing regimes are of mixed woodland, though certain species may be selected to match demand for different types of material. Coppice with standards includes some trees left to grow as larger trees for more substantial timber, creating a two-storey forest with two patterns of rotation. The standard trees (often oaks left for major structural timber) were harvested variously between three and eight coppice cycles (Evans 1992, 22).

The clearances necessary to generate the resources for the palisade would have dramatically altered the appearance of the landscape, though if this was largely through coppicing it would have rapidly regenerated. Given the time span of the palisaded settlement, it is possible to envisage the regeneration of the coppiced oak stands at least once, and the hazel coppices perhaps four times. Moreover, the size of timbers used for roundhouse doorways and rafters could also have been generated during the time of the palisaded settlement, and so manipulation of existing and creation of new managed woodland during this phase would have provided the infrastructure to support and sustain the mature, earthwork-enclosed settlement indefinitely.

6.3.3 The Stone Required for the Palisade Trench

The amount of packing around each timber upright was substantial. Indeed, by weight the stone must have been greater than the wattling used between timber uprights. At all locations, the palisade packing

Fig. 6.5 Segment of the *chevaux-de-frise* showing the variety of rock types and shapes used

was substantial and made from rocks that could not have all been collected from field clearance. Almost all the material was shale, and was largely medium grey in colour, though it was a lighter, more yellow shade in the northwestern segment. There was some quartz used, but this occurs in veins in the shale and does not seem to have been specially selected. It is likely that the shale was quarried from outcrops on the slopes of the promontory; later quarries are visible, but the amount needed for the palisade was tiny compared that required for the subsequent earthwork phase with its stone gateway and internal revetment wall. Nevertheless, the efforts necessary to remove the rock and transport it up to the top of the promontory was substantial.

6.3.4 The Stone Required for the Chevaux-de-Frise

It is probable that the *chevaux-de-frise* is contemporary with the palisaded settlement, but it is likely that most if not all the stone used in its construction were obtained from field clearance. Whilst there may be functional reasons for this division, as some of the material in the *chevaux-de-frise* is very small, suggesting a limited resource from that type of source, it is more likely that there was a symbolic reason to differentiate between the palisade and *chevaux-de-frise* construction. The palisade construction stone seem to have been sourced in the same way as the later revetment walling, and so seems to have been obtained through the same social, symbolic and technological mechanisms (Fig. 6.5).

6.4 Comparisons with Other Regional Palisaded Settlements

Palisaded sites are by their very nature difficult to locate. Although palisade elements can be identified in ideal conditions in west Wales when associated with cropmarks and parchmarks of enclosed settlements, it is very unusual for such a site type to be sufficiently clear without the more obvious feature drawing the attention of the archaeologist to a particular location. As a result, late prehistoric palisaded enclosures in west Wales have been found by accident where other more visible archaeology has initially attracted investigation.

Trial trenching around the small enclosed settlement of Drim produced evidence for a palisade down the slope from the enclosure. A 14 m length of palisade, c. 0.5 m wide and 0.35 m deep was uncovered. It produced a radiocarbon date of 2410±80 BC, which when calibrated gives a range 780–380 BC, so it is roughly contemporary with or earlier than the Castell Henllys palisade. One end of the palisade was found, with a terminal posthole, but the other side of this possible entrance was not located in the limited excavation. The size and extent of the palisaded site is unknown, but probably contemporary interior features were found. It does not lie in a similar topographic location, nor was it immediately replaced on the same site with an earthwork. The nearby farmstead was constructed probably several centuries later, so palisaded settlements may have been widespread and not just used on sites that developed into earthworks. A palisaded settlement has been fully excavated at Cwm Meudwy, though most trace of interior structures had been lost (Murphy and Evans 2006). This indicates an irregular pear-shaped enclosure measuring 45 m by 30 m, defined by a palisade 0.4 m wide and surviving up to 0.3 m deep.

The concept of a timber palisaded phase prior to earthwork construction is one noticed at a number of hillforts in Wales and beyond, but many of these have been much earlier in date, belonging to the late Bronze Age (Musson 1991). The palisade at Castell Henllys belongs to the Middle Iron Age and is an immediate precursor of the ramparts. The parallels at Cwm Meudwy and Drim may therefore be more relevant, and reflect a type of settlement type only rarely encountered by archaeology in the region, but one that may have been more significant and frequent than our present understanding would suggest.

6.5 The Palisaded Enclosure: Functional Necessities and Psychological Desires

The rationale behind the selection of the promontory location, and the definition of the first phase by a palisade are both worthy of some consideration. Given the short period of the palisaded settlement, it is likely that the site was selected with the planned intention of an earthwork construction in mind. The palisade should thus be seen as an interim measure, though one that may have lasted a generation. It was placed, however, to function in its own right, as its line did not mirror the later earthwork; it involved very considerable effort, and would have been clearly visible from a distance; it created a certain physical and psychological environment within which the first inhabitants of the promontory lived and worked.

Palisades are usually considered to have had two potential functions: to keep people or animals in, or to keep them out. At Castell Henllys, both of these could have been relevant. The steep slopes around three sides of the promontory—indeed the sides where the palisade is definitely known—would have been potentially dangerous for stock and children, and so fencing these off would have been possibly for safety concerns. If the palisade ran across the northern side, then this would also have ensured full enclosure. The palisade was also placed near the edge of the steep slopes, in a suitable location to effectively defend the site from casual or small-scale attack or raiding. Indeed, the wooden structure would have been as effective a defence on much of the circuit as the later earthworks; only on the northern side were these more elaborate and substantial once the ramparts and ditches were constructed. The palisade would have made the use of slingshots fired from close to the fence line possible only with overhead action, but the underarm trajectory could have been used from slightly back from the fence, and the slingshots could still have rained down on the steep approach slopes. Spears would have been very effective on attackers, either thrown or thrust over the top or lunged through the probably loosely woven wattle walling at anyone who reached the palisade itself. The palisade would also have been effective at keeping the site protected from animal predators, perhaps a more frequent and serious concern if military conquest had not been necessary, and the region was underpopulated or recently deserted at the time of settlement establishment. The palisade would have been vulnerable to any attack involving the use of fire, but there is no sign that any part of the palisade was burnt down. The palisade could therefore function effectively for safety and security in a number of ways, but may also have been important for social and psychological reasons.

The cultural, social and demographic context of the palisade settlement is unknown. The defence argument would only be relevant if there were any groups in the vicinity likely to attack. If the landscape had been seized from indigenous peoples, against their will, then protection might have been required. In other circumstances, it would appear unnecessary. It is more likely, therefore, that the palisade served as a psychological marker, defining space either in new territory if these were immigrants, or on a new location within an established and well-known landscape if the residents had long occupied this region. The creation of the palisade trench, obtaining all the stone packing, cutting the uprights and providing the (presumably wattle) horizontal elements would have involved various work gangs exploiting the immediate hinterland, and also selecting structural timbers for the repeated entrance structures. That some at least of the palisade packing was quarried suggests determination that this should be structurally sound; the different styles of packing could reflect the varied sources of the stone, or different work gangs. The stones of the *chevaux-de-frise* appear to be field stones, in contrast, collected from the surface of the ground. This suggests a link with agriculture, and may imply that this feature across the saddle of the promontory symbolically linked the community within with its productive lands beyond. The bringing of these stones, perhaps from some distance, to form the feature suggests motivations beyond the most efficient way of constructing the monument. The same could be said for the repeated remodelling of the entrance.

The palisaded settlement and its *chevaux-de-frise* may have provided protection from the spirit world as much as from the human one, and may have been designed to leave a mark on the landscape to show the community's presence from a distance. This communication beyond the promontory itself could have had a defensive quality on the one hand, but also be a form of statement of self-worth for others to see. Whether approaching the site or passing by, the settlement could not be ignored. The scale of the enclosing efforts indicate the desire to mark more than the already clear natural edges to the promontory, but to emphasise them and, on the easily approached north, elaborate through a series of what seem to be experimental arrangements, the ways in which the settlement should be approached and entered.

The chronology of settlement, despite the considerable detail recovered, is not certain. It is likely that a small group camped on the site to begin, then gradually established a settlement and at some point began to enclose this with a palisade. This was presumably a selected subset of the total population, that may have been gradually increased or which was, at a propitious moment, able to invite the rest of the community to join them. Whether these people were locally resident in their nearby existing settlement, on hand to assist even if not living on site, or whether they were invited from further afield, remains unknown (see Chap. 15 for alternative narratives). Likewise, the degree of collaboration in working, or compulsion through serfdom or enslavement, is obscure. The whole endeavour could be seen as an elite dominating an underclass and forcing them to carry out all aspects of the work, through to a completely collaborative process where specialists had no social superiority over others and where the group together made decisions. Issues of age and gender of those involved with the work is also unclear, but many of the tasks do not require the strength only available to an adult male. Indeed, only some of the largest quartz blocks would even require any collaboration to move them, and so the size of teams involved is also unclear. Nevertheless, in order to obtain all the resources and manipulate them to create the settlement, its structures, agricultural infrastructure and then features such as the palisade and the *chevaux-de-frise*, considerable organisation, planning and resources must have been available. The time scale is such that the everyday work of farming, gathering fuel, childcare and cooking would have been well established to keep the community in operation as the many phases of the palisade settlement were experienced.

6.6 Conclusions

The palisaded phase at Castell Henllys offers an unusual insight into the processes and decision-making necessary in the establishment of a relatively large and complex settlement. Initial occupation began in scooped areas on which presumably tents or simple wicker structures would have been placed. Within about a generation or less the settlement developed with at least one roundhouse with a made up floor, craft activity areas and the establishment of a palisade. Various gate arrangements were experimented with during this time, and the extent of the outer enclosure of the later earthwork phase was marked out with a *chevaux-de-frise* formed from field clearance stones. The fluidity and extent of changes in this early period is evidenced at the entrance and with the palisade running over one of the earliest scoops. With the construction of the earthworks, further changes were necessary as parts of the site became buried. Thus the palisaded settlement had a significant existence and history in its own right, even if it were always intended that it should be replaced with an earthwork enclosure. Here we see a founder community creating a home, a physically defined place in the landscape and the necessary supporting infrastructure, from which it was possible to develop, using much greater resources of people, the earthworks that were to replace the features of the palisade phase.

Part III
Ramparts and Ditches

Chapter 7
Previous Research on Hillfort Ramparts and Ditches

Abstract The research on hillfort ramparts and ditches has often been restricted to narrow trenches, but in a few cases, notably the Breiddin, Crickley Hill and Danebury, more extensive excavations can be compared with those at Castell Henllys. The interpretation of hillforts and their earthworks has been heavily influenced by culture-historical, functionalist or processualist, and post-processualist approaches. These various theoretical stances have given different priority to events and processes, military, social, and symbolic roles of hillfort earthworks, and the place of hillforts in the wider landscape. The regional context of research also situates the Castell Henllys project in its historiographical setting.

The three interlocking aspects of research noted elsewhere are all highly relevant here: previous attitudes to and results from hillfort excavations; changing interpretations of the Iron Age over the length of the project, linked to changes in theory; the research context of Welsh and regional hillfort studies; and actual discoveries at Castell Henllys itself that led to new questions and awareness of the potential from further excavation. These are mentioned elsewhere in the report but worth exploring in their particular relevance here to the rampart and ditch investigations.

7.1 Previous Attitudes to and Results from Hillfort Excavations

Excavations of hillforts have been numerous and over a long period. Cunliffe (2005) has laid out a useful historiography, the relevant features here being the rapid development of the trench at right angles across the line of earthworks to provide a vertical section through all the deposits, linking ramparts and ditches together along one long profile. This is exemplified at Maiden Castle, Dorset, where Wheeler (1943) excavated a series of long trenches across the sequence of earthworks. These were very effective in outlining a postulated sequence building and rebuilding. This was the dominant excavation strategy in the early twentieth century, providing sequences of development in rampart construction and linked to interpretations that highlighted defensive qualities of hillforts. This trenching technique has been applied much more recently to similar effect such as at South Cadbury, Somerset, area D by Alcock (Barrett et al. 2000), and Danebury, Hampshire (Cunliffe 1984). It was this approach that provided the precedent for the initial trench across the earthworks, but once the results were positive, and a long-term research programme could be put in place, other precedents provided inspiration and guidance.

At both The Breiddin, Powys (Musson 1991) and Crickley Hill, Gloucestershire (Dixon 1994) the narrow trenches were combined with larger area excavations of portions of ramparts. These indicated the value of more extensive excavations, though inevitably neither provided an exact blueprint for approaching the specific research questions and the topographic context of Castell Henllys.

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Excavations at The Breiddin were possible along a substantial length of rampart in advance of quarrying. The largest single area, B04, revealed c. 18 m length of rampart, but the areas B01 and B03 to the north combined with B04 to create a stretch c. 28 m long, and to the southwest continuous areas B11, B10, B14, B15, and B16 formed a further c. 26 m length, though these represented less than 5 % of the known south-eastern rampart length, and did not examine the outer rampart at all. Linked in three areas with internal activity immediately to the rear, this provided clear evidence of the value of extensive excavation of ramparts. The style of investigation was one of the careful area excavations with the emphasis on plan, using only highly skilled staff excavating from autumn to spring to maximise quality of observable soil differences, even at the cost of comfort of the excavation team. Some of the sides of the trenches created cross sections through the rampart, but no linear sections were produced.

The excavation methods at The Breiddin could not be replicated at Castell Henllys. Relatively unskilled though closely supervised students were the workforce that had to largely operate in the dry summer vacation seasons. This practical factor was one of the reasons for the decision to produce a series of sections, rather than remove the rampart as an area excavation, layer by layer. Thus the experiences of The Breiddin were adapted as best they could in the circumstances at Castell Henllys, and whilst some quality of detailed excavation was no doubt lost, the recording of linear sections and closely spaced cross sections provided different data. Some short Easter vacation excavation was undertaken when necessary, to take advantage of optimum soil conditions, but this limited resource was not usually invested on the earthworks but on locating internal features. The scale of excavation could not be as great as at The Breiddin because of the smaller size of the fort at Castell Henllys, but it was decided that a substantial length could be opened up, and this could be linked to the entrance, which was not possible at The Breiddin.

Crickley Hill was excavated as a training excavation (Dixon 1994, 26–28), and its latter seasons ran at the same time as the first years of Castell Henllys. A considerable length of rampart was excavated over several seasons, in a series of contiguous or closely set trenches. These were linked to the entrance, which was extensively excavated, and meant that the rampart was investigated for a distance of about 10 m each side of the entrance itself, though the whole of the rampart was not removed except in one narrow cutting. The result of this strategic decision, however, was to create linear sections of the rampart at the edges of excavation, even though linear sections were not a stated goal. Integration of excavation and rampart excavations was effective at Crickley Hill, and this provided a highly relevant precedent for the Castell Henllys programme.

At Castell Henllys the surface evidence suggested that the ramparts that extended from either side of the main entrance were different in scale from those around the southern half of the perimeter that overlooked naturally steep slopes. Excavation areas were therefore selected to examine these two main earthwork forms. Each would be subject to sufficient area excavation to obtain at least one linear section and some closely spaced cross sections. In addition, all portions of the circumference would be examined to provide linear sections through the rampart, and some of these trenches would extend out from the fort into the ditch and down the scarp slopes. The results showed that the scale of the northern rampart was replicated originally down part of the western side, and that the southern portion of the circumference on all sides was indeed created with a much smaller rampart.

The Crickley Hill experience at the entrance was developed at Castell Henllys with an extensive area excavation of the entrance complex (see Chaps. 12, 13) directly linked to rampart and ditch excavations on each side. Topography limited the extent to the west, though a c. 15 m length was investigated, and this included the rampart turning to the south along the western edge of the site. Some more extensive excavations were possible to the east, hindered only by large trees and their root complexes, and a post-mediaeval cut into the rampart lined with drystone walling. In total, c. 40 % of the inner and c. 5 % of the outer northern ramparts were excavated, and c. 15 % of the southern ramparts.

The rampart and ditch excavations at Castell Henllys developed out of the methods and results achieved at many sites where trenches had been applied, and through the more extensive rampart investigations at The Breiddin and Crickley Hill. The Iron Age ditches discussed here were too large to allow extensive excavation with linear and cross sections, though this was achieved with the late Roman or post-Roman ditches (see Sect. 14.3), and with some of the outwork ditches (see Sect. 10.4). This owed some inspiration from extensive rescue excavations in the lowlands where upstanding earthworks did not survive, and ditches have formed a major emphasis in excavation. Certainly the extensive excavations of the late Roman or post-Roman ditches on both sides of the site have been important in understanding their varied character along their length.

7.2 Changing Interpretations of Iron Age Earthworks

The Iron Age and its hillforts were the subject of continued research and reflection during the time of the project (Barrett et al. 2000; Cunliffe 1995; Dixon 1994; Hill 1995a, b; Musson 1991), though fieldwork on the earthwork elements of hillforts was less popular than it had been, and interiors were usually the focus of attention. The shifts of emphasis were highly relevant to the Castell Henllys excavations and affected how the results were perceived and how methods could be adapted to ask new and relevant questions. The various research strands current during the project, and which had differing degrees of influence with regard to the earthworks research, are considered under a few broad headings. This section covers the context for research on the entrance and outworks as well as the main ramparts and ditches, as the same historiography and interlocking research themes and methodologies apply across all these. Discussion here excludes historiography linked to internal settlement and buildings.

7.2.1 Culture-History

Welsh hillfort archaeology still had a significant culture-historical strand visible in its practitioners when the project started in 1981. W.F. Grimes was excavating at Dale Fort, Pembrokeshire, and A.H.A. Hogg was still very active in survey and interpretation (Hogg 1979; Hogg et al. 1986). The terminology used in county studies such as that of Carmarthenshire (Savory 1954) followed the typological and invasion and movement models that had been espoused by Hawkes and others (1959), even if some of the ABC terminology of the 1950s was less explicitly used. This tradition of description, typology and its particular associated style of narrative, was still to be seen in the Iron Age section of the most recent overview of Welsh prehistoric and Roman archaeology (Lynch et al. 2000). In many respects this shows surprisingly little development of attitude to archaeological evidence and inference from that that displayed in earlier syntheses (Wheeler 1925; Savory 1976; Stanford 1972a).

The excavation was influenced by the culture-historical approach in that the description of features, and the typology of sites including the inland promontory fort categorisation, was seen as a valid, though the idea of invasion and movement was not so readily accepted as a useful model for interpretation. Subsequent research, reflection, and consideration of alternative narratives encouraged by post-processualism (see below) have led to a reconsideration of the invasion model as a possibility. This is explored once more in the final interpretations (see Sect. 15.6), though with greater awareness of the inferences and assumptions that need to be made than most older culture-historical interpretations explicitly set out (though it would be wrong to assume that some at least of these issues were not actually considered (cf. Piggott 1959, though little else revealing such considerations was published).

Culture-historical approaches often emphasise links to documentary sources, if available. This was an important aspect of research for Hawkes (1956), and the Classical references to the Celts were particularly significant. The public interpretation of the fort, first under the private ownership of Hugh Foster and then under the management of the Pembrokeshire Coast National Park, used the Celtic association as a form of advertisement, branding, and interpretive theme (Mytum 1996b, 1999a, b, 2004; Piccini 1999). The culture-historical concepts and associations have remained strongly within art-historical approaches to Iron Age artefacts (Megaw and Megaw 1986, 1989). The use of Celtic analogies, however, is relevant in the other paradigms also.

7.2.2 Functionalism and Processualism

When the excavations at Castell Henllys began, the main paradigm in British Iron Age studies was distinctly functionalist. Cunliffe's major national synthesis (1974, 2005) provided a social and economic framework that recognised the limited role of population movement, but emphasised other forces in cultural change. Of particular importance in shaping expectations regarding hillfort earthworks was the role of such sites in providing social centres for storage, locations for craft production and redistribution, and protection from military threats from other equivalent political groups (polities) in the region. Thus, social and military pressures led to the development of hillfort earthworks. Alternative interpretations for hillforts generally (Collis 1981; Avery 1993a) and Wessex in particular (Stopford 1987) were still within a functionalist framework.

The social structure proposed for the Iron Age by Cunliffe (1991a, b, 2005) was that of a tribal system with chieftains, the form derived partly from Classical sources but also relying on the evidence from the early medieval Irish laws. This again assumed a widely spread Celtic inheritance that could be broadly applied over a broad expanse of time and space, though this aspect of the interpretation has been become more overtly criticised during the project (Collis 2003; James 1999).

It was within a broadly functionalist view of the Iron Age that work at Castell Henllys began. Collaborative work with George Williams at sites in the Llawhaden area had been conducted under a Cunliffe-inspired framework and was published in that format (Williams 1988; Williams and Mytum 1998). The discussions in the excavation report assumed population pressure as a major force for change, with elites using monumental earthwork features of settlements as status markers. The grouping of settlements close together was even suggested as linked to Celtic partible inheritance rules (Williams and Mytum 1998, 144). In the final stages of the writing up of the Llawhaden project, results of the Castell Henllys fieldwork and post-processual critiques were beginning to impact on the author's thinking regarding the west Wales Iron Age, but this was not reflected in the already much-delayed publication. The Llawhaden report thus reflected the views at the time of the fieldwork, standing as a reflection of early to mid 1980s thinking, applied to an important regional case study, and one that provided a springboard for the Castell Henllys research.

The earthworks at Castell Henllys could, within a processualist viewpoint, have represented on the one hand a military reaction to threats from adjacent or relatively close neighbours, and on the other a social statement of prestige in commanding the labour and expertise to construct the earthworks. These two threads ran through considerations of the evidence throughout all the excavations and surveys of the earthworks. At every stage, the military strengths and weaknesses of the location and scale of the ramparts and ditches were assessed. Visibility and accessibility were key features that were considered; both were important for the military element, but could also be regarded as relevant for their social impact. Computer modelling of the hilltop enhanced understanding (Mytum 1996a), though this modelling was also encouraged by post-processualist interests (see below). Cunliffe (1984a, 30) has noted how earthwork elaboration can be beyond that needed for purely military purposes, and Bowden and McOmish (1987) have further questioned whether the defensive element is the most relevant. They consider that the multivallation, seen by Wheeler (1943) as such a vital element in the defensive scheme with the introduction of the sling, would not have been militarily effective. Instead, they propose that it increased prestige, reflecting greater investment of labour.

The main entrance offered an opportunity to consider defensive elements and also those of controlled access. The same can be seen with regard to the northern access point through the outworks. The presence of possible side entrances and the degree to which they were militarily secure again allow comparison of the military and social functions. The presence of slingshots, singly and in hoards, also contributed to this debate. This led to experimentation with slingshots and types of sling so that the potential role of this weapon in the topographic and earthwork context of Castell Henllys could be understood.

In the regional context of Castell Henllys, inland promontory forts have been considered in terms of territorial units based on Theissen polygons (Mytum 1988b). This was not framed within a population movement model but rather one where population pressure created competition between small-scale polities, as was reflected in the Llawhaden interpretations (Williams and Mytum 1998). This was modelled on arguments regarding central places (Collis 1981; Cunliffe 1974), though given the small size of sites, though defended, it also was based around site catchment analysis time–distance models (Higgs refs; Roper 1979).

One of the most important elements of functionalist study that directly linked to the excavation and interpretation of the earthworks was that related to physical constraints linked to engineering. These had been investigated by Avery (1993a, 10–21) and his researches, combined with the results from Castell Henllys, give significant insight into the knowledge and techniques of the rampart builders. The functionalist models surprisingly have not emphasised the social implications of construction, beyond the obvious need for considerable labour, but this was recognised as an important facet of research to which large-scale excavation of earthworks could contribute.

Functionalist approaches might have been expected to lead to measurement of labour inputs necessary to construct earthworks, but this had not been published elsewhere, despite such calculations for earlier monumental structures such as Durrington Walls (Wainwright and Longworth 1971). The absence of such research for the Iron Age was seen as one of the gaps in knowledge that detailed excavation at Castell Henllys could help to fill. Experimental earthworks at Overton Down and elsewhere (Bell et al. 1996; Reynolds 1989) revealed patterns of erosion and decay on soil types unlike those at Castell Henllys, and a small experimental earthwork was built at Castell Henllys and studied for 10 years before its removal in advance of expanded excavation (see Sect. 10.3). This experiment was not designed to provide information for labour input into earthworks, and so other data is used for this in the interpretations of the construction process and the social implications of labour organisation (see Sect. 15.2.2) do not use site-specific experimental data.

The construction of the earthworks, and their exact setting within the topography, can be considered in terms of functionalist maximising models that make best use of the terrain to create the most effective visual effect. This has interpretive implications for other, unexcavated sites that can be examined with this knowledge, and their design and labour input assessed in the light of the modelling from Castell Henllys. The stability and the long-term effectiveness of the earthworks at Castell Henllys give confidence to the functionalist models that emphasise choices based on structural viability, though that does not completely explain them. The social and military models that build on this functionality require other assumptions to be met; as the excavations proceeded further issues, influenced by post-processualist thought, came into the excavators' considerations.

7.2.3 Post-processualism

The separation of functional attributes such as economic, social, and religious was recognised by Barrett (1989) as hindering as much as helping understanding of the Iron Age. Whilst for analytical purposes it may be useful at one level to isolate the factors relevant in the construction and stability of earthworks, of their actual and potential visibility, the labour required to build and maintain them, and their effectiveness in assisting military defence and impeding attack, this answers only some types of question.

The post-processual critique offered alternative ways of approaching the past that gave greater importance to the integration of belief and action, and to the importance of both individual and small group behaviour, as well as the previously recognised importance wider cultural norms. These additional insights are relevant within the discussion of the design, creation, and use of the earthworks at Castell Henllys, though they largely build on some of the physical constraints examined under the functionalist framework.

The Castell Henllys earthworks define several units of space, and it is likely that these reflect not only functional but also symbolic differences in the past. Unlike the evidence from field survey as used by Bowden and McOmish (1989), however, the extensive excavations at Castell Henllys provide more detailed contextualised data to enrich interpretations. Here, the role of structuration theory in the creation and maintenance of the earthwork elements, and the ways in which they framed everyday life and practice should be considered. Whether or not they were ever used in a military role, and whether or not their initial construction was motivated by ideas of elite social display, creation of communal identity, or threat of attack, their physical presence around and across the site affected life within and around the settlement throughout its life. The earthworks constrained movement and directed it to the entry points of the settlement, and also created an enclosed environment within which some activities took place. The earthworks were also visible across the landscape, the promontory location increasing the distance that the site could be seen along the valley and from high ground. The phenomenological experiences gained from entering the various elements of the earthwork complex, and leading up to the passing through the gateway, should not be underestimated, as discussed for Sussex hillforts by Hamilton and Manley (1997, 2001). The architecture of the earthworks, using that term to establish that they were a designed and meaningful set of constructions, means that archaeologists can consider the intentions of the designers at a number of levels. In addition, however, the builders and users may have had overlapping or competing ideas regarding the role and meaning of the earthworks. This has been explored for the Mississippian mounds by Pauketat (2000) and a similar approach to the Castell Henllys earthworks would be instructive. Some hillforts in southern England have now been considered in this light (Lock 2011; Sharples 2010). The monumental architecture acted as a conscious and unconscious force in behaviour, but with no doubt different results over time and social position.

The role of structured depositions has now become established within Iron Age studies (Hill 1995a, b), and it is mainly in earthwork and entrance contexts that such finds have been made at Castell Henllys, and so they are particularly relevant here. These belong to a range of phases, though many are associated with construction, and no hoards deposited during the longer use of the site have been found as noted by Hingley elsewhere (1990).

7.2.4 The Return of Events

In recent years, some of the interpretations offered by culture historians, involving events such as battles, migrations, and inventions, have come back to the fore (Bolender 2010). In part this has been as a reaction to the high quality excavated data that has allowed the small-scale processes of repeated daily practice to be investigated on the one hand, but also the dislocations now clearly recognisable from evidence such as destruction horizons, and the carefully plotted scatters of artefacts reflecting battles, even in prehistory (Christensen 2004; Dixon 1988; Mercer 1999). In addition, DNA and bone studies including strontium isotope analyses (Budd et al. 2004; Price et al. 2002) have shown that a significant number of individuals at some phases of prehistory grew up in areas quite far from where they were eventually laid to rest, suggesting population movements over considerable distances. The shift in temporal scale from the medium and long term to that experienced by individuals has given greater importance to the types of interpretations offered by historians and which culture-historical archaeologists had favoured; theoretical approaches affect what temporal scale is seen as most relevant in archaeological explanation (Karlsson 2001; Lucas 2005). However, the difference between contemporary approaches to events compared with the traditional culture-historical one is that the events do not in themselves provide an explanation for change, but are part of a series of factors operating at a number of scales.

The temporal scales are also matched by geographical scales; the culture-historical and processual approaches were often regional or even broader, but more recent studies have concentrated on the intra-site or even intra-structure scales. The new interest in events links the site-based rich, contextual data with the broader picture of local, regional, and even international movements. The shift to see artefacts moving along social networks but people being relatively static has shifted back to one where some people, at least, were also highly mobile. These approaches are reinforced by more emphasis being placed on similarities in material culture and practices across longer distances, for example, along the western, Atlantic coastlines of Europe (Cunliffe 2001, 2013). There can be combination of *longue durée* connections and knowledge of the wider landscape against which the rapid and sudden shifts of people and power can take place, aided by this long-term knowledge and long-distance alliances and antagonisms.

The relatively short chronology of the Castell Henllys fort, combined with the complex stratigraphy reflecting numerous changes over just a few centuries, makes it possible to consider events as part of the explanation for the excavated evidence. Moreover, the place of Pembrokeshire along the Irish Sea corridor that serves as part of the Atlantic seaway means that it may not be seen as peripheral, but as part of a network that can stretch both north and south; Castell Henllys can be seen in a local context, but potentially part of ever-wider networks of association.

7.3 The Research Context of Welsh and Regional Hillfort Studies

The earthworks defining Castell Henllys were the most obvious features prior to excavation, and they were what had attracted attention from previous fieldworkers. The classification of field evidence for forts has a long tradition in Britain (Forde-Johnston 1976; Hogg 1975). Typological classes have been applied in Wales both nationally (Hogg 1979; Hogg et al. 1986) and in county surveys (Crossley 1963; Savory 1954). Castell Henllys fell into a well defined category of site, that of the inland promontory fort, though its widely spaced outer earthworks forming what has been termed the annexe was less commonly found, though such features occurred across a range of sites and could be linked to the widely spaced rampart forts of southwest England (Fox 1952, 1958). It was with this background of categorisation and emphasis on certain aspects of field evidence that the excavation was undertaken.

No Welsh inland promontory fort had been previously extensively excavated. Early excavations at Henllan (Williams 1945) and more recent work at Pembrey Mountain (Williams 1981) merely hinted at the potential of such sites. Indeed, none of the larger sites in west Wales had been subject to excavation, with the exception of Coygan Camp (Wainwright 1967). Here, the structural remains on this limestone outcrop were fragmentary, but the excellent soil conditions enabled unusually good preservation of artefacts and faunal remains. The topographical setting of the site was unusual, however, and so it was not the ideal example to compare with other settlements. Some other hillforts in west Wales had attracted survey (Hogg 1973; Mytum and Webster 1989) but limited excavation. Early investigations in the interior at Foel Trigarn (Baring-Gould et al. 1900) were not followed up in the early and mid twentieth century. Hillfort excavations in southern England and the Marches usually concentrated on impressive earthworks, and their sequences were important in the development of the culture-historical framework for the Iron Age (Hawkes 1931, 1959). The west Wales examples were perhaps not of a scale considered worthwhile in this perspective. Later work at Merlins's Hill (Williams et al. 1988) again indicated the potential of excavation on hillforts. This was indeed undertaken at Caer Cadwgan whilst Castell Henllys was being excavated, and several areas were investigated on the earthworks and in the interior (Austin et al. 1988). Coastal promontory forts attracted interest in part because of the threats of erosion. Several sites in southern Pembrokeshire were investigated; Grimes worked at Dale and excavated across the ramparts (Benson and Williams 1987), but other excavations at Tower Point concentrated more on the interior (Wainwright 1971b). More recently, excavations of another interior have been undertaken near Solva, in north Pembrokeshire, and field observation of eroding cliff edges at Black Scar have revealed a possible *chevaux-de-frise* buried beneath a rampart.

The enclosed farmsteads of the region have received considerable attention over a number of decades, in contrast to the work on hillforts. Limited investigations (Crossley 1979; Vyner 1986) were followed by more extensive excavations at Walesland Rath (Wainwright 1971a) and Woodside, Dan-y-Coed, and Drim in the Llawhaden group (Williams and Mytum 1998). The Llawhaden project had provided an opportunity to examine a group of sites in close proximity, but whereas the smaller settlements lay on land under intensive agriculture and so under threat and therefore obtained major funding, sites similar in scale to Castell Henllys could only receive limited attention because they lay in less valuable agricultural settings with consequently limited threats. Thus, only small-scale excavation took place at the Llawhaden sites of Pilcornswell and Holgan Camp (Williams and Mytum 1998).

Of particular importance in the initial research design was the suggestion in unpublished field note sources that the fort was unfinished, as the earthworks became lower towards the proposed (and indeed actual) entrance. Although this interpretation had been framed within an understanding of the forts as refuges built against invading groups, it was possible that this was indeed the case and that there was limited evidence of internal settlement. This affected the initial excavations, and as the excavation developed and the complexity of the site was revealed, other influences came to bear on excavation strategy. The mix of changes in theory combined with new data at Castell Henllys to rework the research design in an ongoing, fluid, and at times conflicting set of priorities, decisions, and revisions.

7.4 Discoveries at Castell Henllys

The ramparts of Castell Henllys were most obvious on the northeastern side of the fort, and it was here that the initial narrow trench was cut to ascertain if there was only one phase of construction or a long sequence of occupation. It successfully demonstrated a complex sequence, interleaved with surviving deposits to the rear, and so encouraged the development of a long-term research and training excavation. The less substantial southern rampart also attracted an early investigation and, whilst this was of a single-phase construction, it again showed well-preserved structure and associated deposits.

From these promising beginnings, excavation expanded to other parts of the circumference, and also developed into an area excavation first of the deposits against the rear of the ramparts, and then of the ramparts themselves. There have now been extensive excavations of the ramparts on the northeast, northwest, and south of the fort, and more limited investigations on the east, west, and on the outer northern rampart of the inner earthworks. This allows for a comprehensive analysis of the stratigraphy associated with the construction of the earthworks, as well as consideration of the later use of these and the accumulation of deposits against their rear. The ramparts have also been extensively excavated in the area around the entrance, allowing integration of those phases into that of the ramparts. The entrance itself was assumed to have been a simple four-post gateway, as found at other sites in the region (Wainwright 1967, 1971a; Williams and Mytum 1998). The discovery of complex stonewalled arrangements forced a reconsideration regarding investment, ambition, access to expertise and resources, and the implication of changes over time in the scale of investment in the entrance complex.

The outworks have also been investigated, though these are not stratigraphically linked to the other earthworks. These again emphasised the scale of investment and the greater complexity of spatial division and control of access than had been previously appreciated. The overall design and role of the enclosing earthworks, and the wider implications, are assessed in Chap. 6. Nevertheless, it is important here to note that expectations of simplicity and paucity of evidence affected the way in which the excavation was designed, the reaction to discoveries, and the development over the seasons of new questions and priorities that had been completely unforeseen at the beginning of the project.

As outlined in the theoretical discussions above (see Sect. 7.2), particular concern during the excavations was the issue of defence versus display in the design and construction of the earthworks. Discussion here is limited to the physical evidence from the ramparts and direct implications to be drawn from them; the implications are more fully explored in Chap. 15. The physical evidence recovered from survey and excavation for the Iron Age ramparts and ditches is discussed below, with the late Roman/post-Roman refurbishment described in Chap. 14. In each area, the sequence is described in chronological order starting with the earliest activity, following on from the palisade phase (see Chaps. 3, 5, and 6).

During excavation of the earthworks, discoveries of artefacts and ecofacts were rare. This was in part due to taphonomic factors—particularly soil acidity, but also the limited use of domestic refuse in rampart construction. The recognition that some finds were placed specifically where they were found was only made gradually, but the early records have been reviewed and structured depositions noted in a number of cases. This is an example of how changing interests in the academic debate can alter the level of importance ascribed to certain types of data that, whilst noted and recorded, were not accorded any priority in the early seasons. Most of the data, however, was structural—layers of deposit and cut features. A research design with a focus on test pits and dry sieving would have been sadly disappointing at Castell Henllys.

Chapter 8
Ramparts and Ditches on the Western Side of the Fort

Abstract The original rampart west of the palisade phase gate was extended down the western side of the promontory as part of the earthwork enclosure process. It was created in a design that also incorporated scarping the natural hillslope to make it even steeper, and the excavation of a ditch and creation of a terrace on the western slope of the promontory. At one point at least this was not stable, and slumping had to be ameliorated by a modified design. The rampart had two phases of rear revetment walling, the first part of the way up the rear slope, the latter at its base and surviving up to 1 m high. These walling phases each related to the major building phases at the entrance.

The earthworks of the fort were constructed as a coherent whole but not in one short-term event, and the life histories of the various portions of the site also varied. The localised site histories are important in their own terms, as a contribution to our understanding the complex ways in which sites change over time. Change comes through natural processes of erosion and decay, as well as through human practices to combat these and as part of the lived experiences within the settlement. All these forces had an impact on the earthworks that defined the settlement, and only large-scale excavation can elucidate the various factors at work.

The results of very extensive excavations of earthworks highlight the limitations of the single trench through the rampart and ditch, often at a prominent point, which has often been the only excavation strategy employed at most sites (Chap. 7). The detail presented in Part III of this book is instructive in its own right in revealing and then interpreting the complex biography of Castell Henllys, but it also acts as a context for the interpretation of other sites where significant narrative and interpretive statements are made on the basis of limited data. This issue is raised a number of times throughout this book, but it is an important one as the discipline grapples with the data-rich particular and its significance on the one hand, and on the other the wider patterns which may be discerned given the extent of work achieved across much larger regions. But for the larger picture to be securely based, each site biography must be robust and the evidence from various parts of the enclosing circuit requires consideration, and here the western side is outlined; the north is considered in Chap. 9, and the remainder of the main fort perimeter and the outworks are discussed in Chap. 10.

8.1 The Gravel Rampart 3693 West of the Entrance (Figs. 8.1 and 8.2)

On beginning excavation in the entrance area, this rampart was barely visible. Its eastern terminal in the gateway was largely hidden by the vast amount of rubble and surfaces that had built up over the centuries. Erosion had truncated some of the front of the rampart and infilled the ditch, and build-up

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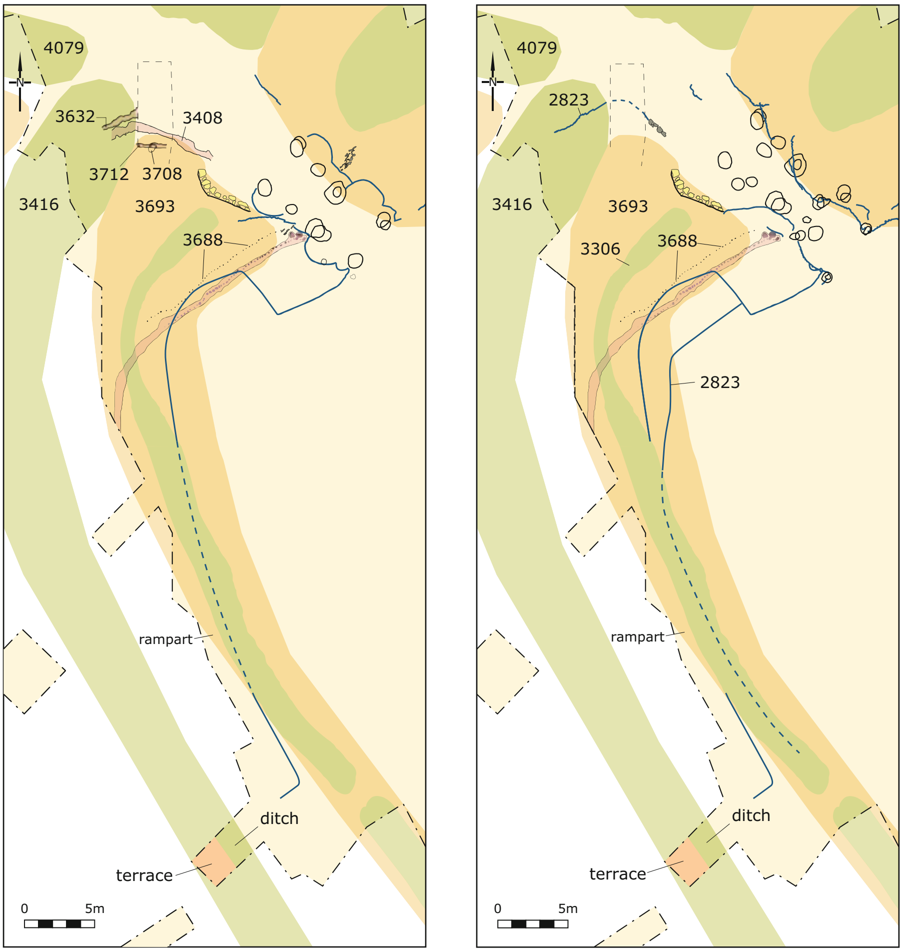

Fig. 8.1 Plan of rampart 3693. *Left*: earlier phases. *Right*: later phases

of deposits to the rear had created a gently sloping surface, completely burying the vertical rear revetment wall that survived up to 1 m in height. The rampart was excavated in several discrete stages, beginning with that associated with the entrance, and then working westwards, leaving a standing balk and allowing a long stretch of the rear of the rampart to be examined that ran along the northern and western sides of the fort.

It is now recognised that the rampart west of the entrance was first constructed during the palisaded settlement phase (Chap. 3), but its detailed description is placed here so that it can be compared with the other earthworks later constructed on the site, and its later manifestations run through the whole history of the settlement.

8.1.1 The Construction of Rampart 3693 (Figs. 3.11, 3.12, 3.13, 8.1, 8.2, 8.3, and 8.4)

The material for the gravel rampart 3693 to the west of the main northeastern fort entrance came from a wide, relatively shallow ditch to the north, 3416 (see below). The rampart was constructed in front of the palisade 3751, and on a flat and relatively horizontal ground surface. The first layers were placed at

Fig. 8.2 *Top*: view of rampart 3693 from the south with palisade voids 3687 in the foreground and stake line 3688 to the north. *Bottom*: section across rampart 3693 showing tip lines of gravel. Figure on the right is cleaning stony fill of late ditch 3306

the front of the rampart, with further layers of gravel dumped behind. The material tended to be deposited at an angle of c. 30°. The rear of the rampart was a gentle slope, terminating against the low rampart 3729 that had encased the palisade posts (that were still standing when the rampart was constructed, see Sects. 3.4, 8.1.1). These posts survived as voids within the lower layers of the gravel rampart (Figs. 3.7, 8.2, and 8.3). If the general slope identified in the section had been maintained, with a rather steeper front face, the rampart would have reached a height of c. 1.5 m. Rampart 3693 would have measured c. 9 m across, with the remains of rampart 3729 forming an additional elongated tail.

Although the palisade 3751 may have formed a temporary rear feature of the rampart during the early stages of construction, it was quickly removed and a charcoal layer 3778 formed over the broken-off posts and the rear of the rampart towards the west. A further layer of gravel, 3699, was laid down and on this a charcoal-rich deposit 3663 formed near the entranceway and ran up onto the rear of the rampart for some distance; it was at the interface of 3663 and rampart 3693 that antler [SF10000] was found, possibly a structured deposition given the role of antlers under the eastern rampart (see Sect. 9.1.2). Beneath layer 3663 was found the base of a line of stakeholes, exactly parallel with the earlier post voids but set further north on the rampart (Figs. 8.2 and 8.3). Though only visible after 3663 was removed, the bases of the pointed stakes must have been driven down through the layer, either to form a temporary revetment or to help consolidation of the gravel layers added during rampart construction. In either case, it seems that the rampart was not seen as stable, and layer 3663 was subsequently covered beneath rubble infill behind wall 3634. This drystone wall was made mainly from shale slabs and was constructed in an adequate but not highly skilled manner. It ran westwards from the entrance, and lay just north of and parallel with the post voids. It lay over the charcoal spread 3663 that overlay post voids 3687 to the west, suggesting that the palisade was in advanced state of decay by this time, and that the posts had rotted off at ground level and had been removed by this

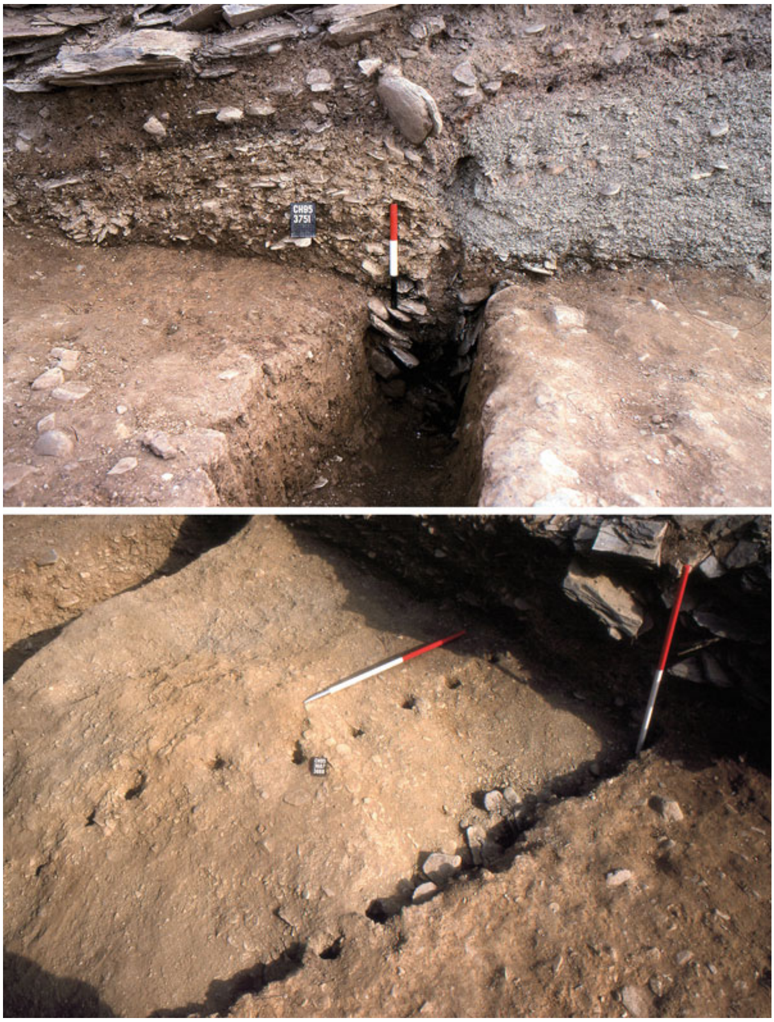

Fig. 8.3 *Top*: palisade trench 3687 with post void visible in section; note also the difference in the lower rampart layers each side of the post void. View from the east. *Bottom*: line of stakeholes 3688 within rampart 3693, stratigraphically later than the voids of palisade 3687, but running parallel to them. View from the south

stage. It would seem, therefore, that the construction of wall 3634 would not have been hindered by the palisade. The wall survived to a maximum of 8 courses and a height of 0.6 m, but it would have originally stood to c. 1 m, given the amount of rubble that had fallen off this wall to the south. Many of the stones closest to the wall in this rubble layer 3626 were upright, as they had slipped off the wall. Probably the pressure from the unstable gravel rampart 3693 to the north caused the wall to collapse.

The wall and rubble largely survived only where they had been encased within the stone tower of the first guard chamber phase of the entrance (see Sect. 12.1.2), and slightly to the west, so unfortunately the original extent of the walling cannot be reconstructed with certainty, though some inferences may be drawn. The surviving length was 6.25 m, and it probably stretched slightly to the east and joined onto a timber gateway structure. The western end as excavated is an abrupt one, and sections through the rampart further to the west give no indication of it extending further. There was evidence of neither a robbing cut nor of any scatter of larger shale fragments which might be expected to remain on the surface of the rampart. It would seem that the walling only ever extended further west, and that from that point on there was no interior revetment wall at this phase. Rather, the rampart

Fig. 8.4 View of ditch 3416 from the northeast. *Top* southern edge of ditch 3416 is *top right*; the ditch ran southwest from this viewpoint. Far figure is next to part of wall 2823 and the surface is the cut into the ditch fill. Near figure is in the terminal of later ditch 4079, which is running west; the U-shaped rubble-filled recut is within the fill of this later ditch, but originally its terminal would have reached near to where the far figure is placed

continued to be expanded beyond this point with the placing of layers of clean gravel, occasionally with charcoal deposits, though over what period of time it is difficult to estimate. It is likely that this part of rampart 3693 in effect continued to be built up at the rear, though perhaps adding little to its actual height, during this period. This accumulation had all been accomplished, and wall 3634 had collapsed, by the time that the first stone gateway phase was constructed (see Sect. 12.1).

That there probably was an extensive amount of shale walling around the entranceway in this phase is suggested by the amount dumped in the infilled ditch terminal to the east of the entrance associated with the building of the final stretch of rampart (and the first phase of stone guard chambers—see Sect. 12.1.2). A significant amount of the shale in this infilling was reddened, suggesting perhaps that some of the walling at the entrance had been burnt and was all dumped into the ditch as convenient fill (Fig. 9.13). It is possible that there was stone walling at the eastern side of the gateway in at least the later palisaded phases that was cleared before construction, but this could not have existed over the area of buried soil. The interface between the buried soil and the clay rampart east of the entrance was extremely clean, with no loose shale slabs or fragments of shale, and no signs of burning. There may, however, have been stone walling between the timber uprights of the gateway itself, and other walling and rubble infill associated with 3634, but only that part which was to be encased in the later structure (perhaps because it was unburnt and so still functioned structurally) remained in place to be excavated.

8.1.2 Ditch 3416 (Fig. 8.4)

The ditch that was dug for rampart 3693 was partially excavated, but proved difficult to understand in the field. There were two main reasons for this. First, the much later reshaping of the profile by a scarp 2826 to allow the construction of wall 2823 (see Sect. 12.2.5) created a false impression regarding the shape and orientation of the ditch, and of the original slope of the ground. This was further complicated by the discovery of another ditch, 4079, which was deeper and ran from the entrance in a north-westerly direction (Fig. 8.4). The various sections across the ditch complex failed to provide one clear drawing that demonstrated all the relationships. By the time the characteristics of the two ditches were understood, it was only possible to cut a long section just at the point where the two ditches diverged, giving only a tantalising and uncertain relationship. However, the sequence of ditches can be understood because all the earlier drawn sections relate to the same ditch, which shows no cuts, even where the two ditches would have intersected. This therefore demonstrates that all these sections were within the latest ditch, which had completely removed the terminal of the earlier ditch. As some of the drawn sections certainly represent deposits within ditch 4709, this means that 4709 is later, and relates probably to the first stone phase entranceway (see Sect. 12.1.3) and 3416 is earlier and therefore is the one that was dug to provide the material for rampart 3693.

Ditch 3416 was cut into the edge of the promontory, where the slope to the west was relatively steep, but that to the north was much more gentle. The ditch was therefore relatively shallow at the outer, northern side, with a wide, relatively shallow U-shaped profile. The maximum surviving depth of the ditch was 1.2 m. The fill of the ditch mainly consisted of clean erosion deposits of gravel from the sides of the ditch and the rampart itself. Most had washed in from the south but given the profile of the ditch, its siting, and the location of the rampart on that side this was not surprising. No rubbish was thrown out into the ditch from the rampart, and there was no evidence that the ditch was ever cleaned out. Some possible recuts were noted high in the fill, suggesting some form of ditch renewal, but not on any great scale. These may have been produced as the instability of the gravel subsoil at this point was recognised, and limited remedial action was taken. The highest surviving substantial layer, 1496, contained a large amount of water-worn cobbles and medium to large shale slabs. These were probably derived from the Period 1 stone gateway architecture, though largely from its demolition as the rubble contained fragments of vitrified rock, derived from the intense burning of guard chamber I, the one adjacent to this ditch (see Sect. 12.1.9). Above this rubble layer was a clay loam with many small shale fragments, a general wash layer that would have accumulated in the slight depression of the ditch over a long period. It would seem that in the remodelling of the gateway for the second stone phase (see Sect. 12.2) the remnants of the earlier ditch were infilled with the rubble layer 1496, derived from the burnt and demolished phase 1 stone gateway walling. Thus this relatively early feature survived as a slight earthwork for some time before being completely obscured, though for some time the later ditch 4079 had provided the dominant element in front of the rampart.

The outer edge of the ditch is only known where it survives for a limited length at the edge of the excavation, but the inner edge, albeit eroded with rampart collapse, is traceable for some distance. It is not known how far the ditch extended round the western side of the promontory, but it is likely that it ran round the site down to the level of the terrace, and has been reconstructed as such on the site plans. The changing nature of the front of the rampart is discussed below.

8.1.3 The Front of Rampart 3693

The northern front of the rampart 3693 had no berm between it and ditch 3416 when excavated. The ditch had eroded back significantly whilst it was open, however, and so there may have originally been such a berm. Erosion was severe enough to have destroyed much of the evidence for a front revetment, but some deposits survived towards the entrance passage where the ditch terminal narrowed, and two early phases can be identified. The first was a timber revetment in a continuous palisade trench, 3712. This trench was cut in the soft gravel subsoil, and was up to 0.50 m wide and 0.36 m deep, though it survived to a lesser depth and faded out towards the east as it approached the entrance. The trench contained many shale packing stones which hinted at post settings, but they were too disturbed for these to be identified. Presumably the posts were either removed or fell into the ditch as the rampart shifted forward. The palisade probably curved round to the front of the rampart, and has partly been lost due to all the changes in the entrance area. The palisade would have continued further west, but the ditch has slumped considerably at this point, and the original line of the palisade has eroded away.

After the palisade trench came a phase of revetment on almost exactly the same line using a fence supported by individual posts. Posthole 3708 cut through the palisade trench 3712, and contained shale and rounded packing stones, though no post impression survived. The posthole was 0.5 m across and 0.46 m deep. The adjacent posthole 3709 lay to the west, making the spacing between posts c. 0.7 m. This posthole was very similar in character to the other, being 0.5 m across and 0.50 m deep. It was positioned slightly further into the rampart than the palisade, suggesting that erosion was already a problem and the palisade was being set further back, away from the encroaching ditch edge.

More detailed phasing of these front revetments is not easy to ascertain. Both lay immediately beneath the modern topsoil at this point, and have no stratigraphic relationship except with rampart 3693. However, it is possible to suggest that they must have been in use prior to stone gateway phase 2. At that time, the infilled ditch 3416 in front of the rampart was partly excavated out by cut 2826, and wall 2823 constructed with rubble infill 3430 behind it. This must have become the front of the defensive rampart at this time, so the timber revetting must belong to the early rampart and/or the stone gateway phase 1.

The gravel rampart was clearly unstable, and the rampart collapsed periodically despite the front revetting in timber. This led to the infilling of the relatively shallow but broad ditch 3416, leaving only a shallow depression; it was presumably at this time that ditch 4079 was dug to replace it on a completely different alignment. By stone gateway phase 1, the rampart had crept forward from its previous front edge by c. 1.5 m, and further attempts were made to hold the rampart in place with the construction of palisades 3632 and then 3408. By this time ditch 3416 was no longer the main defensive ditch on the western side of the entranceway, with the digging of ditch 4079 and the building of a large rampart on its western side. This rampart has not survived erosion near the entrance, but was still a low earthwork down the slope (see Sect. 10.3.4).

Palisade 3632 survived only for a short stretch c. 1.7 m long, having been removed by cut 2826 for the insertion of wall 2823, and having been disturbed to the east by its replacement 3408. Palisade trench 3632 survived to a depth of 0.3 m and had shale packing on both sides of the trench, which was c. 0.45 m wide. The later trench, 3408, 0.45 m wide and deep, was preserved for a much greater length, being slightly uphill and therefore beyond cut 2826 (Fig. 12.7). This palisade curved round and, despite being partly removed by the machine-cut archaeological trial trench, was traced running up the eastern terminal of rampart 3693, and so is considered further in the context of the entrance discussion (see Sect. 12.1.3). It survived as a shallower feature as it extended south towards the fort gateway, and its full line is not known, but it may never have reached much further than its last known point. Collapse of the outer rampart face on the western side of the promontory (see Sect. 8.2.1) prevents any assessment of how far, if at all, the palisade ran round the curving rampart beyond that visible from the entrance way. Palisade 3408 was replaced by wall 2823 during stone gateway phase 2, and this wall is discussed as part of the entrance complex (see Sect. 12.2.5). Thereafter, no timber revetting was attempted on the western side of the entrance.

It is most likely that these palisades belong to the timber phases of the entrance, as the later palisade trench 3408 lies in the top of the fill of ditch. Rampart 3693 may, however, have had timber revetting at the front until stone gateway phase 2 when stone walling was used. There are sufficient revetting designs to assign one to each gateway phase, though it is not stratigraphically certain that this was when they were erected. Thus, for interpretive purposes, palisade 3712 has been allocated to western rampart entrance phase 1, and postholes 3708 and 3709 to western rampart entrance phase 2 (Chap. 3).

8.2 The Rampart, Scarp, and Ditch on the Northwest and West

On the surface prior to excavation no trace of the western rampart could be discerned. On investigation this was explained by some collapse of the front of the rampart down the slope, but more particularly the build-up of deposits to the rear during the site's occupation. This would have preserved the rear profile of the rampart to an unusual degree, but unfortunately, the line taken by the late or post-Roman ditch 3306 meant that much of the rear of the rampart was cut away by this feature. At its southern terminal, ditch 3306 swung slightly away from the line of the original rampart, and so a short length of the rear of the rampart was preserved, and elsewhere along its length the ditch swung slightly westwards enough for small fragments of the rear to survive on the eastern side of the ditch cut. This has allowed a conjectural rear of rampart line to be provided on the plans.

8.2.1 Northwestern Rampart Sections (Figs. 8.5, 8.6, and 8.7)

The rampart on the northwest was solely of gravel, but as it swung round to the western side of the promontory its consistency changed to more mixed layers including a large amount of clay. The clay was first used in layers towards the front of the bank, perhaps to create stability and reduce slippage onto the scarp and into the ditch beyond. Indeed the clay layers as the bank turns to the south formed the surviving outer face of the rampart and indicate deliberate construction of a downward slope at the front of the rampart, perhaps to encourage water runoff. It is not possible to estimate how much rampart was originally beyond this surface; if other gravel layers had been added, their slippage would have been made more rapid by the low friction water-filled intersection with the clay layers. Given the skill with which the northeastern rampart was built, however, it is likely that this design was deliberate and there were no higher deposits on the front of the rampart at this point.

The outer face of the rampart as far as it survived was excavated further to the south, where it was set on a gentle downslope as defined by the buried soil (Fig. 8.5). Grey gravel layers were again interspersed with bands of clay, though these occurred throughout the deposits. This could reflect how much had been lost from the previous section, or that a different pattern of deposition had been employed at this point. Lack of linear sections impedes any more detailed interpretation. The section shows a sloping berm of 0.6 m in width before a sudden break in slope to create a very steep scarp that could only be traced for a depth of 0.3 m because of overburden from early topsoil stripping from the excavation that had been placed on the slope to a depth of over 1.5 m. The break in slope may indicate an original front edge for a ditch, but it is more likely that it indicates a scarped slope of the natural hill, though at its base there was probably a ditch that was a continuation of ditch 3416 to the northwest and ditch 4230 excavated further south along this side of the fort (see below). An alternative is that this is a point of fracture along which natural slumping has occurred, and that the rampart had once been wider but has been lost down the slope. This is unlikely at this point, however, as the rampart can be estimated to have been c. 5 m wide.

The rampart now survives for most of its length along the west with a width of only 4 m, as the rear has been substantially cut away by late ditch 3306 (Fig. 8.6), and the front face has been lost to slumping down the scarp; nevertheless, a length of c. 20 m survives beyond the part intimately associated with the entrance features. The height of the rampart is 0.8 m at its maximum, but for most of its profile is 0.6 m high, with a roughly flat top running parallel with the original ground surface (Fig. 8.5). The construction method seems to have been to build most of the rampart up in horizontal levels for the first 0.4 m, after which deposits were placed at an angle. As the tip lines run downhill towards the scarp, it is possible that upper layers have slumped off down the hillslope, but the rampart may never have been much more substantial. No cut features such as a palisade trench or postholes were found, and the rampart may have functioned as a raised platform dominating the enhanced natural slopes

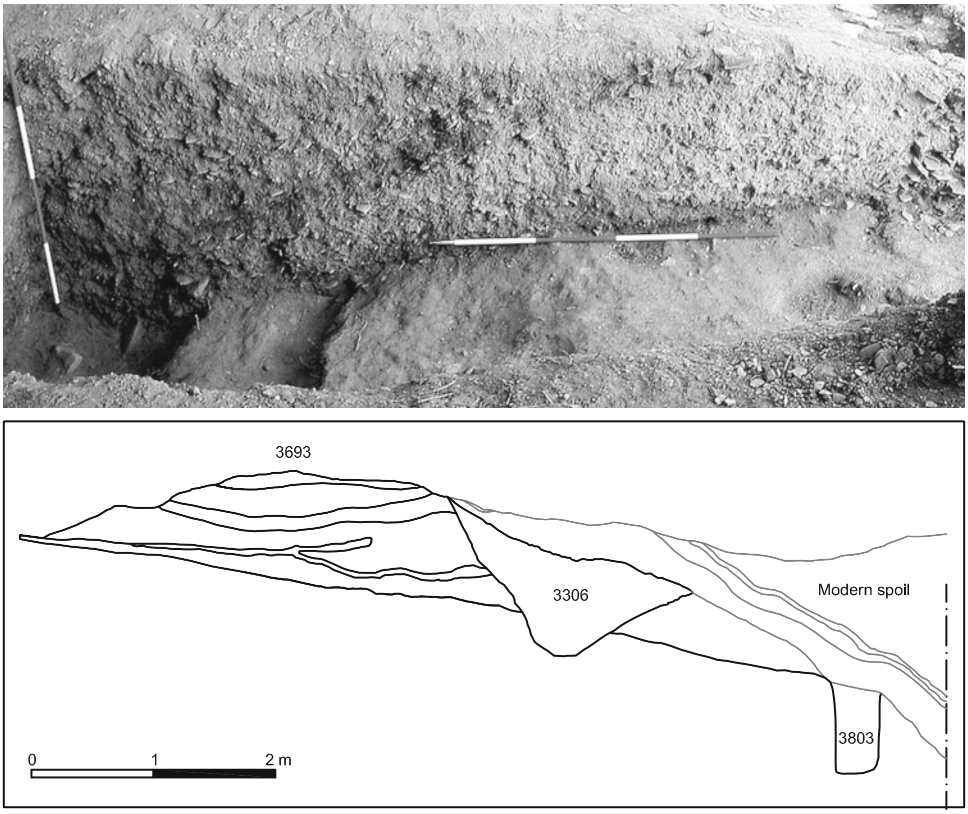

Fig. 8.5 *Top*: northwestern rampart just after the change in composition from gravel to clay. The earlier palisade 3803 can be seen beneath the rampart (for a plan of this trench and the palisade, see Fig. 3.5). The *grey* fill top left is modern spoil; the pre-excavation profile is marked by the (now buried) soil on the surface of the rampart. View from the south. *Bottom*: southern section with earlier palisade 3803 at the far west, later ditch 3306 in the centre, and tail of rampart still surviving to the east. Note this is the other side of the trench to that shown in the photograph above

below. It is likely that the sudden break of slope at every point found during the excavation on this western side reflects deliberate scarping, even if modified by natural slumping (see below). The terminal of the western rampart is discussed below.

Stone rear revetting of the rampart occurred in several phases. Its earliest survival was for a short length 3634 immediately west of the entrance, and this has been described and discussed above. With the construction of the first stone gateway in Period 2, high quality stonework from the entrance was continued to the west and then to the north to construct the tower to house the rear south-western guard chamber III (see Sect. 12.1.2.3). The walling then turns once more and continues westwards, not at the base of the rampart but part way up the rear slope (Figs. 8.1, 8.6, and 12.12). In the angle between the tower and the rear revetment wall a large hoard of slingshot, 3220, was deposited on this rear slope (Fig. 12.6). A scatter of slingshot finds were also made in the build-up deposits to the south and east, and these stones were probably derived from this hoard and had rolled down into the fort interior. The walling made a curved turn to the south and ran along the rear of the clay rampart, and was subsequently sealed by later walling placed further down the rear of the rampart (Fig. 8.8, see below). This first phase of rear revetment walling was made of relatively small stones and probably never stood to a great height. Part of the western stretch of wall had been destroyed by later ditch

Fig. 8.6 *Top*: detail showing walling surviving as only 1–5 courses for most of its length, till cut away by late ditch 3306 (as yet unexcavated in this image) at the right hand edge of the image. *Bottom*: southern stretch of walling, tilting on the rampart terminal on the left as it turns west (see Fig. 13.4). The orange clay is undisturbed subsoil, the darker deposits above are the rampart, the tail of which has been truncated by late parallel ditch 3306, here now fully excavated

3306, but a length of over 4 m of this phase of walling did survive further south, just west of the ditch cut (Fig. 8.7). Here it was associated with the rampart terminal and the eastern side entrance (see Sect. 13.2.1, Fig. 13.4).

The later rear revetment walling associated with the Period 3 gateway consisted of larger facing stones set horizontally, with rubble fill behind (Fig. 12.16). The new walling joined onto the old tower with a slight offset (Fig. 12.15) but then survived a height of over 1 m as it turned sharply to the south and ran along the base of the rampart (Fig. 8.8). In contrast, none of this phase of the walling along its southern stretch survived as it was totally removed by later ditch 3306, which contained large amounts of stone in its backfill, which presumably had formed the original drystone walling. The stonework of this phase of walling where it did still stand was better finished than that of the previous phase, and included more large stones in its facing.

8.2.1.1 South-western Rampart Terminal

The rampart survived as a low bank at its southern terminal, and on a slightly steeper natural slope than to the north. The lowest deposits were pure pink clay, on top of which was placed a mixed layer of gravel and clay. The only other surviving layer was gravel. The layers largely followed the contours of the hill, gradually raising the surface to create a sloping front and a roughly horizontal top over 1.5 m wide. The rampart survived to a maximum height of 0.8 m, the same as to the north (Fig. 8.6), but again may never have been significantly higher. The surviving width of 4.5 m is certainly too narrow, with the rear slightly cut away by the late ditch 3306, and the front lost to erosion. Given the way that the ditch 3306 has destroyed less of the rear of the bank at this point because of its line, but that the front had slumped down the scarp, it is likely that the rampart was originally c. 5 m across, as it had been to the north. This indicates that the rampart was constructed in a broadly similar way along the whole of its western length, and did not reduce in height or width up to its roughly square-ended terminal, but was markedly different along its northwestern stretch close to the entrance.

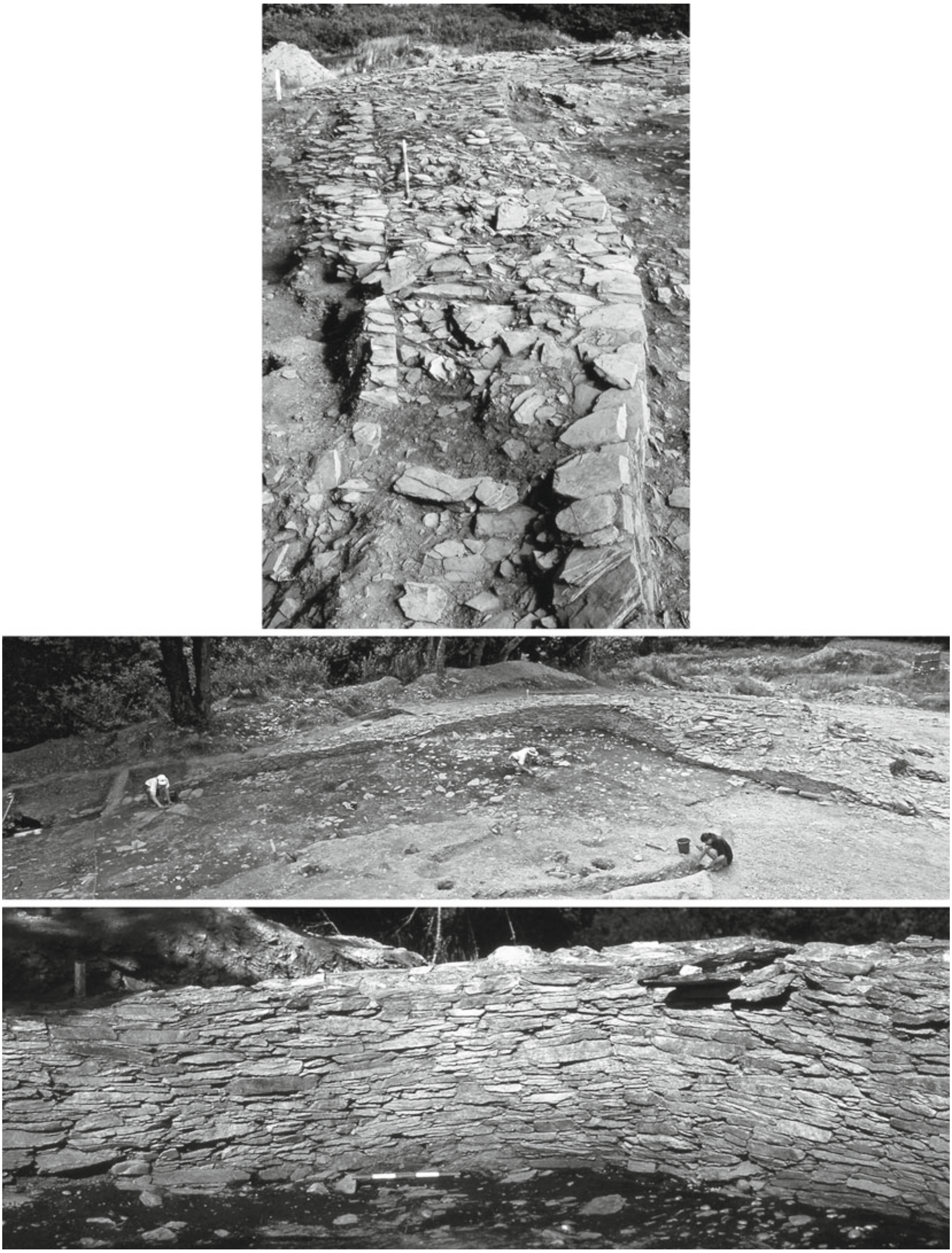

Fig. 8.7 *Top*: revetment walling on the rear of the western rampart. The facing on the left is the early phase linked to entrance Period 2, that on the right, with its distinctly sinuous line, is of Period 3. The excavation is at an early stage before the full height of the walling was revealed. *Middle*: general view of the fully exposed revetment walling on the rear of the western rampart associated with entrance Period 3. *Bottom*: detail of walling at its highest at the change of direction from east–west to north–south

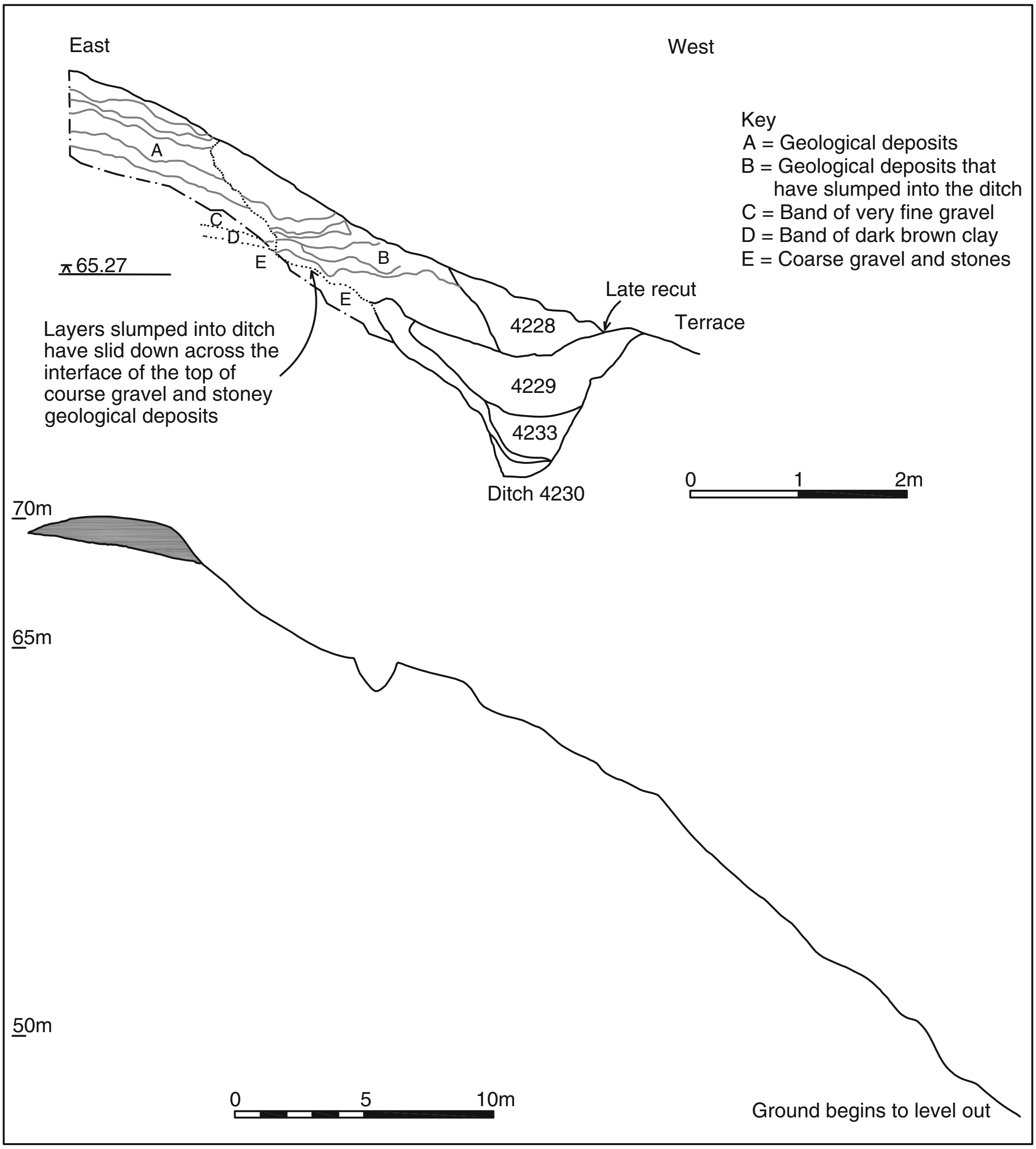

Fig. 8.8 *Top*: section of the western scarping and ditch 4230. *Bottom*: cross section of the hillslope, showing natural topography enhanced by the rampart, ditch, terrace, and scarping. Note that this drawing has no vertical exaggeration

The earlier phase of rear revetment walling at the southern rampart terminal survived because ditch 3306 swung slightly to the east at this point, allowing a single course of stones to survive on the ditch edge. This walling turned sharply westwards, indicating a southern terminal of the clay rampart. This wall also only survived to a height of a single course. The stones used in this stretch of walling were even smaller than those to the north, though slightly more impressive slabs were selected for the corner, which survived to a height of 5 courses. This might suggest that the supply of large stones was almost exhausted by the time that this part of the wall was constructed. However, given that the stone must have been quarried to create all the walling, it is more likely that it was considered acceptable to use the smaller material on this stretch of walling that had been discarded for use near the entrance, and given the stability of the clay rampart served little structural functional purpose. It may have continued merely to be an aesthetically neat and complete portion of walling, turning at the end of the clay rampart to create a visually acceptable vista. The terminal of the walling suggests a side entrance at this point, a matter discussed in Chap. 13. It is notable that there is no evidence of the later phase of rear revetment walling at the terminal, and this may have collapsed down the slope; stone from some phase of walling was found in ditch 4230.

8.3 Ditch 4230 on the West (Figs. 8.8 and 8.9)

Only one section was cut through the ditch on the western slopes; the growth of trees and the amount of slumping made excavation of trenches impossible except at one point where a useful cross section could be obtained. This section was adjacent to the terminal of the western rampart, and so may not be typical of the ditch elsewhere on the west, though it shares similarities with the profiles found to the south and east (see Sects. 10.1.2.1 and 10.1.2.3).

The main element beyond the rampart was scarping of the natural slope, though there was a terrace and ditch 4230 at its base. It is likely that this ditch was still substantial as it turned southwards as 3416, but as it ran along the western slopes of the promontory it rapidly became narrow and relatively shallow, as the scarp that also created the terrace provided most of the material needed to create the rampart, and to define the settlement.

Today, the terrace becomes indistinct to the north, even at times of the year when vegetation cover dies down. In contrast, it remains highly visible to the south, and the substantial terrace has crisp lines indicating minimal erosion. The reason for this differential survival is due to the topography of the underlying shale bedrock and the glacial till of clays and gravels that cover it. To the north the terrace could not be traced because the shale is at some depth (it was not reached, for example, even in the base of ditch 4709 or in any of the outwork ditches on the saddle of the promontory). The scarping was therefore mainly through soft deposits on much of the perimeter of the hill, and the same pattern of slumping can also be seen on the eastern side of the site (see Sect. 10.1.1.2). The original extent of the terrace is therefore uncertain on the northwest, but the extant remains to the south are discussed in Chap. 10, Sect. 10.1.2.2. The western promontory slopes were marked off from the north by the outwork bank 4105 and its ditch 4709/4100 (see Sect. 10.3.4.1), and to the north further earthworks 4120 and 4420 also ran down the western slopes of the saddle (see Sect. 10.3.4.2). The access point into the site at the southern terminal of the western rampart (see Sect. 13.2.1) may have made redundant the need for the terrace further north. It is therefore also possible that the ditch section revealed at this point may not be typical of the whole length.

Ditch 4230 was originally V-shaped, and measured c. 2.5 m across and 1.5 m deep. The outer slope of the ditch was very steep, and this angle was matched on the interior for the lowest 1 m. Thereafter, the cut was at a shallower angle that had originally continued up as the scarp slope to the front of the rampart. This created a slope 4 m in height from the base of the ditch to the start of the rampart; with the addition of the front face of the rampart, the total slope to scale in order to enter the fort on this side was nearly 5 m. This would have created a substantial, visually impressive profile that would also have been physically difficult to scale.

The ditch filled up relatively rapidly at the base with deposits that slumped in from the scarp, creating a more stable slope within the inner side of the ditch that continued that of the scarp above. The ditch then gradually filled with a fairly clean mixed stony fill 4233, followed possibly by a recut and then fill 4229 which contained more charcoal and burnt bone (Fig. 8.9). Both these layers contained some larger shale fragments, suggesting collapsed revetment, possibly from the end of the entrance walling. At some point, however, when the ditch had become almost invisible, a massive slumping event occurred on the scarp. A large, intact segment of the slope slumped down into the

Fig. 8.9 Views of the scarp, ditch, and terrace on the western slopes of the promontory. *Top left*: view from fort interior showing narrow ditch 4230 and wide terrace. *Top right*: view of ditch 4230 from terrace. *Bottom*: slumped deposits into ditch 4230, with late recut filled with stony later 4228

ditch (Fig. 8.9). This created what appeared as a cut line, but was in fact the natural interface between the layers of subsoil that stayed in place and the internally intact and stratified portion that slumped down the hill as a block. It was possible to identify the gravel and clay strata in the slump that matched those still in situ in the glacial deposits in the hillside, although they had been slightly transformed in the process of moving downhill, but the whole block must have slid down as a unit, and probably relatively quickly. The extent of the slump suggests that the ditch would have been filled and that any berm at the front of the rampart above would have been lost, possibly together with the front of the rampart.

Despite the dramatic damage to the earthworks at this point, the rampart, scarp, and terrace were all maintained. Whether the scarp was further modified after this event cannot now be ascertained, but the arrangement appears to have now been more stable, and there was limited further erosion.

At some point late in the sequence a ditch 1.2 m wide and 0.6 m deep was cut through the deposits on the scarp near the foot of the rampart. It reflects a refurbishment possibly after all knowledge of the V-shaped ditch on the terrace had been lost. It is possible that this cut is related to the late refortification of the promontory, and it may have been dug at this point to make focus traffic onto the oblique access route up to the side entrance of the fort. The ditch was filled with a very stony deposit 4228 largely formed from shale slabs eroding off the rampart above. The digging of ditch 3306 unearthed large amounts of stone derived from the Iron Age rampart rear revetting that had been buried and forgotten, and this material was used to make a matching bank that was later thrown back into ditch 3306 (see Chap. 14), and it would be most likely that this was when 4228 was also formed. At the southern tip of the promontory no recut was present in the excavated portion of the ditch (numbered there as 4163), which would match the lack of late walling and so refortification of this natural portion of the perimeter.

8.4 Discussion

The excavation of the western rampart has been hindered by limited survival and the damage caused by slumping of the scarped slope and the cutting of late ditch 3306. Nevertheless, it is clear that the gravel rampart was extended largely using clay with interleaved layers of gravel along the western edge of the scarp slope, on top of or behind the line of the palisade from the previous phase. The limited number of cross sections, and absence of linear sections, prevents detailed discussion of the order and manner of construction along the length of this bank, unlike those to the south (see Sect. 10.1.1) or north (see Sect. 9.2). The rampart seems to have been c. 5 m wide, under 1 m high, and with a wide, flat top. Whilst the front of the rampart may have been lost with slumping of the scarp, there is little reason to suggest large-scale erosion off the top of the rampart. Its low height mirrors that found on the better preserved southern stretch (see Sect. 10.1.1), and can be explained by the effects of the scarped slope of the hillside immediately below the rampart. Nevertheless, it was provided with two periods of rear revetment walling, linked to the two phases of stone entrance (see Chap. 12).

Chapter 9
The Building of a Rampart: Stratigraphy and Action Unpicked

Abstract The northern earthworks consisted to two ramparts and two ditches, though only the inner was extensively excavated. This allowed a detailed sequence of construction activity to be revealed. Following an initial structured deposition in a pit—a burial of human or animal remains—the rampart was gradually constructed from near this point in both a westerly and easterly direction, during which further structured depositions occurred. The rampart gradually extended to join the natural knoll on the northeast of the promontory, which was scarped and incorporated into the inner and outer ramparts. The inner ditch was over-dug on the south and west, requiring rapid infilling prior to rampart construction. Only the outer rampart was topped with a palisade, and even then for only part of its length.

The rampart 3714 east of the entrance that ran across to incorporate a natural knoll on the promontory before curving to south to end close to the natural steep scarp on the east was the most substantial and visible earthwork of the fort, and survives to a remarkable degree to this day. After an initial, traditional, trench through the bank and its associated ditch, as well as the outer bank beyond, it was realised that more extensive excavation was desirable to understand the construction, maintenance and decay of this earthwork. As a result, a large part of the western terminal was fully excavated (Fig. 9.1), the rear of the central section was examined (trees with statutory environmental protection and a historic intrusive agricultural feature limited full excavation here), and the top of the rampart east of the original trench was cleared to look for any cut features on the rampart. This was augmented by examination of the rear of the rampart along the rest of its course and the complete excavation of the eastern terminal. This chapter examines the detailed evidence for the rampart construction and history, together with the apparently less complex story of the outer rampart, and how it joined to the inner rampart at the entrance. The associated ditches are also discussed.

Initial excavation of the inner northeast rampart took place west of the highest point of the surviving earthwork. A 2 m wide trench was examined to provide a preliminary understanding of the structure and sequence of the rampart (Fig. 2.7), but even at this early stage it was clear that more extensive investigation would be necessary to develop a coherent account of the nature of the earthwork. This was because each side of the trench provided sections that were significantly different at the rear, the one to the west having a rear revetment of shale walling, that to the east having a possible palisade trench and large water-rolled rocks. This degree of variability was not found on the more extensive excavation, but the trench had been placed at a location where the highly atypical cobble element was present. However, it highlighted the importance of lateral study of earthworks, and the intensive and extensive study has revealed the methods by which the rampart was constructed, and the variation along its length.

The evidence for the rampart can be divided into several stages, based on the chronology of construction. Discussion of the meaning and significance of the line, size and construction, and overall appearance and functioning of the rampart, will be provided in the Discussion at the end of the chapter.

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Fig. 9.1 Extensive excavation of the western length of rampart to the entrance. The linear balk was later removed to complete the cross-sections. *Top*: view from southwest. *Bottom*: view from the east

9.1 Activities Prior to the Rampart Construction: Structured Depositions

The various domestic and craft areas associated with the palisaded settlement have been described above (see Sect. 4.3), and some of these were preserved because they were buried beneath the rampart. Of relevance here, however, are those activities which seem to have taken place immediately prior to the rampart construction, and which took place as the rampart was extended.

9.1.1 Pit 4299 (Figs. 9.2, 9.3, and 9.4)

The most important single act that can be identified immediately prior to the rampart construction is related to a large pit 4299 found c. 12 m east of the entranceway, and c. 35 m west of the natural gravel knoll that seems to have been included within the area of the palisaded settlement, but became incorporated within the rampart construction. No marker such as a timber post or stone was placed near the pit, though a post was standing in posthole 4556 at its western end before the pit was dug. The pit is oriented

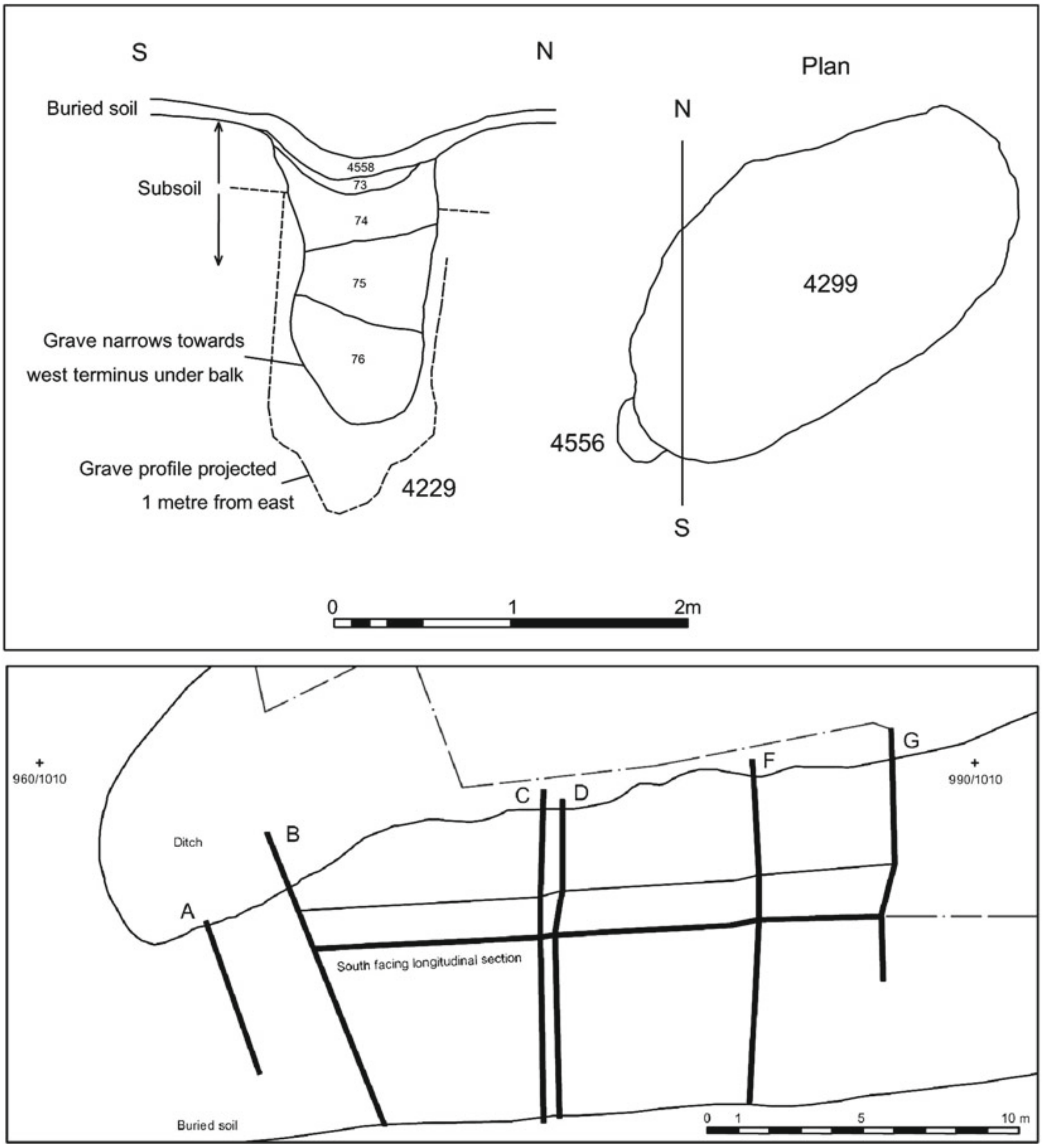

Fig. 9.2 *Top*: plan and section of pit 4299. Note subsidence of buried soil. *Bottom*: position of balks at the western stretch of the rampart near the entrance that are published as sections in this chapter

northeast-southwest, at c. 50 degrees from magnetic North. Although not on the line of the later rampart 4040, it was aligned with the postholes found sealed beneath the bank, of which 4556 was one. It also lay just to the northwest of the roundhouse 4262. If the pit had been dug whilst the house was still standing with its roof, the pit would have been just outside the probable eaves drip line.

The pit 4299 measures up to 0.90 m wide at the bottom, 1.93 m long at the surface and 1.60 m at its base. It is 1.80 m deep over most of its length, and 2.25 m at its deepest point, with near-vertical sides. In two places the sides are undercut, probably as larger rocks within the subsoil were removed. The pit was first noted as a linear depression in the surface of the buried soil 3719, which was intact across its surface and in no way suggested any cut from this level. This suggests that the turf was removed when the pit was originally dug, and then immediately replaced once it was filled.

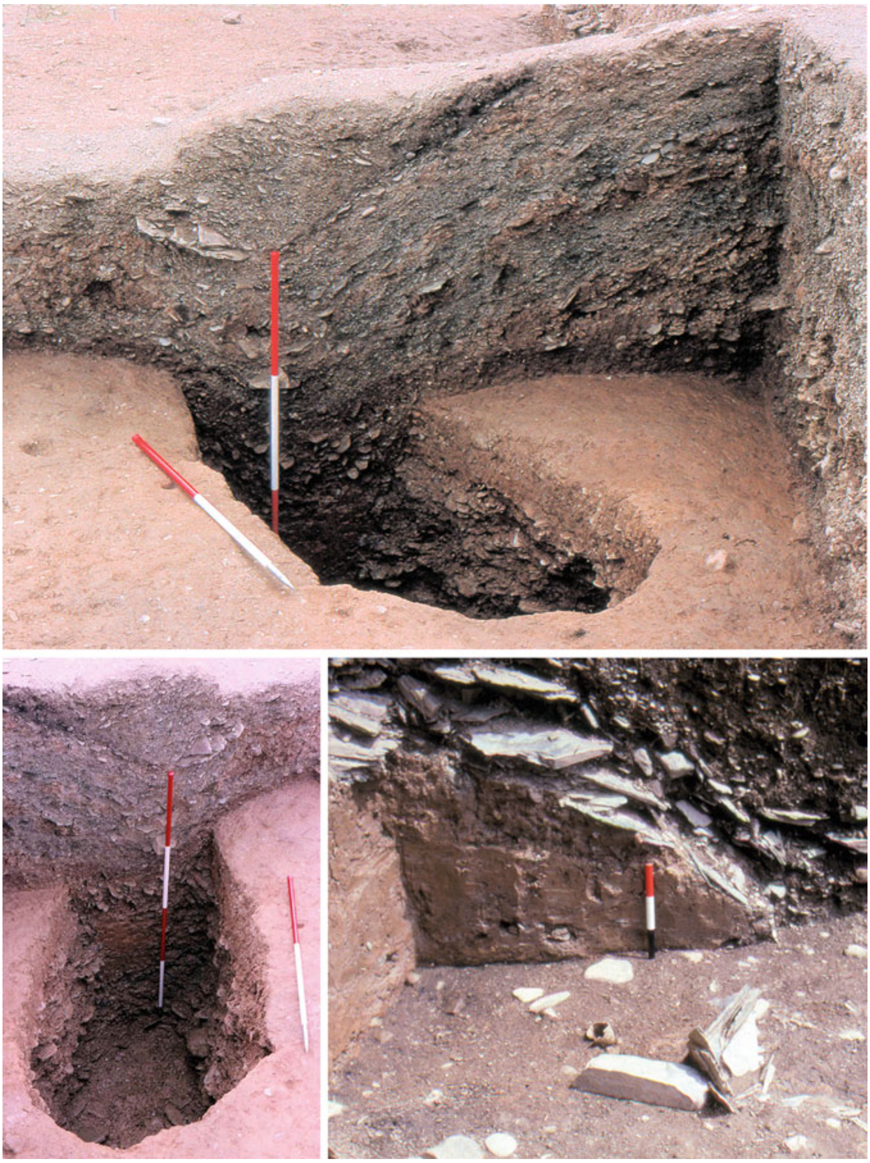

Fig. 9.3 Activities prior to the rampart construction. *Top*: pit 4299 from the east; note deposits subsiding into pit due to decay of its contents. *Bottom left*: pit 4299. *Bottom right*: crucible placed in filled posthole 4241 prior to the rampart being laid down over it

The pit fill comprised redeposited layers of the natural subsoil of clays and gravels that would have been excavated when the pit had been dug. The pit was cut through silty clay subsoil to a depth of c. 0.4 m, and then through clay and gravel. A small mound, consisting of dark yellow-brown silty clay [37], and with a second more gravely layer [3] running off to the east, was noted immediately north of the pit, in the section. This is probably what was left of the material taken from the pit, suggesting that at least some of the spoil was tipped out onto this side of the pit. The infilling of each layer seems to have started at the southwestern end, though the later subsidence makes the exact process of infilling difficult to model accurately. Given the narrowness of the cut it was not possible to excavate to produce

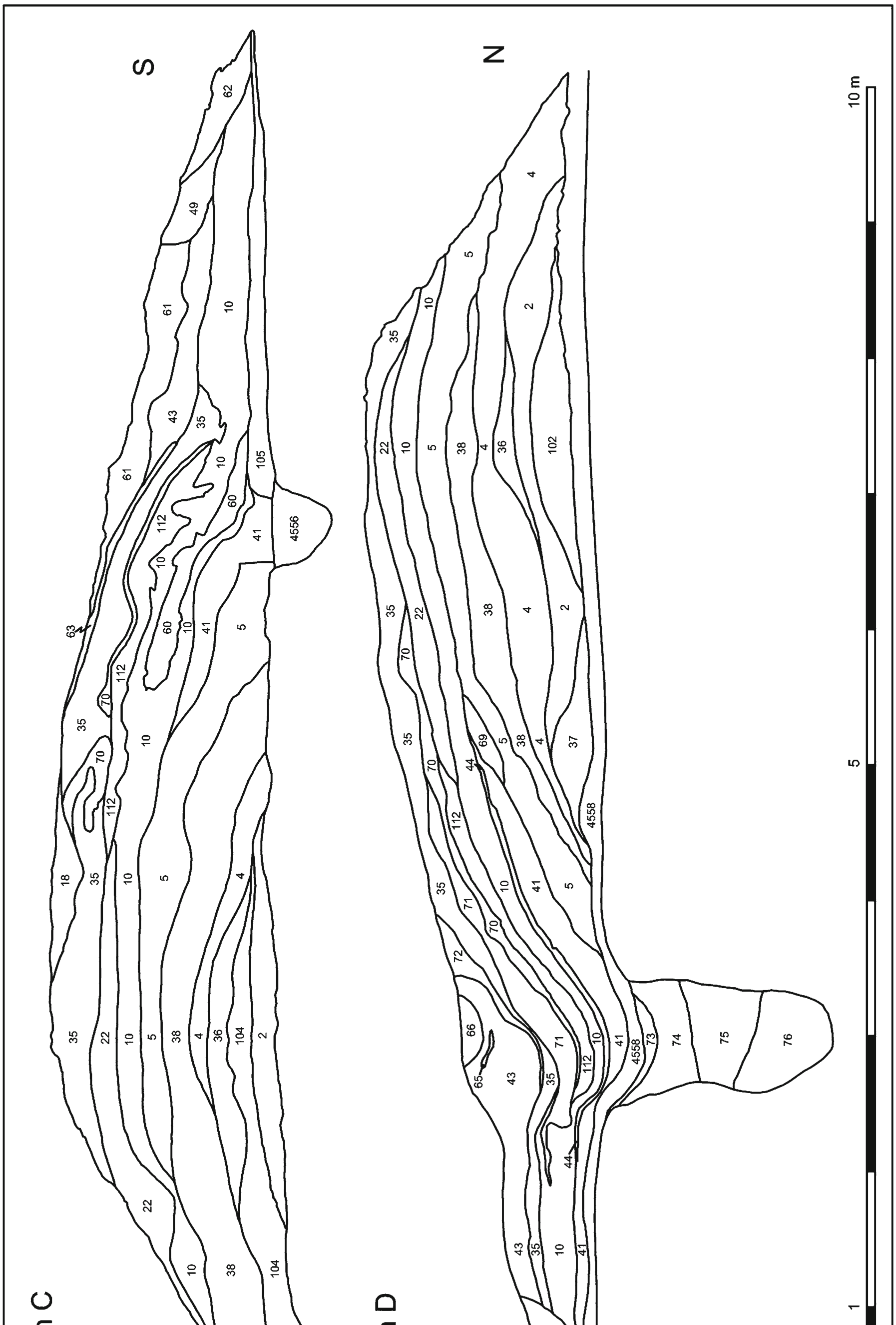

Fig. 9.4 Rampart cross-sections C and D. Layer numbers are given in square brackets in the text

a longitudinal section, as it was felt that it was more important to excavate in plan to look for possible staining within the fill. The top fill was a shallow deposit of mixed clay and stones, below which was gravely silty clay with some larger stones. The next layer was a stiff clay silt with some stones, and below this a finer gravel layer, which retained water partly because of the surrounding subsoil and the clay layer above. It is within this layer that important observations of stains were made, and they may have survived here because of the soil conditions.

At two levels in the pit within the lowest layer, discolorations with a more honeycombed texture to the soil were noted, and soil samples were taken. At a depth of 1.5 m an oval stain the size of a jaw was noted at the northeastern end of the pit, and towards the southwestern end a second more linear stain was identified at the same level. After these were removed, it was found that the pit continued to a greater depth and another 0.3 m of fill was removed from the whole length of the pit, whereupon a flat shale slab was found at the northeastern end, under which another stain was found; these lay immediately beneath the previously described discolouration. The base of the cut was reached at this stage along most of the length of the pit except beneath the lower stain, where the cut continued down for a further 0.4 m.

The section across the pit indicates that the fill compacted significantly after the turf had been placed back into position, and the layers of the rampart over the pit demonstrate that they, too, settled after they were deposited, proving that the rampart was constructed over the pit before the compaction within it took place. The degree of compaction suggests more than merely the settling of the pit fill. This was visible not only in the section, but over the whole surface of the pit as demonstrated by the depression in the surface of the buried soil. The subsidence indicates that biodegradable material that subsequently decayed had been placed within the pit. The soil discolorations may indicate where such items had been placed within the pit, and soil tests on the samples indicate very high phosphate levels. It is highly likely that whole or part carcasses were placed in the pit, though no trace of bone survived the acid soils. It cannot be demonstrated what species may have been present, though the size and shape of the pit would be consistent with a human inhumation. The two higher discolorations could mark part of the skull and a long bone of a slightly flexed inhumation, a human or possibly parts of a large animal such as cow or pig. The extent of each discolouration was always restricted in area, but that may have been due to survival as much as the small size of the items placed within the pit; thus the two features at the same level may represent two smaller items deposited, or the remnants of one large item such as a human body or animal carcass. The lower stain may also be only part of a larger item but, given the additional excavation only beneath where it was found, it is possible that this was indeed small, such as a skull; again this could have been human or animal.

The degree of subsidence in the pit suggests that it is likely that the amount of carcass deposited amounted to at least one human or larger domesticated animal body, or perhaps the parts of several. The degree of subsidence is similar to that of many rural graveyards where human burials have decayed and the grave cuts have become consolidated. The total of one skull and one carcass as suggested by the stains thus fits the evidence from the subsidence and compaction, though it is likely that any depositions made in the higher layers in the pit would not have survived even as stains.

9.1.2 Depositions of Faunal Remains and Artefacts

Once the rampart construction began, the original ground surface of the hill gradually began to be buried beneath the expanding earthwork (see Sect. 9.2.1). Evidence survives for particular activities involving the placing of items on the ground surface, or on an arrangement of stones, prior to their burial beneath the rampart. Due to the acidic nature of the gravels, the only portion of the excavated rampart length where faunal remains survived was within and near the original excavation trench through the rampart, and it is in this area that more clay layers were found. Whether other similar activity took place to the west, or beneath the eastern terminal of the main rampart, is unknown. The pattern of deposition beneath mounds of soil began at the palisade phase (see Sect. 3.3), but was repeated when the main rampart was constructed.

How frequent were depositions is hard to ascertain. Although settings of stones can be recognised as such when a bone or antler has been first noted and is seen to lie on them, a few pieces of shale would not be seen as significant when excavating a rampart where such material is so common in its general construction. Moreover, some types of deposit may not have required stones, and deposits such as textiles, furs, skins, drink, and most food would leave no trace even beneath the clay rampart. Thus, the range of identified depositions may be seen as possibly only a part of the full repertoire, though they are sufficient to indicate activities undertaken in association with the rampart construction.

When the first excavation trench across the rampart reached the surface of the buried soil, numerous animal bones and an antler pick were recovered from the surface. Further excavation has expanded this assemblage, and many faunal remains have come from clay layer 4557 just above the buried soil. It should also be noted that an antler was recovered from beneath the rear of the gravel rampart 3693 at the interface between it and the charcoal layer 3663 to the west of the entrance (see Sect. 8.1.1).

Many other faunal remains were found within layer 4557, the lowest layer within the main rampart. Their significance also needs to be considered; though they may represent domestic debris, they could be the remains of feasting associated with initiating rampart construction. The problem with evaluating faunal assemblages at Castell Henllys is that only those deposited within certain deposits such as those sealed beneath the clay rampart, survived the acidic soil conditions. They therefore appear special to archaeologists uncovering them, but may have been typical of other deposits in which all faunal remains have decayed. Above 4557 was dark gravelly layer, and it is notable that a perforated stone [SF15488] was recovered from this layer, together with a complete stone bowl or unused lamp [SF15934], along with another antler [SF15932]. The possibility that these were deliberately incorporated within the layer as it was laid down is strong, as so few even broken artefacts have been recovered from extensive excavations of midden and occupation materials and ditch fills. The faunal remains immediately below and incorporated in the clay 4557 may also represent some form of special deposit; a redeposited midden would have contained more charcoal, burnt clay and stone, which would have created a dirtier and more mixed layer.

Posthole 4241 had its post removed and the void filled, and at the level of the old ground surface an almost complete crucible was laid down, after which the clay layer of the rampart covered it over (Fig. 9.3). This is highly likely to be a structured deposition given the paucity of finds from the site, and its very particular placement.

An iron sickle blade was recovered from black rubbly layer [12] found in the excavation of the extension of the rampart towards the entrance. It is possible that the sickle was deliberately placed on [113] before the black rubbly deposit was laid down within some ritual act associated with the ongoing rampart construction and ditch terminal infilling. There are, however, several other alternatives. One possibility is that the sickle had already been lost within layer [12] and was merely transported to its find-spot when this was laid down; another is that the black layer represents some ritual activity elsewhere, during which the sickle was deposited, only to be moved to its recovered location within the black layer. The other alternative is that the sickle was simply mislaid whilst the rampart was being constructed, and the gravel deposits had covered it by the time that its disappearance was noticed. Of these explanations, the second is least likely as the sickle was on the interface between the two layers and a casually lost valuable item as this would have been visible. The loss during construction is possible, but a ritual element to its deposition seems a distinct possibility. The burnt nature of the rubble is also suggestive, and has been discussed in Chap. 3 (see Sect. 3.5).

A copper alloy fibula [SF15416] was found within the buried soil 3719 near where the rampart joins the entrance (Fig. ?.?). This object was not on the surface of the soil, but fully within the deposit, suggesting that it had been lost either prior to the rampart construction during the palisaded settlement phase, or during the rampart construction phase when it had been trampled into the ground. It is possible that the brooch was a casual loss, though it is also possible that it was deliberately placed under the turf as an act of structured deposition. All the other structured depositions that have been identified were on a surface, some associated with postholes or arrangements of stones; none were near the brooch find. However, there may have been other forms of structured deposition that did not require to be associated with any feature, and others such as foodstuffs or artefacts of biodegradable materials that would leave no trace. The single brooch is insufficient to be certain of a further structured deposit, though it being trampled to that depth also seems unlikely.

9.2 Extensive Excavations Near the Northwestern Entrance

It is not clear when the various elements of structured deposition described above took place, nor their order, only that they occurred prior to the construction of the section of rampart that sealed them. They could have all taken place in the same set of ceremonies, or could have been sequential. As described below, rampart 3714 was built from a particular point outwards, so some of the depositions could have been months or years after the first if each took place immediately prior to that section of rampart being started. Indeed this successive pattern would best explain the condition and placement of surface depositions on stones that otherwise would have remained open to disturbance for some time. Whilst this detail of chronology remains uncertain, the relative sequence of events for the whole rampart for a length of 18 m can be elucidated, with the rear part more than an additional 15 m examined, and the deposits associated with the eastern terminal also excavated.

The method of excavation and recording of the rampart 3714 has allowed a fine-grained resolution of the rampart construction, which can be reconstructed using the drawn longitudinal (Fig. 9.14) and cross-sections (Figs. 9.4, 9.5, and 9.12). Unlike the evidence from a simple trench across the earthworks, which emphasises only buildup in two dimensions along the face of the sections, the extensive records allow the lateral development of the rampart to be elucidated.

The account presented here is derived from combining together evidence from all the excavation sections. Many layers could be identified across two or more sections, and it has been possible to incorporate evidence from these to create plans of these layers as derived from the sections. These plans were not generated during the excavation of the deposits, as the tip lines were not always easy to see in plan. The morale of trainee excavators would not have withstood the painfully slow progress necessary to attempt the differentiation of tip lines in plan, and the resources that would have been necessary to carry out this degree of excavation detail were more usefully employed elsewhere on the fieldwork. However, the extent of each layer has been derived from the drawn and photographic record and whilst these are only schematic they do demonstrate with some confidence how the rampart was built up in three dimensions. A computer modelling of the earthwork may be possible, but would be best published in a web format where animation and colour could be employed.

The long and detailed description of this dump rampart is provided not merely because it can be worked out from the records, but because the nature of the rampart construction is important evidence regarding the role of the earthworks. The logistical, social and ideological significance of the rampart only becomes clear once the complexity and the manner of its building have been elucidated. A combination of field drawings which included relevant marking stones and their angle of rest as well as layer descriptions, combined with detailed photographs, greatly assisted the understanding of the sequence. The simplified layer drawings here allow the identification of particular deposits in a number of sections and, where sufficient can be displayed, on the phase plans. Many layers have been omitted from the plans either because their full extent cannot be determined, or because they merely amplify the development of the rampart in plan, even though they may increase its height.

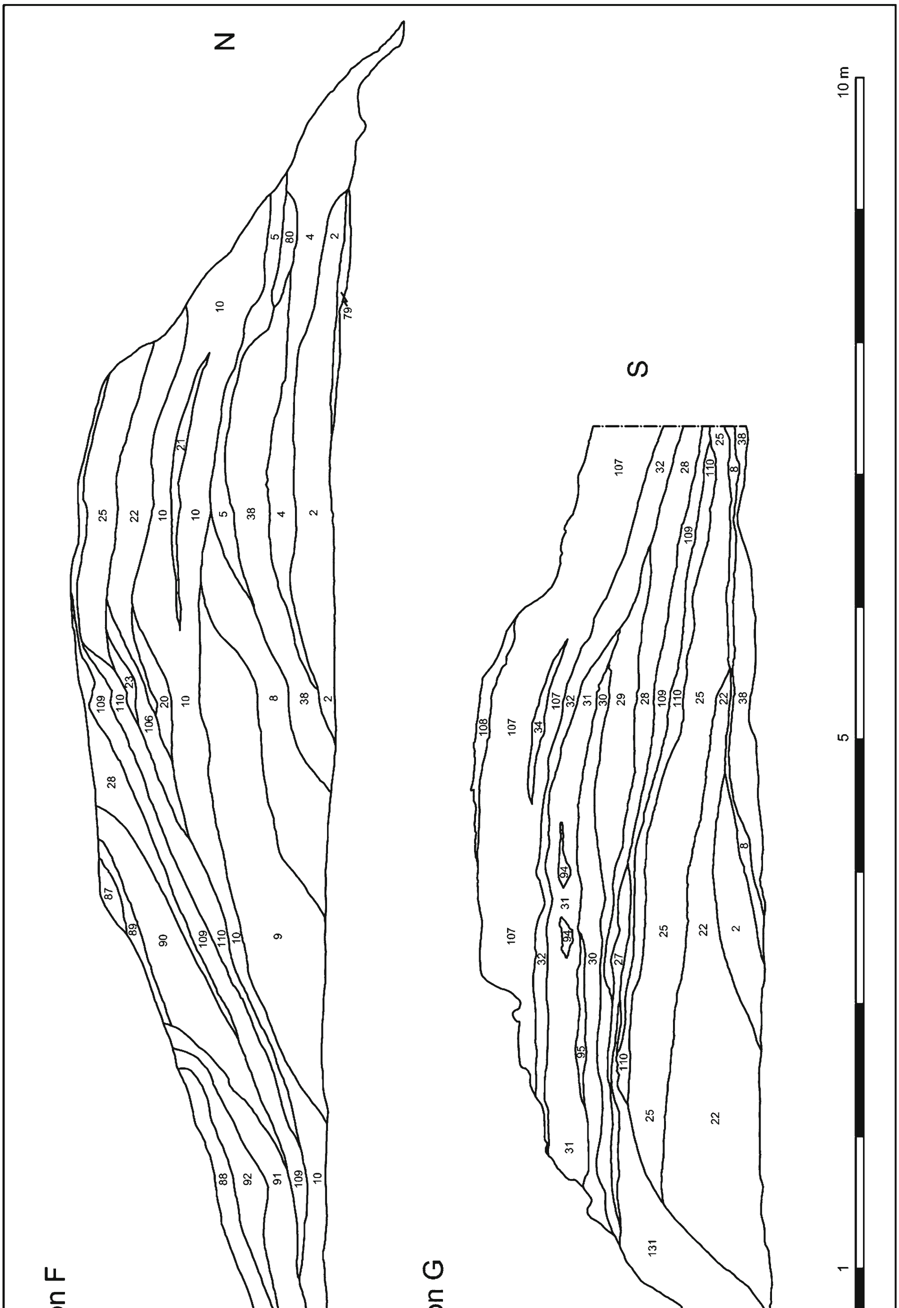

Fig. 9.5 Cross-sections F and G. Layer numbers are given in square brackets in the text

9.2.1 The Beginnings of Rampart 3714 (Fig. 9.6)

The building of the rampart began immediately north of the infilled pit 4299 with a small mound of medium sized gravel [37], reflecting the nature of the nearby subsoil these have been discussed earlier (see Sect. 9.1.1) in relation to structured deposition, but the layers are reviewed again here within the context of the rampart construction of which they are also key components. A small dump of slightly smaller gravel [3] was then placed east of this pile, creating a tail to the spoil. This mound was roughly parallel with the pit 4299, and was similar in extent, being 3 m by 1 m, and 0.35 m high. This probably represents the surplus spoil not used after backfilling the pit and its contents, and carefully placing the turf back over the feature.

Just to the north of the pit spoil, a separate mound was made; it is assumed that this was made after the pit, but it may have been constructed first, and the pit placed south of it. This material, medium sized gravel [102], was similar in character to that left in the pit upcast, reflecting the nature of the subsoil. The mound was roughly circular, 2.2 m in diameter and 0.3 m high. The initial appearance was therefore of two distinct low mounds on a large expanse of horizontal, smooth ground surface.

The first extensive layer of the rampart proper incorporated these mounds within the deposition of layer [2]. It extended to the west in a narrow tongue only 0.1 m thick that may even represent trample along the route along which the material was brought to where it mainly developed to the north and east. Though joined, the mounds still had two distinct peaks, up to 0.7 m high, with the northern peak now closer to the ditch edge. The earthwork was now roughly linear along the line of the completed rampart, having a central bell-shaped longitudinal profile 3 m long, with a low extended tail up to 0.3 m thick for probably another 13 m to the east. The rampart was now up to 4.5 m wide and was 4 m wide for most of its length. The initial construction feature for the rampart was a double-peaked mound that, apart from the low tails at each end, measured 5.5 m wide and 6 m long. It would thus have appeared more like a barrow than a rampart, and the pit lay immediately beyond its extent to the south.

It is notable that the rampart did not begin construction as a linear feature, but was given substantial width and height before being augmented to form the rampart. The rampart base was now extended westwards when [104] laid down, its eastern edge overlapping with the western extent of [2], and spreading for 7.5 m westwards. It was up to 0.3 m thick, but was generally only 0.2 m thick. Along much of its length layer [104] was mainly used to heighten the rampart along its central spine and did not spread very far to the south. These two layers [2] and [104] created a low platform that provided the alignment for 15 m of rampart, close to the ditch edge on the north, but little more than half of the final width of the rampart to the south. Layer [104] ran along the northernmost part of the rampart line, and at its westernmost extent it was one of the layers that filled in the ditch that had been considerably over-dug at its western terminal. It was therefore at this stage that it became apparent to the earthwork builders that the ditch as they had dug it extended too far to the south and west. It is noteworthy that the overcut ditch began to be infilled from this early stage, demonstrating that the material for the first part of the rampart must have been obtained from the western length of ditch, and that it generally moved eastwards from that point. On excavation this was an unexpected discovery, as layer [104] formed both part of the ditch fill and part of the early phase of rampart construction, a combination that at first seemed completely contradictory. Only the extensive excavations allowed some sense to be made of this apparent conundrum.

The rampart was then extended further west than had previously been the case, using [36] which largely overlay [104]. Layers [51] and [52] have only been noted in section B, but they suggest that a large spread of material, mostly only 0.1 m thick but rising to a maximum of 0.25 m, was spread over a wide area beneath the southern edge of [36] for a distance of 5 m to the south. This again may be as much evidence of trampling or temporary dumping places for material excavated from the ditch as rampart base layers per se. They survive here, however, because the rampart later covered them. By this stage the rampart builders were deciding on the exact alignment of the rampart and ditch, and how they were to eventually connect the rampart with the entrance. Thus, [36] was another rampart layer used as a fill in the

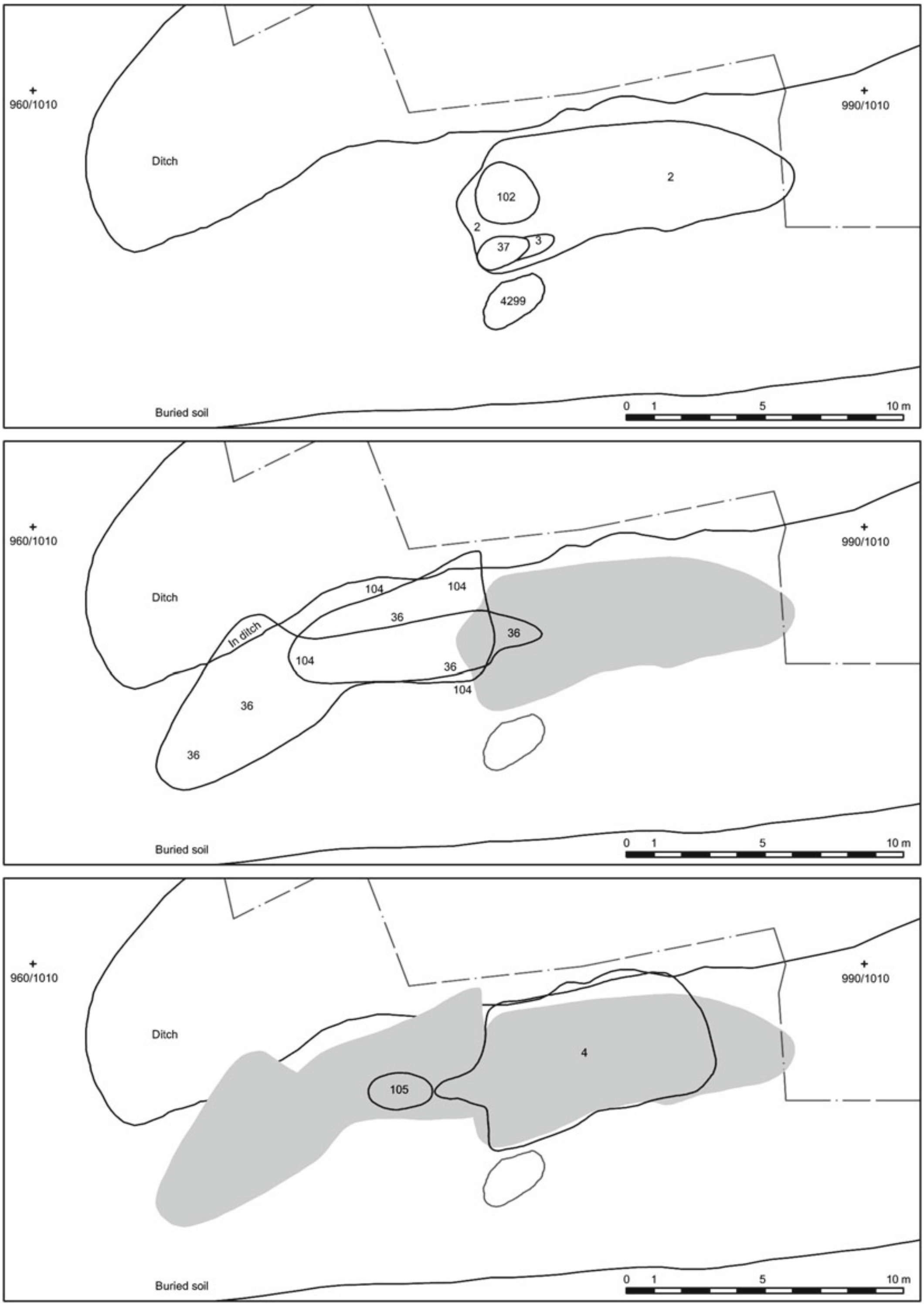

Fig. 9.6 The beginnings of the rampart. Layer numbers are given in square brackets in the text

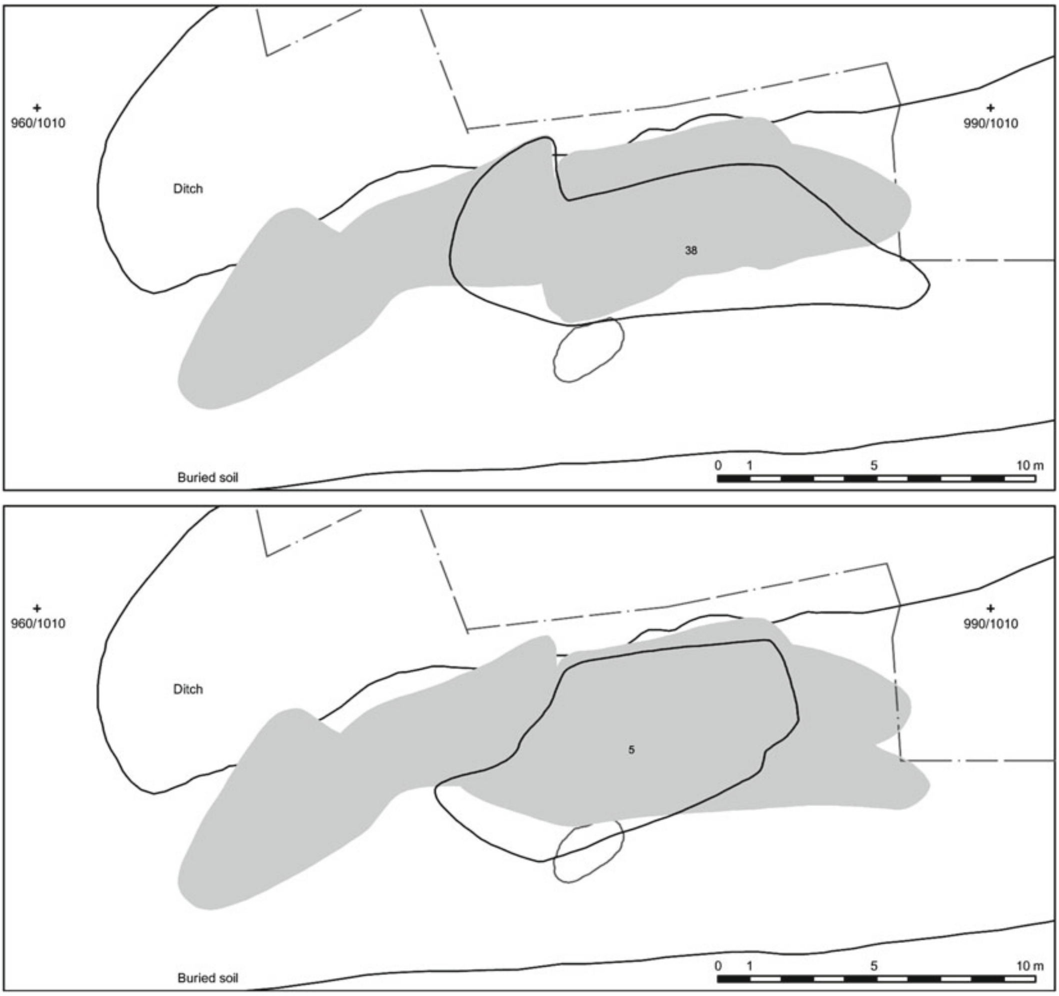

Fig. 9.7 The continued extension of the rampart

over-dug ditch edge, a pattern that was to be repeated at various points along its length. To begin to align the rampart to the entrance, [36] swung slightly to the south at its westernmost end.

A thin oval lens of material [105] was placed over [36], and then the next major deposit was made. This layer [4] joined onto [105], then expanded to both north and south, beginning on top of the original mounds and extending to the east, though not as far as [2]; its total length was 10 m. This raised the rampart by up to 0.4 m, a significant addition. This deposit was the first to define the final northern edge of the bank, surviving at the edge of the ditch; it may have originally stretched further to the north if the eroding ditch edge has undermined the front of the bank, but the cross-sections suggest that erosion here has probably not been significant.

9.2.2 The Continued Extension of Rampart 3714 (Fig. 9.7)

A major layer, [38], was then deposited partly over [4], increasing the height of the rampart by generally no more than 0.2 m, except where it extended beyond the eastern end of [4] where it added up to 0.5 m.

To the west, it widened the rampart where [4] had narrowed to join [105]. Layer [38] considerably added to the bulk of the central and eastern extension of the rampart, slightly augmented that to the west, and extended the tail at the rear of the rampart by over 1 m, where it was the lowest deposit on much of the buried soil. Here it increased the rampart's width along the whole length that had been marked out on its northern side by layer [2], and made it more uniform in width and with roughly parallel sides. At this stage, the rampart was marked out for a 24 m length, and was 5.5 m across, still hardly more than half its final width.

Layer [5] followed a similar line to [2] on the north, and on the south extended the width of the rampart by up to 1.3 m. Only a small amount of material was placed on the highest part of the existing earthwork, but most of the surface was covered over a length of 11 m, with particularly thick deposits, up to 0.5 m thick, on the western sloping part of the earthwork. Here the ground between the main part of the rampart and the eastern extension of [36] was now being infilled. The layer was a distinctive deposit, varying somewhat in consistency and colour along its length but always having much fine yellowish gravel in a loamy sand matrix.

At this point deposits were laid down that were stratigraphically not linked, so that work extending to the east and west cannot be phased relative to each other. Work could have continued on both ends simultaneously, or alternated between the two on one or more occasions. For convenience the western extension is described first, and then the eastern.

9.2.3 Western Sequence Below [10] (Figs. 9.8, 9.10, and 9.11)

Layer [11] created an extension of the rampart to the west, by accumulating a deposit up to 0.5 m thick over part of layer [5]. Although only bisected by the linear sections, its extent can be estimated based on the thickness and general method of accumulation of the rampart, suggesting an oval dumping to increase the height of the earthwork to the west, particularly at the rear. It is estimated that it extended to the full final width of the rampart at this point because a later layer [17] subsequently extended the rampart further to the west, and it must have been building upon the shape formed by the addition of [11]. The gap to the rear of the western end of the earthwork, between [11] and that part of [36] that swung round southwest at the end of its area of deposition, was filled in, developing the trend begun with the previous deposition [5]. This was achieved first with [13], and then with [113], creating a surface that gradually sloped down to the west, covering part of layer [36]. Although these last two layers could have been deposited before or after [10] on the basis of vertical stratigraphy alone, the logic of earthwork stability and coherence suggests that they were laid down before [10]. Neither layer can be drawn in plan, however, because both only appear in the southern longitudinal section.

9.2.4 Eastern Sequence Below [10] (Fig. 9.7)

The same inferences applied to [11] on the west have to be made for [7] to the east, extending the height of the rampart up to 0.25 m for 3.5 m of its length, and making its profile on the east steeper; it probably extended up to about 3 m in width. The next accumulation [8] again greatly increased the rampart to the east, with a deposit up to 0.35 m thick; this also has a long tail covering much of the original deposit [38]. It stretched from the top of the rampart back down the southern slope, was up to 2.5 m wide and an estimated 11 m long (it ran beyond the easternmost balk but was by then very thin and it seemed to be coming to an end. This layer increased the height of the rampart in a similar way to [38], but only added height to the southern slope on its eastern stretch.

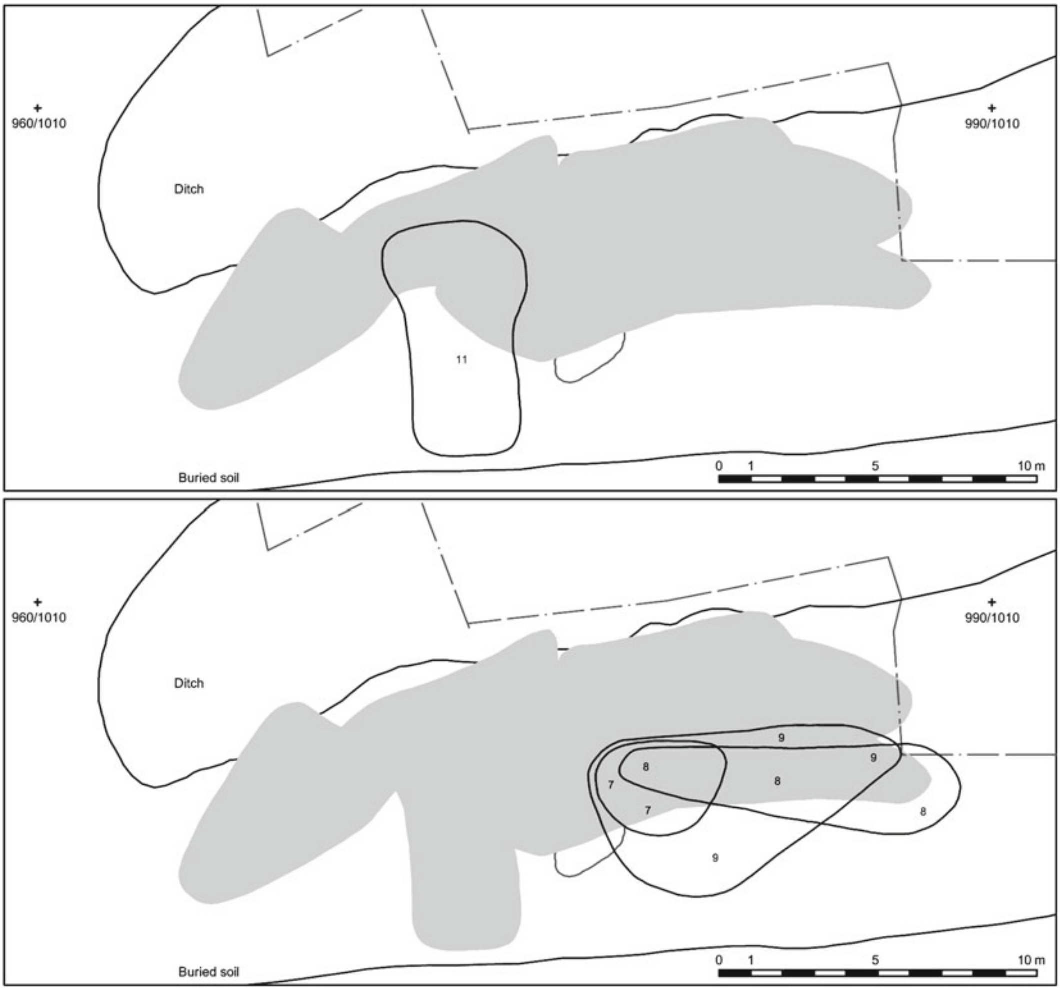

Fig. 9.8 Western and eastern sequences below [10]

The subsequent layer [9] was substantial, and increased the length to 4 m of the rampart at its then maximum height of 1.4 m. It formed a convex longitudinal profile up to 0.6 m thick, though this too had a long, thin tail to the east. This layer, up to 5 m across, began to widen the earthwork to the south beyond the extent already created by [5], [7] and [8].

9.2.5 Integrated Sequence, Layers [10] to [22] (Fig. 9.9)

At this stage of rampart construction, a layer [10] was laid down over a large proportion of the existing rampart. It was formed of clean pink clay, in most places only containing the small fragments of shale that occur in the natural bands of clay in the subsoil. However, on the top of the rampart to the east, where it was up to 0.5 m thick, a lens of gravel [21] 3 m long was found partly interleaved within the deposit, and extending on its upper surface to the east. Moreover, where the layer extended the width of the rampart to the south, a considerable amount of shale, sometimes with large pieces up to 0.3 m across, was incorporated within the deposit. This variation in the clay composition of the layer can be explained by lack of uniformity within the glacial clay deposits on the promontory. The natural clays

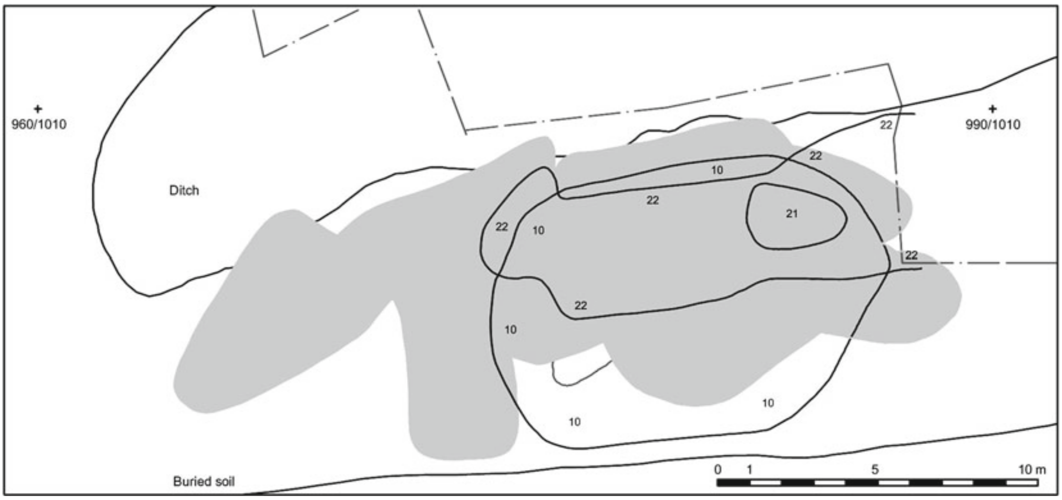

Fig. 9.9 Integrated sequence, Layers [10] to [22]

can be very pure, or can contain considerable amounts of rock, often shale but also quartz and igneous rock. If not deliberately removed from the clay material, they could be incorporated into the rampart makeup. It is probably significant that when [10] was at its thinnest, no rock was included, and when thicker then larger inclusions appeared. This suggests that the surface of the clay layer was to appear stone-free, and a smooth pink surface.

There is little doubt that [10] represents an important stage in the construction of the first stretch of rampart. It covered the eastern surface of [11] and all of [9], and formed a substantial and visibly different deposit that must have been as distinctive when constructed as when it was excavated two and a half millennia later. It marked the final southern edge of the rampart for a length of 7 m, covered the top of the rampart for 12.5 m, and in places also overlay much of the northern slope, creating an overall sealing layer. It is noteworthy, however, that it did not extend to cover the low, western deposits as they curved to meet the entrance.

Following the clay layer [10], the pattern of deposition to the east changed significantly. Numerous distinctive but relatively thin layers were laid down, mainly with the purpose of extending the height and reach of the rampart to the east. The first was a lens [20] overlying part of [10] and is not illustrated in plan. Although it covered an area about 1 m by 4 m, it merely raised the height of part of the bank by 0.1 m. It was followed by [22] which raised the height of the bank by 0.2 m above the original mound, but did not extend onto the southern rear of the earthwork. Instead [22] was largely dumped to create the lowest northern portion of the bank adjacent to the ditch edge; along the easternmost part of the excavation it was up to 0.75 m thick and was therefore important in extending the length of the higher part of the rampart.

9.2.6 Eastern Sequence Above [22] (Fig. 9.10)

The sequence above [22] reflects the significant heightening and some widening of the rampart at this point and further to the east, but the termination of the longitudinal section, and the absence of the rear, southern, part of section G, makes some aspects of the reconstruction from this point more partial than previously, so most of these layers do not appear on plan. Indeed, much of their contribution to the lengthening and widening of the rampart would have been to the east of the present excavations. It is not possible, however, to link any of these layers with those recorded in the main trench through the ramparts 20 m to the east, as so many layers comprise similar gravels and clays, and layers on the excavated portion did not extend for that distance, so it is highly unlikely any of these deposits reached that far.

Fig. 9.10 The sequence above [22]

The first deposition top of [22] was [106]; on the eastern part of this stretch of rampart it appeared as a 0.15 m thick layer in the southern longitudinal section, but from the cross-sections was shown to be a low pile only 2 m wide placed for a distance of 7 m along the top of the bank. It was followed by [25] which was up to 0.35 m thick across quite a width of the rampart, and so significantly increased the height of the earthwork at its easternmost excavated part. How far it extended to the south is unclear, and so it has not been drawn in plan. Layer [25] incorporated lens [23] that only was visible in the southern longitudinal section. At this point the eastern portion of this stretch of rampart began to be formed with a flat-topped profile that at this stage produced a 2 m wide platform.

This was followed by a whole sequence of deposits. First to be laid down was [110], 0.1 m thick, and then [109] at 0.2 m deep, that incorporated layer [27] within it, after which [109] was completed. This complex of layers was important because it extended the flat top of the rampart by a further 1 m to the north, making the flat top 3.5 m wide. At this point [131] was laid down to build out the front of the rampart to the edge of the ditch to the full height of [109], thus creating a more substantial and thicker rampart at this easternmost part of the circuit. This layer created for the next part of the rampart the same front face that [4] had done at an earlier stage further to the west, and perhaps stretches for a similar distance to the east under the balk. A thin layer [27] was then laid down on the flat summit, then [28] contributed to the southern slope, with [29] at up to 0.3 m in thickness widening the flat top to over 4 m. Next, [30], up to 0.2 m thick, and thin lens [95] were placed on the top of the rampart. The platform is again raised in a more substantial manner, by 0.3 m, with the laying down of [31] with its lenses of [94], though this did not contribute at all to heightening the rear of the rampart. In contrast, [32] added no more than 0.1 m to the platform height, but up to 0.2 m to the rear of the bank, where it extended for a considerable distance down the slope. The final layer, [107], certainly had lens [34] within it, but appeared as a thick deposit up to 0.8 high, raising the platform still further and increasing the height of the southern rear of the rampart by up to 0.5 m. It is possible that [107] actually comprised several similar deposits that could not be identified because of the presence of substantial tree roots that had not only mixed the layers but created problems in recognising them due to differential removal of moisture. Moreover, this root disturbance affected the front portion of this layer so the top front of the rampart has been lost at this point. Many of these layers were relatively horizontal at the front and summit the rampart, but on the southern slopes ran downslope to the east with almost straight profiles at 10–15°, each extending the whole of the rampart in plan a few centimetres to the east and to the south. In places, a very thin layer [108] was identified on the surface of the platform.

Fig. 9.11 Western sequence above [22]

9.2.7 Western Sequence Above [22] (Figs. 9.10, 9.11, and 9.12)

The linear section continues for 7 m beyond the end of [22], but cross-section A lies a further 3 m to the west. Because of the complexity of the construction of the various periods of guardchambers at the entrance, it was not possible to excavate a linear section joining the inner and outer rampart, but this stratigraphy was observed during excavation, and the two ramparts at this point were being built at the same time. Nevertheless, it is possible to provide a tentative framework for the construction of this lower portion of the rampart as it joined with the earthen backing behind the entrance, swinging to the north to join the outer rampart.

Following the laying down of [10], the rear of the rampart was augmented by thin layers [112], [70], and [71]. Together they increased the height of the rear of the rampart, but all suffered from subsidence as the contents of pit 4399 consolidated. As layer [70] interleaved with more extensive layer [35] this shows that all these were laid down more or less at the same time. Layer [35] was placed on the top of the rampart at the point where [10] began to dip down to the south, thus extending the highest part of the rampart slightly to the west by 1 m. It is unusual in being the only deposit that runs north–south in plan; most linear deposits run along and enhance the contours of the earthwork, rather than running across it.

The western portion of the rampart had already been laid out by [36] and [12], the former being the lowest layer to commence the backfilling of the over-dug terminal of the ditch 3716.

A major fill [55] of ditch 3716 was then sealed by rampart layer [12], an extremely rubbly layer that was laid down along the western stretch of the rampart for a distance of over 10 m. It had a very dark grey silty clay matrix that contained charcoal, and a few of the shale fragments showed signs of heating. The source of this material will be explored in relation to ditch 3716 below. To the north it infilled part of ditch 3716, but was mounded to form a low convex rampart to the south, with a height of up to 0.4 m. This was a very distinctive layer in the sections, and indicates how the bank was being constructed as the westernmost length of the ditch was being infilled. Similar rubbly deposits were tipped in from the west at the ditch terminal, forming the infill behind the drystone guard chamber walls. Given that they were very similar in character and function they have been interpreted as the same deposit, though the method and order of excavating the rampart and the entrance complex means that this cannot be illustrated on a drawn section, but are very clear on photographs (see Fig. 9.13).

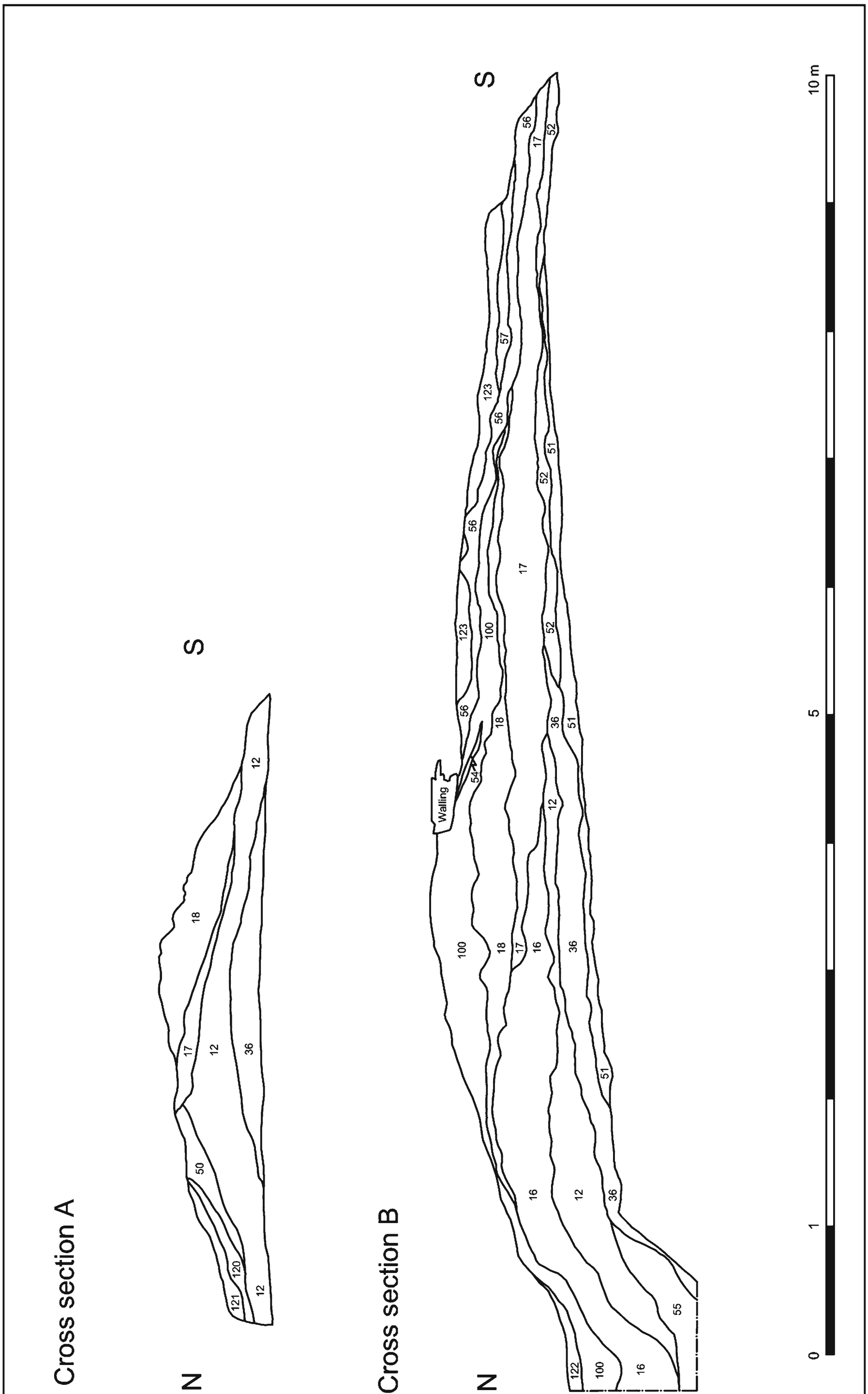

Fig. 9.12 Cross-sections A and B. Layer numbers are given in square brackets in the text

Layer [12] continued the line of the rampart to the southwest to join the entrance, as had been begun by [36] much earlier in the sequence.

On this platform was laid a substantial deposit of clay [16], up to 0.45 m thick, which was laid down to form the front base of the rampart 3 m wide on its new line running across the infilled ditch. This gave a convex cross-section profile to the rampart in this sector; it built upon the slight profile provided by [12], and extending this to the west. The next deposit [17] largely filled in behind and slightly over the surface of [16]. This layer was a dirtier clay with charcoal, suggesting that it had not been laid down immediately after being excavated from the ditch, but had been contaminated from nearby a midden or domestic activity. By this stage the rampart was its full final width of 6.5 m at this point, though it was rapidly narrowing as it approached the entrance. The rear of the rampart was then significantly heightened by [17].

On this part of the rampart the last major layer [100] increased its height by up to 0.4 m. It sloped down slightly to the west, and then in its surviving profile was flat-topped for 4 m. It then must have sloped down relatively sharply as it was not present on the final, westernmost, cross-section of the rampart. However, much of [100] was held in place by drystone walling to both the north and south, and it is likely that this had originally continued along the rampart to join the entrance stonework; much rubble that was clearly wall tumble was found during excavation of the higher levels of the ditch, and area excavation to the rear of the ramparts produced much evidence of collapsed walling (see Sect. 9.6). This walling would have made the rampart up to 0.5 m higher originally.

Further layers created the final rear profile as [56], [57] and [123] were added, though they were only required near cross-section B as the rampart was rapidly being reduced to the size seen in cross-section A. The base rampart by this stage was remarkably slight in both width (under 5 m) and height (0.8 m), but did join onto the entrance complex at this level, with front and rear revetment that survives intermittently. This walling was found in places on the northern face of the rampart, and frequently to the rear, but is discussed as a coherent set of features below (see Sect. 9.6).

9.2.8 Ditch Terminal 3716 (Fig. 9.13)

The ditch terminal 3716 was originally dug in the Iron Age too far to the west for the first stone entrance, and so part of the ditch had to be almost immediately backfilled. This original terminal was only partly excavated, but sufficient was uncovered to consider the methods of ditch digging, the nature of the infilling, and the revised form of the ditch terminal.

Ditch 3716 had been dug through glacial deposits of clay and gravel, and it came to what was probably a relatively narrow but steep-sided terminal. The southern edge of the ditch cut was close to vertical, and the profile so produced would not have been stable for any length of time; it may have been unfinished, and was just the extent reached when work was halted as the decision was made to place the entrance structures partially over it. Observation of excavated features and finished excavation areas left at subsoil level over several years has demonstrated the effects of weathering on steep slopes cut in this subsoil. It is therefore possible that the ditch terminal was either unfinished, and would have been widened to create a more gentle slope, or was primarily dug as a source of rampart construction material. The full depth of the ditch 3176 terminal was not found, but the steep angle of the infill deposits demonstrates that it must have been at least 1 m deep.

Whatever its original purpose, the ditch was rapidly backfilled up to the surface for a length of over 5 m, and thereafter for its lower levels to create a new terminal. At about 5 m from its end, a drystone wall was constructed to hold back the infill that stretched from this wall at the new ditch terminal through to the entrance way walling. The ditch terminal wall was set on the consolidated backfill that included much shale rubble, burnt deposits and layers of clay. The significance of these

Fig. 9.13 Terminal of ditch 3716 rapidly infilled soon after being dug. *Top*: view of part of cross-section B showing front of rampart being constructed into the ditch. *Bottom*: linear section of ditch 3716 from its terminal on the *left*. Note rubble infill; ditch was not fully excavated. Note stone entrance walling on *far left* and walling of rear of rampart and modified ditch terminal to the *right*

deposits is discussed below, but here it should be noted that they provided a solid foundation for the revetment wall that survived to a height of 0.6 m.

The infill of the ditch was not largely the material that had been excavated from it. Some of the layers contained considerable quantities of burnt material including shale fragments and charcoal. Other deposits were much cleaner, and they may have come from ditch digging elsewhere. Some of the ditch fills also continued as layers in the inner rampart (Figs. 9.12 and 9.13). The thick layer of shale fragments, at least 0.7 m deep in places, may represent waste from the construction of the drystone walls of the entrance, or demolished features of the palisade phase entrance (see Sect. 3.5). It is assumed that the material dug from the ditch had been used in the early phases of rampart construction.

Ditch 3716 to the east of the excavation of the terminal was dug to its full extent and has been discussed below as 4563 (see Sect. 9.3.2.2).

9.3 Rampart 3714 to the Natural Gravel Knoll

Many of the layers described above ran for a number of metres to the east, but it is likely that the impression given that layers [22], [25], [31] and [107] give of being the major elements in the rampart construction is correct at this point, but within a couple of metres to the east these may have become thinner and some of those layers shown as insubstantial, or not revealed in this excavation, would dominate construction.

9.3.1 The Central Stretch of the Rampart (Figs. 9.14 and 9.15)

A more southern linear section than that shown in Fig. 9.10 extended further eastwards, but longitudinal sections through the highest part of the rampart were no longer obtained. This was in part due to large tree stumps that impeded excavation (those to the west had proven problematic, but effective section lines were nevertheless located). The southern east–west limit of excavation revealed a significant change in construction method a further 2–4 m to the east (Fig. 9.10, right). The layers of gravel were replaced with a substantial dump of clay, making a very steep (albeit temporary) terminal of the rampart with what appears to be a horizontal surface, though the north–south section shows that the clay was sloping as steeply in this direction and may have continue dot do so behind the section face. Above the thick clay deposit, a series of grey-brown deposits with much shale and clay layers completed the rampart, and these tipped steeply down the eastern end of the clay, and down its southern slope, the layers remaining surprisingly even in thickness throughout. If the rubbly layer had been just dumped against the clay it would not have been so even in thickness, as the rubble would naturally slide to the base and create a more gentle slope, being thicker at the bottom and thinner higher up; this has been deliberately formed with an even thickness. The rear deposits, hardly visible in the linear section, were more mixed grey-brown deposits, suggesting a different source from those seen in the linear section.

The rampart excavations to the east were then interrupted for c. 4 m by a relatively recent, probably nineteenth-century stone-lined cut that was investigated archaeologically but later converted into an access route to the fort interior for those working on site maintenance, so even a more southerly linear section was not possible. Beyond this further to the east, the rampart was again cut back as far as that to the west, and revealed the linear pattern up to the main trench through the ramparts (Fig. 9.11). By this point, the rampart was almost completely of clay, with some interleaved layers of gravel, a pattern also matched by the main trench sections through the rampart. The linear patterns show layers apparently horizontal or sloping gently down to the east, but the north–south section (Fig. 9.11, top) shows that these are wedge-shaped deposits that were spread evenly along a length of rampart. Nevertheless, this shows that the rampart was still being constructed from the west, the gangs moving eastward and approaching the natural mound. There is no evidence of any team working in the opposite direction, from the knoll towards the entrance. All these deposits relate to the rear portion of the rampart; it is only the section through the whole rampart at the main trench that reveals the pattern of deposition at the front, and this is discussed below.

9.3.2 The Main Trench Across the Earthworks (Figs. 2.7, 3.8, 9.15, 9.16, and 9.17)

The trench through the earthworks produced two important, though significantly different, sections in 1983 despite the trench sides being only 2 m apart. From 2002, the trench was widened, and further investigated and recorded with an additional set of drawings and photographs. The results were important for the palisaded phase (see Sect. 3.3) but also added to the understanding of the main rampart construction.

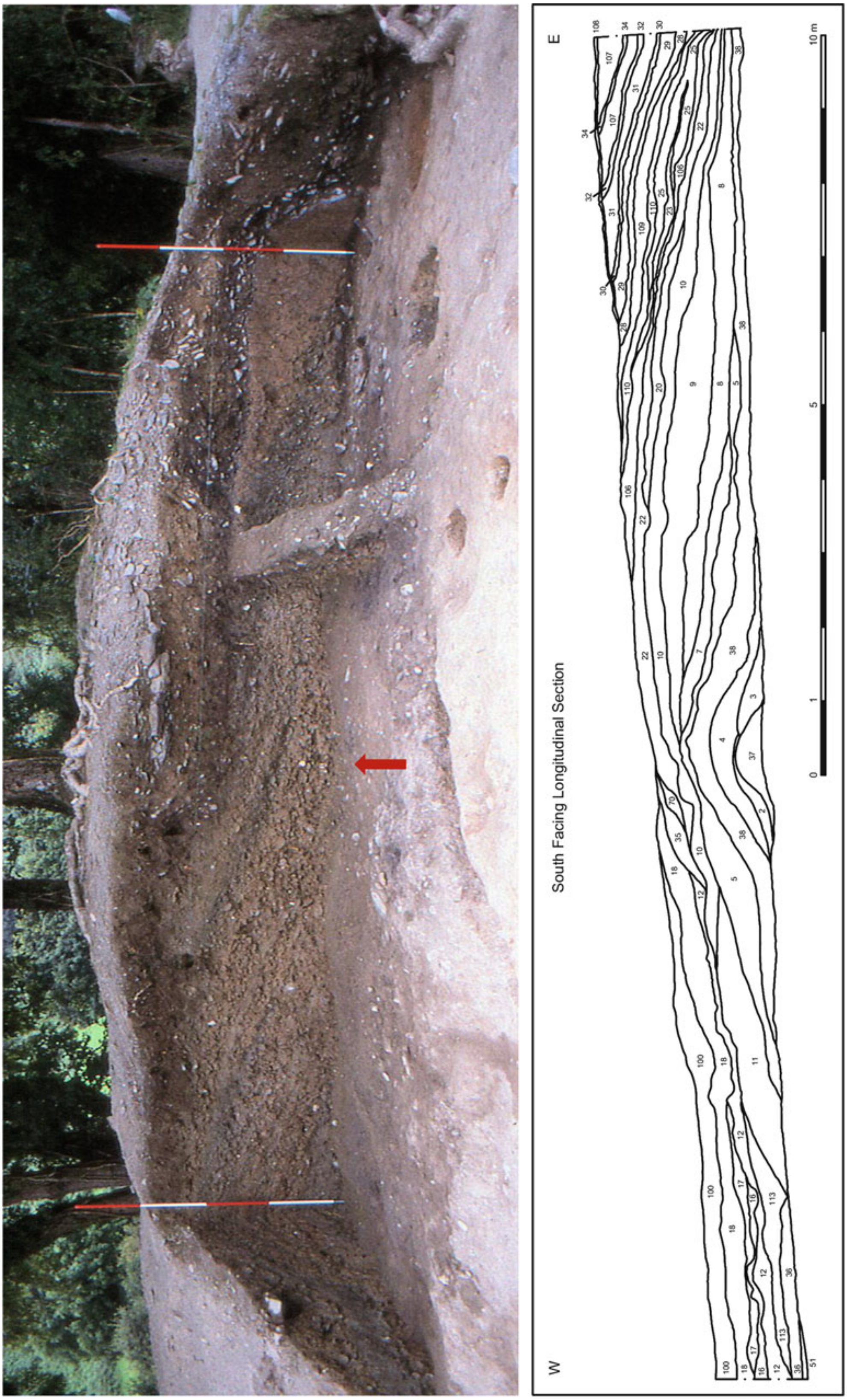

Fig. 9.14 *Top:* the rampart to the east. The section left/below of the *red arrow* was taken back to form the eastern part of the linear section, but that to the right/top was not excavated beyond this point. The balk for section F is partly visible on the left/bottom. *Bottom:* linear section. Layer numbers are given in square brackets in the text

Fig. 9.15 Linear section immediately west of the main trench through the ramparts. *Top left*: north–south section with drystone walling in section. *Top right*: cobbles 224 on rear of rampart in original rampart trench. *Bottom*: linear section showing gently sloping tip lines; figure on *right* stands in original rampart trench running off to the *right*

9.3.2.1 Rampart 3714

The rampart was excavated in the first seasons of the excavation, and then reexamined in the light of the knowledge gained during excavating the large area to the west. The section (Fig. 9.16) clearly shows the palisade phase small, low mound or bank 4414 (see Sect. 3.3) and cut of a ditch 4563, but these may not have been related as the 4563 cut suggests a much larger ditch that required for the bank. It is more likely that 4563 represents the early cutting of the ditch linked to the main rampart construction, as seen at the terminal and the southern edge along the western length. As seen to the west, the inner part of the ditch was then infilled with early rampart layers, allowing the front of the rampart to be further north that was originally planned. Above the buried soil on the rear portion of the rampart was a pink clay layer with many animal bones which was sealed by a charcoal-rich layer also containing bone that sealed palisade phase posthole 4560, indicating that this had been dismantled

Fig. 9.16 Main trench rampart. *Top*: western side of the trench with drystone rear revetment wall 4575. *Right*: eastern side of the trench with original end of drystone rear revetment wall 4313 and a few remaining cobbles 224 in place

so that the rampart could be constructed. This layer may be redeposited refuse from the palisade phase occupation, or could indicate particular activities where the rampart was later to be constructed. By this stage ditch 4563 had been filled on its southern edge to create a horizontal surface that ran back to the rear of the rampart, and from this point a series of layers built the rampart up, with 4578 on the rear of the rampart, but most building up across the whole of the width, unlike the patterns seen to the west. Most layers were clay, with thin layers and intermittent lenses of gravel, creating a rampart just over 2 m high.

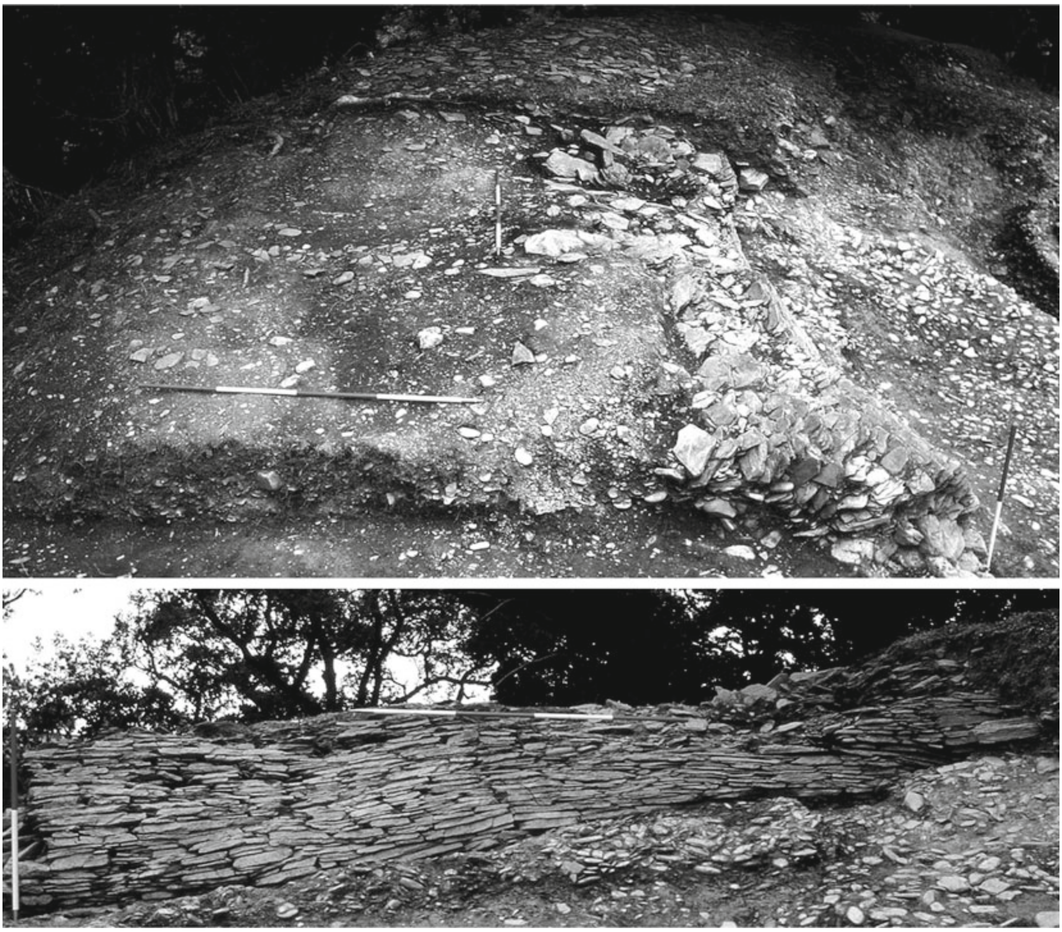

Fig. 9.17 *Top*: surface of the rampart east of the main trench through the rampart, with rear revetment wall 4313 on the *right*. *Bottom*: face of rear revetment wall 4313; note vertical end to the left which is an Iron Age break, and the rising ground along the length of the wall reflecting the natural knoll rising to the right

The southern portion of the western side of the trench revealed a drystone wall 4313 up to 0.8 m high (9.16). The wall had a vertical cross-section edge that almost exactly matched the edge of the excavation trench; the walling had not spread across the excavation trench at all. The west-facing section on the eastern side of the trench originally displayed a very different situation. Here no shale walling was present, and instead a large number of cobbles 224, unlike any other stones on the site, had been piled against the clay bank; these cobbles had extended across the original trench and had butted up against the end of the shale wall (Fig. 9.15). The earliest excavations had revealed such great distinctions less than 2 m apart, and this highlighted the potential variation along the rampart. For example, further excavation widening the original trench revealed how the cobbles were no longer present (Figs. 9.15 and 9.16) and drystone walling began again, and survived to a height of 0.5 m. The reason for the short gap in the walling, filled with cobbles, is not easy to explain. The most likely explanation is that a wooden structure, presumably steps, had stood in this deliberate gap in the walling (and fortuitously almost exactly where the excavation trench was placed). The steps could have been flush with the walling at ground level, and ran up the rear of the rampart to provide access close to the highest part of the circuit. The cobbles may have been placed there after the steps were no longer required, but perhaps the steps set against the clay bank rotted quickly, due to the runoff of water down the clay surface. The cobbles were then used to fill this space, and they were held in place by an external stair that ran over them, allowing better air circulation and so survival of the structure. No subsurface features survive to suggest a stepped structure, but these would not have been necessary for its structural stability.

Walling 4313 seems to have been in a narrow cut, into which it has sunk back to create a battered angle, but the walling to the west, 4575 was set in a wide cut 4415, which then was partly backfilled before the wall was constructed (Fig. 9.17). The wall then subsided within this cut, no doubt one of the reasons for the partial collapse of this wall, in contrast to the settling of wall 4313 which made it more stable. The wider context of these rear revetments are discussed below (see Sect. 9.6).

In its complete form rampart 3714 measured up to 2.3 m high and 10.5 m wide, though for most of its length it was both lower and narrower than this, particularly near the entrance. The excavated stretch of the main northern rampart was far wider than was structurally necessary for stability, and had a wide and relatively horizontal flat summit and smooth, gentle rear sloping surface. This was explored immediately east of the main rampart trench (Fig. 9.17) where the topsoil was removed for the whole width of the rampart and for a length of 8 m, to examine the top of the rear revetment wall (see below) and whether there were any features on the rampart top. This location was chosen because it was the only extensive area so well preserved along the highest portion of the rampart, and it demonstrated that there was no palisade, and indeed no features of any kind on this broad, flat-topped surface.

9.3.2.2 The Inner Ditch 4563

The large trench through the defences was undertaken early in the investigation of the fort, and was first drawn in 1983. Whilst it was thought at the time that the sides and bottom of the ditch had been reached, and indeed that undisturbed subsoil had been revealed in overcut steps on the inner slopes of the ditch and scarp, further excavations elsewhere on the site suggests that this was not fully the case. Excavating the ditch terminals at the entrance, other sections across the ditch of the outer rampart, and numerous outworks ditches, has given experience of the ways in which silting, slumping and infilling at Castell Henllys creates false edges easily misinterpreted by excavators. Moreover, the intersections between rampart and ditch in the original sections were somewhat problematic, though this was explained at the time by over-digging into subsoil. Further examination of the rampart from 2002 emphasised the complexity of the deposition in relation to ditch 4563 and rampart. This now indicates a ditch at least 2 m below the current ground surface within the earthwork, and informed inference based on the sloping ditch sides suggests a full depth of c. 3 m, with several phases of slumping of the scarp and recutting. Only with a large-scale excavation of a length of the ditch and its consequent large-scale site disturbance with stepping in of trench sides, shoring, and spoil removal and management, could a more detailed account be provided. Even with such massive investment, however, the sequence may still remain unclear because of recutting, and there is the further difficulty of associating episodes of ditch activity with the stratigraphically unconnected rampart and other site sequences. Moreover, the use of the site by school parties and the public means that this element of excavation has not been attempted for logistical and health and safety reasons.

The ditch 4563 in its form that complemented the rampart was dug on sloping ground, and thus with sides of uneven length, much longer to the south than the north. On each side was a rampart, neither with any evidence of a berm. The slope formed by the front face of the inner rampart thus lay on top of the infilled ditch edge, and then continued down as a scarp cut into the subsoil. The top part of this slope had no ditch silting at all; beneath the topsoil lay the deliberate ditch infill that also was in effect a layer in the rampart. Lower down the slope it appears that the cut was into pristine subsoil, continuing the same angle as that established immediately in front of the rampart. This cut then became the inner side of the ditch, probably without a change in angle. On the downhill northern side, the ditch cut through the buried soil on which the outer rampart sat, and may have carried on down at the same angle. Towards the bottom of the ditch it is probable that the slopes became steeper on both sides, finishing in a V-shaped profile. This element of the ditch was not recognised during the early 1980s excavation, which stopped at a recut.

The fill of the ditch does indeed indicate some recutting even in the higher deposits that were investigated. On both sides of the ditch a silty deposit 503 indicates slow natural infilling. A recut 504 was subsequently filled with some large shale slabs, up to 0.35 m long, perhaps from a collapsed outer revetment wall of the rampart. A further recut created a wide ditch over 1 m deep with a shallow inner side and a much steeper outer face. This was then filled slowly with a clayey deposit with intermittent shale fragments up to 0.25 m in length, though not sufficient to suggest a refurbished rampart revetment. A lens of clay loam up to 0.3 m thick was the final infilling of the ditch, which remains a major earthwork feature to the present day. It is likely that further recuts would be discovered in the lower levels of the ditch that remain unexcavated.

9.4 Rampart 3714 East of the Main Trench and the Southeastern Rampart Terminal (Fig. 9.18)

As the rampart extended east beyond the main trench described above, it was not excavated but the rear of the rampart was cleaned as part of the interior excavation. This revealed that the rampart rapidly reduced in size (see the changing height of the revetment walling in Fig. 9.17) as the natural ground level rapidly rose, and the rampart merely smoothed out and slightly enhanced the knoll which was shaped both internally and externally to create the impression of a massive rampart. Only as the natural ground dipped away to the south towards the eastern side of the promontory, did the rampart increase in size once more.

The rampart southeast of the gravel knoll ran down towards the naturally steep slope of the promontory. Before excavation, it formed a relatively steep end profile, though excavation revealed that the bank had once extended slightly further to the southeast than the earthworks suggested, its original terminal eroded severely in antiquity and was then truncated by the late period ditch 4477 (see Sect. 14.3.2) but this had eroded severely in antiquity. The nature of the rampart's original end profile cannot therefore be ascertained with any certainty.

The rampart terminal was excavated to create a partial longitudinal section, and a cross-section sufficiently far back along the rampart length to reasonably reflect its scale. At this point the rampart was completely formed from human action, but further to the northwest it would have been increasingly formed from scarping and reworking the gravel knoll. Unfortunately, no section across this point of the rampart was possible because of the need to preserve protected mature oak trees that were seen to enhance the site's value both as a natural habitat and visitor attraction.

The rampart cross-section was placed close to the terminal, just before the point where the rampart began to decline rapidly in height and to a lesser extent in width. Spoil from excavations within the fort to the north had been placed on the top of the rampart in the 1980s, and some spread down the outer slope. Nevertheless, the original profile of the rampart was easily identified, sitting on the gradual downslope of the original ground surface. The rampart was constructed by the placing of a low spread up to 0.2 m thick at the front of the rampart position, covering posthole [4508] and the palisade trench [4492] (though this was beyond the extent of the rampart at the drawn section). This sealed earlier structural features and slightly levelled the ground before the first major dumping occurred. This consisted of a large mound, 1 m high and 3 m across, of silty clay and small stones at the front of the rampart, behind which all subsequent layers were deposited. The rear was then sealed with orange clay, after which layers of gravel and small shale fragments were all placed at a similar angle, increasing the height to 1.7 m and width to 6.7 m.

The rampart at this point was slightly wider and higher than that on equivalent point on the western side of the site, and created a definite end to the massive rampart. A similarly clear end was indicated for the matching outer rampart, though this has not been excavated. The linear section was produced

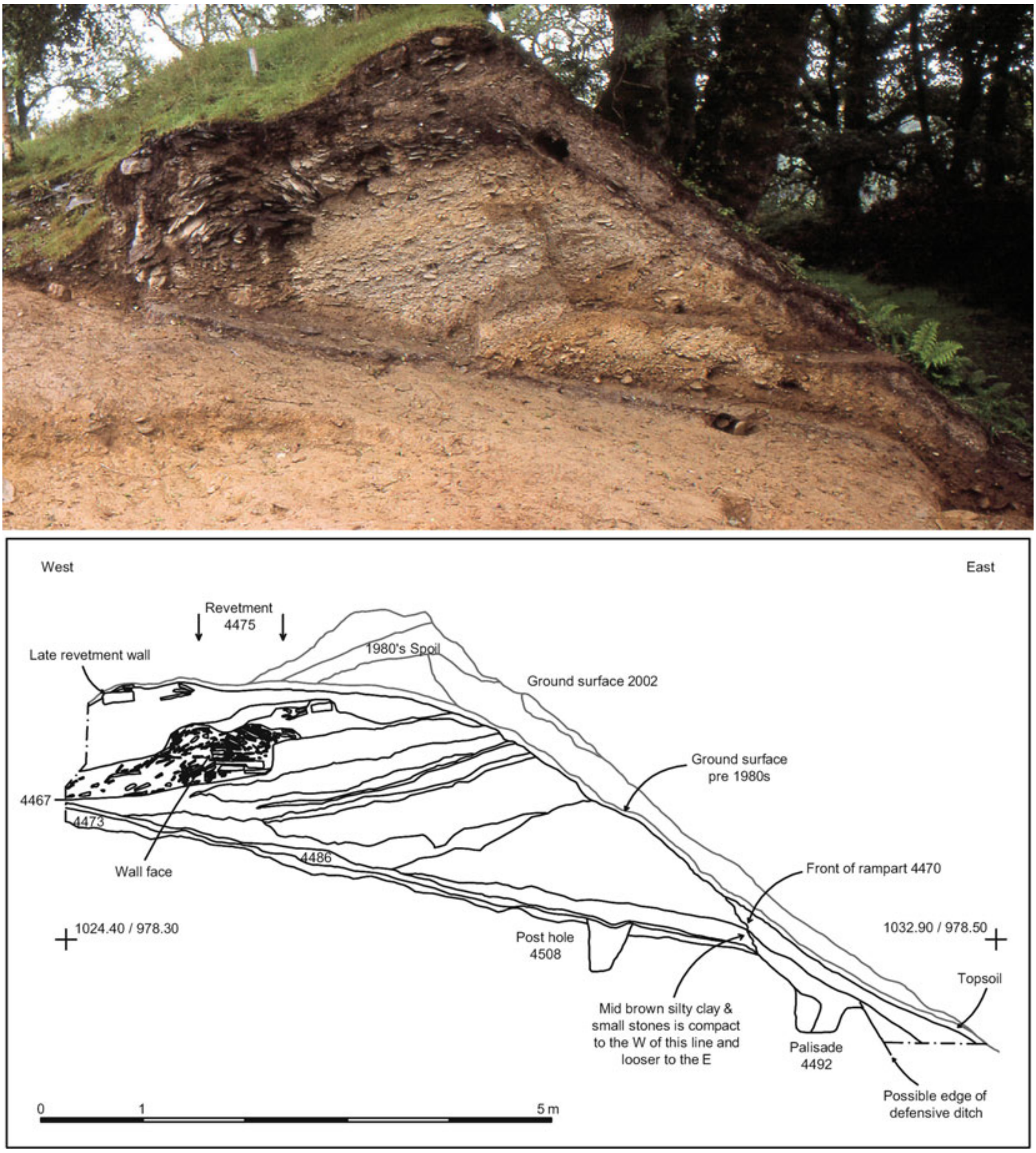

Fig. 9.18 Rampart near to eastern terminal. *Top*: photograph of section, with step to prevent collapse due to soft gravel in the rampart makeup. *Bottom*: section drawing

by leaving a narrow balk standing whilst the rampart was excavated to layer 4473 on both sides. After recording it was then removed so that the pre-rampart surface could be studied in one block (see Sect. 4.3.8). The section demonstrates how the rampart was running down across the contours of the promontory at this point, and that most of the layers in the bank sloped downhill and gradually became thinner towards the terminal. Despite some damage by animal burrows and the cut from late ditch 4477 it is possible to identify that after the initial deposit of clay, a small stony mound marked the end of the rampart, and the layers tipped against this. This is similar to the initial dump at the front of the rampart in the nearby cross-section, and could indeed be the same deposit curving to the west at the terminal. In this case, subsequent layers were built up against the rear and were held back at the terminal by this initial dump. This demonstrates that the first deposit marked out the line, location and shape of the rampart at this point, its internal width and height being decided as the deposits were accumulated. This is in contrast to the more complex pattern of development of the northern part of the same rampart. Before excavation, it may have been thought that the shape of the terminal was largely determined by erosion, and all the layers would be truncated. Examination of all the completely sealed layers demonstrates that erosion that has not greatly affected the cross-section shape of the earthwork here and that the angle of slope was largely that determined by the rampart builders. The terminal has thus remained remarkably stable for millennia, with a small accumulation of natural wash at the rear, and only its very terminal had been eroded, possibly by all the traffic through the side entrance not only during the fort's occupation but subsequently.

9.5 The Exterior Revetment Walling for Rampart 3714

It is possible that there was a continuous front revetment of shale walling that has been completely eroded into the ditch, but it is unlikely that this was a substantial wall away from the entrance area. The new ditch terminal and rear of the eastern guard chamber fill was revetted with drystone walling, but there is no indication that this continued as a rear revetment of the outer rampart and cannot be used to assume that the outer face of the inner rampart was revetted along its entire length either. There is evidence, however, of two types of outer revetting on this inner rampart.

The first type of walling extended from the entrance itself, surviving at an angle to the contours of the rampart at its westernmost end. This wall, 4450, can be explained as a support for a narrow raised element of the rampart that provided a horizontal walkway over the entranceway and onto the tower on the western side of the guard chambers. More typical front revetting may have been present at the most impressive stretch of the rampart as ditch 4563 revealed a significant amount of shale in its fill, and the most likely explanation for this was derived from a small wall at the front of the rampart, though no trace survives.

Wall 4035 was recorded as a single course with stones up to 0.35 m long and 0.1 m thick, with the occasional second course still in situ. The stones used in the walling diminished in length and thickness to the east, and it is difficult to imagine the walling standing to any great height with such feeble foundations; the lowest course stones at this point were generally only 0.02 m thick. It is likely that the wall had been higher nearer the entrance, supporting an addition to the rampart that was held in place at the front by wall 4450 discussed above. The larger basal stones near the entrance reflected the greater anticipated height of wall at this point, with decreasing size to the east.

9.6 Interior Drystone Revetments for Rampart 3714 (Fig. 9.19)

Evidence for interior walling has survived at many points around the northern ramparts, but preservation has been affected by several different processes. It has been encouraged by the buildup of deposits against the walling, either falling from above (including the loss of higher courses of walling) or from dumping of material from the fort interior. Destructive forces have been more varied. The walling in some places has clearly sheared from behind, and rotated. The stonework has slipped forward with the face of the wall rotating anticlockwise to face upwards. In contrast the material held in place by the wall facing can have pushed forward, producing a clockwise movement causing the wall to lean forward. From this position one of the two processes has been identified. In some cases the angle was such that the courses of stone gradually slipped forward and fell off, first against the wall face and, over time, at ever-shallower angles. It is also possible to find places where the whole section of walling has remained intact but has fallen forwards (clockwise). Therefore walling may survive intact,

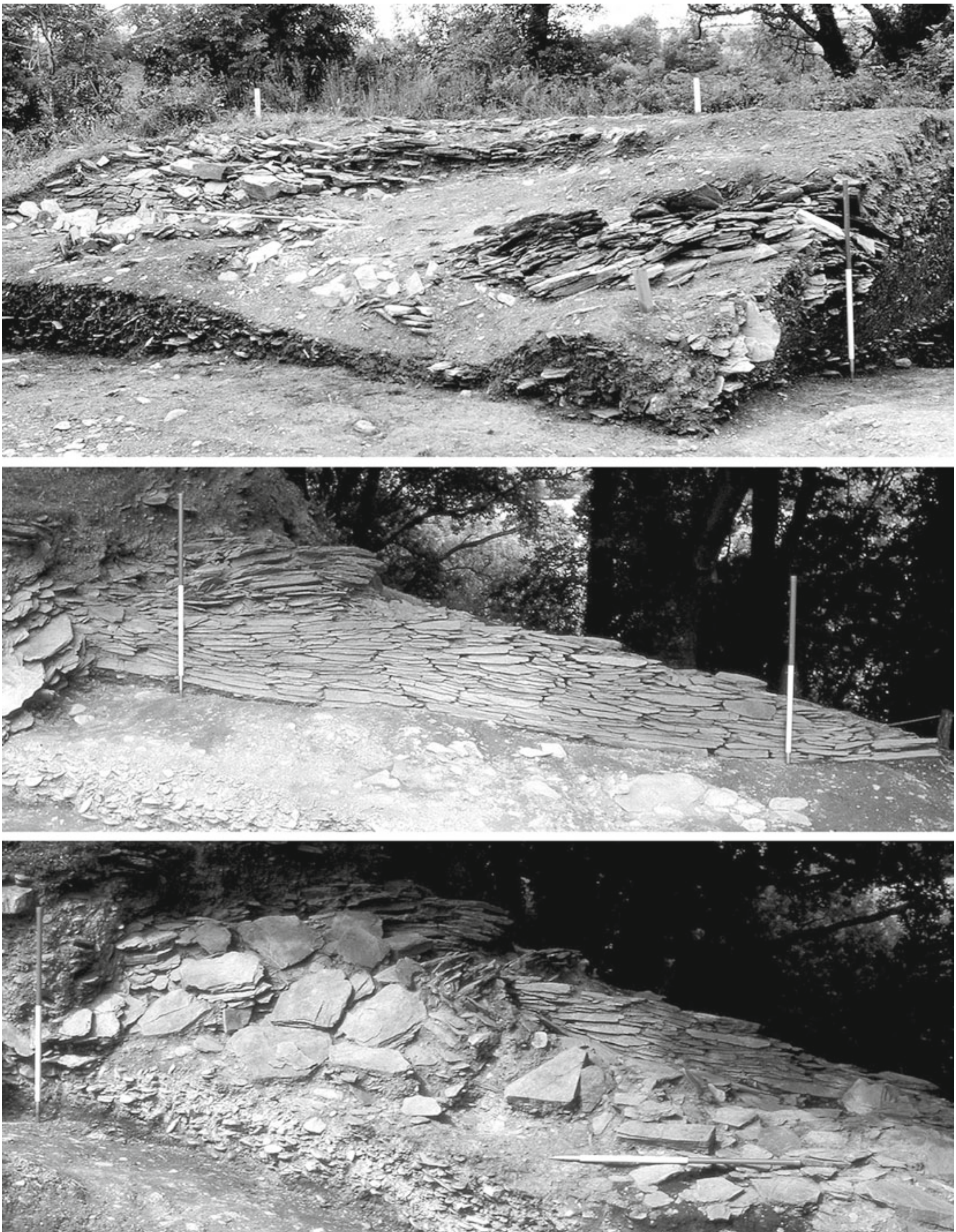

Fig. 9.19 *Top*: two stretches of wall 4575, which must have changed direction significantly to join; a scatter of rubble, largely removed, indicated the wall's course. *Middle*: rear revetment wall at the southeastern terminal. *Bottom*: south-eastern terminal with rubble from the wall, with the wall visible beneath this

intact but with sections moved, or be completely lost to downslope movement, producing a dense scatter of stones.

All of the walling has suffered some truncation through stones falling from the tops of the walls, but in the northwest this still allowed up to 1 m of wall to remain (see Chap. 8). In contrast, immediately east of the entrance the walling survived to only one or two courses, and even that was intermittent. Further to the northeast the walling was much better preserved, though here slumping was a problem. At the most northeasterly point the walling stood to 0.8 m (see above) and along the eastern side it survived intermittently and at the southeastern terminal the walling survived again to a reasonable height, though adjacent deposits indicated the loss of several courses.

The drystone walling is of high quality, and exclusively of shale. Unlike the entrance, the use of quartz blocks is unknown, and the same applies to igneous rocks. This and the freshness of the edges on many of the stones indicate that the material was all freshly quarried for the purpose of building the walling. Although quartz bands occur in the shale, none was used on the interior revetment, and a consistency of material was therefore desired. The walling uses a variety of lengths and thicknesses of stone, with a slight tendency for the lowest course to have larger stones. Elsewhere in the wall, however, there is a variety of sizes used. Butt joints are rarely visible. Where the second phase rear revetment wall joined the first stone entrance phase tower there was a butt joint and a slight rebate, indicating that a smooth face was not required (Fig. 12.15). On the northwest a stretch of walling had a clear vertical edge, with large cobbles filling in a gap; here it has been suggested that the cobbles filled in behind a timber stairway. In general, however, the walling seems to have been made in one continuous process, probably starting from the entrance and steadily working away from it. The walling, as in the entrance, is of high quality, with the stones tightly packed together. Some of the stones appear to have been shaped to have a flat outer surface, though this may merely be careful selection of appropriate pieces and choosing the best side to place on the wall face.

The character of the walling is similar throughout, though the amount of large stones varied from stretch to stretch and may reflect what was available from the quarries at that time. As various stretches of walling were uncovered, it was at first thought that these represented ad hoc wall building episodes, each undertaken as that portion of the rampart was seen as liable to collapse. However, it became clear that the walling was frequently placed in cuts into the rear of the rampart, such as cut 4242 for the 10 m long stretch of walling 4035 east of the entrance, or the more extensive cut 4415 for walling 4575 on the western side of the main rampart trench. The different alignments and survival heights related to the original design of the wall in plan, and then subsequent postdepositional processes. It is now clear that most of the walling is of one phase, but that could be immediately following on from the building of the first stone entrance, or could be linked to the second stone gateway. Only on the western perimeter is there clearly different rear revetment walling associated with each phase (Chap. 8). This was more impressive in the later phase, which might suggest that this was when it was extended round the interior of the fort to the east of the entrance in the form that survives, but this later walling was placed at the foot of the rampart slope, and the eastern revetting described above all sits partly up the rear of the rampart, as was the case with the first phase on the west.

Some of the walling was clearly constructed to be vertical, but in some places it seems to have been built on a batter, leaning back into the rampart. The vertical walling was high on the west, and also occurred at the southeastern terminal. This may have been because the stability of the rampart material in these stretches seemed greater. On the northeastern rampart, two of the intact stretches of wall both lean back into the rampart, and here perhaps concerns over stability were greater. Certainly adjacent stretches of walling have indeed collapsed, though what their original form might have been is now unknown. The angled walling created a stable form, in that movement was prevented as gravity would encourage slippage into the rampart face, further stabilising it. However, such an angle might create stresses at the base, encouraging shearing and movement of the wall so that the already angled face became even more upward-looking, and could slide down slope if the shelf it were cut on eroded.

On the northwest and west the evidence indicates two distinct phases of interior walling, and both consisted of straight sections in plan, with a neat curve where the east–west stretch changed to a north–south one, and then a sinuous line as it ran southwards. The picture elsewhere is less clear. In places such as immediately east of the entrance and at the southeastern terminal the walling appears straight, in others it has a concave or convex appearance. Are these irregularities how the wall was deliberately constructed, or are they a result of the postdepositional processes described above? Some of the best-preserved stretches of walling are straight, but there are others that are definitely curved. Careful examination of the base of the walling indicates that the sinuous alignment was original and, given the competence of the construction, was deliberate. There are two possible functional explanations for this.

The sinuous wall may have offered a more structurally stable way of holding back the rampart material, as it increased the length of walling and gave some opportunity to restrain lateral movement. It is also possible that the walling was curved to go around existing structures within the fort. The rampart construction led to at least one roundhouse being moved, but presumably others were still in place within the fort. The gentle rear slope of the rampart could run close to a roundhouse wall line and still leave room for the eaves to hang over the rear of the bank, but this would not have been possible where the vertical stone revetment walling was concerned. The curved walling could thus indicate the possible location of pre-rampart buildings still in use when the rampart and then the walling were constructed. The overall line and appearance of the walling, and its links to the interior activity, will be discussed in the subsequent volume.

9.7 The Outer Northeastern Rampart 1687 and Ditch 1740 (Figs. 9.20, 9.21, and 9.22)

The outer rampart has not been subjected to the intensive linear investigation of the inner earthwork, but has been examined in the first trench across the defences and close to the entrance where it was a relatively low feature. Nevertheless, these excavations, investigation immediately to the east of the entrance, and surface survey of the earthwork as a whole allows its varied character along its length to be described to provide a basis for discussion. The ditch, though completely filled up, has been traced for a considerable length and several sections have been excavated across it. These provide complementary information regarding shape, size, patterns of infilling and recutting, and some relationships with other features.

The original trench across the earthworks was recorded in 1983, and further work was undertaken on these sections, and in revealing the surface of the rampart to the west in 2001 so that the palisade could be studied in more detail. The outer ditch was excavated at this point in 2003.

9.7.1 The Outer Rampart 1687 and Ditch 1740 in the Main Trench (Fig. 9.20)

The buried soil beneath the outer, northern rampart 1687 indicated that the ground was sloping evenly but slightly more steeply than it had been under the inner rampart. The form of construction was straightforward, and is similar to that adopted for the eastern terminal of the inner rampart. A thin deposit of upcast subsoil 1689 was laid down at the front of the rampart, where it reduced the natural slope of the buried soil and perhaps marking out where the rampart should run, but continued back across most of the rampart width, and so may have been also intended to roughly mark the rear as well. On top of this was placed a substantial dump of gravel, up to 0.8 m thick, which formed the front

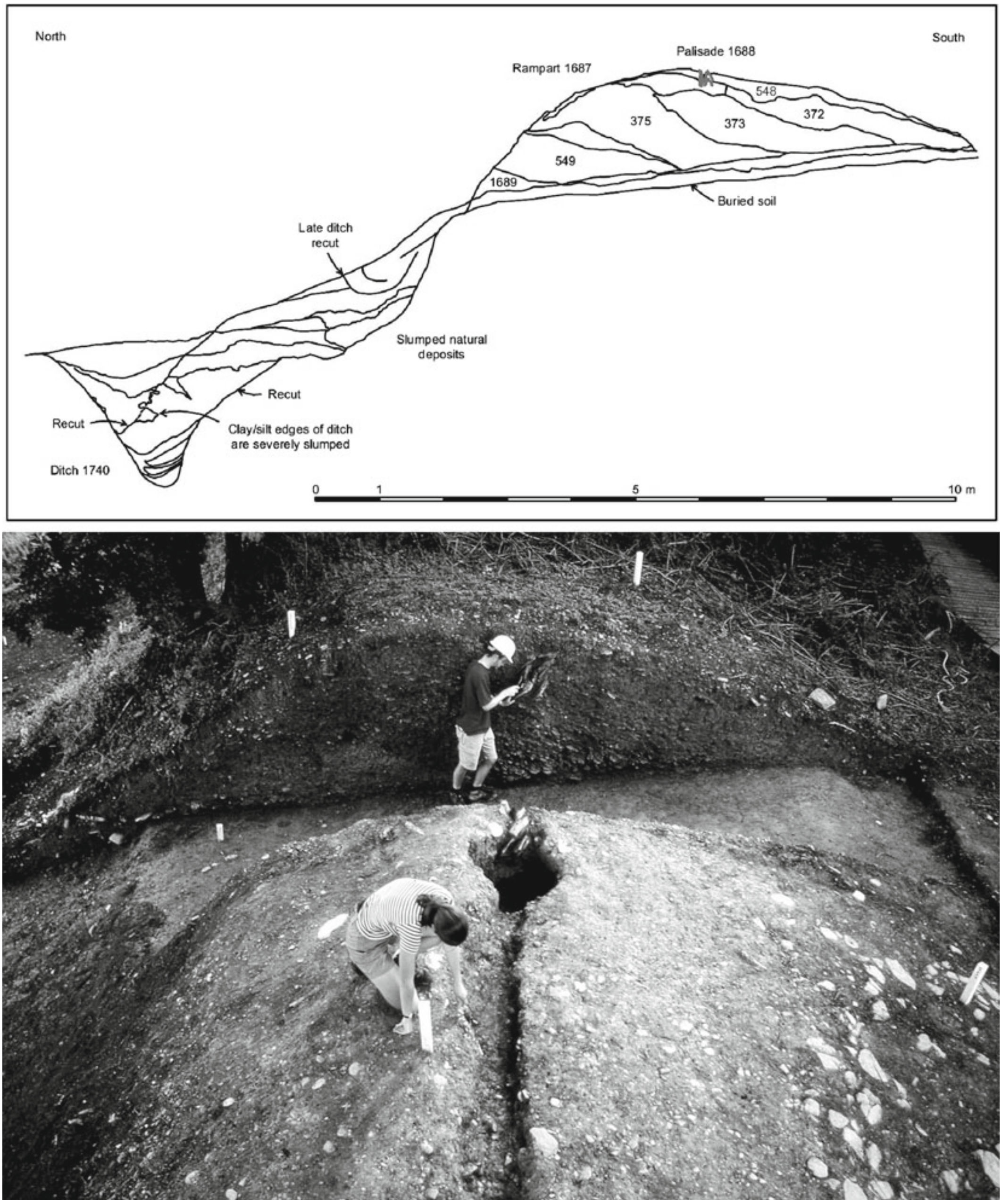

Fig. 9.20 *Top*: section through outer rampart 3714 and ditch 1740. *Bottom*: view from west of trench through outer rampart 3714 and extension with the surface cleared to reveal palisade 1688

of the rampart. Onto this was placed 549, after which another very large deposit 375 created the full height of the rampart at 1.5 m. The addition of 373 and then 372 widened the rampart from 4.7 m to over 7 m, with a flat top and gently sloping rear. The addition of 548 slightly raised the rear but added practically nothing to the top, though some of this layer may have eroded.

Unlike the main inner rampart, a palisade was employed on the top of the rampart, set well back from the front slope of the earthwork. The palisade trench 1688 was up to 0.5 m deep, and was provided with stone packing. Excavation of a stretch of palisade west of the east-facing section demonstrated that the palisade was set in a continuous, stone-packed trench that had at least one larger posthole 1694 0.55 m in diameter and 0.5 m deep within its line to provide additional support. Such posts may have been placed at intervals to ensure that the palisade did not collapse in strong winds. There is no evidence of multiple phases of palisade, though replacement of posts within the trench may have occurred leaving little trace.

The original ditch 1740 was V-shaped, and had a very steep outer face giving a depth to the ditch of 2.2 m. The inner edge of the ditch cannot now be certain, as a later very large slumping of the scarp removed the cut edge, but it was probably 3.5 m wide before the scarp itself sloped up a further 1.5 m in height over a horizontal distance of about 3 m to reach the base of the outer rampart. The lower part of the ditch filled up, and it was recut with a relatively flat bottom and to a depth of 1.3 m but to the original width. It is possible that this recut steepened the scarp in front of the rampart and made it unstable, as it is at this point that a slump of clay, up to 1 m thick, came into the ditch from the south. This probably happened soon after the recutting as no silting had formed in the ditch. A further shallow recut, creating a ditch no more than 0.5 m deep, c. 3 m wide and set close to the scarp, was then created. This was subsequently filled with gravel and clay layers. Some of these may also have slumped off the scarp face, creating a steeper cut line in the section than was originally dug. However, the higher layers in this ditch fill seem to have been formed by deposits eroding gradually off the scarp, until the ditch was completely filled.

The final ditch cut was again roughly V-shaped, but placed further away from the scarp than previous phases. This may have been because the original ditch line had been forgotten, or was a belated recognition that undermining the scarp slope whilst refurbishing the ditch was self-defeating. The ditch was 2.5 m across and 1.4 m deep, with a relatively gently sloping berm over 2 m wide before the gradient gradually increased up the scarp and outer face of the rampart. The outer edge of this late ditch mirrored that of the first ditch, and was probably chosen as the excavators encountered the undisturbed subsoil on this edge and kept it intact; they then excavated southwards to the desired width of 2.5 m and dug down from there, the inner side and base of the ditch being dug into fill. The lower part of this ditch subsequently filled with a stony silty clay, after which a less stony deposit accumulated to fill in the ditch completely.

Although the various ditch recuttings would have created considerable spoil, there is no evidence that any of this material was placed on the rampart. It is likely that it was used to form a low counterscarp bank, all trace of which has since been lost as an earthwork, though indirect evidence for it has been found nearer to the entrance (see Sect. 9.8). One of the main reasons for not increasing the height of the rampart would have been the difficulty in transporting the material up the scarp and rampart front face. Even in dry summer conditions, it is extremely difficult to climb up even today, and spoil could realistically only have been moved up by creating long paths gradually rising up the gradient at an angle, or by dragging it up in baskets or sacks on ropes. The creation of the counterscarp bank may therefore have just been a way of disposing of the spoil with the minimum of effort, in effect a by-product of the ditch digging rather than a deliberate addition to the earthwork as a whole.

Excavation of the ditch 1740 was fully achieved at one other point west of the trench described above, where a size and profile similar to that of the original ditch was recovered, but without natural slumping into the ditch and with no significant evidence for internal revetting falling into the ditch. Here, however, both the scarp and rampart above were both reducing in size, a trend seen all the way to the entrance (see below), Only at the ditch terminal near the entrance was the ditch much larger in size (see below).

Fig. 9.21 Outer rampart 3714 from the north, with revetment walling collapse in the foreground. Note the cross-section through the entrance walling on the *right*

9.7.2 The Outer Rampart 1687 and Ditch 1740 at the Entrance (Figs. 9.21 and 9.22)

One cross-section was recovered of the outer rampart 1687 as it turned north to form the eastern side of the entrance complex. This section demonstrated that the rampart here was very low in its surviving state (only 0.8 m in height above the buried ground surface). However, its appearance from outside the fort was considerably greater because of the scarped natural slope in front of it. This slope provided another 0.5–1 m of height in front of the large outer ditch discussed below. The rampart was over 6 m wide, and it may have lost some of its bulk, particularly at the front; the significant amounts of shale on the lower parts of the scarp slope suggests stone front revetting at the entrance, though it cannot be linked to any phase and did not survive as intact walling. Rampart 1687 was constructed in the same manner as seen in the section described above, with an initial dump at the front, northern edge above the scarping, with layers set at an angle one above another behind. Most of these were clay layers, with some gravel deposits between some of these. The rear portion of the rampart near the terminal of the infilled ditch 3716 was formed by the rubbly layers and infill including burnt material also seen on the south and which indeed was also tipped in from the entrance walling on the west and from the outer rampart, as demonstrated by the steeply angled tip lines of the fill (Fig. 9.22). The clay and gravel rampart 1687 was only joined onto the inner rampart 3714 by these rubbly layers and the rest of the ditch infill. Traces of revetment walling 4559 were found part of the way down the northern scarp slope. This may have been the original position of the outer revetment wall when the stone entrance was constructed, in which case much rampart has eroded away at this point, probably partly due to the collapse of the walling. Much stone was found in the ditch fill at the entrance and at the foot of the scarp slope, and the wall may have slid down the scarp into the ditch.

The rampart 1687 overlay a pebble surface 4553 that was itself set over some upcast from the early inner ditch 3716, though the pebble surface ran slightly down the inner edge of the ditch, showing that it was in use whilst some of the ditch was open; it may indicate an access route into the ditch and a path by

Fig. 9.22 North–south section through outer rampart at the entrance, from the south; the excavation of the ditch 3716 terminal is at an early stage

which spoil was removed to be used in rampart construction. No evidence of the palisade noted to the east was recovered here, which may suggest that up to 0.5 m has been lost from the top of the rampart, or perhaps more probably that the palisade did not run round to join the entrance complex. The surviving size of the outer rampart matches that of the inner one which never had been very high at this point.

The ditch terminal was large and its base was not found, despite reaching a depth of 2 m, and then ceasing because of health and safety concerns. The expanded terminal included a number of recuts, and it was extremely difficult to assess whether the ditch was ever as wide as 4 m or whether this reflected shifting recuts that cut into the subsoil in some phases, but it is probable that it was a massive terminal. The top layers of the fill were silty, but at c. 1 m deep there was a large amount of stone, derived from either front revetment or entrance walling. Other stone was found in quantity to the lowest levels excavated, which suggests that there was a persistent problem with walling collapsing from the structures to the south. Some of the infilling, and the unusually high quality survival of features immediately outside the ditch to the north, suggests that there was originally a very low counterscarp bank that has been completely erased.

9.8 The Unexcavated Northeastern and Eastern Earthworks

The outer rampart 1687 east of the main earthwork trench is a prominent feature. It gradually swings round to the southeast and then south, its outer face merging with the steep slope down into the valley below. It is not known whether the ditch 1740 was continuous and is completely infilled, or whether the scarping of the already steep natural hillslope as it turns to the south was sufficient. Excavations in 2008 along the outer face of the rampart and scarp for a length of c. 10 m beyond the excavations described above demonstrated that the ditch continues as a small feature, with most of the apparent rampart being scarped hill. As the rampart curves, it becomes wider and its top is broader and flat. At its southern terminal it is steep on all sides, and it ends to match the inner rampart, and here a substantial ditch terminal is likely, though no excavation has taken place here to confirm this. It is notable how massive the inner and outer ramparts of the main fort appear on this northeastern portion of the circuit.

Excavation of the main fort ditches was not as extensive as of the ramparts. This was in part for practical reasons, in that large amounts of labour would have been required to achieve this, it also was because the nature of ditches makes their excavation and interpretation more problematic, with slumping and recutting making interpretation of the initial form of the ditch and the subsequent chronology of maintenance and negligence extremely difficult to disentangle. Whereas most of the rampart history is one of accumulation, that for the ditches is a mixture of single or repeated cutting and spoil removal, and accumulation.

9.9 Conclusions

Extensive excavation of the inner rampart has revealed considerable information regarding its construction methods. The complexity of the process can only be elucidated using linear as well as cross-sections, though only the latter have been obtained for the outer rampart. The inner rampart had internal drystone wall revetting, with external stonework at the entrance and possibly along its whole length. There was no palisade on the top of the rampart, which had a wide, flat top. In contrast the outer rampart had only stone revetting at the entrance, a limited area on its summit, and a palisade set in a stone-packed trench, supported perhaps at intervals with substantial posts, though the palisade did not extend as far as the entrance. The ramparts were of limited scale at the entrance, but gradually increased in scale to the northeastern curve, after which they gradually reduced in size, though remaining substantial until their terminals close to the steep eastern promontory slopes. In much of the most massive part of the earthworks, most of the material was in situ natural clays and gravels, sculpted and shaped and merely topped with material obtained from the scarping and relatively limited ditch digging.

Chapter 10
Encircling the Promontory

Abstract The southern portion of the promontory was defined by a relatively small rampart, scarping of the already steep natural hill slope combined with the creation of a ditch and terrace. Excavations on the south revealed a distinctive pattern of rampart construction with small gangs of workers creating heaps that were then joined together; the rampart was largely lost on the east due to slumping. The outworks to the fort lay to the north, creating a divided annexe area, with the northern rampart covering the *chevaux-de-frise* and with two lines of ramparts and ditches running down the western slopes of the promontory. The outwork ramparts are degraded by historic agriculture and erosion but still survive as low earthworks, and the ditches are intact.

The most substantial earthworks associated with the fort were those connected to the main, northwestern, entrance, with one rampart running to the west (Chap. 8) and two to the east (Chap. 9). However, the remainder of the promontory perimeter was also defined by earthworks and indeed through substantial scarping of the natural topography of the hillsides. The scale and nature of these features was different, as was their construction methods, and this provides important and illuminating contrasts with the engineering described thus far. Moreover, a series of outwork ramparts and ditches created an annexe area and outer boundaries and access points (discussed in Chap. 13) that framed the main site in the wider landscape and affected its overall appearance from a distance, as people approached, and the order of experienced spaces as they journeyed into the settlement.

10.1 The Southern Rampart, Ditch and Terrace (Fig. 10.1)

An initial trench across the perimeter rampart and down the scarp at the southernmost point of the promontory revealed the complexity of deposits in this zone in 1982. A small area was partially examined to the west of the original trench, and then a larger area opened to the east, and this involved more extensive investigation of the rampart. Whilst the role of craft activity in this area is to be discussed in the second volume, the examination of a linear stretch of this rampart is discussed here, providing a striking contrast to that of the northern rampart described in Chap. 9. Whilst this larger-scale excavation was under way, further work was conducted on the terrace, and its rock-cut ditch was excavated. Excavations on the eastern perimeter of the site also recovered evidence for the rampart and ditch. These results can be compared and contrasted with those on the west discussed above (see Chap. 8).

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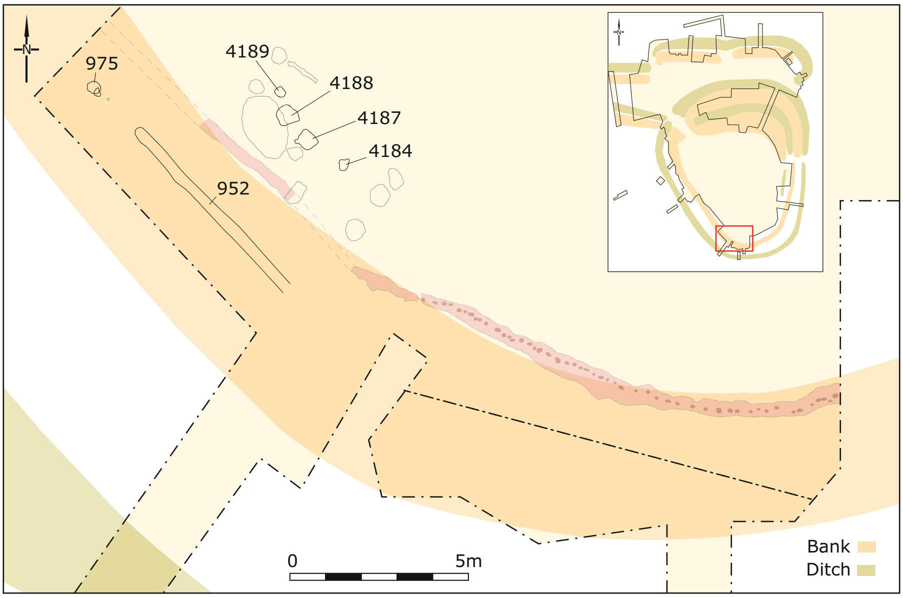

Fig. 10.1 Plan of southern rampart and ditch

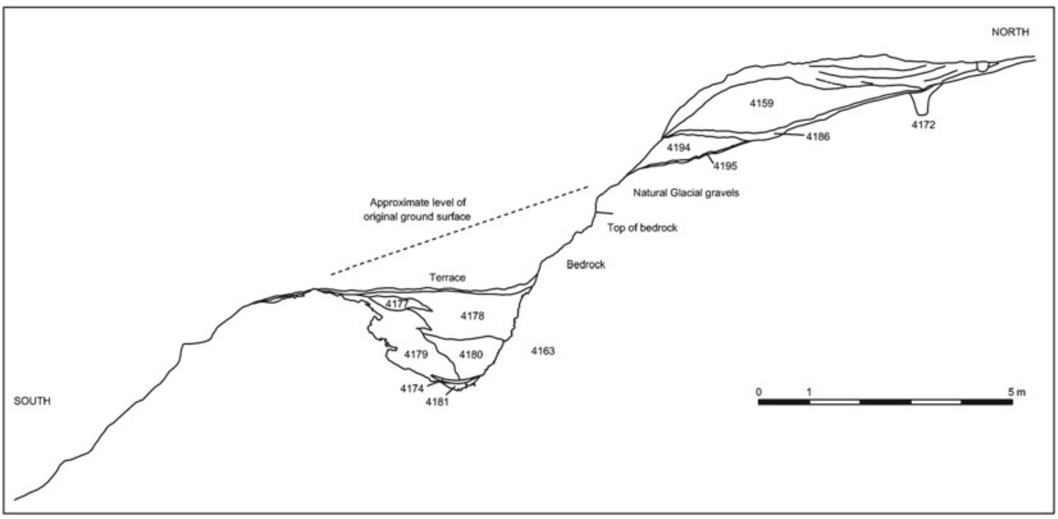

Fig. 10.2 Composite rampart and ditch section; the rampart portion is from the original 1982 trench where the scarp was mainly glacial till (see Fig. 10.5) so there is no rubble, and the ditch and scarp is from the 1997 excavation on the terrace cut through shale

10.1.1 The Rampart

10.1.1.1 Rampart 4159 at the Southern Tip of the Promontory (Figs. 2.3, 10.2 and 10.3)

The rampart around the southern edge of the site was positioned beyond the line of the earlier palisade, and in places the palisade line was at the inner edge of the bank. An earlier mound 4194 was merely a pile of spoil outside the palisade to the south of that enclosure, and so probably represents some short-term activity before it was erected (see Sect. 4.3.1), and not the first element of the rampart.

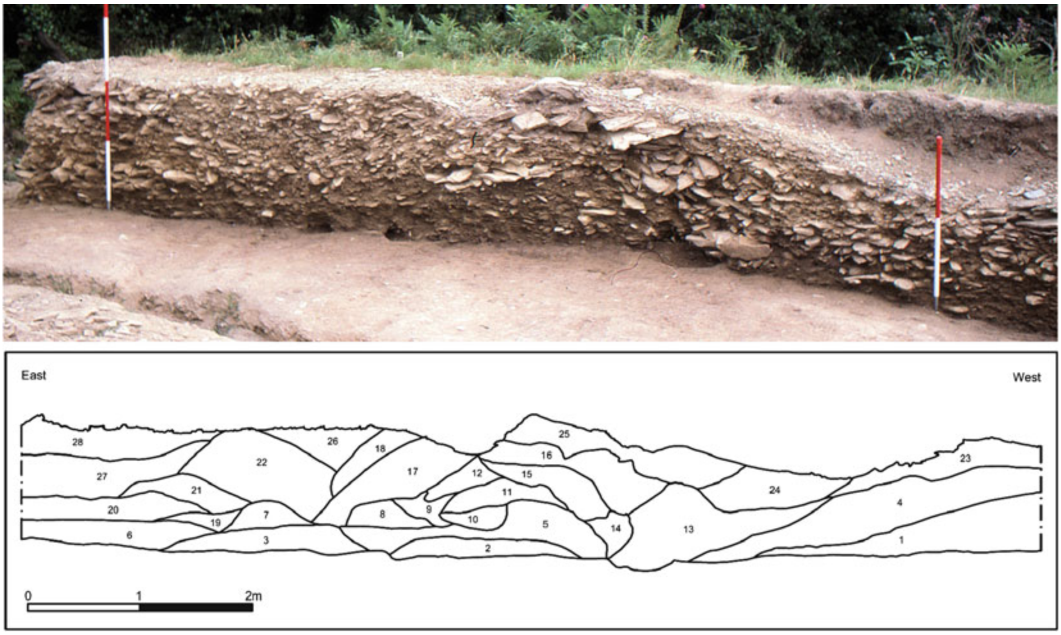

Fig. 10.3 *Top*: View of the longitudinal section of the southern rampart. *Bottom*: Interpretive longitudinal section of the southern rampart based on stone by stone drawings, photographs and direct on-site observation during the excavation of this length of rampart. The irregular top profile reflects later disturbance

The rampart was constructed on a natural slope of 20° and set directly on the buried soil and covering the earlier mound. It was composed of a large amount of broken shale, mixed with the glacial overburden of clay and gravel. The cross-section shows that the material was laid horizontally, with only that deposited at the very front of the rampart tipping downslope slightly. The front of the rampart was stabilised with a yellowish-brown loam and at the rear and the very top of the rampart with a thicker layer of brown silty clay loam. The rampart was built to a height of 1.3 m, its front face largely mirroring the slope of the underlying buried soil until steepening sharply in the front 1 m of width.

The content of the rampart was investigated by excavating a longitudinal section at the southernmost part of the site, to the east of the original trench through the rampart and down the scarp. The section provided the opportunity to examine a length of over 9 m of rampart and demonstrated that in this sector the first elements of the rampart were mainly made from glacial overburden of gravel and clay with small- and medium-sized fragments of shale which reveal the tip lines of the dumps. Of particular interest, only revealed by the longitudinal section and the careful excavation of the rampart, was the very varied nature of the deposits and the way in which they were laid down, something completely invisible in the cross-sections, and not easily seen in plan during excavation, though an even more painstaking excavation methodology with a team of experienced excavators may have been able to recover at least some of these variations in plan. Experience of two parallel longitudinal sections 1 m apart in the northern rampart gives caution to interpretations of some layers as being small, when their great bulk could lie on one side or the other of the section. Nevertheless, some clear and distinctive patterning emerges, and the descriptions have to be recognised as based on this single slice through the earthwork, amplified in part by excavation, though the southern portion of the rampart was left in situ following recording.

The stone by stone field drawings of the section differentiated between the various matrices. This has made it possible to unpick the sequence of events in the construction and has allowed identification of a complex sequence of depositional events. As all deposits incorporate to varying degrees thin, flat fragments of shale, the angles of rest can be steep, and some of the finer deposits intermingle in the interstices of the coarser material. Also, some of the layers were certainly being laid down at the same time as others, and yet more were apparently rapidly augmented with new deposits. Exactly where in lines of pure rubble one tip line ends and another begins is less clear than when there are no distinctive matrices binding the rocks, but the overall pattern of deposition can be ascertained by the angle of stones and their relative size.

The longitudinal section shows the rampart being built up in three mounds which are joined together to form a coherent earthwork. The westernmost mound begins with [1], onto which [4] is piled, creating a high and long mound. The easternmost mound starts with [3], onto which [7] is placed. This is then extended to the east with [6] and [19], and with [20] and [21] the apex of the mound moves eastwards. The central mound starts with [2], which appears thinner than the others, but as this is the point where the rampart extends furthest to the south, the section probably runs at a point further back in this mound than for the others. Indeed, the section probably runs through the centre of the western mound, based on the cross-section, which explains why this looks the largest and may explain why more complicated layers, added to the rear, do not show in this portion of the section. Layer [2] of the central mound is then overlain by [5], with [8] being added as [5] is laid down, as then is [9] and [10]; finally in this stretch, [12] is added.

The space between the western and eastern mound was filled in with the dumping of [13] and [14], with [15] lapping up onto the central mound and then [16] creating a more stable profile. The east of the central mound is also infilled, probably at the same time. First [17] and then [18] is laid down, followed by [22]. The final infilling between the mounds and the creation of a smoothed rampart is achieved by depositing [24] and [25] in the west, [26] in the centre and [27] and [28] to the east. The irregular surface shown on the top of the drawing reflects the recent post-rampart features that had been completely excavated before the longitudinal section was drawn.

Once the earthen component was in place, most of the eastern excavated stretch of the rampart was covered at the rear with shale. In the easternmost portion, this included a rough vertical face of piled up larger slabs with smaller fragments behind, the thick blocks laid in horizontal courses but with no attempt at producing a smooth outer face. In contrast, further west the materials were smaller and were not horizontally laid, but appear as though they were dumped in piles, though still with attempts at preventing the stones tipping down the slope of the rampart into the interior (Fig. 10.4).

The photographs of the rubble layers of the rampart do not fully represent the feature, which was finally covered in a clay layer to smooth out its profile (Fig. 10.4 top) and make the external appearance similar to that of the stretch immediately to the west (see below); indeed the change from mainly rubble to that of clays and gravels began to occur within the balk between this area and the original trench, and the section drawn of the latter comprised a mixture of small shale fragments and clay and gravel matrix (Fig. 10.2). The appearance of walling-like elements in places is therefore merely a feature of the rampart construction, not a rough rear revetment wall. At no point in the circuit of the rampart round the southern half of the site is there any indication of internal or external stone revetting, in contrast to the northern rampart (Chap. 9).

The rampart west of the 1982 trench was revealed for a length of nearly 10 m, and linear gully 952 and posthole 975 were excavated. The latter was cut by a shallower posthole 976. At first appearance, these features seem to indicate a palisade along the top of the rampart, though no trace was found on the stretch to the east. They may, however, relate to the activity to the rear of the rampart and be part of a structure erected to make use of the protection from the wind that a wall and rampart could provide. This length of rampart was partially excavated by removing the rear along its length to reveal a linear section, but as the material was clay with few variations in fill or shale inclusions, disappointingly no pattern of tip lines was visible from which to reconstruct its method of construction. Its size and profile matched that to the east, however, and on completion no difference would have been discerned by the viewer. Throughout, the rampart was insubstantial from the interior, but with the ditch, terrace, scarp and bank created a significant sculpted feature around much of the site perimeter, forming an impressive exterior appearance.

Fig. 10.4 Photographs of the southern rampart under excavation, with earlier palisade trench in the foreground. *Top*: Overall view of rubble within southern rampart; note the change from larger to smaller slabs—see detail photographs below. *Middle*: Eastern portion with roughly laid courses; note the clay of that bank that covered the stone visible in the east section. *Bottom*: Western portion with piles of smaller stones. The right-hand figure is within a later cut (see also Fig. 10.3)

To the rear, deposits containing much craft debris built up, mainly on the eastern portion. Throughout the use of the site, there was minimal erosion of the rear of the rampart, indicating that the clay capping and angle of construction was stable and presumably deliberately designed to work this effectively. The rampart was partly sealed by the historic field boundary bank that ran on the rear of the Iron Age rampart. There was probably little erosion off the front of the rampart. As there was no front revetment of any kind, it would have been constructed at a stable angle of rest similar to that found on the existing earthwork today, merging with the scarp slope (Fig. 10.5; see below).

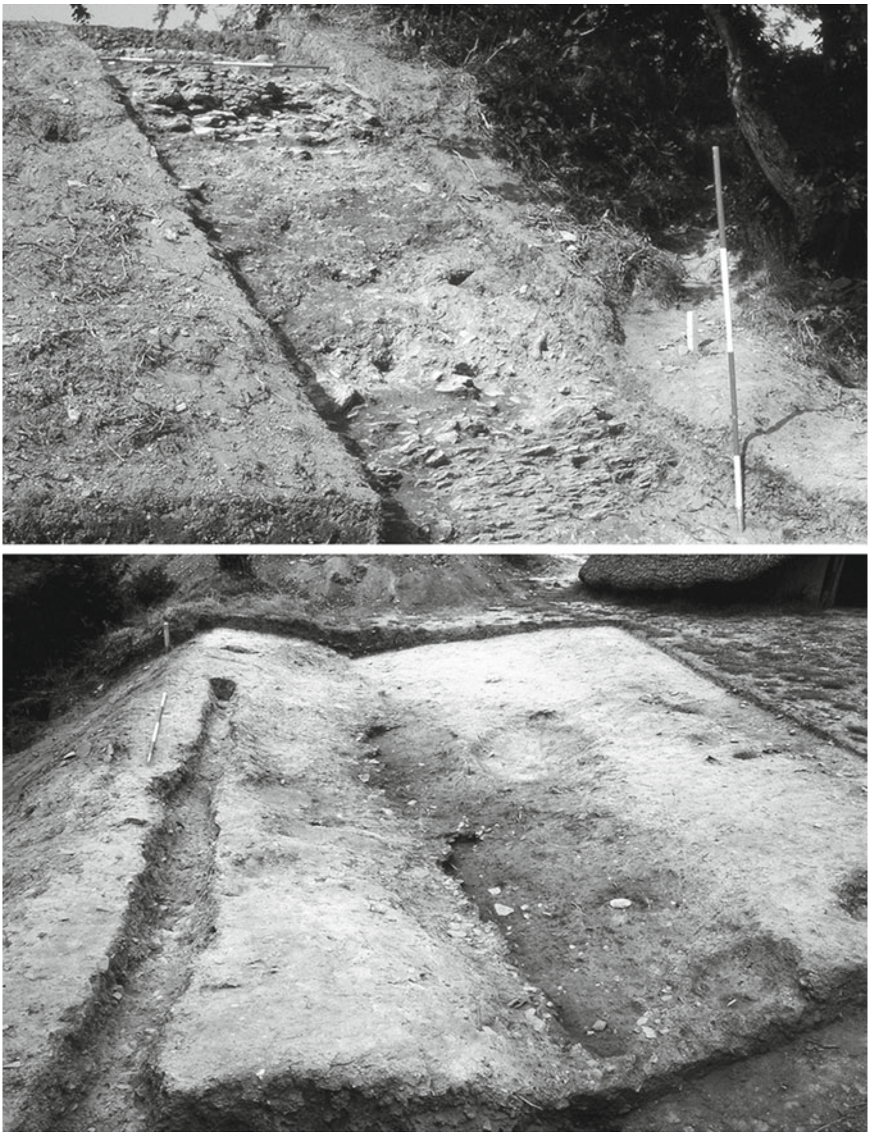

Fig. 10.5 *Top*: View of original 1982 trench, with rampart material at the *top*, scarping of glacial gravels and clays and terrace cut into underlying shale at the base. *Bottom*: View of western portion of southern rampart, showing foundation trench 952 along the top and a single posthole 976 beyond. The original trench through the rampart runs across the *bottom* of the image

The variation in construction along the southern rampart length requires explanation, part of which is functional and another part social. The presence of stone, and its varied character along the length of the rampart, is explained by the underlying geology. The southern tip of the hill consisted of a capping of glacial clays and gravels set on an uneven bedrock of shale (Fig. 10.5). At the very tip, and round to the southeastern corner, this was near to the surface, but further west the shale dipped away and a greater depth of softer material is present (see Sect. 8.3). Along the whole length of the rampart, the first deposits to be removed and used to form the bank were the clays and gravels, but as work proceeded gangs to the east encountered shale rock which had to be cut back to form the scarp and

Fig. 10.6 *Top*: View of the ditch 4163 cut onto the terrace at the southern tip of the promontory. The far figure stands on bedrock, with steep drops behind. The scarped shale can be seen in the right foreground. Note the limited amount of stone in the ditch fill. View taken from the rampart. *Bottom left*: View of ditch 4163 from west; note the limited stone in the fill and the thin, laminar shale into which the ditch is cut on the *left* (north) and large blocky shale on the *right* (south). *Bottom right*: Eastern perimeter, near figure stands in ditch with bedrock outer lip in foreground. Far figure on remnants of rampart above scarped hill slope

excavated to create the terrace and ditch. The size of the blocks reflects both the techniques of the original quarrying but also the nature of the strata; some are thinly laminated and others less so, and some are friable, others relatively resilient, as can be seen in the sides of the ditch 4163 (Fig. 10.6) discussed below. The gang at the eastern end of the excavated stretch were using materials gathered from workers downslope who were cutting through substantial shale deposits; the teams to the west were progressively encountering less shale.

The social dimension can be discerned in both the earthen portion to the east and its subsequent rubble elements. Here, three mounds can be identified in the early stages of construction, reflecting three gangs of workers. It is possible that the same three gangs continued when there was more shale, that to the east creating the horizontal element, the next using much stone but with smaller material and investing less effort in creating courses and the third creating a mound. These sections are each only about 3 m long,

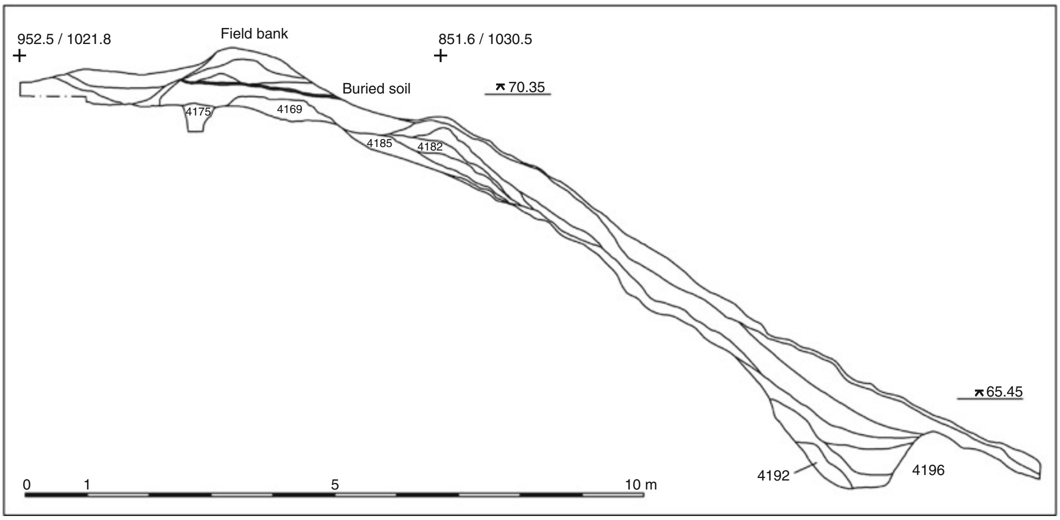

Fig. 10.7 Section of the remains of the rampart 4182 sealing the palisade features, remnants of buried soil 4185. Rock-cut ditch cut 4196 with natural fills apart from charcoal-rich 4192

so may have consisted of only two or three people. Whether these same individuals also dug the deposits and then carried them up the hill or whether there were three categories of workers—the excavators, movers and the builders—is uncertain. The same issues have been raised in relation to the northern rampart in Chap. 9. More consideration of this issue is offered in Sect. 11.2 and Chap. 15.

10.1.1.2 The Rampart to the East (Figs. 3.4 and 10.7)

Although the line of the rampart could be traced around the southern tip of the promontory, as it did not lie under the later field bank at this point, for most of the eastern side, very little trace of the rampart survived. Excavation revealed only the rear of the lowest level of the rampart 4182 to a width of 2 m, indicating that over 2 m of the rampart front had been lost downslope. This was sufficient to indicate the line of the rampart along the eastern side of the promontory, but contributes nothing to its form. Layer 4169 was an accumulation of occupation debris in the lee of the rampart, which has been truncated by later cut and fill. Above this is the historic field bank.

10.1.2 The Ditch, Scarping and Terrace

10.1.2.1 The Southernmost Portion of Ditch (Figs. 10.2 and 10.6)

Prior to excavation, a terrace was clearly visible along the southern half of the western side of the promontory and around the southern tip. At the southeastern corner of the promontory, the terrace became a ditch, creating a small rocky knoll beyond this to the southeast, but the eastern side was one uninterrupted steep slope and no ditch was visible on the surface. The first excavation onto the terrace continued the preliminary trench across the rampart and revealed the steepness of the artificial scarp, here cut completely through glacial overburden. The fill in the top of the ditch resembled the subsoil, and at this preliminary stage in 1982, it was interpreted only as a terrace. Further excavation at the southern tip in 1997 identified a ditch, however, and it is likely that this was present in the first trench; the ditch cut through glacial overburden was found on the western side (see Sect. 8.3), and the ditch was also located on the eastern side, where it was rock-cut (see Sect. 10.1.2).

The trench across the terrace and ditch revealed a rock-cut ditch 4163, set below a steep scarp cut here through shale bedrock. Rapid infill layers were found in the base of the ditch; the lowest, 4181, was sterile, but 4174 contained some charcoal flecks and small fragments of burnt clay and bone. Above this was 4179, containing a lot of large shale rocks. Some appear to have fallen in from the southern side of the ditch, with erosion probably along fissures that had been used to prise out blocks at a higher level to create the ditch and provide material for the rampart. Some of the material, however, probably came from a small counterscarp bank that must have stood on the narrow strip of bedrock between the slopes of the promontory to the south and the ditch. No trace of the bank survived, but this may have been removed when the terrace was shaped (see below).

The ditch 4163 is gradually filled with 4180, a layer with rocky fragments entering from the south, presumably off the outer bank, and a dark grey-brown clay loam that contained a few pieces of charcoal and a scatter of bone and teeth fragments, suggesting a small amount of refuse from the settlement above. There is very little to suggest loss of rampart or erosion on the scarp above the ditch. The last main layer within the ditch, 4178, was more yellow in colour, with no charcoal or bone and only a small amount of burnt clay. Within it was a large lens 4177, a darker stonier deposit that probably came from the lower levels of the outer bank. The pattern of deposition within 4178 suggests that material was settling into the top of the ditch from both sides, but there was no dramatic slumping from uphill. The lack of stone from this side is notable, but the yellow fill suggests some degree of very gentle erosion off the surface of the scarp. The level, horizontal, nature of the surface of the ditch fill does not seem natural, however. This requires discussion of the terrace as a feature in its own right.

10.1.2.2 The Terrace (Figs. 10.2, 10.5, and 10.6)

Even with limited erosion down the slope, the final profile would be expected to retain a slight dip in the centre of the ditch and an asymmetrical topsoil profile, running up the lower slope of the scarp towards the southern rampart. Instead there was an almost horizontal surface, and it would appear that the terrace was a deliberate creation, formed by shaving away any build-up against the uphill scarp and removing any remaining trace of the outer bank. The smooth, horizontal terrace is therefore a deliberate cut feature, though dating this has not been possible. The largely sterile nature of yellowish layer 4178 suggests that this accumulated whilst the fort was abandoned, presumably whilst the late Iron Age and Roman-period farmsteads were in use. The terracing could therefore have been part of the late Roman/post-Roman refurbishment (Chap. 14) or may have been even later to provide a narrow terrace of grazing; documentary sources indicate that the ditches of Castell Henllys were used for this purpose in the Middle Ages. The terracing seems considerable effort for a small gain in grazing area, and the topsoil is very thin, so the late Roman/post-Roman refurbishment phase may be the most likely.

At the southern-most point in the perimeter, a small, low natural knoll of shale rock extended out into the valley, and this seems to have been modified by human action. Although not excavated, it appears that the builders of the ditch and terrace did not attempt to cut these round the outer face of the knoll, but instead cut through this to create a smooth curve round to the eastern side of the site. The existing tree cover of this area has impeded further investigation.

10.1.2.3 The Ditch on the East (Figs. 10.6 and 10.7)

A narrow trench was excavated, with considerable logistical difficulty, down the steep eastern slope of the promontory. This was successful in revealing the original rock-cut ditch and the artificially steepened scarp slope through the glacial till that functioned in a stable manner following the collapse of the rampart above. It is clear that the rampart must have extended eastwards and so the original scarp would have been much steeper; the scarp and the front of the rampart had slumped down to fill the ditch completely, creating a continuous surface that hid all trace of the ditch. The outer lip of the ditch was rock-cut and only rose 1 m above the base as the natural slope of the ground was so steep at this point. However, the vertical rise from the bottom of the ditch to the top of a 1 m high rampart would have been a total of 6 m, and the inner rock-cut side of the ditch indicates the angle of the slope at c. 50°. A deposit 4192 on the inner base of the ditch was an occupation debris from the fort containing considerable amounts of charcoal and some burnt bone. The other layers represent gradual infill and then the major slumping that buried the ditch completely.

10.1.3 Discussion

The longitudinal section of the rampart at its southern top demonstrates a very different method of construction compared to that on the north, whereas the cross-sections in all cases are less distinctive. The southern construction in mounds reflects different work gangs operating side by side. Shale is so plentiful in this section because the lower part of the scarp and the ditch on the southern part of the promontory was dug through shale bedrock as well as the overlying glacial deposits of clay and gravel. Even slightly to the west, the bank was mainly of clay, and this no doubt reflects the nature of the subsoil encountered. The rock relatively near the surface occurs round to the eastern outcrop cut off by the ditch (see above), so which part of the ditch was being dug when the excavated section of rampart was being built is not certain. Nevertheless, the different types of material used in the rampart can be assigned to different depths downslope, from the glacial gravels and clays or from the shale rock, where large rubble can be differentiated from smaller material. This in part represents different strata but also that the larger rubble can be handled piece by piece, but the smaller fragments need to be collected together and would have been transported presumably in baskets. The section thus reveals the ways in which different deposits were excavated, moved and deposited to create this rampart. A series of mounds were formed, and then the gaps between them were infilled to create a smooth surface to the earthwork.

The scale of the southern rampart and ditch, with counterscarp bank, was not as large as the earthworks to the north, but because of their position on the steep slopes of the promontory, further enhanced by scarping and perhaps also the quarrying for stone further down the slopes in order to supply the demand for materials required to construct the drystone walling at the entrance and revetments on the northern earthworks, they appeared extremely substantial. The significance of the distinctive method of construction and the siting and form of these earthworks are further considered in Chap. 15.

10.2 Experimental Earthwork (Figs. 10.8, 10.9 and 10.10)

The experiment involved the construction of a small rampart. This was designed to replicate mainly aspects of the small rampart round the southern portion of the site but also assist in understanding the outer rampart on the north. At the stage of the excavations when the experiment was designed, it was thought that these earthworks were constructed solely from material obtained by scarping the natural slope and creating a horizontal surface in front. There was therefore no ditch dug, but this does not invalidate the rampart experiment as long as the ditch erosion did not undermine the rampart.

Fig. 10.8 Experimental earthwork. *Top*: Under construction in 1986 with the rampart built but not fully compacted, rear revetment wall in place, scarp being completed and palisade being put in place. *Bottom left*: Placing the palisade in its construction trench, more fill was to be added at the front. *Bottom right*: With animal-proof fence in 1989; note turfs on the front, grass from seeds on the rear; the base of the scarp cut (visible on the *left*) has not yet regenerated vegetation naturally

10.2.1 Construction

The experimental earthwork was constructed using volunteer labour from Earthwatch teams, under archaeological supervision during July 1986 (Fig. 10.8). There was no attempt to quantify the labour input given the level of fitness and inexperience in manual labour of the workers and the use of modern tools. Nevertheless, the heaping up of soil by scraping it together with shovels and using buckets would have reasonably mirrored past activity. The earthwork was periodically trampled and tamped firm with timbers to provide consolidation as it was being built up and to minimise subsequent settling and slumping.

The turf was left in place under the rampart, but on the area of the scarp and terrace, it was removed and put to one side. It was cut in blocks with spades, retaining the full depth of topsoil. The hill slope was then steepened, and the area in front of the rampart made flat. Given the relatively gentle slope on which the reconstruction was placed, the scarp was not a great depth, but it was sufficient to simulate

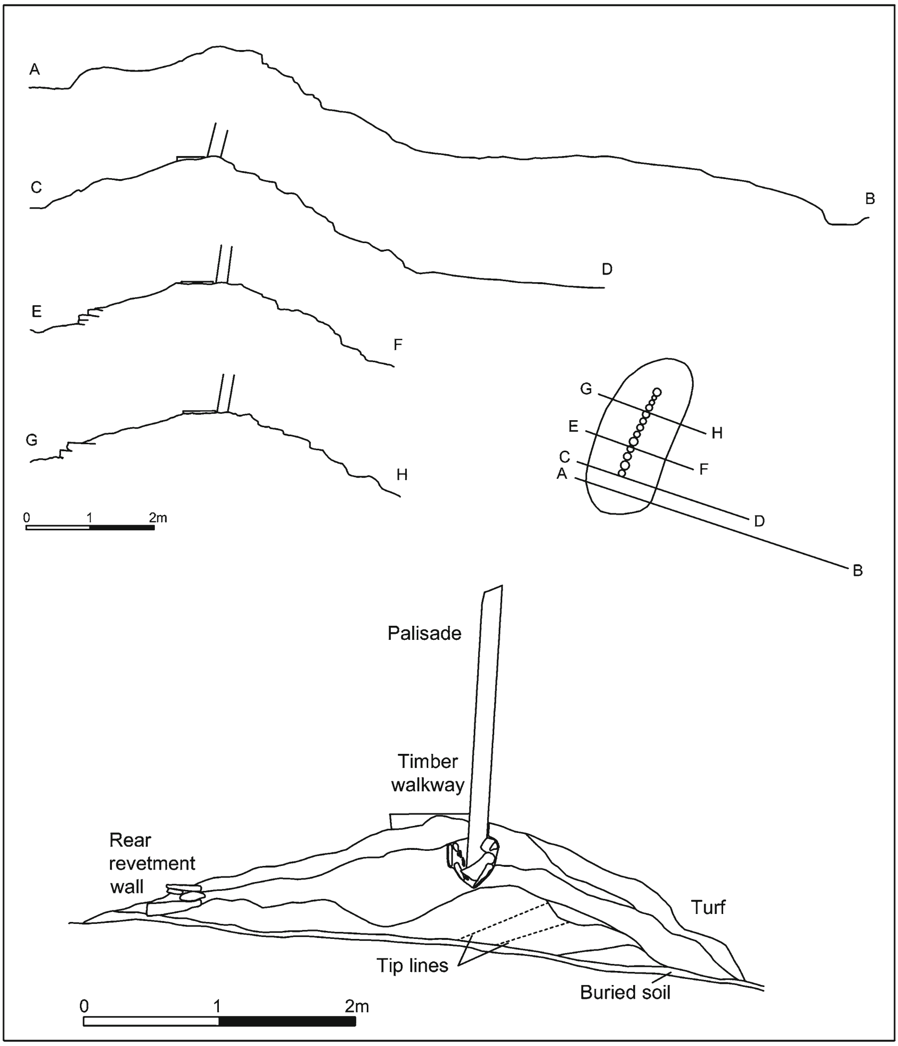

Fig. 10.9 *Top*: Plan and profiles through the experimental earthwork immediately prior to removal, 1996. *Bottom*: Section through rampart (part of C–D) at the end of the experiment

a continuous slope from the rampart face down onto the scarp; the structural integrity would not be altered by a longer scarp. The spoil resulting from the scarping was used to construct the rampart, and because the topsoil had been removed with the turves, none was used in the fill; this replicates the evidence from the excavation of the Iron Age ramparts. The earthwork was begun by placing spoil at what would be the front base of the earthwork, with simple dump layers placed one on top of the other, running down the rear of the existing rampart. Only a single gang worked on the earthwork, but as the longitudinal sections had not been considered by this stage, this aspect of the work was not recorded, nor unfortunately was a longitudinal section recorded through the earthwork. However, the length of 3 m for this stretch of earthwork very much mirrors the sort of scale of work seemingly undertaken by each Iron Age gang; the modern team consisted of about half a dozen people of varied ages and both genders; the composition of the original groups is unknown. Nevertheless important measurements concerning erosion, and a cross-section of the earthwork, were made.

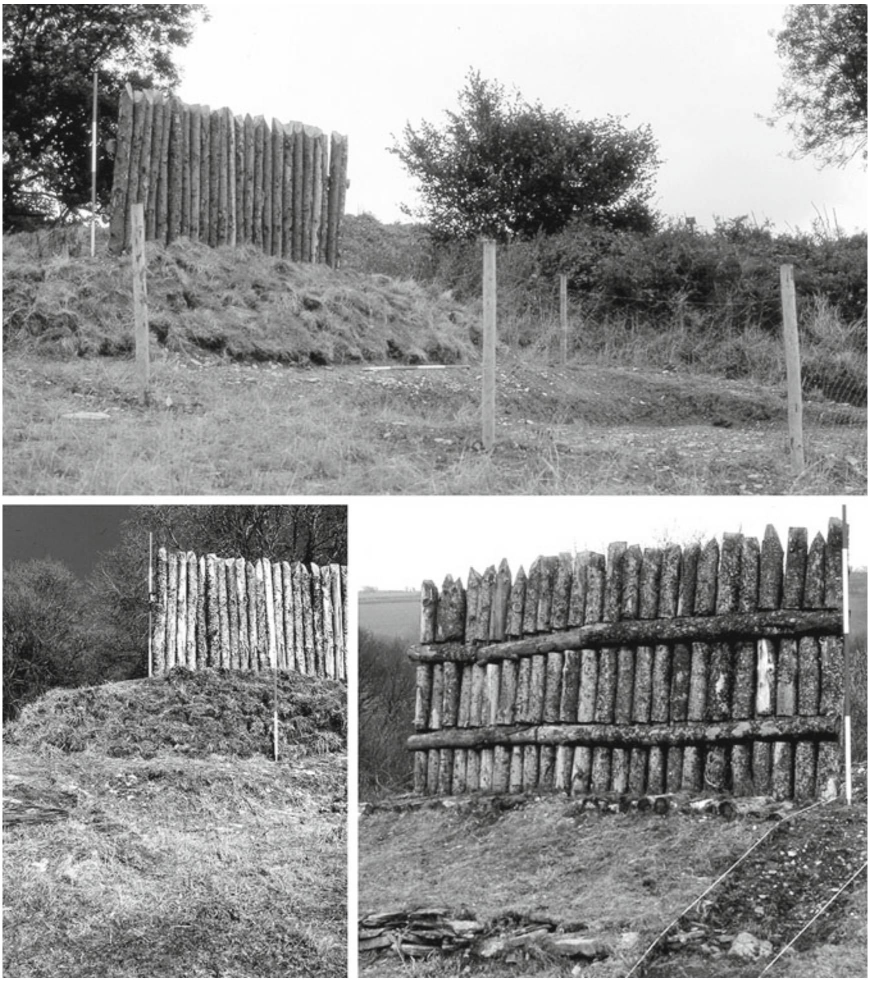

Fig. 10.10 Experimental earthwork. *Top*: Front of rampart and scarp and terrace still uncolonised by vegetation in 1989. *Bottom left*: Front of rampart and scarp now fully colonised and with no erosion, 1996. *Bottom right*: Rear of rampart showing no erosion, 1996

A simple palisade was placed on the top of the rampart, set in a stone-packed trench. Only conifer was available in straight enough lengths to make an effective close-set palisade, but as the weathering of the timber was not part of the experiment, this was not a drawback. It was made 1.6 m tall, which looked large on the relatively small rampart, and it was probably taller than Iron Age palisades, but it was decided to err on the side of larger rather than smaller to create the greatest stress on the construction. The palisade was present to estimate whether the stresses of such a feature caused any soil movement and instability in the rampart. A small timber walkway was placed to the rear of the palisade. A length of possible palisade has been noted at the southern tip of the promontory, but that is more likely to be associated with other structural features within the fort, and the only palisade trench on the top of a rampart was found on the outer part of the northern defences (see Sect. 9.7.1). This palisade was formed with less substantial timbers than the reconstruction, and the rampart was larger.

The rear slope of the rampart was supported at its base by a drystone wall. This was not as finely made as the excavated walling, but was stable and effective, and not made thicker than the original. The front slope of the rampart was covered with the turves taken from the scarped area, and these were arranged over the whole surface of the deposits. They were difficult to position by the inexperienced team, no doubt partly because of the way they had been cut initially, and then in their abilities to place them together to knit as a uniform surface. The result was that the front surface of the rampart was rather rough, but this allowed the possibility of whole turves moving downslope, and so this formed part of the experiment. There was insufficient turf for the rear slope of the rampart, and here grasses with their seed heads were laid all over the surface. It was impressive how, even over the next few weeks, the seeds germinated and rapidly created a grassy surface that held the soil in position. This slope was also later colonised by various weed species, but the integrity of the surface was never threatened.

The earthwork was surrounded by a wire fence that kept the public, grazing livestock and wild burrowing animals such as rabbits and badgers out of the area. Whilst intervention from animals might have been more realistic, this was not easy to organise with such a small length of earthwork near to the excavations and the public access to the site, and anyway rabbits were not in Britain during prehistory, and badgers do not build their setts close to human occupation sites. Whilst burrowing animals may have destabilised the slope, sheep or goats would have done little damage, on the basis of their activities on our spoil heaps that were left to grow over and were used for grazing. Only if larger animals such as cattle and horses used the slopes, especially in the winter, would damage have been possible. The concept being tested was that the Iron Age inhabitants of the fort could have maintained the earthworks in a stable position with minimal effort, and this is what was tested through this experiment.

10.2.2 The Results After 10 Years

After 10 years, the earthwork was recorded and dismantled, during March 1996, prior to topsoil stripping of a large area for archaeological investigation the following summer season. Observations over the intervening years had recorded no visible evidence of erosion and damage, and by 1989, within 3 years of construction, vegetation growth was becoming well developed on the earthwork itself, but had only just commenced by natural colonisation on the scarp and terrace in front of the earthwork (Figs. 10.8 and 10.10). The earthwork became stable within its first year and then did not alter. The only change within the first year was that the palisade settled forward slightly, because it was erected whilst we were completing the rampart, and so the upper deposits were not compacted sufficiently before the packing round the palisade was put in place. It is also possible that stone packing itself was not sufficiently tight, as the volunteers were inexperienced in this procedure, and also the palisade posts were too tall for the depth of the palisade trench. Once the palisade had shifted forward slightly, however, it did not move any more for the remaining 9 years. The top deposits of the rampart consolidated remarkably quickly and held the palisade at that angle thereafter.

The earthwork itself had not altered in profile at all over the whole 10 years, and profiles of its final outline (Fig. 10.9) could not be differentiated from the readings taken after its initial construction a decade before. The lumpy appearance of the turves when constructed still remained after 10 years, though the vegetation had filled in any crevices and bare topsoil. The rear of the rampart had an even growth of vegetation which grew to natural height of 0.3 m during the summer and died back during the winter. The drystone walling at the rear had settled and the occasional stone had slipped forward, but was largely intact. Considering the lack of skill in constructing the wall, it had remained remarkably coherent. On the shelf that had been left as base subsoil in front of the scarp and rampart that had been turf-covered, there had been a slow natural regeneration of vegetation. A thin layer of humus, under 5 mm thick, had accumulated (Fig. 10.9). This was over-dug into the subsoil to ascertain whether there were layers of subsoil wash on the slope, but there were none. To what extent this thin humic layer was topsoil that had washed down from the turves, and how far it had been created in situ by the vegetation cover, is unknown, but it demonstrated the limited erosion and also the rate of regeneration and topsoil formation and retention on this geology.

The experiment demonstrated that the construction of ramparts that could remain stable with no form of maintenance was easily achieved with Iron Age technology, if that was desired. Therefore, if ramparts are shown to have eroded rapidly, it was a deliberate choice of the builders to leave the surfaces free of turf or grass stems. If they wanted to stabilise the earthworks, they could. The visibility of bare earth or rock, such as chalk, may have been more important than the additional labour maintenance required. Many Iron Age ramparts have buried soil beneath the ramparts, but the turf from the ditch areas would have been available to be relaid. Sometimes turves are used for revetment walling, and this may itself have regenerated into a grassy surface. But if many turves were laid on the surface of the ramparts, their stability could be assured. Even without putting any topsoil over the rear surface of the rampart, the grass seed heads laid down were sufficient to initiate rapid plant colonisation on the gravel and clay matrix. With a shale rubble (or chalk or sandstone elsewhere), some topsoil would be required as a sealing layer, but this would require minimal effort considering the labour involved in the whole construction.

10.2.3 Ditches

No ditch was dug as part of the experiment, but many of the excavated ditches in the annexe area were left open for years and were observed. Collapse in both clay and gravel was frequent, often in the form of scalloped slumps from the sides. If compaction from walking or vegetation colonisation made the surface more coherent, the slumping often created small overhangs. The slumped material would move into the ditch through rotational slides (Avery 1993a, 12). The ditches would not widen appreciably before erosion reduced, so any rampart nearby would have remained intact if there had been a berm of c. 0.5 m. Gradually, stability was achieved as the ditches partially filled. Vegetation would then develop, and some ditches became water-filled. Although they had been dry when excavated, some became water-filled throughout the year, and many others held water in the winter. Even the dry ditches developed verdant vegetation because of the damper conditions; this would no doubt encourage gradual build-up of deposits, and the amount of rampart contributing to the ditch fills could therefore have been very small.

The ditches in these observations were archaeologically excavated features, already with a V-shaped profile that may have been acquired through past erosion into a stable shape. There is no reason, however, to assume that ditches could not be dug to a relatively stable slope when being made, as observation of dug ditches would soon allow assessment of what, in any geology, was an appropriate angle of rest. There would then be some subsequent erosion, but the ditches may even have been dug deeper to take account of the amount of rapid collapse, still leaving a viable earthwork after this natural phase of stabilisation. Although ditches can be recut, and the cleaned out material used to make counterscarp banks, the volumes of these features often suggest that major maintenance was not a significant drain on resources. Indeed the way in which many ditches were left partially infilled for some time before a periodic larger recut was undertaken suggests that the stable form of the earthwork was predicted and seen as acceptable. Perhaps only in association with other investment, for social, symbolic or military reasons, would major recutting be undertaken. This effort may still only be necessary on ditches; the ramparts could remain remarkably stable if constructed with that as a priority.

10.2.4 Conclusions

This experiment, designed to encourage structural stability by including stabilising features, has shown that the experimental earthworks elsewhere were accurate given certain assumptions and variables.

However, the experimental earthworks on sand at Wareham and on chalk at Overton Down and Butser may overstate the extent of erosion on typical settlement sites. Erosion on shale, gravel and clay need not be so dramatic as to undermine the intentions of the builders of earthworks. This experiment indicates an alternative pattern and one that matches the evidence from the ditches across the site at Castell Henllys which do not seem to be largely derived from eroding ramparts. Instead they seem to be filled with a mixture of some cultural debris and the gradual accumulation of soils forming in the ditches themselves; the ramparts have not lost the amount of deposit now filling the ditches, and the experiment here shows one way by which this could have been achieved.

Very simple low-technology techniques could encourage vegetation growth and the stability of ramparts. Whether this would be easy to achieve in ditches has not been attempted, but the excavations do not suggest buried soils on ditch sides and bottoms, so it is less likely that the strategy was applied to them. The scarped slopes cut through the glacial till could easily have been turfed or seeded, which would help to explain the limited rapid silting in all the ditches around the promontory, but the major slumping when groundwater ran between the subsurface interfaces between natural gravel and clay deposits in the glacial till could not be prevented by such strategies. The natural erosion of ditches, when ramparts remain solid, rapidly produces a partially filled but stable earthwork component which, if its eroded state was planned for, would make the whole structure relatively easy to build and maintain.

10.3 The Outworks

Many hillforts have outworks of various types, some concentrating around the entrance, others with appended enclosures and yet others with widely spaced concentric earthworks. The use of outworks at Castell Henllys was topographically constrained on the south and for much of the east and west because of the steep scarp slopes, though there was some modification of the lower slopes on the west. To the north the more gradual approach offered opportunities for further division of space, and in addition on at least the western flanks of the promontory, substantial earthwork features augmented those deployed around the main fort itself.

There are three main challenges with the study and interpretation of outworks. The first is one of chronology, both relative and absolute. The second is one of identification, as varied land use beyond the main fort can lead to even large earthworks having no surviving surface traces. The third is that few detailed studies of outworks have been undertaken, with the result that likely patterns of division, chronologies or functions cannot be easily compared or corroborated through parallels. Each of these needs some discussion in turn, indicating how the difficulties have been overcome or merely acknowledged. Given the undeveloped research framework for such earthworks, this is necessary; many will lie beyond statutorily protected scheduled areas, but opportunities to survey and even excavate them may be greater than is often realised; recent work in West Wales has revealed the extent of not only completely ploughed out sites but also those where some features survive as upstanding earthworks, but other elements have been differentially degraded (Murphy and Mytum 2012). The extensive study of the outworks at Castell Henllys therefore sets a precedent in this aspect of hillfort research, and the questions and methodologies employed will provide a framework against which fieldwork elsewhere can be set.

The essential chronological challenge associated with most outwork features is that they have no stratigraphic link with the main fort sequence and were often constructed in areas with limited domestic or craft activity to create deposits that can be dated through diagnostic artefacts or from radiocarbon samples. Little survives on the buried soil surface to provide a terminus post quem, and little enters the ditch fills to provide dating evidence of later use. At Castell Henllys the plan of the various elements, extensive excavation in ditches to reveal the sequence of cuts and fills, extensive rampart excavation that recovered a few faunal samples for radiocarbon determinations, combined with debris and artefacts derived from the later occupation within the area defined by the earthworks can suggest a sequence. Each element of the outworks can be defined and examined in its own terms, partly from excavated evidence, and also through the results of surface survey. Geophysical survey has been repeatedly disappointing at Castell Henllys, probably because of the very varied subsoil, with its interleaved layers of sand, gravel and clay, and the large amount of redeposited natural found in many of the rampart and ditch fills. At sites on the plateau areas, where Ordovician shales provide an even background, good results have been produced with recent surveys (Murphy and Mytum 2012). Unfortunately, most of the sites of the Castell Henllys type lie on slightly lower elevations on valley sides where more glacial drift survives. Many are also wooded, making survey logistically difficult. The results from both aerial photography and geophysics on the shale plateaux demonstrate, however, that many sites have appended enclosures, sometimes with large ditches and at others with small ditches or palisade trenches (Murphy and Mytum 2012). The extensive excavations at Castell Henllys have shown some of these smaller features, though they belong to the late Iron Age and Roman period that is not being considered in this volume.

It is possible that the outworks may have included timber fences, hedges and other non-earthwork-defining features. Certainly the *chevaux-de-frise* that was found beneath one of the outwork ramparts at Castell Henllys fit into this category, but traces of other non-earthwork boundaries have not been noted. Some of the divisions appear to have been maintained over long periods of time, even when ditches have been largely or completely infilled, suggesting that now-lost upstanding earthworks, or hedges, maintained the lines so that the ditches could be recut at a later date if required. One of the challenges with several of the outworks ditches has been to determine on which side, if at all, there was a bank made from the upcast material. The pattern of infilling has not always been helpful in this regard, yet the arrangement of banks and ditches helps to differentiate inside and outside and influences the effective areas enclosed by such earthworks. These problems have been most notable with the subdivisions of the annexe (see Sect. 10.3.3).

Even what were once substantial earthworks can be difficult to identify. The large rampart running west from the entrance is only now visible after extensive clearance of undergrowth after badgers left the area; its ditch is completely infilled. The rampart west of the outer entrance survives only in one short stretch as a very low bank, and again the ditch is completely infilled. The eastern outer rampart is likewise very degraded and, with the erosion on the slopes of the hill masking the ditch completely, has only been traced through a series of excavation trenches. If there is any earthwork running down the eastern slopes, it is now completely eroded, its ditch infilled with hill wash. Excavation may be necessary to test whether such earthworks were ever built, but present discussions assume no further investment on this side of the promontory.

Previous studies of outworks have concentrated on two main themes, defence and stock management. These are not unreasonable categories, but both assume that the interior of the fort was where all habitation and activity took place and that the outworks create a further barrier for movement of people or animals that are not to enter the fort itself. These are indeed sensible and relevant arguments, but there can be further reasons for the provision of outworks, including control and differential access for people, the segmentation of particular activities within the outer but defined areas of the settlement and the symbolic marking of parts of the landscape, potentially linking, though perhaps different in scale and meaning, to wider patterns of division such as field systems and trackways. The development of research at Castell Henllys started from the familiar assumptions regarding defence and stock management, but as the scale of investment and the extent of the earthworks became apparent, other research questions became more prominent, combining with those from the main fort itself.

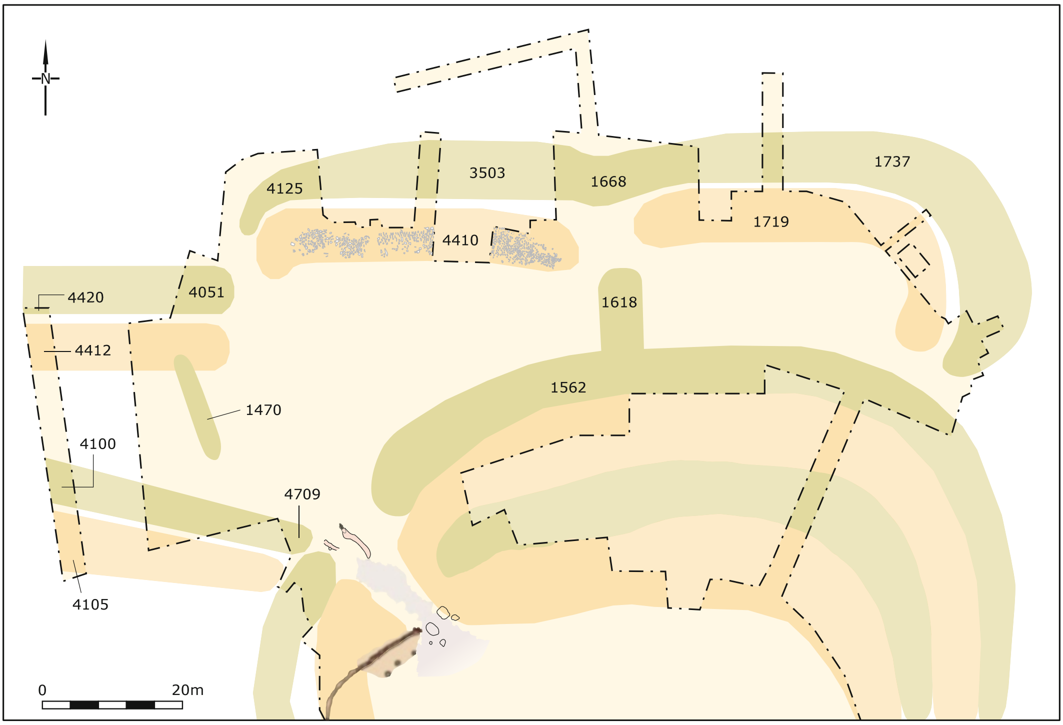

Fig. 10.11 Schematic plan of the outworks earthworks with key feature numbers

10.3.1 The Sequence of Study of the Castell Henllys Outworks (Fig. 10.11)

Surveys by Ordnance Survey had identified an outer bank at Castell Henllys, and this ran across the spine of the promontory c. 50 m north of the main inner rampart, defining an area subsequently termed the annexe. Most prominent in the west, it appeared as though there was possibly an entrance towards the centre where the western rampart and the scarp to the east, each slightly convex, came together. Although the Royal Commission had not noted these outwork features, other later archaeological observers did note their presence in degraded form. The initial excavation across the western portion of the rampart took place in the first excavation season of 1981, and the nature of the rampart, the presence of the *chevaux-de-frise* and the width of the ditch were revealed. The purpose of this trench was to test whether there was any evidence of occupation in the annexe, and as intensive activity was identified (later shown to be almost completely late Iron Age and Roman period), efforts subsequently concentrated on the annexe interior south of the rampart. It was only in 1991 that the trench was recut, the ditch was bottomed, and a more extensive area of the *chevaux-de-frise* was uncovered to the west. In 1998 the eastern end of the *chevaux-de-frise* was uncovered and recorded, and at the same time excavations to the west revealed the full surviving extent of the feature.

Further examination of the western slopes of the promontory revealed two more lines of earthworks running down the slopes. One was directly associated with the rampart already known from its slight earthwork traces close to the access route up the hill, though detailed survey and excavation indicated a more extensive arrangement than previously thought. The other was associated with the ditch which ran up to the western side of the main gateway and which also extended a considerable way down the western slope of the hill. A long trench was placed across both these ramparts, and the latter also had the ditch fully profiled. Excavation of a full profile has not yet proved possible for the more northerly ditch, except at its terminal, because the public approach to the site and an animal pen lie over its line. An entranceway between the outer northern and western ramparts and ditches has been excavated, and fragments of the roadway leading to the main fort have been found. Access points where the annexe outworks cross the saddle of the promontory and between the outer rampart at its southeastern terminal and ditch of the main fort have also been investigated (see Sect. 13.3).

The eastern portion of the main northern rampart has also been partially investigated, and its ditch has been profiled. This rampart is even more heavily eroded than the outwork on the western part of the promontory saddle, but its full extent can be inferred from the plan of the ditch, aided by the excavation of its massive eastern terminal.

Within the annexe between the main defences and the outworks were several smaller ditches placed at right angles to these larger earthworks. For many seasons these were considered to be Romano–British, with an origin perhaps in the late Iron Age when the settlement shift from the main fort to the annexe took place. The lower levels of the ditches contained few finds, but the upper recuts contained Roman material. As excavation has proceeded, however, and the layout of these ditches has been plotted, it would seem that one of these ditches was constructed during the Iron Age when the inner fort was in use. Evidence for early occupation and activities within the areas defined by these subdividing earthworks is extremely limited. Identification and comparison are made more difficult because of the post-depositional processes that have differentially affected zones within the annexe and the paucity of material culture from this phase compared with the late Iron Age and Roman periods. Nevertheless, the results indicate a larger and more complex site than initial site surveys and interpretations have suggested, and certainly a range of uses for the outer enclosure and its subdivisions can be considered.

Only very extensive stripping of the exterior areas has allowed for all these features to be uncovered, and the results indicate that hillfort annexe areas are not necessarily merely undivided open spaces for animals or as zones separating defensive earthworks to impede attackers. Moreover, it was only through careful observation of the hill slopes at different times of the year and in varied light conditions that made it possible to identify the various heavily eroded banks and ditches which stretch away from the main fort.

10.3.2 The Outer Northern Rampart and Ditch (Figs. 10.11, 10.12 and 10.13)

The *chevaux-de-frise* created a boundary across the saddle of the hill that continued to be significant through the whole history of the site. It was along this line that one of the most enduring elements of the earthwork design was subsequently constructed.

10.3.2.1 The Western Segment of Rampart 4410 and Ditch 3503

As the most visible of the annexe earthworks, this attracted the first attention during the excavation campaign in 1981, but the trench across both bank and ditch was re-examined in 1993 when understanding of ditch fills in this subsoil was better understood and a step 3547 was cut into the subsoil to check that there were no further ditch cuts filled with very clean material.

The rampart 4410 survived to a width of 10 m and was placed on a buried soil gently sloping from south to north. It consisted of three main groups of deposits, sequentially laid down to form the earthwork. A small pile of buried turf and topsoil 3545 was deposited at the front of the rampart, possibly laid out in a line to indicate in the place from whence it was taken where to begin to dig down to create the ditch and in its chosen location to indicate the front point of the rampart, behind which further deposits were to be made. This small marker was emphasised by clay 3544 and a more shaly layer

Fig. 10.12 *Top left*: Rampart 4410 and ditch 3503, from the north. Note *chevaux-de-frise* set in the buried soil beneath the rampart. The main fort entrance is in the background to the *right*. *Top right*: Detail of the base of ditch 3503 showing the terminus of the deeper element of the recut. *Bottom*: Ditch 3503 to the east, close to where it terminated in some phases, from southeat. Note the Roman-period black occupation debris behind the upper figure

3543, mirroring the natural strata identified in the overcut step 3547 into the subsoil. The main part of the bank comprised 1498, a clean pink clay layer, derived from the deposit through which most of the ditch was cut. The final layers 1500 and 1499 contain more fragments of shale, reflecting the natural subsoil encountered at the bottom of the ditch at this point.

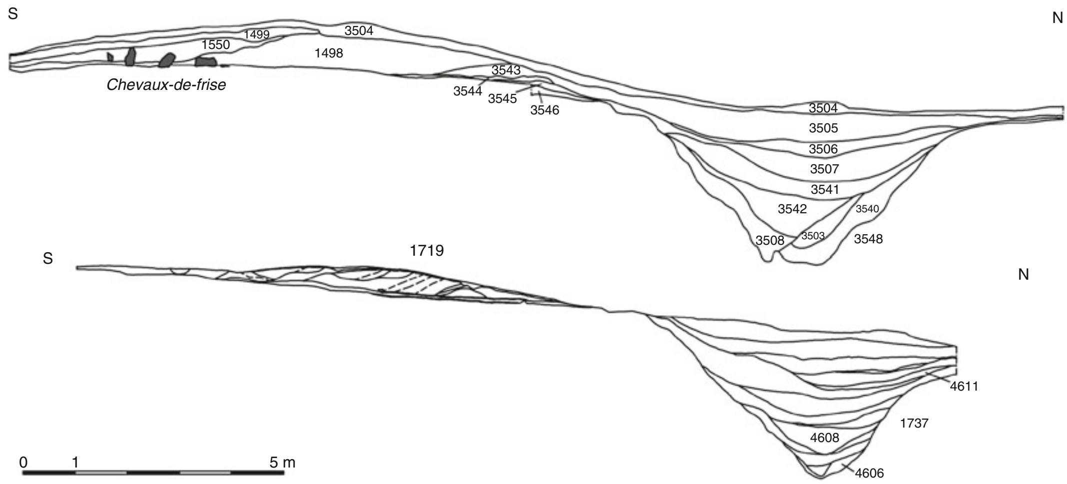

Fig. 10.13 *Top*: Section of the southern face of the trench through the outer northern rampart 4410 and ditch 3548. *Bottom*: Section of the eastern face of the trench through the outer northern rampart 1719 and ditch 1737

The tail of layer 1498 was packed around the upright stones of the *chevaux-de-frise*, but at this point layer 1500 was added to completely cover the stones. The rampart was also excavated at its surviving eastern and western limits, though certainly on the west and probably at the east, these do not represent the original terminals. In both these areas, the extent of the *chevaux-de-frise* was identified, and this feature is discussed in detail in Chap. 5. Of significance here is to note that at the western extremity, the stones were all left in place, as in the centre, but to the east, where the stones were very small, some had been removed and thrown down on the existing ground surface before the rampart was constructed. At both the eastern and western areas opened for excavation, the only deposit, which completely covered the stones, was the pink clay 1498, though in both areas excavation did not extend far enough towards the northern rampart front to find the initial laying out deposits noted in the full cross-section (Fig. 10.13).

Understanding the construction of rampart 4410 is only based on the single cross-section and linear sections towards the rear of the rampart. Whilst these linear sections exposed only the uniform clay layer 1498 and stood to a height of only c. 0.6 m, they did provide a combined length of 18 m of linear section from both the east and western parts of this length of rampart. Careful examination of these sections in the field revealed that the few small shale inclusions do not indicate any lateral tip lines within the clay, suggesting that the construction sequence appears to have been uniform along its length, the clay being raked out and compacted, rather than being constructed in piles by different gangs and then levelled up, or built from one point and extended laterally to the east and west. In this regard the rampart was constructed in a different manner to those within the fort.

The ditch 3548 in the initial excavation trench reveals in both plan and section two distinct phases, each creating a ditch 3 m deep and up to 6 m wide. There are only two fills, the first an extremely clean clay 3540, almost indistinguishable from the subsoil and probably representing slumping down both sides of the ditch, and 3503 which contains more shale fragments in the clay matrix. It is likely that the ditch had silted up considerably by the time it was recut, and it is noteworthy that it changed depth dramatically within the width of the excavation trench (Fig. 10.11), perhaps in part because those recutting realised that as they began to dig through undisturbed subsoil, they were deviating from the line of the original ditch; a trench placed even 1 m to east or west would not have located this feature. The first fill of the recut was a slumping of clay with very few inclusions 3508 which was derived from the inner slope of the ditch. Layer 3542 was derived from the south and contained small amounts of

Fig. 10.14 *Left*: Terminal of ditch 1737 from the northeast. The far figure is on the edge of the ditch, the nearest figure in the deepest part of the ditch reached in the excavation. *Right*: Rampart 1719 in its degraded state; the bank has not survived at all from the point where it sweeps round behind the far figure

charcoal and burnt clay, implying that some activities were taking place on the rampart or within annexe to generate these traces, though the amounts do not suggest deliberate dumping of refuse. In contrast, the next layer 3541 was a cleaner layer of wash. This was the ditch profile at the time of the late Iron Age and Roman-period settlement shift into the annexe area, and layer 3507 contained more charcoal and burnt clay and some fragments of Roman-period ceramics; 3506 was similar but with more shale, perhaps reflecting changed land use following abandonment of the annexe. A silty clay 3505 probably represents erosion of the rampart into the ditch, possibly assisted by historic agricultural activity, now sealed by the modern topsoil and turf, 3504.

Further to the east, close to the central northern access point into the annexe, another cross-section reveals the ditch still with a depth of 3 m and revealed the charcoal-rich Roman-period occupation debris high up in the ditch fill, indicating the depth of infilling by the early centuries AD which meant that the earthworks would have been visible but insubstantial. Discussion of the eastern ditch terminal is found within the section on the intersection of the western and eastern ditches below (see Sect. 10.3.2.3).

The western rampart 4410 only survives to a maximum height of 0.8 m but probably was originally c. 2 m high. The western terminal has suffered particularly badly from erosion and ploughing, and all trace has been removed as it approaches the northwestern entrance (see Sect. 13.3.1). As the ground begins to fall away to the west at this point, the soil movement into the ditch terminal is easy to explain, but the eastern terminal has suffered a similar fate even though the ground is more level here. However, here the northern access point, and the complex series of cut and recut ditches, may have affected this part of the circuit (see below, Sect. 10.3.2.3).

10.3.2.2 The Eastern Segment of Rampart and Ditch (Figs. 10.13, 10.14 and 10.15)

The eastern rampart 1719 was less visible as an upstanding earthwork, and so the topsoil was stripped by machine from its predicted line when the eastern part of the annexe interior was opened for excavation (Fig. 10.13), and this allowed several sections to be placed across the feature at right angles to its line. The external ditch 1737, which had completely silted up in this part of the site, was also

Fig. 10.15 *Top*: Ditch 1737 near its western terminal. *Bottom*: Rampart 1719 at its highest surviving point; ditch 1737 was not excavated at this point and lies down the slope to the right

traced in these sections and also investigated at its terminal (Fig. 10.13). All show the same sequence. The western portion was on only gently sloping ground, whereas as the earthwork swung round to the south, the natural slope of the side of the promontory affected the ditch profile.

The rampart 1719 survived to a maximum height of 0.5 m near the western terminal, but rapidly became much less substantial to the east (Fig. 10.13). As with rampart 4410, the first layers were placed at the front of the rampart, thereby marking both where the ditch needed to be dug and the line behind which the rampart should be constructed. A series of clay layers with varying amounts of shale and gravel reflected the deposits through which the ditch was cut and were piled up at an angle of 30° (Figs. 10.12 and 10.14). No longitudinal section was excavated as the height of the rampart was so limited that it would not have greatly assisted in understanding the lateral construction methods. However, during excavation the angles of the stony material suggested that it was raked and compacted along the whole of the length rather than being built by gangs that created distinct piles of spoil later that were landscaped to create a continuous rampart.

Ditch 1737 was V-shaped in profile and was 5.5 m wide and was cut to a depth of 3.5 m on the northern part of its length (Figs. 10.13 and 10.15). After an initial rapid silt 4606 in the base, the ditch was recut and then infilled with a slump followed by a recut that was then infilled with a gravelly deposit 4608, after which more silty layers formed, suggesting that there was no more erosion from the ditch sides and that the earthwork was fully stabilised. A later recut 4611 created a narrower shallow round-bottomed ditch further from the rampart, but all the remaining fills continued to be silty suggesting a very gradual accumulation. A second trench as the ditch began to turn south at the edge of the promontory revealed a very similar profile, though with less of an outer side to the ditch because the natural slope of the ground was falling away at this point. Here, the earthwork had such an impressive appearance in part due to the scarping of the slope between the front of the rampart and the ditch itself.

The southeastern portion of the outwork was subject to considerable investigation, but no rampart survived even though the ditch terminal was massive. The ditch terminal appeared to have a width of 7 m, but this was because the section line was oblique to the inturned line of the feature. Nevertheless,

Fig. 10.16 *Left*: The intersection of the western and eastern ditches 3503 and 1737, with the lowest central deposits being early ditch 1668. The Roman-period dark refuse layer is visible high in the section. *Right*: North–south ditch 1470 west of the line of the roadway from the other northwestern entrance and the main fort entrance

it was clearly wider than it was along much of its length, and its depth was greater than what had been found elsewhere, with the ditch rapidly reaching a depth of at least 3.5 m as the excavations did not reach the base of the ditch terminal (Fig. 10.13). Discussion of the eastern ditch terminal of ditch 1737 is found in the following section.

10.3.2.3 The Intersection of the Western and Eastern Ditches (Fig. 10.16)

The surviving ramparts and ditches and their distinct curvilinear plans indicate that at some periods during the history of the site, the ditches 3503 and 1737 were distinct and that there was access into the interior at this point. However, once the topsoil was removed to reveal the predicted causeway, surface indications of the expected terminals revealed what appeared to be a continuous ditch. Initial excavations revealed a complex sequence of recuts, so a linear section across the area attempted to reveal the sequence. The stratigraphy was eventually resolved, though this could not be clearly defined in plan, and so the implications for site layout remain provisional. The earliest deposit 1668 indicates either that the ditch was continuous or that the access point had moved. This deposit survived despite recuts of both 3503 from the west and 1737 to the east, suggesting also that the exact entry arrangements shifted over time. It is possible that the initial fill relates to a ditch terminal when only the western rampart 4410 was erected, covering and replicating the arrangement with the *chevaux-de-frise*, and that only later was the full enclosure of the outworks constructed. This might also explain why the northwestern entrance was the only outwork which had a timber gate (see Sect. 13.3.1), and this is only of one phase. It is possible that as the outworks were extended, all access points to this now fully enclosed area were without such timber-built structures controlling movement.

Fig. 10.17 *Top*: Northern terminal of ditch 1618; the change in the subsoil at this point from clay to gravel is clearly visible in the sides of the ditch. *Bottom*: North–south linear section through ditch 1618 (to the *left*) but also upper fills of ditch 1562 which dips down on the right the figure as this ditch runs east–west. There are no cut lines, and fills run across both ditches showing that they were open at the same time

10.3.3 Subdivision of the Annexe (Fig. 10.17)

After the removal of the topsoil over a large area in the centre of the annexe, a single large ditch 1618 was identified running north–south across the site. Other smaller ditches run parallel with this, in some cases only a few metres distant. These are not discussed further here as they relate to the late Iron Age and Roman-period settlement, but they suggest that the north–south subdivision established earlier in the Iron Age was maintained in adapted form. The ditch had a very clear and steep-sided northern ditch terminal with a clear V-shaped profile. To the south, the relationship between ditch 1618 and the ditch 1562 associated with the outer rampart of the main fort was examined with a section that was linear along the estimated centre of ditch 1618 and at right angles across 1562. This section clearly demonstrated that although ditch 1562 had partly filled when the fill of 1618 started to accumulate, both were open for most of the time that these ditches filled up with deposits. Layers which dipped into the profile of 1562 then rose and continued along the base of the shallower ditch 1618. The inference is that ditch 1562 existed before 1618 was dug, though it is possible that the latter was kept clean whilst 1562 gradually filled and then only subsequently both were allowed to fill. For a long period, however, the ditches would have acted together to create an inverted T-shaped plan, the terminal of 1618 being positioned to create a division allowing access into the two elements of the annexe from the northern access point, wherever this was located in the shifting recutting of the ditch terminals of 3503 and 1737. Given the relationship with 1562, it is unlikely that 1618 represented the original eastern extent of the annexe with 4410 forming the northern perimeter and 1719 an extension. It is more likely that 1618 was designed to divide the annexe when 1719 was constructed.

One aspect of 1618 has not been satisfactorily resolved, and that is the position of any rampart that would have accompanied the feature. The infilling comes evenly from both sides, and apart from the rapid fills at the bottom which were probably derived from the ditch sides, there is no indication of rampart material sliding back into the ditch. As a result, it is unclear on which side any upstanding feature might have been placed. It is even possible that a relatively small amount was thrown up on each side, and these were planted with hedges to divide the annexe and prevent animals entering the ditch from either side.

10.3.4 The Western Flanks

Two major ramparts and ditches ran down the western flanks of the promontory, the inner one with its northern terminal at the main entrance to the fort and the outer one forming the western side of the outer entrance. These earthworks form the outworks on the western flanks, but they were only examined on one long trench with topsoil removed by machine. No cut features or deposits were found in the space between the two lines of earthworks. In addition, between the two ran a north–south ditch, which presumably originally had a low bank associated with it. However the chronology of this feature is problematic.

10.3.4.1 The Inner Western Rampart and Ditch 4100/4709 (Figs. 10.18 and 10.19)

Ditch 4100 was dug with a clear V-shaped profile, to a depth of 4 m and a width of 7 m, into very soft natural gravel deposits, which rapidly filled the base of the ditch with fills 4409 and 4411. Material entered the ditch from both sides and may have been partially cleared out before most of the ditch was gradually filled with a relatively uniform silty loam with a scatter of gravel and small shale stones, 4416, that suggests that the rampart and ditch sides must have been stabilised and the infilling took place over a longer period of time without any slumping. The higher layers were more humic but otherwise similar. The lack of any cultural material or charcoal indicates that no human activity was close to the ditch to the east. The rampart did not seal a well-developed buried soil, but the bottom layer may have been formed by the humic material removed as the ditch digging began. The original width of the rampart is uncertain, but was at least 9.5 m and survives to a height of 1 m. It is formed of layers 4421 and 4422 gently sloping down from the front of the rampart to the rear at the south. These layers are largely gravel, derived from digging the ditch 4105 to the north. Other gravel deposits at the rear, 4423 and 4424, could have been a deliberate widening of the rampart or slumping off the rear. The gravel was so unconsolidated, and excavations were so limited that this could not be resolved. The southeastern terminal of ditch 4100 was on the west side of the entrance and was given the number 4079. This ditch was dug as part of the design for the first stone phase gateway (see Sect. 12.1.3, Fig. 13.11).

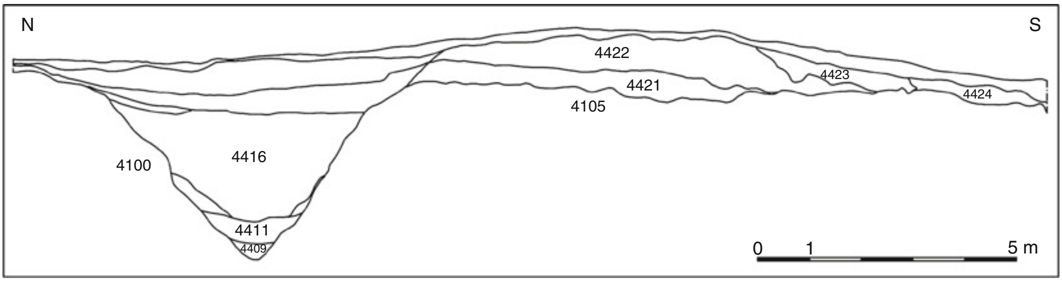

Fig. 10.18 *Left*: Section of inner western rampart 4105 and ditch 4100. *Right*: Schematic overall profile through the inner and outer ramparts and ditches of the fort, and the annexe rampart and ditch, with the original ground surface marked

Fig. 10.19 Inner western rampart 4105 and ditch 4100 from the northwest, with the far figure standing at the rear of the rampart

10.3.4.2 The Outer Western Rampart and Ditch

The outer rampart and ditch have been badly damaged by the grading of the slope on the modern route for wheeled vehicles and pedestrians as they approach the fort from the valley and work their way up the scarp at an angle along the western side of the promontory. This route cuts across the line of the rampart and the ditch, which must therefore have been already very degraded when the line was chosen, but it inhibits excavation of a full section across these elements of the outworks. For decades, those wishing to visit the promontory itself then turned through where the outer entrance was located in the Iron Age and then followed the route taken in prehistory up to the fort, where the site of the entrance was the lowest point in the perimeter and so remained the access point. In the Iron Age, the outer rampart and ditch would have forced access along what is now the longer route from the valley floor slightly to the north but must have encouraged similar patterns of movement to those still active today.

The outer ditch 4420 was not excavated in the long trench that also examined rampart 4120 beyond its inner southern lip because of its proximity to the public route to the fort and its reconstructions, but its terminal 4051 has been excavated and is described and discussed in Sect. 13.3.1. The rampart 4120, which did not survive at the entrance, was encountered further west, where it lay south of ditch 4420. The buried soil was sealed at the ditch edge by the first rampart layer 4132, a gravel layer with some clayey matrix, which was then sealed by a thin layer of brown clay 4133, after which a further stony deposit 4134 and then a final clay layer were laid down, all with interfaces at an angle of 30°. The rear of the rampart was preserved by a layer of loose stony loam, wash from the rampart that naturally developed after the rampart was constructed or at least when it was no longer maintained. The rampart seems to have been c. 10 m wide, but only survives to c.0.4 m in height.

10.3.4.3 The North–South Ditch (Fig. 10.16)

A ditch running roughly north–south following the line of the contours provided an earthwork feature that prevented easy access up the slope between the outer western rampart 4120 and ditch 4420 and the inner western rampart 4105 and ditch 4100. Its position and shape, however, present interpretive difficulties. The northern end is located where it would be expected that part of the rampart 4120 would have been placed as it approached the northwestern outer entrance. Also, the ditch was clearly defined with clear terminals and was slightly wider and significantly deeper at the northern terminal, where it was 0.9 m deep, but only 0.4 m deep at the southern one, a change not easily explained by differential erosion of the hill slope. There is also a significant space between the southern terminal and the ditch 4100 as it ran uphill to become the terminal 4709. The ditch filled from the uphill side but also from the northern end and for much of its length contained two charcoal-rich layers above some sterile silty infills and separated by a clayey layer; the highest levels were more gravelly. The infilling suggests some collapse of the ditch sides and some of the small rampart that presumably was uphill of the ditch. The lack of any Roman-period material from any of the layers suggests that it belongs to the Iron Age, but to what phase is uncertain.

10.3.4.4 The Eastern Flank

The natural slope of the promontory runs steeply down to the stream in the valley bottom, the slopes being covered with bracken, blackthorn scrub and hazel. This has made observation of surface earthworks difficult, even in winter, and no equivalent has been found of the ramparts and ditches noted on the west. Only extensive trial trenching would have any chance of locating now-buried ditches on these slopes, and that has not been attempted.

10.4 Discussion

The results from the annexe area and the numerous outwork features demonstrate the value of extensive area excavation not only within annexe areas but over the ramparts, even if only trenches can be excavated to the full depth of the ditch fills at selected locations. It is the large areas open at once that have allowed some of the features to be identified where no surface earthworks survive and also have assisted with the selection of locations for more detailed excavation. This is now the most excavated annexe attached to an Iron Age fort in Britain and reveals the level of investment in the original construction and, in places at least, a continued concern to maintain ditches with recutting. The design and form of the various access points are discussed in Sect. 13.3, and the full consideration of all the earthworks and their varied characteristics in primary form and construction, and their different maintenance regimes over time, are discussed in Chap. 15.

Chapter 11
Ramparts and Ditches: Evidence and Inference

Abstract The evidence from excavations at many hillforts reveals evidence for the forms of construction and the placing of earthworks onto the landscape. In particular the evidence from the Breiddin, Cadbury Castle, Crickley Hill and Danebury provides high-quality comparative evidence regarding earthen ramparts. At Castell Henllys the logistics of construction can be most fully explored, including how and why the northern rampart was constructed over the ditch edge. Once constructed, the ramparts at Castell Henllys show limited evidence of modification.

The evidence from the excavations conducted over nearly 3 decades has revealed extensive evidence of how the ditches were dug and the ramparts were constructed at Castell Henllys. They represent the creation of monumental earthworks that significantly modified the natural promontory and which formed a visible feature in the landscape. The Castell Henllys evidence can be set against some other extensively examined sites to reveal similarities and variations in behaviour in hillfort construction. It is possible to separate out those factors linked to the physical constraints caused by soil mechanics from those which were culturally selected. Whatever the perceptions and intents of the builders, the formation of earthworks with a certain level of stability was clearly intended and, as far as these earthworks remain into the present, they were successful in these intentions. Those occasions with structural failure, and situations where there were clear changes of plan, all inform on the decision-making process. There could be many other avenues of enquiry that could be taken with this data, but here the issues of construction and consolidation are given primacy. Wider social and cultural implications are considered in Chap. 15.

11.1 Scarping, Digging, Building

The construction of ramparts is a subject that has received detailed attention in print on only a few occasions, and it is clear from many of the brief comments in excavation reports that field archaeologists have rarely thought deeply about this, assuming that the past options were limited whilst often grappling with the complex logistics of archaeological intervention and their contemporary management challenges. In fact, the past situations were at least as complex as those facing the modern excavators.

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11.1.1 Rampart, Scarp and Ditch Stability

The evidence established from many different parts of the circumference of the site can contribute to our understanding of the knowledge of the hillfort builders and maintainers. That the earthworks survived to the present day gives some support for assumptions that there was substantial technical knowledge and practical ability available; the excavation evidence largely supports this, though reveals some weaknesses. Avery (1993a) has outlined a number of problems that the rampart builders had to overcome. The two soil structure problems were the stability of an unsupported slope, relevant to the dump ramparts and scarping, and the stability of a retaining wall holding backfill, present in the entrance complex and around the interior.

The shear strength of the deposits in the rampart decreases if moisture levels rise. The control of rainwater was an important consideration within the design of the entrance complex but was also therefore important on the ramparts at large. Rainfall is relatively high in north Pembrokeshire, but the steep slopes of the ramparts and scarps would have assisted run-off. Consolidation of deposits increases shear strength (Avery 1993a, 12), and the layering and smoothing of the deposits within the main rampart suggests careful construction with deliberate compaction being part of this process. Given the millennia of subsequent settling of the earthworks, this cannot be measured, but it is likely that the construction of the ramparts created stable forms. The banding of material was also apparently deliberate, and this has interesting effects on stability.

Two forms of landslide are noted by Avery (1993a, 12). In the case of rotational slides, the surface on which the movement occurs is on an arc of a circle and can be steeply angled upwards. Translatory slides occur where a weak horizontal layer is overlain by a stronger material; shearing can then occur along the weak layer. Avery notes (1993a, 13) that excavators have not defined the types of failure noted in collapse and that narrow trenches would in any case not always assist understanding of the processes involved. Despite narrow trenches across the ditches, two examples of rotational slides can be identified at Castell Henllys; both are found on scarps.

The rotational slide on the western slope of the hill involved the large-scale movement of natural strata downhill into the ditch (see Sect. 8.2, Fig. 8.8). Exactly the same occurred on the scarp beyond the outer rampart on the northern side of the site (see Sect. 9.7.1, Fig. 9.20). In both cases, the ditch was largely filled with the natural deposits, and the shear line appeared as a cut in the section. It was, however, a natural shear line not a human cut. The inhabitants of the fort in both cases redug the ditch, though reducing its size to restrict the weakness it created. Although the pattern of shearing exactly matches that predicted by Avery, the reasons for these failures are less clear. In general terms, the scarp must have been cut too steeply, and the ditch at the base of the slope in effect undermined the natural deposits above. Why the shearing happened where it did, however, is less clear. The natural banding in the glacial deposits is of clays and gravels, and the former can impede drainage and create interfaces where friction would be less. The deposits appeared roughly horizontal, and so presumably the water accumulated at some of the interfaces, rather than running away along sloping surfaces within the subsoil. Indeed, in both cases water flowing down from the higher parts of the promontory could have generated considerable quantities of liquid along the interfaces (unlike in a rampart where only the rain falling on the earthwork itself would have been a contributor). Whether collapse occurred widely around the north and west of the fort is not certain, though where excavated it appears that the front of the rampart on the west may have been further truncated slightly by later, post-abandonment erosion. The extent and timing of slumping may have been completely dependent on the localised stratigraphy within the superficial geological layers on the hilltop, unknown to the fort builders.

Much of the rampart on the eastern side of the promontory has suffered collapse down the hill slope (see Sect. 10.1.1.2, Figs. 3.4 and 10.7). All that remains are traces of the lowest levels at the rear of the rampart, in contrast to the excellent preservation elsewhere. This may have been caused by the moving out of the line of the rampart onto the steep slope, to meet the larger ramparts stretching round the northern side. In this case, collapse may have been caused by rotational slides along the buried soil where water could accumulate from the bank and run-off from that part of the promontory lying immediately uphill to the west. Given the location of the ditch at the one point where it has been identified, however, it is possible that the whole of this side of the promontory suffered a major natural collapse, causing a substantial landslide down the hill slope. This would explain the complete absence of a terrace on the east, as it would have been filled in and perhaps sheared off on its outer edge by the great weight of material moving down the slope along a distance of c. 7 m. The reason for this scale of erosion may have been the undermining of the whole hill slope by the meandering stream in the valley bottom or perhaps the clearing of vegetation off the slopes during the construction phases of the settlement which led to massive erosion. It is therefore possible that there has been significant movement on the eastern and to a lesser extent the western sides of the promontory; this may have been induced by humans through changed landscape use or by construction of too steep a scarp, which was certainly the problem in the excavated examples.

11.1.2 Dump Ramparts

The evidence from Castell Henllys clearly demonstrates that the ramparts are all of the unretained low dump type defined by Avery (1993a, 51–54), with a relatively steep front face and a more gently sloping rear. He notes (1993a, 62) that on subsoils of gravel and clay, the dump rampart was the normal form of construction, and in this respect Castell Henllys is typical. Around the entrance the outer front rampart had front stone revetting, and it is possible that there was limited front revetting for the inner rampart also, though none remains in situ. However, most of the Castell Henllys walling should be seen as part of the entrance architecture, not the rampart design, though some rear revetment walling was used and is discussed below. Despite the term unretained, other forts with low dump ramparts, Croft Ambrey 2 and the western part of Maiden Castle Dorset 2, had some front walling (Avery 1993a, 53). The evidence from a few hillfort sites illustrates the variation within dump rampart construction, within a generally similar approach to construction. The observations highlight at one level a great deal of information regarding the deposits and how they were laid down, but on another lack of certainty as to where exactly the deposits came from, and the mechanics involved in the ordering and reordering of the deposits between digging out from ditches and scraping up from the surface or quarry hollows and the placing within the dump ramparts. The archaeologist tends to only have available the cut of the ditch, subsequently weathered, recut and eventually infilled, and the finished ramparts themselves, also somewhat denuded. The potential narrative of rampart building at Castell Henllys is discussed in Chap. 15; here the evidence for the actual constructional methods and their practical implications are considered.

11.1.2.1 Danebury

The long excavation trench at Danebury provides a useful cross section where a particular pattern of dumping can be found (Cunliffe 1984, 16–19). The box rampart construction was sufficiently close set for three pairs of posts to have been found within the trench. Although the published section does not show voids running up through the mound, two were identified during excavation reaching a height of 0.6–0.7 m. The higher, horizontal, elements of the framing were not identified, however. After the deposition of a small amount of turf, presumably from the ditch, the lowest layers of chalk rubble appear to have run out between the posts, and by the time that the voids were first noted, the rampart would have been twice the width of the timber framing.

Cunliffe (1984, 18) notes that the chalk rubble was presumably from the ditch, suggesting that the overlying turf and subsoil must have been dumped elsewhere and citing Ladle Hill, an unfinished fort, as a parallel (Piggott 1931). This is possible, but given the lateral development of bank and ditch at Castell Henllys, and fuller consideration of the logistics of digging a ditch and creating a rampart, it is more likely that by the time that this part of the rampart was being constructed, excavations in the ditch had already reached the solid chalk. The material used in the earliest layers of the rampart was of two types, and Cunliffe suggests that they were derived from different sources. He suggests that the chalk rubble came from the ditch, and the layers of clayey soil and chalk were scraped up from within the fort. It is again probable that these were derived from the surface of the next stretch of ditch to be dug and so presumably coming from a different gang who concentrated on the superficial deposits. This would have a practical logic in that different techniques and tools would be required for the two types of excavation and may have allowed a wider range of people to be employed in the labour force. Quarry hollows of an early date were identified within the fort, but the material for these could have been used at any point in the rampart construction and may have been necessary to finish the last part of the rampart if the ditch ran ahead of the rampart construction.

Cunliffe (1984, 18) notes "considerable lateral variation", with flat platforms representing paths along which basket carriers could move. More extensive excavation could have more effectively examined this process, though this would have involved considerable archaeological excavation resources. The notion of moving along the rear of the rampart to deposit soil does further enhance the sense of more complex movement of people and materials than a simple dig and throw up model might imply.

The other layers in the build-up of this period of the rampart were "piled indiscriminately behind, each tip more or less following the sloping surface of the growing earthwork". This is very familiar at Castell Henllys, but the idea that this was indiscriminate is probably inappropriate. Casual, disorganised dumping of baskets of material, particularly if coming from a range of digging gangs, would have produced a far less coherent section. The deliberate scraping and sloping of the layers was part of the construction process, probably combined with simple compaction. This is not to say that each layer was meaningful and placed with a particular purpose but that the rampart construction involved more organisation of labour and instruction on what to deposit where that might be assumed.

The first period of rampart construction was finished off by the deposition of layer 22, a clayey material that Cunliffe (1984, 18) thought was "probably redeposited turf and topsoil, capped with a spread of fine chalk. The layer was consistent across the trench and may well have been deliberately chosen to seal the earthwork and to prevent erosion". It is possible that the top of the rampart was shaved flat so that layer 22 could sit on a stable horizontal surface and that it soon levelled off to provide a platform on the top of the rampart, rather as in Cunliffe's reconstruction (Fig. 3.6) but perhaps even slightly lower. The deliberate use of this layer may parallel the use of clay [10] at Castell Henllys, marking a distinct phase of building but not one that necessarily lasted for any great time. It also resonates with the experience from the Castell Henllys experimental earthwork (see Sect. 10.2) in that rampart builders could design elements that would encourage vegetation growth and so stability of their newly completed earthworks.

The Period 2 construction shows a distinct contrast to the earlier work. Here, "tips of turf and soil interlaced with lenses of fine chalky rubble" were use to increase the rampart by 3 m in width and 1.5 m in height. The layers contained considerable amounts of pottery, and it is likely that the deposits came from stripping the interior and digging shallow quarry hollows. The excavator does not comment further on these deposits, but the section drawing clearly shows an intermingled pattern of small dumps that would represent individual baskets emptied onto the sloping surface. Despite being 1.5 m thick, there are no long tip lines within the deposit, but numerous small mounds and lenses. This is the pattern to be expected when a workforce is active with no concern for any particular order of deposition, though it would appear that deposits were placed over the whole surface and then others added over the slope, rather than starting at the bottom and gradually building up. Gully 43 was dug into the chalk and then filled as the rampart extended back over it; this may represent less organised digging for material when an earlier part of the rampart was being extended, only to be found to be in the line of the rampart at a later stage. The profile of Period 2 shows a distinct break of slope over the gully, the lower part being much less steep. The last layers suggest the abandonment of even dumping over the whole surface and more frequent tipping at the base. This may suggest that the required height and stature had been reached, and this was merely depositing the last material to be dug up.

The Period 3 addition to the rampart was with layers of chalk rubble and chalk silt, and this infilled the break of slope of the Period 2 rampart to create a more even, if slightly undulating, slope. There are indications that this was created by a series of dumps beginning at the lowest part of the slope and working uphill. This would be yet a different way of constructing the rampart.

A section excavated in 1975 extended into the rear of the rampart on the northwestern side of the fort and so provides an important comparison with that found in the long trench to the southeast (Cunliffe 1984, 19–21). The eroded tail of the Period 1 rampart was uncovered, but the rampart was all of a later period, and Cunliffe (1984, 21) tentatively suggests Period 3. The material for the greatly expanded rampart was derived from extensive and unusually deep quarry hollows in the interior and incorporated cultural material from these areas. Cunliffe notes "Bearing in mind the slope of the hillside hereabouts the labour of lifting material from the recut ditch to the crest of the rampart was clearly unacceptable". This is indeed an important point to consider when enlargement of complete circuits took place. During initial construction, journeys from the quarry to rampart could be relatively short and indeed be tailored for much of the circumference to meet ideal gradients for carrying material. Once the circuit was in place, the steep outer face of the existing rampart created an impediment to movement for the builders. If materials were dragged up the slopes, or the front of the ramparts adapted to carry narrow footpaths, this would all have been very labour-intensive. Transporting material from the quarrying round through an entrance to the rear of the rampart would also involve much effort. Thus, initial construction was much less complex than subsequent alteration, unless internal sources were utilised, as at Danebury. This may explain the minimal enlargement except to the rear with cultural material, at Castell Henllys.

The building up of the rampart in the northwestern section was similar to that in Periods 2 and 3 in the southeast, though not identical. The excavator notes that "layers of chalky silt, chalk rubble, and clayey soil laid in almost horizontal tip of widely contrasting textures" (Cunliffe 1984, 19). Numerous individual dumps can be identified in the section (Cunliffe 1984, Fig. 3.7), and whilst the initial deposits are horizontal, and the rampart rises in a series of stages, each having a sloping rear before the next phase of addition begins again at the base. The lower half of the rampart contained little chalk rubble of any size, but the second half did; this probably reflects more of the material coming from the chalk subsoil in the quarry hollows and less from the superficial deposits that overlay them. It may, however, represent two episodes in rampart construction with different working practices in each.

The counterscarp rampart in the southeastern section is made up of many thin deposits, each a layer of "coarser chalky material merging up to a much finer silt" (Cunliffe 194, 18). Each is convincingly explained as debris from ditch cleaning and represented 14 episodes of this activity. The first was placed near the outer lip of the ditch, with subsequent deposits resting on top and running down the downhill slope of the mound. The layers are all similar in thickness, but as they grow longer with each deposit, the later ones represent up to twice as much material being removed from the ditch. The evenness of the layers also suggests that they were raked smooth and probably compacted to prevent erosion. This suggests that, whilst a by-product of ditch cleaning, the appearance of the counterscarp bank was a matter of concern, since most erosion would have been away from the ditch and so would have not been a problem for fort maintenance.

The Danebury inner ramparts, both the main earthwork and the counterscarp, have simple dumping sequences moving back from the lip of the ditch. Each period, however, involved a different method of rampart construction, suggesting different organisation of labour and perhaps a different degree of control and purpose. Further information on these various processes would be gained from longitudinal sections and study of any easily identifiable layers in plan.

The ditch sequence at Danebury could not be stratigraphically linked to that of the ramparts, and the periods suggested by Cunliffe contain, as he admitted, some problems. The Period 1 ditch is seen as completely removed by a later recut, though when this occurred is unclear. The volume removed in the recut was considerable, far greater in volume and more rubbly in character than any of the deposits on the rampart section. As the total cross section area of the rock-cut ditch is a known variable, the material must have been used elsewhere. Without more excavations of the rampart and ditch, it is not possible to link any one ditch section with that of the rampart, as one trench no doubt bisects parts of the earthwork that were constructed at different points within the one period. It may be that much of the later chalk rubble was used not in rampart construction but in other purposes within the fort or elsewhere and the bank and ditch profiles should not, in that case, match in terms of volume. It has already been noted how much of the rampart was derived from deposits from inside the site, so it may be that the ditch material was indeed used elsewhere.

11.1.2.2 The Breiddin (Musson 1991)

The late Bronze Age rampart was formed around and behind two lines of paired upright timbers, and whilst some appeared from their packing stones to have leaned forward, this was probably during the decay process and all had been vertical on construction (Musson 1991, 25). The timbers were encased in rubble and soil. The rubble was largely weathered pieces of natural scree. In only one area, B4, quarry scoops were visible. It was thought that much of the tumble on the slope in front of the timbers had been derived from the boxed structure that they had formed, but it seems that there was a rubble rear from the beginning. The rampart had a rear kerb of stone, with the size of stone varying considerably. The southern stretch had the kerb added after construction of the rampart had begun, whereas to the north both were begun together, and so this kerb must have been part of the box rampart design.

The linear excavation of the rampart allowed variation in soil colour to be noted, but the report does not attempt to identify depositional events. The upper part of the rampart in the southern excavated stretch appeared to contain more charcoal and burnt bone than elsewhere (Musson 1991, 25). This might indicate that this part of the rampart was built later, and so there was more occupation debris around the site by that time to be incorporated. Alternatively, it may have been derived from material from near an occupation area within the fort, unlike that obtained for the northern stretch.

The Iron Age rampart was constructed when the earlier earthwork was very degraded. Its front face ran along the middle of the earlier feature, and it extended back into the earlier phase interior. The earthwork was up to 6 m across, with front and rear facing surviving to a height of 1 m in places. A lower core was dumped between the walls and against the rear of the front facing. The material was thrown in from the interior, and the excavator suggests that this may have been obtained by shallow, widespread digging. There was more stone than in these interior deposits, so additional rocks must have been collected (Musson 1991, 33). It is possible, however, that material was collected from outside the fort and brought round to be placed from within. Unfortunately, the tip lines within the rampart core were hard to detect, and very little evidence was found of any timbering to suggest internal subdivision, though a few possible traces were noted (Musson 1991, 34). The upper material in the rampart was stony scree, with little fill between the stones; the nature of the rubble and the way in which it had shifted as the front revetment collapsed meant that the original methods of laying down the rocks could not be ascertained. The nature of the subsoil at the Breiddin limited the elucidation of the details of rampart construction as found at Castell Henllys; the more valuable evidence from limited excavations at Danebury again emphasises the relationship with geology in making the tip lines visible on archaeological investigation.

11.1.2.3 Cadbury Castle (Barrett et al. 2000)

Excavations at Cadbury in Site D allowed for the examination of a 13 m length of rampart, with a narrow balk providing four cross sections of the earthwork (Alcock and Bishop 2000a, 51). This was sufficient to provide good evidence in plan, but there were no longitudinal sections through the Iron Age deposits.

The early Bank A at Cadbury appears to have been of box construction, with pairs of timbers perhaps at 1.85 m intervals (Alcock and Bishop 2000a, 54–55). An alternative pattern with a third row of postholes is also suggested in the report, though this will not be considered here, as the main concern is with rampart fills. Between the uprights was lain red-brown clayey earth with small limestone rubble, derived presumably from a shallow ditch that cut only into the hill's superficial deposits. Whilst the horizontal brown clay 524A could have been the remains of a horizontal timber, this was thought unlikely (Alcock and Bishop 2000a, 55). Nevertheless, the flat surface of this layer may have been used to rest the lateral timbers in the rampart, though this is only a height of c. 0.2 m above the original ground surface. Whilst there may have been continuous planking at the front, the rampart extended beyond the timbers to the rear with layer 525, on top of which turf line 525A formed (this is only correctly identified on published section C-C′, and not correctly on A-A′, C-C′ and D-D′, where the original buried soil is so labelled, though it can be seen on all sections). This would suggest a very small rampart, under 1 m high, with perhaps a timber walkway behind the front posts that could have provided a breastwork; although part of the rampart was dug away for Bank B, the slope indicated by the buried soil is a valuable indicator of the range of possible rampart heights. Some postholes such as 694 and 635 were leaning; the excavators assume that this was how they were dug, but it is possible that they moved to this position, perhaps as the posts rotted; in particular, 694 is vertical at the base and then curves, perhaps indicating where the structural weakness lay. The alternative is that some of the timbers were not very straight and that curved elements were used on the rear part of the structure, saving the straighter elements for the front elevation.

Bank B cut away the front of Bank A, and new uprights were placed there, with drystone walling of blue lias rock between them. This was imported onto the hilltop and worked there, as many fragments are found in the feature fills (Alcock and Bishop 2000a, 56). It only survived to a maximum height of 0.4 m, a facing up to 0.25 m thick with limestone rubble perhaps from a ditch in front. It is suggested that the rubble and walling rose together at the same time, though no reason for this is given. Presumably it is because the facing was not structurally strong and cannot have been constructed first to any height, and the internal rubble needed a front edge to support it. None of the published sections show the facing surviving to any height, so the relationship between these cannot be further explored. The rubble in the sections, however, is very jumbled and, even when away from the collapses at the front and rear, does not suggest any careful form of deposition. The lowest stones tend to lie flat in the cut into Bank A, and in section C-C′ the material seems to be laid in layers with some careful positioning of larger slabs, but that is the most that can be tentatively said. The rear of the rampart had a timber revetment that was replaced on the west by a line of smaller but more closely spaced timbers, presumably after a collapse.

The later phases at Cadbury show a complex sequence, but the important feature with regard to comparison with Castell Henllys is that the layers lie at a very low angle, largely raising a wider expanse of rampart up and stopping wherever they met the uphill natural slope to the rear. Each builds on the earlier one in a series of deposits generally less than 0.4 m thick. Simple sequences of dump deposits can be noted in Site I (Alcock and Bishop 2000a, 67–69) and Site J (Alcock and Bishop 2000a, 69–72). In both cases, material was placed in a low mound at the front of the proposed rampart, close to the eventual ditch lip. Extending behind this were then added a whole series of deposits, varying in character but generally maintaining the same angle. At Site I the deposits narrowed in width towards the top, but this was less noticeable at Site J. The pattern here is very similar to that on the outer northern rampart at Castell Henllys.

Banks 3 and 4 on the outer earthworks at Cadbury were investigated by excavating a single narrow trench at Site D (Alcock and Bishop 2000b, 72–75). The results appear to reflect simple deposition of spoil, in long, thin, tapering layers, spreading from the outer edge of the ditch. Whilst they slightly steepened the natural slope of the hill, the ramparts seem to have mainly been a simple and efficient way of disposing of spoil dug from the uphill ditches. The equivalent has not been traced at Castell Henllys, where no ramparts have been found running along the contours on such a steep slope.

11.2 The Logistics of Digging and Construction

In a world attuned to the use of large earth movers, as was the case for topsoil removal at Castell Henllys, it is less easy for modern archaeologists to appreciate both the physical labour that past individuals could routinely employ, and the ways in which human labour could be organised and used.

11.2.1 The Use of Gangs

The use of gangs, or the identification of small stages in the rampart construction, can be informative regarding workforce size, organisation and potential time taken to construct the rampart. Unfortunately, as Avery (1993a, 41) notes, few sites have had the details of their walling recorded, and the same applies to longitudinal variations in rampart fill. Nevertheless, a few sites can be used to indicate some of the possible ways in which excavated evidence may throw light on this issue.

At the Breiddin, the meandering line of the late Bronze Age rampart identified by the excavator (Musson 1991, 176) was thought to perhaps reflect the elements constructed by different gangs. Also, the evidence from B04 revealed that the "spacing of the paired postholes and to a certain extent the character of the rampart core and its rear kerb all change fairly sharply about 6 m north of the quarry road". How long the stretches were for each gang cannot be estimated with only one break, though it is perhaps significant that the pattern of the paired posts is not uniform along the whole length and that the last stretch of rear kerb in the north of B01 returns to large blocks as seen in the southern half of B04. This may suggest stretches of about 8 m for each gang.

The front facing of the Breiddin rampart survived to varying degrees along its length, but there is no variation mentioned in the published account to suggest the use of gangs or defining the order of construction (Musson 1991, 34). In contrast, the rear facing did show numerous changes in stone size in area B04, suggesting sections between 2.2 and 2.4 m in length; less substantial traces were noted elsewhere. Some of the internal deposits, such as layer 0457, the band of stones set in dark soil up to 1.5 m wide that ran between the upper and lower fills, were integrated with the rear facing (Musson 1991, 35). It must therefore have been laid down in stretches as well. This implies that the incorporation of this specific material at this stage was deliberate; otherwise it would not have been so consistent along a stretch with so many changes in the wall. The significance of this deposit, with its dark soil and charcoal, may have been more than purely functional.

The construction in short lengths of under 2.5 m, for walling at least 1 high, suggests quite small gangs each responsible for building the whole height of a section of the wall. This would represent a significant number of baskets or perhaps one large load on a drag sledge pulled by humans or a horse. Gangs could have moved along building several courses over a longer stretch, but this was not done. It may be that it was easier to dump the material collected by each gang in one place and then use it to build a wall stretch. This may suggest the drag sledge is more likely as baskets could have been dumped in a line. The varied size of stones presumably reflects the part of the hill from which each gang collected its materials.

An alternative view would suggest that the builders of the wall may not have been different but that they worked in sections using the material left in piles by different collecting gangs. This would then allow for a small skilled wall stone laying group and many unskilled teams scouring the locality for building material. At the same time as the wall was being built, the dark stony layer was being added, and as the rampart proceeded (though the direction is not known), others may have followed along behind putting the upper fill in place.

Crickley Hill is the only other site where sufficient has been investigated for the excavator to propose a detailed three-dimensional pattern of work, though this is a rampart with lacing and with walling. The nature of the material at Crickley Hill with its limestone fragments and walling and the location of the entrance—in the centre of the rampart length rather than near one end—created distinct engineering and logistical problems. It is not surprising, therefore, that the decisions taken were in many respects different from those at Castell Henllys.

The Period 2 rampart at Crickley Hill was remarkably well preserved and was excavated on the exterior over a length of 12 m north of the entrance. It survived to a height of up to 1.8 m and revealed three tiers of horizontal lacing (Dixon 1994, 179). The rampart was laid out with the timber uprights put in place, though cutting AXVII had what may have been an evidence for a low marking out bank beneath the main rampart build. At Crickley Hill, some early postholes are thought to represent the first form of laying out for the rampart, though they were in part at least replaced by low drystone walls that divided the rampart area up into distinct blocks. These have been interpreted as gang-break walls, creating a series of compartments. The presence of different gangs is also reflected in differences in construction of the Period 2 rampart north of the entrance (Dixon 1994, 176–181). Due to the variation in the type of stone fragments produced as the ditch was deepened, the excavator has been able to identify which parts of the wall were made with material from high in the ditch and which from material gathered at a greater depth (Dixon 1994, 181). This is interpreted as demonstrating the phasing by which the wall was erected (Dixon 1994, 180–181), but it may demonstrate a more complex pattern of gangs working in the ditch and on walling that ran parallel than is implied in the report.

The detailed field recording at Crickley Hill shows a pattern that demonstrates a combination of alternating activity laterally and vertically. The different sizes of stone did not have a particular place in the wall elevation; small stones occurred at the base [2] and [4] and high up [8]. The same applied to the largest stones, with [3], [5] low down and [7] high up. Medium-sized material occurred low down [9] and in the middle [2] and [6]. There was therefore no aesthetic or structural design to have certain types of stonework in any particular position. The detailed appearance of the rampart façade did not matter, though no doubt its bulk and appearance did.

The breaks in the walling match the placing of horizontal timbers in the lacing and show how integrating that aspect of the construction with the ditch diggers and wall builders was essential. It is this information that suggests that more than one section of walling was sometimes in progress at the same time. The match between gang breaks and timbering is particularly striking in the horizontal plane, with only [2] having a timber buried within the middle of its facing. Some of the timbers mark the end of one walling block and the start of another, sometimes resting between the two along the join, as with those between [1] and [2], and [3] and [6]. In other cases the timbers are clearly set in the top or end of one particular stretch, as with [4] and [5]. Although it is suggested that [3] did not start until [1] and then [2] were completed, it is likely that the lower part of [3] was erected by the time that the horizontal timbers were inserted. That gang then continued to build its section higher, whilst [2] began its work, running in parallel for some time at least with [6] at the second level of timber lacing. This complexity may have been removed with the more northern stretches, as a simpler system was introduced. Now, the lowest level of lacing timbers was placed securely on one section of walling, at the northern end of [3] and in the centre and north of [5]. The traces of higher lacing along the whole length of wall were placed within a particular wall length. This suggests adjustment of building method as work proceeded, allowing the interaction of the carpenters with only one set of wall builders at any one time.

The relationship of the verticals and horizontals suggests that they were normally linked together, though whether this was with joints, as implied in one illustration (Dixon 1994, 176) or they were merely lashed together, as suggested from the one excavated intersection (Dixon 1994, 81, 179), is unknown. The excavator suggests that the wall face and the timbering were in place before the wall core was filled, though there are no published longitudinal sections showing the patterns of fill within the rampart. However, the section showing the northern face of cutting AIV shows how the lower layers, up to the height of the low internal gang-break wall, were different on each side of the wall (Dixon 1994, 52). This demonstrates either different gangs or the filling of one section up to this height before filling the next. The position of the horizontal timber along the top of the wall further emphasises the breaks seen in the front wall face matching different constructional activities. The way in which the sections were filled, as far as can be revealed in this one section, was not by dumping against the wall and working back, but placing in the centre of the area and the material spreading out towards the walling. The result was a series of horizontal deposits, though those covering the marking out bank at this point near the entrance created a surface replicated by the subsequent rampart fill, dipping down to the wall; a separate deposit was then placed to level up the intersection, and it was onto this that the horizontal timber was placed. Unfortunately, the higher levels of the rampart did not display clear tip lines, so the later pattern of construction cannot be understood. The effects of the burning of the timbers in the rampart at the end of Period 2 altered the consistency of the material to what the excavator terms meringue, though fortunately the marks of the timbering could still be identified in places.

Cutting AXVII at Crickley Hill demonstrated the use of gangs in the construction of the Period 3 rampart (Dixon 1994, 146–147). This wall was set in the base of the recut ditch but extended into the cutting from the north for a distance of only 8 m. The wall then clearly ended, and the main part of the rampart had two clear gang breaks within it. Each represented a stretch of no more than c. 2 m and had a possible return buried by the next addition. It is possible that the gang breaks were not typical, but represent a series of attempts to end the wall at the point where the Period 3 ditch recut ended and the partially infilled Period 2 ditch continued.

At Crickley Hill, a low bank with intermittent pits beyond it has been partially excavated (Dixon 1994, 134–139) and shown to be an unfinished outer rampart and ditch. Cut into the limestone, the diggers had begun working in separate pits, and two of these were joined in the excavated area. The sides of the ditch were still irregular, and the base of the ditch was uneven where various slabs had been prised out to be used in the rampart. The excavation was sufficiently extensive to reveal the size of one complete pit, but six pits have been noted across the brow of the promontory, suggesting the beginnings of a bivallate defence that was not completed at the time of the successful and destructive attack on the hillfort at the end of Period 3b (Dixon 1994, 195). Three quarry pits were certainly of Period 3b, and three more were probably so; one was probably identified but not excavated and remains undated, but its shape, size and location make it probably of the same date. The seven hollows are ranged round the rear of the rampart, and others may yet lie undiscovered further to the south (Dixon 1994, 131). It is argued by the excavator that the pits were used to quarry stone to build the new rear wall. Stone for the exterior walling, and that in and around the entrance, including the interior, came from these sources, and this explains the position of the internal quarries away from the entrance area. The hollows may indicate different groups working simultaneously to obtain material or that one or more teams worked a quarry and built the adjacent length of wall, before starting a new quarry half way along the next planned stretch.

Stone-walled wall-and-fill ramparts with possible evidence for gangs come from Cherbury and Rainsborough 1 (Avery 1993a, 40). Marking out banks may have been used at Castle Dore and Stanwick 2/4. Evidence for gangs has also been recovered from some sites where unfinished ditches have been located and where quarry pits and irregular ramparts suggest that the monuments were not completed; quarry hollows within a fort may also suggest the organisation of gangs in excavating and moving material from each hollow to the adjacent stretch of the rampart (Feachem 1972; Silvester and Quinnell 1990).

The Castell Henllys evidence for gangs comes in two forms. The first is with the main northern rampart where the sequence of deposits suggests a relatively small group of people laying down deposits in a sequential manner. Most of these are relatively small in volume, but nevertheless each consists of many baskets of soil. It is unclear whether the gangs carried out all stages of the work, but it seems more likely that there were ditch diggers, spoil movers and rampart builders. Whether the spoil was dumped and sorted before being placed onto the rampart is uncertain. Also, the techniques of ditch digging are not known. The presence of antler picks as structured deposits might imply their use in ditch digging, but presumably wooden spades and some iron tools were available. Given the interleaved nature of the glacial subsoil and the relative ease of digging gravels and the implacability of the clay even with modern hardened steel tools, it is likely that the deposits were dug by type, the seams of gravel cut away and the clay broken off. Whether dug as concrete-hard material in the dry, or sticky, glutinous slimy deposits in the wet, the clay would have been more difficult to dig but had the advantage of being compacted down to make a solid and coherent deposit once relaid within the rampart. The characteristics of the deposits were clear enough to the twentieth-century excavators and must have been equally obvious to those two and a half millennia earlier.

The sizes of the ditches and ramparts are such that it is not likely that spoil was generally moved by shovelling and throwing over a distance but was instead loosened and scraped into baskets which could be carried by the waist, on the back or on the head. Many of these tasks could be undertaken as easily by women as men, but there may have been gendered differentiation of tasks. Children could have assisted with filling baskets and also in the sorting and spreading of material once brought out of the ditch. The compacting of the rampart layers could be achieved by trampling, possibly as large-scale communal events as part of the completion of each minor phase in the construction, or could have been achieved by a few allocated that task who graded and raked the deposits to the appropriate angle and thickness and used either feet or upright timbers thumbed down on the deposits to consolidate them. These are not deposits that were rapidly thrown up without great care and management. The size and composition of the gangs could vary, but their focus on detail was unerring.

The main rampart may have involved different groups each with their own tasks, but together they ensured that the whole rampart organically grew. At one stage it was extending both westwards and eastwards, which could have involved different gangs or ones alternating across the expanding length of rampart, but generally the construction was working from west to east apart from the element closest to the entrance. The southern rampart, however, reveals a different pattern of gangs (see Sect. 10.1.1), where distinct short lengths each formed by these different groups can be identified. Here a series of gangs all seem to be working at once, each dealing with their own distinct type of material obtained from the glacial till and variable bands of shale. There is no attempt to spread particular types of material along any great length but rather to use whatever each gang obtained on its own portion of the length. Only at the final stage was the whole edifice sealed within a uniform clay-rich layer, creating a united appearance along the whole length of the rampart. Beneath, the variety in construction reveals the organisation of labour and attitudes to the deposits, but the final product reveals none of this.

The social cohesion and meanings derived from the erection of the main rampart cannot have been transferred in the same way to the southern rampart. It is not known which was constructed first or whether one followed on immediately from the other or whether both were being erected simultaneously. What is certain is that the southern gangs were small and each relied on the same or linked team that dug and quarried on a distinct section of the ditch and scarp below. A more complex movement—lateral as well as vertical—must have been in operation for the northern rampart, but that was not the only reason for the difference in organisation and structural integrity of the earthworks. The social and symbolic implications are discussed in Chap. 15.

11.2.1.1 Conclusions

The variety of evidence from a number of hillforts reveal that the construction of ramparts was more complex than it first appears. Only limited evidence has been presented to allow understanding of the three-dimensional process of construction, even where evidence for gangs is argued. The vertical cross section prioritises certain types of information, and archaeologists are trained to “read” these sections and infer sequence from them. All excavators, however, soon learn that what is represented in the section does not reveal the full variation and complexity of deposits away from that arbitrary vertical line and yet what is easily seen in section is not that which is so clear in plan; these are two forms of data, where different aspects of deposit colour and texture, slope and character of inclusions are prioritised in these different circumstances and require a subtle awareness during excavation that is difficult to record, analyse and interpret. This is easier to unpick and understand with stone, where the individual elements can be recognised in terms of angle of rest and order of deposition, as seen with Crickley Hill above. This is more problematic with other forms of deposit, as was the case at the Breiddin, but nevertheless, there are clear indications within these sympathetic and high-quality accounts that the process of deposits being obtained, moved and laid down was not a simple dynamic and clearly also varied over time and space.

Rarely is any idea of timescale and workforce size given in archaeological accounts, because short-term cessation of work would leave no trace. Soils do not form during construction, and the use of sterile materials would mean that vegetation regeneration sufficient to leave a trace would take more than a summer season and so would not be visible. Construction could have been continuous or could have been seasonally intermittent over a number of years. The low-technology format of the dump rampart allows maximum participation and requires only the most limited range of tools already available for agricultural activities. Whether any specialist advice was available for the laying out of circuits and the ways in which construction should take place is uncertain. This could be a widely known and shared cultural knowledge or could be controlled by a specialist group to whom were also known the ritual and supernatural implications and obligations that would be associated with such massive interventions into the natural form of the world. A combination may be relevant—initial design and ritual were a specialist concern so that the desired manipulation of the landscape into an enclosed, monumental form was achieved without alienating any hidden forces—but that once commenced the work could progress with a local workforce now understanding how to construct the earthwork as a whole. The evidence of changes in plan at Castell Henllys, and also the different methods employed on the various elements of the fort perimeter, can throw some light on these issues.

11.3 Building Earthworks over Ditch Edges

For a significant part of the length of the large northern rampart at Castell Henllys, the front part of the rampart was constructed over a ditch edge that had been deliberately filled in immediately before. The consolidation of ditch edges can be noted at a number of other hillforts, with walls at Crickley 3b, Bury Hill and Winterbourne 2 being built up from the bottom of the ditch, but the construction of ramparts partly over ditches is less common. Moreover, at Castell Henllys this was not a change from one layout of earthworks to another, causing part or whole ditch lengths to be filled. This was a decision taken soon after the initial ditch digging took place. This raises questions of decision-making, forward planning, control of the workforce and the requirements of the alignment of the ramparts and ditches in their final form.

The digging of the ditch along a considerable length took place before the inner face was infilled and the rampart built over it. Was this a deliberate decision or the result of a mistake? It is not possible to imagine any reason why the natural glacial deposits of the hill should be removed to be replaced by deposits laid down by people. This therefore suggests that it was an error. The area excavation of rampart towards the entrance showed that the first deposits were not along the front time of the rampart, but it was not long into the construction process that infilling of the ditch edge began. Where the main section through the defences was placed, the rampart did built up early on over the ditch lip, so this raises the question of where all the deposits from the ditch were being placed before the line of the rampart was decided. Perhaps they were being dug out, brought out of the ditch and dumped ready for the rampart construction. This suggests more stages of movement for the deposits than the filling of baskets within the ditch from the spoil created in the ditch digging, its dragging or carrying out of the ditch and round and placed onto the rampart.

The infilling of the ditch 1740 also suggests that the exact alignment of the rampart was highly significant; it could not be moved southwards by between 0.5 and 1 m so that the already dug ditch edge could remain. Rather, large amounts of material, which had to be well laid and consolidated to support the earthwork, were placed so that the line of the rampart could follow a particular route. This can be explained by two fixed points, one a natural physical one and the other a culturally designated feature. The natural knoll that was incorporated within the rampart provided a fixed point that limited shifting of the rampart alignment. It would presumably have been possible to carve it somewhat differently on a slightly altered alignment, but this was not to be the plan. This therefore led to substantial infilling, achieved by having roughly horizontal deposits in the backfill, a method that clearly was effective. Unfortunately the excavations did not reveal the bottom of the overcut ditch, but it is likely that it must have been made as a horizontal shelf rather than a sloping scarp as this would then have formed a secure base on which these layers could be placed.

The other fixed point was the entrance, and it was here that the most significant problem with the original ditch digging becomes obvious during excavation. The extent by which the ditch had been dug west provided too little space for the architecturally ambitious gateway, backed on the west by gravel rampart 3693 and by the combined inner and outer ramparts on the east. In contrast to further east, the scale of ditch digging to the south on this stretch of rampart was not great, but the western extent was very noticeable. It was infilled with material that was stratigraphically placed after some of the inner rampart had been laid down and also after the outer rampart at the entrance had been largely completed, suggesting that the outer rampart was, at least at this point, progressing at least at the same pace as the inner rampart.

The extent of the ditch terminal 1740 suggests that the layout of the entrance complex had not been indicated on the ground. As this had been the location of the numerous phases of palisade gateways, and indeed the last may still have been standing as the rampart construction began, it is clear that the amount of space required for stone walling and the rubble infill required behind these faces was not appreciated. It is possible that the techniques of wall building and entrance construction were the responsibility of specialists and that work on the ditch and ramparts had started before they arrived. This would suggest that the ritual activities associated with the pit 4299 happened without these experts and that the initial laying down of the ramparts began before the implications of the entrance were understood. It would also explain how and why the entrance builders managed to fit in the desired double pair of guard chambers by the construction of a tower on the southwestern part of the entrance, extending the thickness of the already substantial gravel rampart 3693 to the south. The angle of the entrance allowed the best use of the supporting ramparts but also replicated the angle of approach already established in the earlier phases. Although there was some drystone walling in the palisade phase, little survives, and it may be that the complexity of construction for the gateways required more skills and experience than that held in the Castell Henllys community. The arriving gateway architects had to adapt to the landscape and already built conditions to fulfil the double guard chamber brief, and this could only be achieved by undoing some of the previous work on the east and adding yet more elements to the rear of the entrance corridor on the west.

In all cases the excavated evidence suggests that the strategies to deal with ditch infilling, and drystone wall construction, were successful. Although the gateway eventually collapsed, there is no reason to envisage this happened rapidly but rather that maintenance was not carried out or was only undertaken in the initial years or decades. Likewise, the ramparts remained remarkably stable and effective and show very few signs of degradation. The shearing discussed above was all involving natural deposits slumping into ditches, though these could undermine the ramparts. The management of humanly laid deposits was impressive, suggesting practices based on many years of experience elsewhere, and knowledge of other earthworks in the long term. These may have been the first ramparts constructed at Castell Henllys, but they were not erected by a group that had no access to communal knowledge of what to do. That mistakes were made suggests that the knowledge was restricted and that the project management and planning was far from perfect, but the resolution of the difficulties suggests clear heads and logical, informed minds, able to call up experience that created an earthwork that has since stood for millennia.

11.4 Stone Walling

Stone walling used to retain part of the rampart was rarely used for Avery's (1993a, 51–54) low dump types, though at Castell Henllys it was a major feature of the interior. He notes only three such sites with internal walling and of these, two—Woodbury Castle and Breedon-on-the-Hill 2—had sod walls. The third site, Oldbury 3, had a low kerb at the tail (Avery 1993a, 57). This suggests that the Castell Henllys arrangement was unusual and may not have been solely for functional purposes linked to retaining the rampart fill. Of greater significance is the walling's relationship to the unusually large investment in the complex guard chamber entrance, with its drystone walling. A retaining wall holding backfill was applied most noticeably in the entrance complex in its first stone phase. Here, walling held back existing gravel rampart on the west, the largely clay outer rampart to the northeast and the recent infill of the over-dug ditch to the east.

The stability of stone walling has received some attention at Castell Henllys, and whilst the movement of stone walling in a block has been noted at Crickley Hill (Dixon 1994, 58), it was not described in detail, and this is often the case in excavation accounts. This phenomenon was recorded in several places at Castell Henllys, indicating how drystone walling of shale can collapse in a number of ways, depending on the quality of construction and the types of forces operating on the wall (see Sect. 9.6). The variability in the survival of the walling was considerable, from only the lowest course a few cm thick to walling of over 0.8 m high. The damage was never caused by stone robbing; indeed it is noticeable how much of the scatter of collapsing walling was allowed to move naturally downslope, creating screes of material mixed with cultural material. This suggests that once the walling was no longer maintained (and how long this lasted is unknown), the walling was allowed to stand or collapse at will. Despite this, some stretches such as on the rear of the northern rampart must have remained visible for a longer period, whilst others, such as to the west of the entrance, were gradually buried by the build-up of cultural material against the wall, albeit over centuries. As this walling was gradually disappearing from view, other stretches must have collapsed completely, the scatter of stones on the rear of the rampart being incorporated into the accumulating deposits.

11.5 Possible Phases

At many hillforts, the integration of rampart construction, ditch digging and phases of entrance and outwork construction is problematic. Even with extensive excavation, as at Castell Henllys, there is no stratigraphic link between many elements of the site or between discrete sets of sequences.

The correlation of these is a matter of judgement, and the archaeologist can evoke long sequences with frequent single changes in many places or fewer more comprehensive changes over much of the perimeter on each occasion. This largely depends on the archaeologist's assumptions behind social organisation and its role in rampart and ditch maintenance and the context within which refurbishment could take place.

Moreover, the ways in which changes were implemented could have stratigraphic implications that may imply more significance than they deserve. Thus, the refurbishment of a rampart may begin at one point and run (over an unknown period of time) round the perimeter and then be completed by overlying the first element to tidy off the construction. At that point it would seem that there were two phases of refurbishment. Also other features, such as a gate rebuilding at the entrance, could happen after the rampart refurbishment in that area had taken place and so be later, or before it reached that point, and so earlier, though in practice it would have been part of the same overall refurbishment. Thus, even stratigraphic sequences on their own are insufficient to understand the construction and management of an earthwork even the size of Castell Henllys; with larger hillforts the matter is even more problematic.

The ramparts at Castell Henllys show limited refurbishment. The only clear example of multiple phases comes with the two lines of rear revetment extending from the entrance complex round the rear of the western rampart (see Sect. 8.2.1). In no other cases can any physical enhancement be identified. Ditches, in contrast, show limited amounts of ditch cleaning and recutting. This was sometimes after catastrophic slumping events, but all the ditch sections of the main fort and the outworks show several recuts. It is clear, however, that these could be very intermittent and did not always clear out the whole of the ditch, extend along their whole length, or even follow exactly the original line of the ditch. The ditch fills do not seem to be derived from large-scale degradation of the ramparts, which largely remain intact. The outworks that are now in a poor state of preservation seem to have been largely upstanding through the whole of the occupation of the fort, and even the ditches were only partially infilled when the late Iron Age and Roman-period settlement of the annexe was in operation, though the outer ditch of the main fort was completely infilled by that stage.

The way in which the entrance indicates two main phases of stone construction, each followed by periods of neglect, some lesser timber gates and then no gate at all, discussed in the next part of this book, may also be relevant to the ditch biographies. The ramparts remained largely intact throughout but the ditches gradually infilled naturally; they were always present but only sufficiently significant socially for intervention—cleaning and scouring and realigning—at considerable intervals. What could have prompted these phases of activity and investment, and how coherent and co-ordinated they were, depends on one's assumptions about Iron Age society; these issues are considered in Chap. 15.

Part IV
The Entrances

Chapter 12
Crossing Thresholds: Entrances in Stone

Abstract The northwestern entrance to the main promontory fort at Castell Henllys had a complex series of entrance gates during the palisade phase, and these were replaced with a stone entrance when the earthworks were constructed in Period 2. The first stone phase comprised a double pair of semicircular guard chambers, together with massive timber uprights for the gate structures, and internal and external walling. All the walling was drystone construction, largely of shale quarried from the promontory slopes. The gateway was modified with posts replaced and added, and then it collapsed. At some point one part of the gateway suffered high temperature burning, creating slaggy material from the shale, equivalent to vitrification. The gateway collapsed, to be replaced by a second stone phase in Period 3, with a single gate and one pair of shallow guard chambers, internal walling and external convex walling. In both periods there were also outer timber structures on the approach to the gate.

The entrance to the fort of Castell Henllys has always been assumed to lie in the northwestern corner of the main fort, and indeed this was the main vehicular route into the fort in modern times. There was, however, little earthwork evidence for the entrance itself. The rampart to the west was not visible to the south because deposits had built right up to the top of the surviving rampart, and the slope on the north had eroded to completely infill the ditches. Moreover, the front of the rampart seemed like the natural slope of the hill. Only during excavation did it become apparent that there was no such natural slope, but the whole topography was man-made, albeit eroded. On the eastern side of the entrance, the main inner rampart became lower to the west and so merged into the rubble-filled entrance passageway and the western rampart. A slight dip was present, used by modern vehicle access, but the nature of the defences around the entrance was far less clear than at any other part of the defensive circuit.

A single, small, machine trench was dug in 1981 to locate the western ditch and entranceway. The trench was positioned by judgement in the only slightly sloping area to the west beyond the visible northern rampart. The scale and nature of the defences in this area were not visible at all from the surface because of the build-up of deposits behind the rampart and the complete infilling of the ditches. The excavation dug down into the edge of the terminal of the ditch, but also unfortunately into the edge of the roadway. Whilst this trench was valuable in both locating the entrance and indicating the potential complexity of the sequence, it did mean that in a small area of the entranceway the stratigraphic relationships between a few features were lost.

The obvious complexity of the entrance meant that excavation was not attempted until it could be carried out over a large open area, and this part of the site was not attempted until most of the interior had been studied. This was for two reasons, one academic and one logistical. The academic reason was that some idea of the sequence of the ramparts on either side of the entrance was thought desirable before the entrance itself was investigated. The logistical reason was that, once excavation began on the entrance,

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there would be no vehicular access for earthmoving machinery to strip topsoil for excavation, nor to remove it from the interior. As the site was not backfilled with topsoil but left as a solid and well-drained base of subsoil on which to build the reconstructions and lay out visitor interpretation, spoil accumulated in large spoil heaps which needed removal. Once this had been achieved in 1991, excavation on the entrance area began. All the palisade period phases of the entrance have already been discussed in Chap. 3; the narrative therefore continues with Period 2, the first phase in stone at Castell Henllys.

12.1 Period 2: The First Stone Phase (Figs. 12.1 and 12.2)

The first phase of gateway which used extensive drystone walling in its construction came with the completion of the northern rampart being extended westwards from its original starting point next to the probable burial pit 4299 (see Sect. 9.1.1). The first phase of rampart construction had concentrated

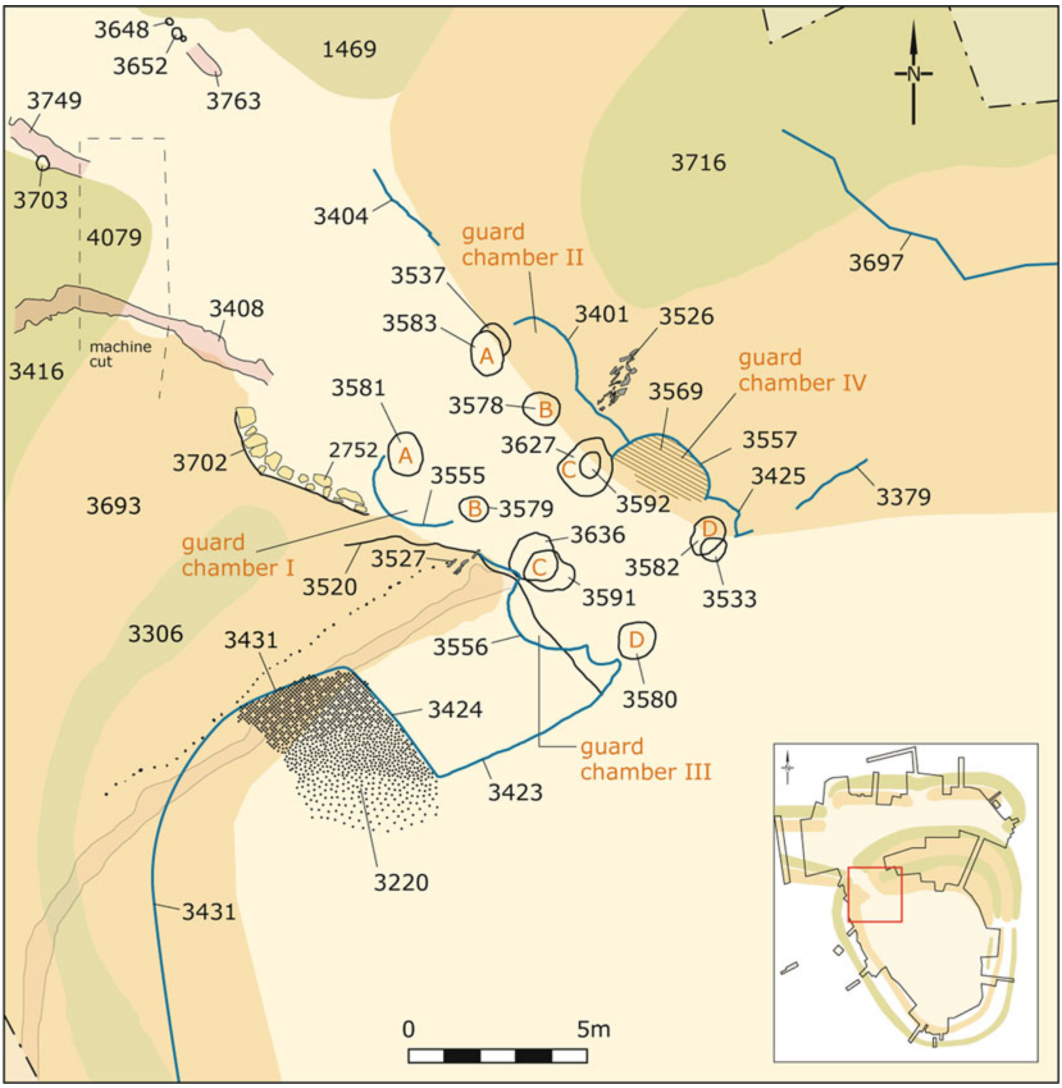

Fig. 12.1 Plan of Period 2a gateway

Fig. 12.2 *Top*: view of Period 2 entrance from interior. *Bottom*: Period 2 entrance postholes. *Left*: posthole 3537 in section; the scale sits in the earlier posthole 3583

on moving eastwards, though it would seem that the ditch was dug from the eastern side of the entranceway. The gap between the rampart and the entrance was later infilled with the additional clay rampart, as an integral part of the stone construction. This development also involved backfilling the westernmost part of the ditch and joining the outer and inner ramparts east of the entrance together at the gateway (Fig. 9.13). This major modification of the entrance was to influence all subsequent designs for the approach to the fort. Description of the first stone phase entrance is divided into the construction and description of the various elements, changes during use, and the process of decay. The wider parallels and implications of the gateway are considered in discussion at the end of Chap. 13.

The main features of the gateway at this phase consisted of eight posts set in postholes, between which were constructed two pairs of guard chambers (Fig. 12.1). To the rear, stone walling ran east along the rampart, and west to form a tower structure and then walling along the rampart. In front of the gate, timber palisades were constructed which directed traffic to the gate. Although the phasing of some of these palisades is problematic when linking them to the entrance sequence, the general pattern of design for the approach to the site remained similar throughout this phase.

12.1.1 The Evidence for the Timber Structure of the Gateway (Fig. 12.2)

The postholes for the gateway all cut through surface 3666 (not depicted on the plans), though many were fragmentary at the surface because of later posthole cuts, both replacements within this phase and other posts in subsequent phases; they are all shown complete on the plans for clarity. They can be considered in four pairs, A–D, working from the outermost inwards.

The northwestern posthole pair A, consisted of a post earlier than 3581 but in the same location so this is marked on this plan, c. 0.8 m in diameter. Its eastern pair was 3583, c. 1.0 m in diameter and c. 0.7 m deep. The post pipe for the post survived at lower levels but as the surviving section was off-centre, the diameter of the post is uncertain but was at least 0.3 m. The posthole fill included a large quartz block but was mainly redeposited; it is likely that the quartz block had also been excavated in the digging of the hole and was not carefully selected stone packing for the post.

Pair B was formed by posthole 3579 on the west and 3578 on the east. Posthole 3579 contained a clear post impression c. 0.2 m in diameter, within a hole c. 0.45 m in diameter. The backfill round the post contained few stones and was clay and gravel backfilled from the original pit. The opposite posthole 3579 also contained a well preserved post impression 0.2 m in diameter in a hole c. 1.0 m in diameter. It too was backfilled with subsoil and contained no packing stones.

Pair C were larger pits and contained more massive timbers. To the west was posthole 3636, with a diameter of c. 1.2 m and a depth of 1.1 m, filled with redeposited subsoil and no packing stones, though some rocks occurred in the fill, derived from the glacially mixed subsoil. Preserved within the posthole fill was the post impression, suggesting a timber measuring 0.7 m by 0.5 m, perhaps narrowing to 0.2 m at the base. To the east, posthole 3627 was c. 1.4 m across and 0.9 m deep, with a well preserved post pipe 0.7 m by 0.5 m, though at a different orientation than that of 3636. Again, the posthole was backfilled with redeposited subsoil.

The innermost posts, D, were placed in postholes 3580 and 3533. 3580 was 0.5 m across. It contained within its fill of backfilled subsoil a few large shale stones on its western side, including a perforated stone SF 5667. The post pipe survived in the fill, indicating a post narrowing to only c. 0.1 m diameter. The other posthole 3533 was c. 0.7 m in diameter and 0.5 m deep. No post impression survived in this hole, though some redeposited shale slabs suggest that there may have been stone packing and the post had been removed and the hole backfilled.

12.1.2 The Evidence for the Stone Structure of the Gateway (Fig. 12.3)

Once the timbers had been put in place, drystone walling was erected which would have run up to the wooden structure. However, later modifications to the entranceway prior to the construction of the stone phase 2 gateway removed much of the evidence for the walling close to the upright timbers, and so how they were integrated is unknown. Fortunately, other parts of the walling survived to a height of up to over 1 m and so the general design and structural characteristics of the walling can be described in detail. The walling can be described in terms of four guard chambers, I-IV, rear revetting to the east, and the rear tower to the west.

Fig. 12.3 Period 2 guard chamber walling: guard chamber III wall 3556

12.1.2.1 The Guard Chambers

Although there is much discussion regarding the function of structural features traditionally called guard chambers (Avery 1993a, 1993b, 1993c; Bowden 2006); for the purposes of description the traditional term is used here, though others have described them with alternative names including guardrooms or recesses (Cunliffe 1991a, 1991b, 2005). The possible purposes of these structures are discussed briefly in Chap. 13, but fuller consideration will be offered in the second volume; in all discussions to date there has been insufficient consideration of the three-dimensional implications of these features, and how they would have worked structurally, what the spaces would have been physically like and how they could have been experienced. The few reconstruction drawings of entrances with guard chambers have not been based on detailed consideration of all the implications learnt from on-site reconstruction (and no complex entrance has been experimentally reconstructed). Therefore at this stage the basic archaeological data essential for any interpretation is set out, and the changes in construction and form noted.

Guard chamber I lay to the northwest, and was the least well preserved of the gateways. It had been subject to intense burning at the time of its destruction (see Sect. 12.1.9) as well as suffering from the cutting away of rubble and walling by cut 3520 in preparation for the phase 2 stone gateway. The wall 3555 survived over a length of only c. 1.5 m at the rear of the chamber, where the wall stood to 13 courses and a height of 0.7 m. The lower two courses had larger shale slabs than higher up in the wall. The original shape of guard chamber I can be postulated through comparison with the better preserved examples, and the need to link with posts set in postholes 3581 and 3579. No interior surfaces survived the later disturbance in this area.

Guard chamber II on the northeast survived, despite the cut 3520, with a length of 3.5 m of wall. This was sufficient to show that in plan it was not a regular semicircle, but that it linked to the uprights in postholes 3583 and then 3537 to the north and 3578 to the south. The walling, 3401, contained the occasional non-shale rock, but was largely of large shale slabs up to 0.7 m long. Small areas of wall were filled with smaller pieces, though it was not possible to be certain that these were patching. The wall stood to 11 courses, and a height of 0.7 m.

Guard chamber III to the southwest survived with a 3.5 m length of wall, 3556. This also was not a perfect semicircle, and linked to the large post 3591 in posthole 3636 to the north and posthole 3580 to the south. This was the best-preserved walling from any of the guard chambers, standing to 17 courses and 0.8 m high. It was made completely of shale, with a foundation course of large slabs, on top of which mainly very thin pieces were laid. In the centre of the surviving stretch of wall, the coursing of the stones was not horizontal, and this was not due to postdepositional subsidence. Further along the wall, this problem was rectified and the courses became horizontal again. The reason for this aberration is not clear, but given the general quality of the drystone construction, it was probably not an error.

Guard chamber IV lay to the southeast and had been badly damaged by cut 3520, and the wall 3557 only survived to 7 courses and 0.5 m high. However, it survived relatively well in plan, with a length of c. 4 m, because some of the line of facing remained nearer the entranceway at only one course high. It would have linked to post 3592 in massive posthole 3627 to the north, and posthole 3533 to the south. The bottom course of the wall comprised larger slabs, followed by several with thinner pieces, on top of which larger slabs were again used. All floor deposits within guard chamber IV were destroyed by cut 3584 which removed everything to a depth 0.2 m below the base layer of the wall. No deposits accumulated in this cut before rubble from the walls 3569 began to accumulate.

12.1.2.2 The Material Behind the Walls

The guard chamber walls on the southeast held back a rubble infill that also was mixed with a matrix which varied greatly from one area to another. In places this was a loam, in others a solid clay. The variation suggests that any materials that became available were used. They continued the deposits that had been tipped into the ditch terminal (see Fig. 9.13), giving tip lines that ran away from the walling in this location.

Where the outer eastern rampart joined the entrance, and then extended southwards along the eastern side of the entrance, it remained an earthwork largely formed from clay (see Sect. 9.7.2). The walling of the entrance was set on a flat ledge dug up to 0.12 m into the subsoil, on which larger slabs were placed. On top of this was built the drystone wall, a single course thick but with some rubble behind. As the wall was built, first a gravel and loam deposit was built against it from behind, and then a substantial clay layer. A further gravel and then clay layer was added, though with erosion these did not reach the wall face. Further north, the section shows only the first two layers and no infill behind the drystone wall, but otherwise a very similar pattern.

The walling for guard chamber I, as far as it survived, and the northern part of guard chamber III, were set within the already existing gravel rampart 3693 (see Sect. 8.1.1). No cut lines were visible, but as this gravel was so loose, it presumably shifted back behind the stones as construction proceeded. The rest of guard chamber III was set within the tower, discussed below.

There was no obvious structure to the infill, with the exception of two important features, one on each side of the entrance (Fig. 12.4). The best preserved was on the eastern side, between guard chambers II and IV. This consisted of a linear setting of upright shale slabs, 3526, clearly marking out a slot through the fill. A less well preserved example, 3527, was also present on the western side. Both sloped down at an angle towards the entranceway.

During excavation these were interpreted as slots for carrying a timber that would have been slid forward into the entrance passage when the gates were closed, but would be housed in the slot. The ends of the timbers would have rested on the ground. This may indeed have been their function, but when plotted on the plan in relation to the gate posts, they would appear to be in an unsuitable location. The slots would bring timbers down in front of the largest posts, rather than behind them. They may have acted as a hindrance to anyone trying to pull the doors open, rather than push them, or acted as a barrier for anyone with some form of battering ram. An alternative interpretation, however, might be that they were internal drains to carry off rainwater from the upper surfaces and away

Fig. 12.4 Linear slots with upright slabs. *Left*: eastern slot 3526; *right*: western slot 3527

down the passageway. Avery (1993a) notes that drainage was a potential problem that could seriously weaken the structural stability of ramparts and entrance complexes. Although he found no evidence for this being addressed it is only the extensive area excavation that makes the exact position of these features in relation to the gates clear, and so their interpretation as slots problematic.

12.1.2.3 Rear Revetting and the Tower (Fig. 12.5)

The rear revetting to the east continued from guard chamber IV, though the actual corner had been removed by cut 3520. This wall, 3379, survived for a distance of c. 3.5 m but presumably had been much more extensive.

The rear tower to the west was, in essence, the backing for guard chamber III. In effect, this had the same functional effect as the revetment walling 3697 at the front of the inner rampart to the east of the entranceway; this curved round the newly created ditch terminal and joined the inner rear of the outer rampart, thus providing the rear support for the infilling behind the guard chambers on the east. The stone tower fulfilled the same function for most of the western side of the entrance where it protruded into the fort beyond the western gravel rampart.

The tower was formed by the walling of guard chamber III on the east, wall 3423 on the south, and wall 3424 on the west. The southern wall 3423 had been modified with replacement walling 3425 at its eastern end to cope with changes brought about with stone entrance phase 2 (see Sect. 12.2.2 below). The western part retained its original character, however, with many long slabs up to 0.6 m long. It stood to 10 courses and 0.5 m, and had a perfectly vertical face. The wall turned to the north, numbered 3424, and ran up onto the rear of gravel rampart 3693. This wall was less well finished than the other faces, and was stepped into the rear of rampart 3693 and never more than 8 courses and 0.4 m high. A large quartz boulder within the rampart provided a suitable point for the largest single step up the rampart, with only a couple of courses surviving beyond this point to the north.

Fig. 12.5 *Top*: base layer of wall facing of the Period 2 rear tower and guard chamber III. The line of large postholes to the *right* represent the western postholes of posthole pairs A, B, C and D. *Bottom*: rear tower to *right*, and rear revetment walling running round to the W

This arrangement of walls created a tower which measured 6 m east–west, into which guard chamber III was set, and c. 5 m north–south. At this point the wall would have turned to run westwards as the rear revetment wall 3431 of the rampart, surviving at first with only a single course of facing, then with a few courses, and finally turning south after c. 4 m (see Sect. 8.2.1). At a greater height the surface of the tower would have spread over the rampart 3693 and over the entrance passage, making the raised surface a considerable area. The construction of the tower became clear during the excavations. The lower courses of the wall faces were built, and then a foundation layer of large shale slabs was laid within the void, the stones overlapping with the rear edges of the wall facing stones. Thereafter the walling was raised and the void was filled with an orange gravel fill that was packed round the irregular rear faces of the walls, on top of which were placed more large shale slabs.

In the corner between the rear of the tower, wall 3424 and the rear revetment wall of the rampart, 3431, was found a large hoard of water worn pebbles interpreted as slingshots (Fig. 12.6), sufficient

Fig. 12.6 Slingshot hoard 3220 as buried beneath infill of Period 3 rear walling, in corner of Period 2 tower

to be considered a context 3220 in their own right, (see Fig. 12.1). This was definitely contemporary with this phase of the entrance. The walling continued westwards from the tower, though of only a few courses in height (see Sect. 8.2.1).

12.1.3 The Approach to the Gateway (Figs. 12.1 and 12.7)

The stone gateway was approached by a cobbled surface which led between the ditch terminals and up and through the entranceway. The ditches at this phase were dug on both sides of the entrance. This was the first time that a ditch, 1469, was placed on the east, lying beyond the second, outer rampart, which had its western face revetted by shale wall 3404; it is probable that this ran round to the northern front face for a short distance, given the displaced shale stones on the scarped surface that sloped down from the rampart face into the terminal of ditch 1469, and the amount of shale tumble in the terminal itself, but none remained in situ. On the west the original ditch 4078 running round the promontory fort to the west and then south was abandoned, and the ditch terminal was dug in almost the same location at the previous one, but the ditch 4079 now ran on a new alignment to the west northwest (see Sect. 8.1.2). The result of digging of these ditches was that a longer narrow approach was inevitably formed by the earthworks themselves. The approach also included timber elements of the entranceway, beyond the gates to the north, and some of these were designed to prevent animals and people falling into the ditches.

The stonework beyond the front postholes 3581 and 3537 did not survive, though there probably would have been short lengths of walling linking the gate back to the ramparts on each side. Timber palisading certainly ran up either side of the cobbled surface, though the lack of stratigraphy directly linking the surviving stretches of palisade trench with the gateway features makes only general phasing possible.

The best-preserved palisading survived on the western side of the entrance. Palisade trench 3408 served as front revetting of gravel rampart 3693 (see Sect. 8.1.3) and then ran up the western side of the entranceway (Fig. 12.7). Beyond this, it would appear that the edges of the route between the

Fig. 12.7 *Top*: fire-reddened walling in guard chamber I. *Bottom*: palisade 3408

ditches were also fenced off. A posthole 3703, 0.35 m in diameter and 0.5 m deep and with large packing stones indicates one attempt, and palisade 3749 0.25 m deep is another; they were not contemporary but their relationship could not be ascertained with any certainty. Palisade trench 3749 ran along the western side of the outer entranceway. It would seem that these two palisades joined, preventing access to the front of the rampart. A less substantial palisade, 3763, was located on the eastern side of the entranceway further to the north, and small stake and posthole features 3648 and 3652 also probably indicate the same fence line. Both palisades probably originally ran up the slope but have been removed in later alterations. How far beyond to the north they may have extended is uncertain, but they probably only prevented animals and people from falling into the ditch terminals. Nevertheless they provided a significant outer structure to channel arrivals up towards the impressive drystone walling and the entrance tower.

12.1.4 The Appearance and Functioning of the Gateway

The gate at this phase was perhaps the most impressive at any period in the history of the site. Flanked by large ditch terminals, and with timber palisading defining the shale-paved roadway, a long approach route incorporating two pairs of guard chambers provided access into the fort that was oblique to the line of the ramparts, and which had been carefully designed using the tower to the west to thicken the rampart terminal in order that both pairs of guard chambers could be accommodated.

12.1.4.1 The Choice of Materials for the Gateway

The quarrying of the shale used in the walling probably took place on the slopes of the promontory, allowing relatively easy transport of the material and the steepening of the natural feature also. The scarping and ditch digging would not have produced much shale suitable for walling as much of the excavation was through glacial clays and gravels, or through the soft upper layers of the shale. The shale is bedded almost vertically, and it would be relatively easy, once the topsoil was removed, to prise off the rock from the already steep promontory slopes in slabs of varying thickness. The natural bedding in the shale would create planes of weakness where wedges could be driven in creating scree with many large stones that could be selected and removed for use on the top of the promontory. Quartz occurs naturally in the shale, and may have been quarried as a by-product and used on the lower layers of the entrance walling. It is more likely, however, that the few quartz and other, igneous, rocks used in the entrance came from the existing features on the site. The large blocks used as revetment 2752 to gravel rampart 3693 remained as a single course, but there could have been more that were subsequently removed.

12.1.5 The Subsequent Changes to the Gateway and Its Approach (Fig. 12.8)

The gateway may have survived in its original form for a number of years, probably several decades, but then a number of changes were introduced (Fig. 12.8). Almost all of the posts in the gateway were replaced, the only exceptions being 3579 and 3578 in pair B.

The new outer posts in pair A were placed in slightly larger postholes than before. Posthole 3581 was an impressive circular posthole 1.0 m in diameter and with much stone packing, including quartz blocks. To the east, posthole 3537 was also 1.0 m in diameter and had similar packing. This posthole was 0.8 m deep, and in the base a post impression 0.4 m in diameter could be discerned. Changes in the outer guard chambers could only be identified in II, as guard chamber I had such poor survival. Within guard chamber II there had never been a deliberately created floor surface, though this does not mean that this space was not used, and there was an accumulation of layers which built up against the wall. The first, 3576, was a thin layer of loose grey loam with some charcoal that was against the base of the wall, possibly brushed there during the use of the guard chamber. Above this accumulated a more substantial layer 3571, a mid-brown silty clay with small and medium sized fragments

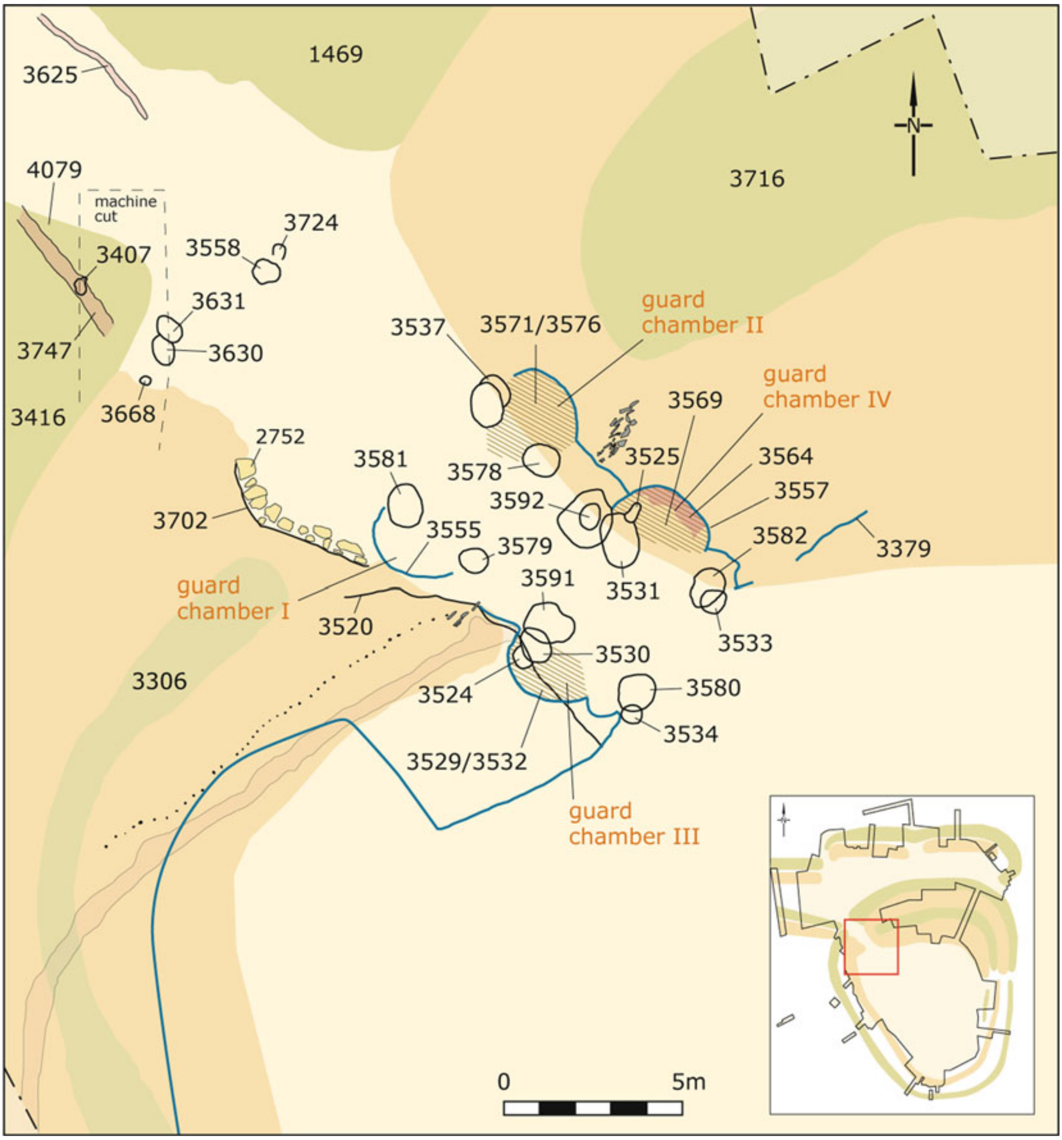

Fig. 12.8 Plan of Period 2b gateway

of shale. This resembles what have been interpreted as wash layers elsewhere on the site, and may indicate material derived from the rampart into which the guard chamber was set. This may be significant in considering how the guard chambers functioned and were roofed, and will be discussed in the second volume in conjunction with consideration of all the architecture on the site.

The most complex sequence of changes took place with pair C. It is likely that the main timbers marked by post impressions 3592 and 3591 remained in place throughout the phase. However, additional posts seem to have been added.

On the west, posthole 3530 was dug within guard chamber III, cutting through the occupation layer 3532. It was c. 0.8 m in diameter and 0.5 m deep, though no post impression survived. This posthole was itself cut by another, 3524, which was placed even further within guard chamber III (Fig. 12.9). The clean orange-yellow clay upcast from the digging of this hole, 3529, was spread over much of the rest of the guard chamber floor, covering most of 3532. The surface of the upcast was pristine, suggesting that no activity took place to dirty this surface.

Fig. 12.9 Postholes in guard chamber III; 3524 and 3530 (with the scale) cut through flooring in the chamber

The western side of the gateway shows what was probably an identical sequence. All that survives of the additional large post is a shallow cut 3531, 0.2 m deep, the edge of a large posthole which has been removed by one of the main postholes 3517, belonging to stone phase 2. This was set south of original post 3592 and within guard chamber IV. At a subsequent time, oval posthole 3525 was dug into the eastern edge of the shallow cut 3531, set even further within the guard chamber. Measuring 0.5 m by 0.15 m, and 0.35 m deep, it had contained a post only 0.10 m in diameter at its western end.

Changes were made to both of the rear posts in pair D. On the east, an irregular posthole, 1.1 m wide and 1.3 m long, was dug to a depth of c. 0.5 m. This could only have been achieved if the post in 3533 had been removed first; this would explain the infill described for that posthole. On the west, a posthole 0.6 m in diameter and 0.5 m deep was excavated with a 0.2 m diameter post impression surrounded by small upright shale packing stones. It is possible that this new post was placed south of the original one, which may have remained standing as the post locations do not overlap.

Within guard chamber III there was again no specially constructed floor surface, with the lowest layer being an occupation deposit 0.03 m thick which contained a high amount of small shale fragments. The northern part of the guard chamber was later filled with posts set in posthole 3530 and then also 3524 (Fig. 12.9), and a clean clay layer 3529 was spread over much of the occupation deposit. This suggests that the guard chamber was no longer used as it had been previously. Guard chamber IV had no surviving surface and all fill had been removed during this phase by a cut 3584 which dug down c. 0.2 m below the level of the base of wall 3557. No obvious reason can be suggested for this excavation, and no floor levels or occupation material was laid down in the guard chamber after this event.

No changes to the drystone walling could be identified in the surviving courses of stonework. Depending on how the stonework met the timber uprights in the gateway, the replacement of posts may have necessitated the demolition and then rebuilding of some sections of walling. In particular, changes at the front and the rear of the entranceway may have affected the walling. In the case of pair A, the two replacements both lay east of the original posts, potentially creating a slight gap on the western side of the gate. The space between the original post and the newly erected timber in posthole 3581 might have been filled with timbering, as the shift was only in the order of 0.2 m. On the east, however, the end of the walling would have had to have been taken down to allow the posthole to be excavated, extending possibly 0.6 m under the previous wall line. At the rear with pair D, there was again probably little problem on the western side where the original post may have remained in place, and anyway the additional posthole 3534 did not necessarily need to undercut the existing walling. On the east there was again a much greater impact, with posthole 3582 extending again 0.6 m to the east beyond the post in the original posthole 3533. As the walling did not survive up to any of these postholes, the extent of such changes is unknown.

Maintenance, replacement and changes in design may have taken place at a higher level, but no evidence survived. There were no surfaces laid at any stage in the guard chambers, and all of the deposits in guard chamber IV was removed at some stage. Indeed, the interior spaces of both guard chambers III and IV were constrained by the replacement posts, and the upcast from this activity was left in guard chamber III. Along the passageway, patching of the cobbled surface could have occurred and left no discernible trace given the variable nature of the surface. Moreover, much had been removed in cuts 3520 and 3521 in clearing rubble before the construction of stone phase 2 (see Sect. 12.2 below).

12.1.6 The Effects of the Changes on the Appearance and Functioning of the Gateway

Whilst some of the changes to the gateway were necessary in the inevitable process of maintenance and refurbishment, the overall pattern of changes suggest that the quality of work dropped significantly. Moreover, the implications of the changes suggest a loss of coherence and change in the function of some at least of the gateway features.

The replacement of posts in pairs A and D suggests that the effects of exposure to the elements took their toll on these timbers. Nevertheless, dealing with this maintenance requirement was not straightforward. The replacement of posts in a structure with butting drystone walling creates its own problems, and it would seem that the fort inhabitants recognised where the greatest potential structural weaknesses lay. The walling on the western side joining the relatively unstable gravel rampart and stone tower was left intact, with some modification necessary on the eastern walls. This was probably because the rampart behind, being largely made of clay in the vicinity of entrance, was seen as sufficiently solid to remain in place, perhaps with some timber shoring, whilst the walling was dismantled. The rotten posts could then be removed, new postholes dug and timbers inserted, and the walling rebuilt. This would have been particularly easy in summer, when the clay rampart (as we discovered from our excavations) is very hard and solid in dry conditions.

The post pair B did not require any replacement, and it is likely that the massive timber in pair C were also effective throughout the life of the entranceway. The post additions in pair C suggest not simply changes due to the rotting of timber uprights. First, larger posts were placed behind the massive timbers and set slightly into the guard chambers, and then further smaller timbers were set further into these recesses. These may have formed vertical supports which strengthened the gate posts, but if that had been the function they would have been more effective leaning at an angle. They may, however, have supported timbers which held up the roof of the entranceway and which served as the floor of the walkway which joined the stone tower on the west with the rampart walk on the east. The solution to the structural problem led to the severe reduction in space within guard chambers III and IV. This may have dramatically affected the ways in which such spaces could have been used.

12.1.7 The Collapse of the Gateway

Following the various replacements and addition of upright timbers, the gateway at some later point gradually began to decay. This led to a collapse of walling, with shale slabs falling from the tops of the walls. This rubble, 3569, survived particularly well within guard chamber IV, though most had been removed elsewhere by cut 3520. Guard chamber III was filled by loose shale rubble 3570, with many large shale slabs and very little soil matrix, though the tower fill behind the wall did contain a great deal of stone as well as loamy fill. In guard chamber IV, many large shale slabs were also found tipping off the wall. Towards the top of the rubble layer a loose dark brown loam, 3564, containing charcoal and some burnt bone, was noted. This must represent some activity in the decaying entranceway, of which no other evidence survives. No rampart makeup was found within or above these layers, though it would have been expected to have eroded down into the entrance area once the revetting wall had collapsed. It is likely that such deposits had accumulated above this rubble, but had then been swept away by cut 3520.

The fill around the gate postholes was removed by cut 3520, so it is not known whether the gate-posts had continued to function and were protruding through the rubble. The level of the entranceway would have risen considerably to cross over the rubble, however, with perhaps 1 m of debris filling much of the gateway passage. This would have impeded access, but what surfaces, and the degree to which the rubble was spread to make the approach more gentle, is unknown as all such evidence was removed by cut 3520. Clearly, with such a rise in the level of the surface the old gates would not have functioned, and either modified gates were hung on the still visible parts of the uprights, or there was no gate at all. Indeed, with this rise in floor level it is unlikely that any superstructure and walkway could have been in place, otherwise the head space of the entrance way would have been too low.

12.1.8 Changes to the Outer Gateway Features

With the infilling of rubble at the main gateway location, the digging of major structural postholes would have been extremely difficult through the shale. Some postholes were dug to the north, however, which suggest that a gate was placed away from this rubble spread. On the west postholes 3630 and 3631 intercut so slightly that no sequence could be discerned, but they represent repeated placing of the western gate post at this point. Given the surviving slope of the ground when investigating these features their original depth is difficult to estimate but was at least 0.4 m and could have been significantly more. On the east 3558 matches 3630 and 3631, and 3724 is more like 3668 on the west, and these may have been additional supports for the gate and tied the structure into the ramparts on each side. The line of the earlier wooden palisade seems to have shifted slightly to the west, as ditch 4079 became infilled. Now palisade 3747, and posthole 3407 within it which was 0.5 m in diameter and 0.45 m deep, with substantial packing stones of shale and igneous rock, provided the western edge of the approach, the slight palisade gully 3625 possibly matching this on the east. Both 3747 and 3407 were sealed beneath the stone gateway phase 3 wall 2823, so they must belong to this phase, since they also overlay the infilled terminal of ditch 4079.

12.1.9 The Destruction of the Gateway

One important aspect of the evidence for the destruction of the gateway was that of deliberate burning in the area of guard chamber I. Little of the structure remained, mainly because of stone period 2 remodelling. However, the intensity of the heat had such a drastic effect on the stonework that it would no longer have functioned as walling. Parts of the top seven courses of the surviving guard chamber wall were reddened, and this suggests that the rubble had filled the guard chamber to that level when the burning took place. Moreover, some of the fill behind the guard chamber was heated to temperatures which caused the shale rock to turn a bubbly slag-like consistency (Fig. 12.10). This suggests that the heat reached was not that which would have been achieved during an attack, and anyway the rest of the gateway was not burnt. Moreover, the burning in this one structure, and the rampart and rubble behind it, suggest a very focused and deliberate intention of reaching very high temperatures at this point.

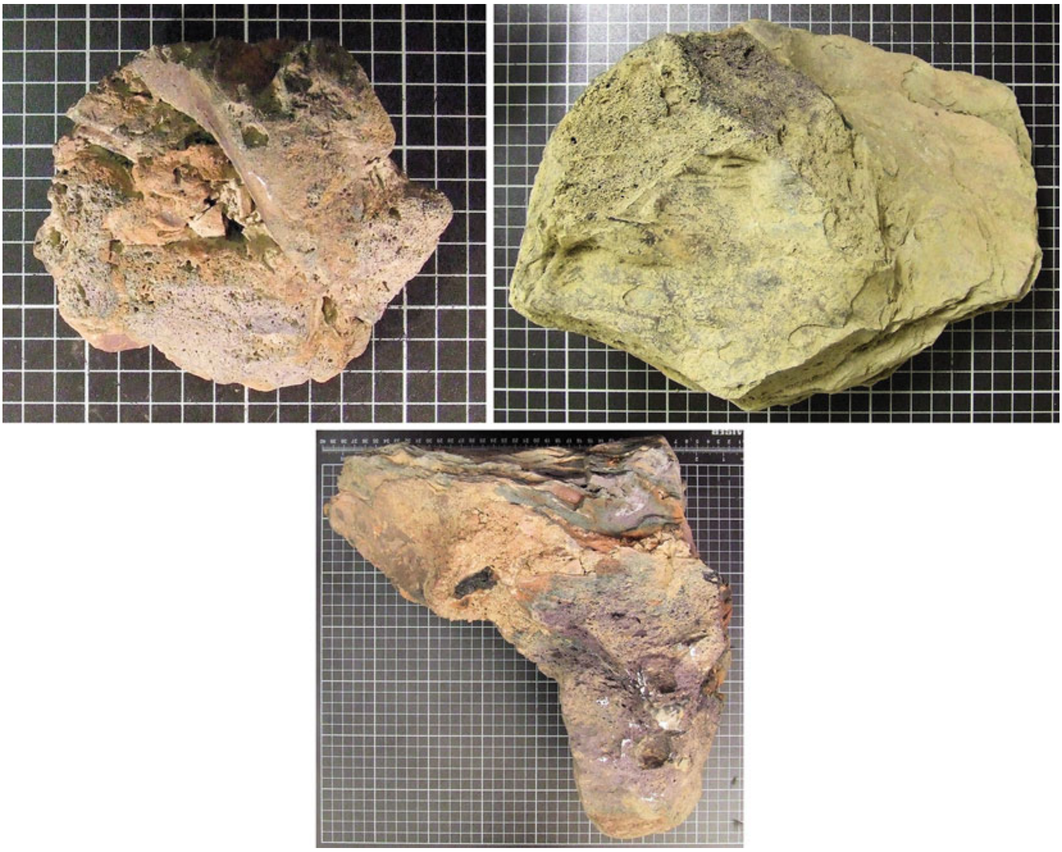

Fig. 12.10 Shale from entrance heated to slag-like state. Note how the shale is fused, but only parts are slag-like, and the rest is reddened but still laminated

This may have been a deliberate act during the decayed phase of the gateway, at the very end of the use of this gateway phase, or as an initiatory event at the beginning of the remodelling for phase 2. These possibilities are discussed further (see Sect. 15.4.2). Fragments of the slag-like rock have been recovered from a range of contexts around and to the north of the site of the burning, and provide a valuable *terminus post quem* in phasing.

The rear walling 3379 east of the entrance was also allowed to fall into disrepair, with slabs sliding off the wall. At first the stones toppled off and lay vertically against the face, but gradually, as the debris accumulated, they slid further away and formed a rubble layer 3573. This deposit, which also contained silty loam and charcoal suggesting some rubbish dumping, survived to a width of c. 1 m. It may, however, have once been more extensive, and was subsequently partly cleared when the entrance was rebuilt. It would then have been treated in a similar way to the rubble in the entrance.

12.2 Period 3: Second Stone Phase (Figs. 12.11 and 12.12)

Following a period of decay and collapse, the first stone phase gateway was completely abandoned, and a new set of structures were erected. This involved the removal of large amounts of rubble from the entranceway passage, and the demolition of segments of still upstanding walling of the earlier

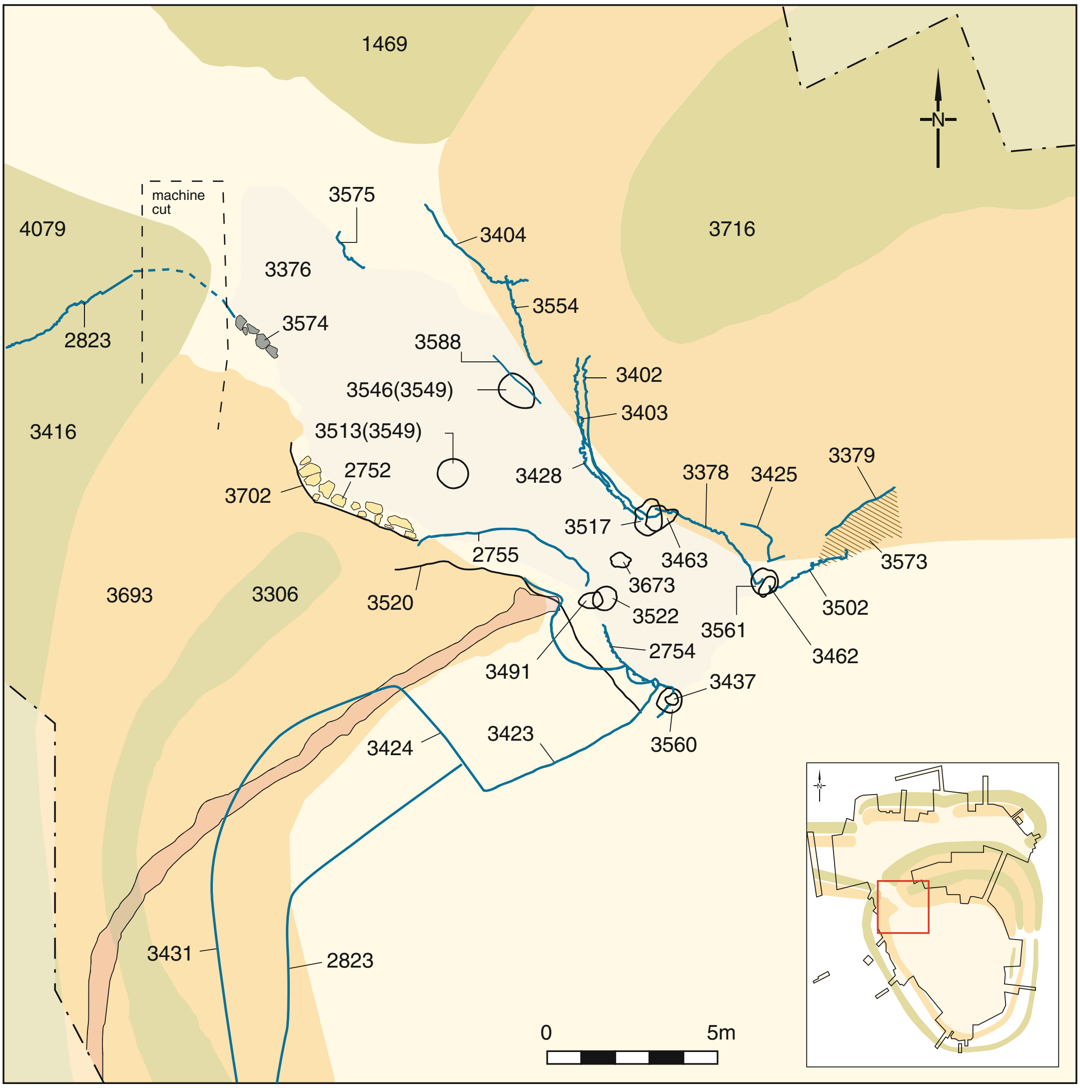

Fig. 12.11 Plan of Period 3 gateway

guard chambers. The cut, 3520, would have produced a large amount of rubble which needed to be disposed of somewhere. It is likely that some of the better preserved slabs were selected for reuse, and the rest was probably used as rubble core in the modified and extended structure to the west of the gateway.

12.2.1 The Evidence for the Timber Structure of the Gateway

The timber structure of the gate was constructed prior to the drystone walling, which ran over the backfilled postholes and up to the timber uprights (Fig. 12.13). The gateway consisted of four posts, with larger posts at the front on which the gate was swung. The western gatepost survived as a post pipe, 3491, was c. 0.55 m across, and set within a post pit which was 1.4 m in diameter and 1.15 m deep.

Fig. 12.12 *Top*: Period 3 gateway from the interior (south) with the bridge postholes visible at either end of the far scale; *Bottom*: Period 3 gateway from the east with shallow guard chambers and convex walling outside the gate; note Period 2 rear revetment walling running to the west and south in the background

It contained large packing stones of shale and quartz. Matching this on the east was post pipe 3463, indicating a roughly rectangular timber c. 0.5 m by 0.6 m. This was set within a post pit 3517, again with much packing including large lumps of quartz, and measuring c. 1 m across and 0.7 m deep. Between these two postholes was a much smaller feature, 3673. Although the packing was displaced, it would seem that a small post c. 0.2 m across and set to a depth of 0.5 m was set at the northern end of this feature. Given its central placing in the entranceway, it is likely that this supported a clapper post against which the doors of the gate would have swung. The total width of the space between the gateposts was 2.4 m, and the central post suggests that each door would have been c. 1.2 m wide.

Fig. 12.13 Post pipes for Period 3 gateway. *Top left*: post pipe of NW post 3491. *Top right*: post pipe of NE post 3463. *Bottom left*: post pipe of SW post 3437. *Bottom right*: post pipe of SE post 3462

The rear posts of the gate structure were set c. 3.5 m back from those at the front, and were less substantial. Post impression 3437 suggests a shaped timber c. 0.45 m across, set within a posthole 3560, 0.8 m by 1.2 m and 0.4 m deep. Its twin was marked by 3462, a roughly rectangular impression measuring 0.6 m by 0.2 m, set within an oval posthole 3561, c. 0.7 m by 0.5 m and 0.6 m deep with vertically placed shale packing. It is not possible that a second gate was hung from these posts, although the timbers were substantial enough to support one. They are set further apart from the front posts at 3.9 m, and this is too wide for gates. It is therefore highly likely that they are the rear supports for a tower structure over the gateway and which joined the enlarged stone platform to the west (see below) and the ramparts to the east.

12.2.2 The Evidence for the Stone Structure of the Gateway

The new design of drystone walling created a single pair of very shallow guard chambers (Figs. 12.11 and 12.12), set within the four posts described above. The best preserved was the western example, guard chamber I. This was defined by a wall, 2754, standing to 13 courses and a height of 0.5 m at its northern end (Fig. 12.14), but only to a single course to the south. Larger shale slabs were used in the foundation courses to the south, and this may relate to the rebuilding of the corner at this point and walling 3425 (see below). Many of the shale pieces used in this wall were small, and a number were shattered due to the weight of walling above. This was most noticeable next to the northern gatepost

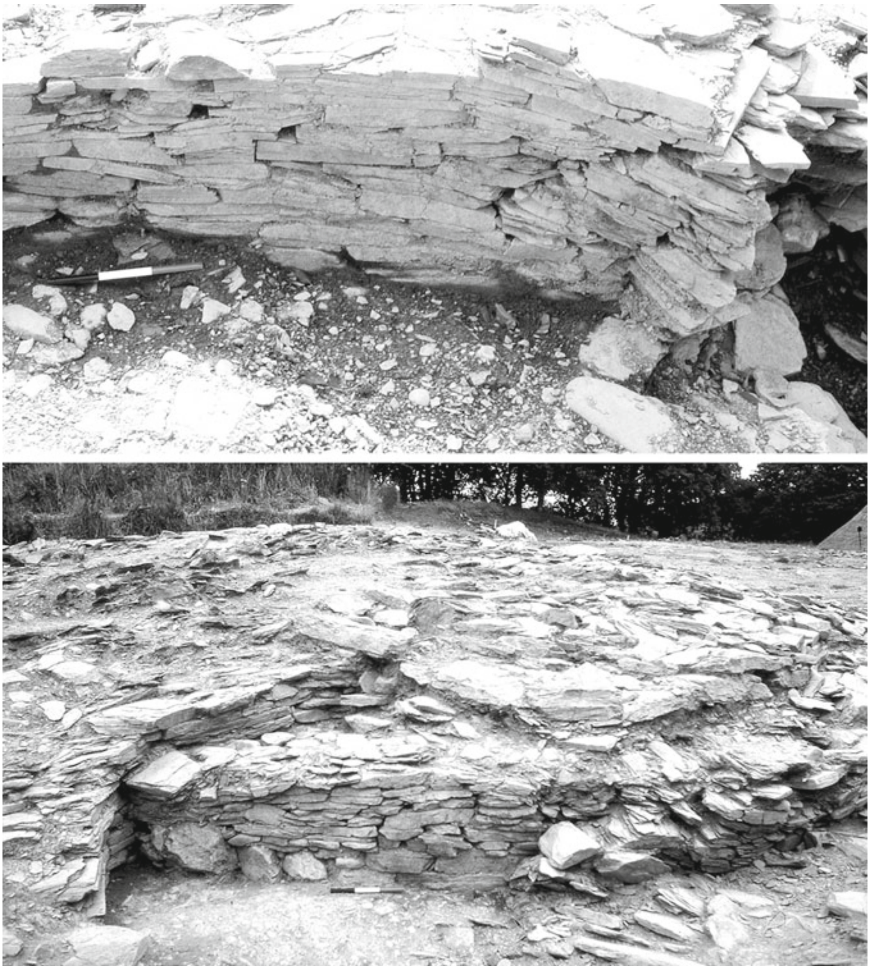

Fig. 12.14 *Top*: walling 2754 of western Period 3 guard chamber I. *Bottom*: eastern outer convex walling 3402, butting up against the interior of Period 2 guard chamber II wall 3401. Note the unstable and repaired part of this wall to the right, towards the gate itself, with rough walling 3403

void, where some subsidence into the post pit was visible. This may have caused the stress on the shale walling. The recess formed by this concave wall 3.5 m long was only 0.9 m deep at its greatest, measured from a line drawn between the external face of the timber uprights.

The wall 3378, which demarcated guard chamber II on the opposite side, survived to a much lesser height of 0.2 m, and with only 3 courses. The depth of this recess was only at most 0.75 m from the line between the entranceway face of the timber uprights. These guard chambers were set slightly south of but overlapping with guard chambers III and IV of the previous period, and the rubble which had fallen into these was left in place when the new structures were erected.

A major feature of this phase of stone entranceway was the erection of matching, symmetrical convex walls outside the gate. Wall 3402 on the east curved round and into guard chamber II of the previous phase, part of which was allowed to remain standing as revetment for the outer rampart (Fig. 12.14). On the west, wall 2755 curved round and joined onto the gravel rampart and ran over the much earlier quartz revetment 2752 which by this stage must have been more or less completely buried under rampart wash. These convex walls created a dramatic facade for the gate, though the abstract design had clearly to be adapted to fit the existing topography.

The western wall 2755 is a fine example of the style of walling characteristic of much of the work associated with Period 3. It survives to a height of 0.8 m and 14 courses, and has two substantial quartz blocks in its lowest course. Many large, long shale slabs are also used at this level. The coursing shows some dipping next to the gatepost void, suggesting some subsidence into the post pit of this or earlier postholes. In other respects the walling is sound, though a few of the slabs showed evidence of laminar shattering probably caused by the weight of the original structure above. The higher surviving courses of the wall show the use of larger shale slabs, similar in scale to those on the lowest course. This may suggest a deliberate banding in the wall, both to improve the keying of the face into the rubble core, and to provide a banded visual effect.

The line of wall 3402 could be traced, though it suffered from collapse at a later date (see below). The lowest course of the wall incorporated several substantial quartz blocks, even though most of the wall was made of shale. This wall survived to a height of 9 courses and 0.6 m, and it was neatly made. It butted onto the inner wall face of guard chamber II of the earlier phase (Fig. 12.14), and so it was clearly more important to maintain the curve of this revetment wall than to hide all trace of the earlier design. Only a small change in the curve of this and its companion wall could have ensured that all trace of the earlier plan was hidden, and the convex walls could have joined onto earthwork ramparts on both sides.

The western wall, 2755, stood to 0.75 m and 10 courses. The lowest course was offset by c. 0.1 m, a feature also noted to the rear of the gateway on the western side. Again, some large quartz blocks were utilised in the lowest course, which also contained many other large shale slabs.

The western rear revetment wall 3423 continued the same alignment as that on the previous phase (Fig. 12.15), but was rebuilt as wall 3425 at its eastern end to join with the new position of the rear gate tower post. This rebuild only survives to a height of 0.2 m and 3 courses, and it had not been well bonded into the earlier wall. As a result, this alteration collapsed forward as a block and was not found exactly in situ. This collapse would seem to be part of the decay of the gateway discussed below.

The eastern rear revetment wall 3502 was set c. 0.6 m forward of the previous wall 3379, and on tumble 3573 which must have come from this earlier revetment. Wall 3502 was not made from shale alone, but included igneous blocks. Only the lowest course survived over a length of c. 2 m, and probably the higher courses would, as with other walls of this period, have been constructed only of shale.

The tower structure of the previous phase was in essence continued in the new design, but it was expanded westwards (Fig. 12.15). The tower's western return wall to the north, 3424, was no longer exposed with the construction of a new revetment wall, 2753, set c. 1 m forward of the previous line. This butted against the previous southwestern corner of the tower, but did not meet in a completely flush manner and left a small offset (Fig. 12.15). Though linked to the entrance complex, this wall continued round along the western side of the site, and so is also discussed in relation to the rampart sequence (see Sect. 8.2.1). In effect the tower was expanded westward with a walkway that gradually narrowed towards the west, making the western terminal expanded over a greater length. It was the construction of this walling, and the shale rubble infilling behind, that sealed most of the sling shot hoard 3220 (Fig. 12.6). This hoard could have been removed and retained, but was instead sealed within the new construction. This was either because sling shots were no longer required, or as some deliberate, meaningful deposition. The sling shots were not deliberately placed there as a structured deposition, however, as they spread out beyond the line of the new walling, suggesting that they had been in this location for some time, and some had rolled away from the rear of the rampart on which they had been dumped.

12.2.3 The Approach to the Gateway

Outside the gateway was a pair of massive posts set in the trackway approaching the gate (Fig. 12.11). The western post was marked by an impression 3501, c. 0.4 m in diameter, set within posthole 3513

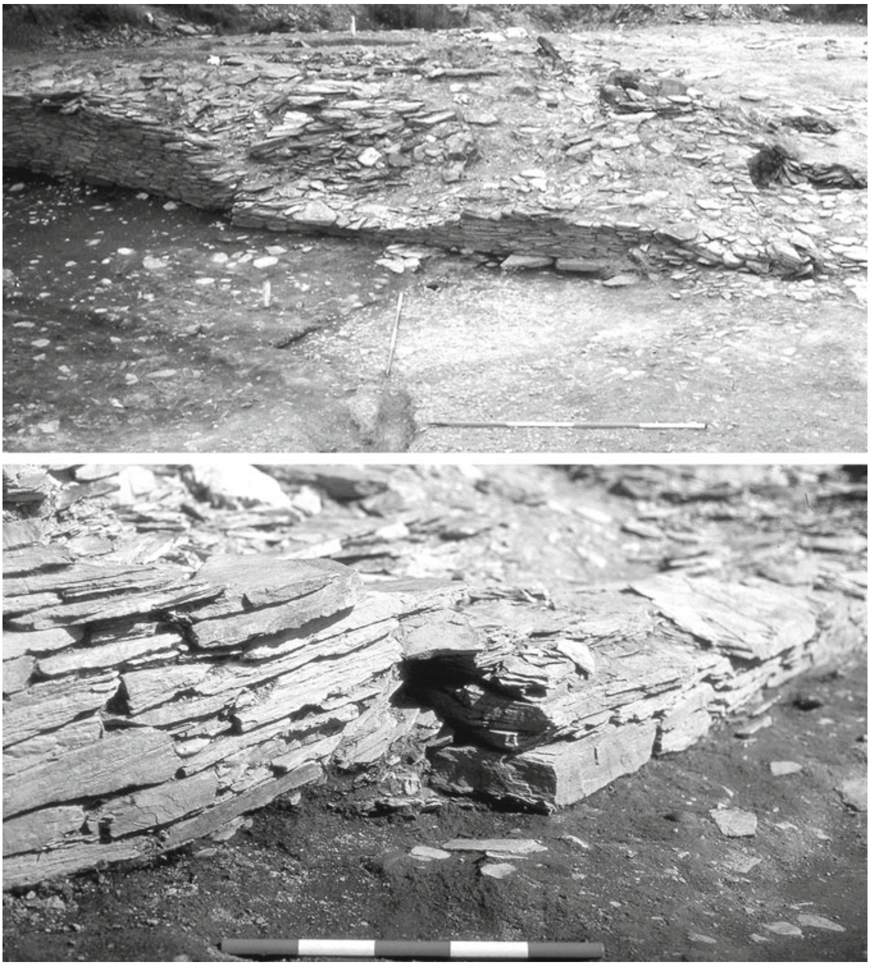

Fig. 12.15 *Top*: overall view of western rear wall 2753 of Period 3 gateway, with tower infilled with slight offset. *Bottom*: detail of wall offset

which was 0.9 m in diameter and 0.9 m deep. The post had been held in place with large slabs of shale and quartz blocks. The eastern post impression 3549 was c. 0.5 m across, and its posthole 3516 was more oval 0.9 m by 1.2 m and 0.85 m deep, but with packing similar to that in 3513.

These substantial and well set posts are well aligned on the gate and may have been part of the original structure, though they could have been an addition. They lie over 5 m forward of the gate, and so were probably not joined to it. Instead they probably supported a bridge that would have run across the entranceway from rampart to rampart; this line was just beyond the end of the convex walling. It is possible that the posts supported a lintel which was decorative and symbolic, though this could also have been achieved within the range of functions including that of a bridge. It is noteworthy that a number of cattle teeth were found on the roadway surfaces near these postholes, perhaps suggesting that skulls were hanging above.

The rampart on the eastern side of the entranceway had been revetted by shale wall 3404 in the previous phase, and this seems to have continued in use. This wall had never been very long, however, and had probably only held a short length of the rampart in place. The new convex walling included

Fig. 12.16 Revetment wall 2753, with shale rubble infill behind. Note how this seals the slingshot hoard 3220 (*bottom right*)

the removal of the entranceway part of guard chamber II whilst still retaining the northeastern part of its walling for a revetment. However, further masonry was added to join these disparate stretches of walling together. The primary length of wall was 3554, set at an angle which cut back presumably from the stub of the earlier guard chamber wall, perhaps then refaced, and ran into the rampart, joining the line of wall 3404. Wall 3554 survived to a length of 3.25 m, and incorporated a quartz block in its lowest course. Its maximum height was 0.4 m, with up to 4 courses surviving.

12.2.4 The Appearance and Functioning of the Gateway

The gateway at this phase was once again very impressive. The gates were hung on the outer uprights of the tower, and would have swung open to the north. This is certain because the clapper post 3673 would only have been effective if the doors had swung against it. The eastern door would have swung open to an angle of c. 90° before meeting the revetment wall; the door on the west could have swung slightly more if its method of fixing allowed it to swing further. No door furniture for any period was recovered, so discussion of its detailed features has to be based on wider comparison. The first parts of the convex walls are relatively straight, and so the image of the facade would not have been impeded even when the doors were open.

12.2.5 The Subsequent Changes of the Gateway and Its Approach

The design of the walling with the posts set partly within the thickness of the facing made maintenance difficult. There was no full scale replacement of posts with the digging of new postholes as there had been in the previous phase, but additional support was provided for post 3491 at the northwestern corner of the tower. A small posthole, 3522, 0.8 m in diameter and 0.45 m deep with some shale packing, would seem to have been added to help support the western side of the gate. In all other respects the structure appears to have remained intact, probably for a very considerable length of time. It is notable that the wall 2755 on the opposite side of the entranceway appears to have had no repairs during its life. However, collapse off this wall also shows that the gradual decay of the gateway as a whole was not limited to the one structurally problematic area.

Although the timbers of the main gate were not replaced, there were several significant changes to the gateway approach during the second stone phase. It is evident that the eastern convex wall 3402 was not stable (Fig. 12.14). This may in part have been caused by the butt joint against the earlier wall, and also the type of material used to infill behind the wall at this point. After some walling had slipped off 3402, a new wall face 3403 was built immediately in front of the old one in an attempt to shore it up. This survived to 8 courses, and it was clearly less well made than the original walling. The wall continued to collapse, and another attempt, 3428, was built in front of 3403. This was also a rough construction, with some quartz blocks in the lowest course, but the central part of the wall collapsed and all attempts at maintaining this revetment were abandoned. The nature of the rubble between these episodes of rebuilding resembled slow decay rather than rapid collapse. It would therefore seem that the problems with this revetment wall were longstanding, but not such that they prevented functioning of the gateway over a long period of time. No substantial quartz blocks were used in the walling of stone phase 1, and this is a clear change in style of construction.

At some point after the forward bridge posts 5301 and 3549 were in position, walling 3588 was constructed to run along the eastern side of the entranceway, passing to the rampart side of post 5301. Only a small stretch of this wall survived, c. 2 m in length and only one course high. This wall was made from large shale slabs and one block of conglomerate, and had presumably originally extended further in both directions. If it had run up to the convex wall 3402, this would have had two implications. The first is that it would have obscured much of the impressive convex wall, and the second is that it would have provided a buttress to wall 3402. This wall became unstable and was rebuilt a number of times (see above), and how this would have affected wall 3588 is unclear. It is possible that wall 3588 was never very high, and served merely as a revetment to the lower part of the rampart which may have been eroding into the entranceway.

More walling survived, again only one course high, along both sides of the entranceway, but further away from the timber structures. The walling on the east, 3575, was parallel with walling 3404 but set much further west, to the entrance passage and defining the eastern edge of surface 3376. It would seem, therefore, that the revetting on this side was tiered, holding back the rampart in a series of steps. The western walling, 3574, survived as only four large shale slabs in a single course, on the edge of the surface, but it probably continued north and west, and survived as a front revetment for the gravel rampart 3693. This wall, 2823, was set in a cut over the infilled ditches 4078 and 4079 (Figs. 12.17 and 12.18). It is important for the information it sheds on the state of the external ditches at this time, the way in which they were treated, and the design of the gateway well beyond the timber gate structure itself.

Ditch 4079 must have been in an advanced state of infilling and settlement by the time that the wall 2823 was planned. The wall was placed in a cut, 2826, which made a flat and slightly sloping surface in front of the wall. In this way, the wall was set on a stable base, but it was also easily visible from a distance, being part of the architecture of the gateway. In effect the uppermost layers comprising the southern infill of ditches 4078 and 4079 were left in place and held back by wall 2823 (Fig. 12.18), whilst the fill to the north was cut away to create a terrace as part of the remodelling to create an impressive façade for the new gateway complex (Fig. 12.17).

Behind the upper courses of wall 2823 was a rubble makeup deposit, 3574. This was mainly made up of shale fragments in a brown loam matrix, possibly derived from the cut 2826. This indicates that the gravel rampart 3693 had not slumped forward to any great extent to this point otherwise this would have formed the fill behind the wall. It suggests that the design created a flat terrace or berm between the stone wall 2823 and the rampart 3693. Thus, the design of the line of the wall was not dictated by

Fig. 12.17 *Top*: wall 2823, sitting on the cut 2826 made in the largely filled in fill of ditch 4079, sitting on *top* of the largely filled in ditch 4079. *Bottom*: wall 2823 with tumble from wall beginning to emerge in the continued filling of ditch 4079

practical matters such as revetting the rampart. Whereas the walling along the sides of the entrance-way may have served at revetting, this would seem not to have been the case on the western outwork.

The construction methods of wall 2823 matched that found elsewhere for this phase. On the lowest course, some quartz boulders were used, and in places large slate slabs were incorporated. The wall survived to a height of 22 courses and 0.8 m. The courses were largely laid on the slope, but the use of quartz boulders allowed the courses to tip to horizontal or even against the slope of the ground made by cut 2826, and so prevent slippage. A large amount of shale was found in front of the wall, and whilst some will have come from the rubble 3574 behind the wall face, much will have been from

Fig. 12.18 *Top*: wall 2823 from above showing its revetting in situ upper fill of ditch 4079, with the surface of cut 2826 beyond. *Bottom*: detail of wall 2823 showing use of quartz blocks at base and drystone construction

the wall itself. The rubble filled in the remaining depression of ditch 4078 and the cut 2826, and later collapse would have eroded down the hill. It is impossible to be certain of the original scale of the wall, but a minimum height of 1.5 m seems likely.

Surface 3376 was an extensive deposit that covered the whole of the interior of the gateway, and continued down the entranceway for a distance of c. 15 m beyond the gate. It varied in thickness, but in places was as much as 0.4 m deep, and was partly formed from collapsed shale walling. The layer clearly consisted of many surfaces, with *ad hoc* patching as wear took place and as further decay of the walls occurred. It therefore provides only a broad chronological framework, though the Period 3 gate was in use before this layer began to accumulate and was relaid in an *ad hoc* manner over time, and indeed the surface continued after this gate was is disrepair. The length of time that the layer took to form can be gauged by the way in which it butted up against the walling, and some of the features belonging to the next phase were completely sealed within this layer.

12.2.6 The Effects of the Changes on the Appearance and Functioning of the Gateway

The limited recutting of the gateposts might imply that the structure did not function after a relatively brief period. However, it is likely that this was not the case. A successful gate would have been feasible even after the rotting of the structural timbers at ground level, which in the Castell Henllys subsoil is only a matter of decades even for substantial posts. The structure did not have to rely on these posts for support, just as roundhouses can stand after their posts have rotted, given the inertia and weight bearing down on the walls. The tower could have been sufficiently strong internally to remain in place, helped by its fixing within the walls. Moreover, the higher levels could have been integrated with the side walling and the surface of the tower and rampart to each side.

It is highly likely that the gate was in full working order during the first phase of changes to the gateway approach. The outer walling was added to enhance its external appearance, which must have been to a fully effective gate, and the design created a longer funnelled approach, similar to some of the inturned entrances found elsewhere (Avery 1993a, 1993b, 1993c; Cunliffe 2005).

The entranceway clearly began to suffer from neglect with the falling of shale slabs from the walls at a still later date. However, the rebuilding of the collapsed convex front walling to the east of the gateway indicates that there was still a wish to maintain the structure and the design, even if the level of investment and skill had declined.

12.2.7 The Collapse and Destruction of the Gateway

The gateway seems to have suffered a slow decline. However, the timber gate structure itself came to an end when the timbers were pushed over, as shown by the angle of collapse of some of the posts, visible in the way that the drystone walling had shifted. These could only have been at the angle at which they were excavated if the timbers had still been within the walls, but were rotten at the base and the supporting cross members of the gate had decayed or been removed. The tower and gate structure may then have collapsed or been dismantled once in an advanced state of decay, perhaps just to allow easy access through the ruins.

The framework of walls within the gateway, and to front and rear of it, would seem to have continued to function with varying degrees of effectiveness throughout some of the subsequent timber phases, even after the Period 3 timber gate was gone. The structure of the entrance remained, even though its architectural prominence was no more. This can be seen in the first of the later timber phases (see below). Although much stonework collapsed off the outer western wall 2823, and gradually slipped downhill and filled the upper depression that marked ditches 4078 and 4079, it must have taken a long time for this to reach stability.

12.3 The Stone Gateway Periods: Some Conclusions

The evidence from the elaborate gateway of Period 2 and the more modest but still significant investment of Period 3 indicates an unexpected level of sophistication not expected prior to excavation in this western part of Britain. This, however, may reveal more about modern cognitive geography and perceptions of the Iron Age than any uniqueness in the past.

The more general issues regarding the function of the gateway and how that may have changed over time is discussed at the end of the following chapter when the full Iron Age sequence can be considered and placed in the context of the whole site layout. It is notable, however, that many of the features described here—notably many of the short lengths of timber palisade and stone revetments—would not have been identified, let alone placed in a logical stratigraphic sequence, without the complete open-area excavation of the whole entrance.

Chapter 13
Crossing Thresholds: From Monumental to Non-monumental

Abstract The Period 3 stone northwestern gateway gradually collapsed, and along with unsuccessful attempts to stabilise the walls a timber gate was constructed on the rubble, and in the final phase of occupation there appears to have been no gate in this location. Side entrances have been identified on the east and west of the promontory, and these never had structural gates. Likewise, only the initial design of the northwestern outwork entrance had a timber gate, and even that was simple and was not maintained. All the other outwork access points never had a gate, even though some were monumental in terms of the scale of the ramparts and ditches at these points of the circuit.

Most discussions of hillfort entrances have concentrated on the most complex. This is not surprising; they demand obvious explanation, both in terms of the reasons for such investment, in how they could have worked both militarily and in other symbolic ways, and in how they may have been adapted over time. However, extensive excavation and comparison allows consideration also of the less impressive which also, in turn, requires explanation. If, at some times and in some parts of a settlement, there is massive investment in the entrance features, why was this not applied at other places or times? Here the later phase of the northwestern entrance is considered, together with other access points to the main fort and the outer annexe area throughout the Iron Age. The last phase of the entrance, in the late Roman or post-Roman period, is discussed with all evidence for that period in Chap. 14.

13.1 Later Timber Phases at the Northwestern Entrance

Following the final demise of the gateway integral with the drystone walling, some timber phases show continued use of the ruinous walls. They, with the earthen ramparts behind them, still provided a clear boundary to the site and an obvious entrance route into the settlement, even over all the build-up of rubble.

13.1.1 Period 4: The Timber Gate (Fig. 13.1)

During the accumulation of the composite surface 3376, the gateway seems to have been abandoned as an effective structure. The walling on each side would have still been upstanding and functioning as a revetment to the entranceway, but was probably not as high as it had been. Nevertheless, an attempt was made to construct a gate in front of the old one, and slight traces of this survive. The most significant piece of evidence was a simple shale door stop 3495, c. 0.4 m long which protruded 0.1 m through the layer 3376, but would have been effective when part of the layer had accumulated (Fig. 13.2). It was positioned at such an angle that its long face would have prevented the leaves of the gate from being pushed inwards.

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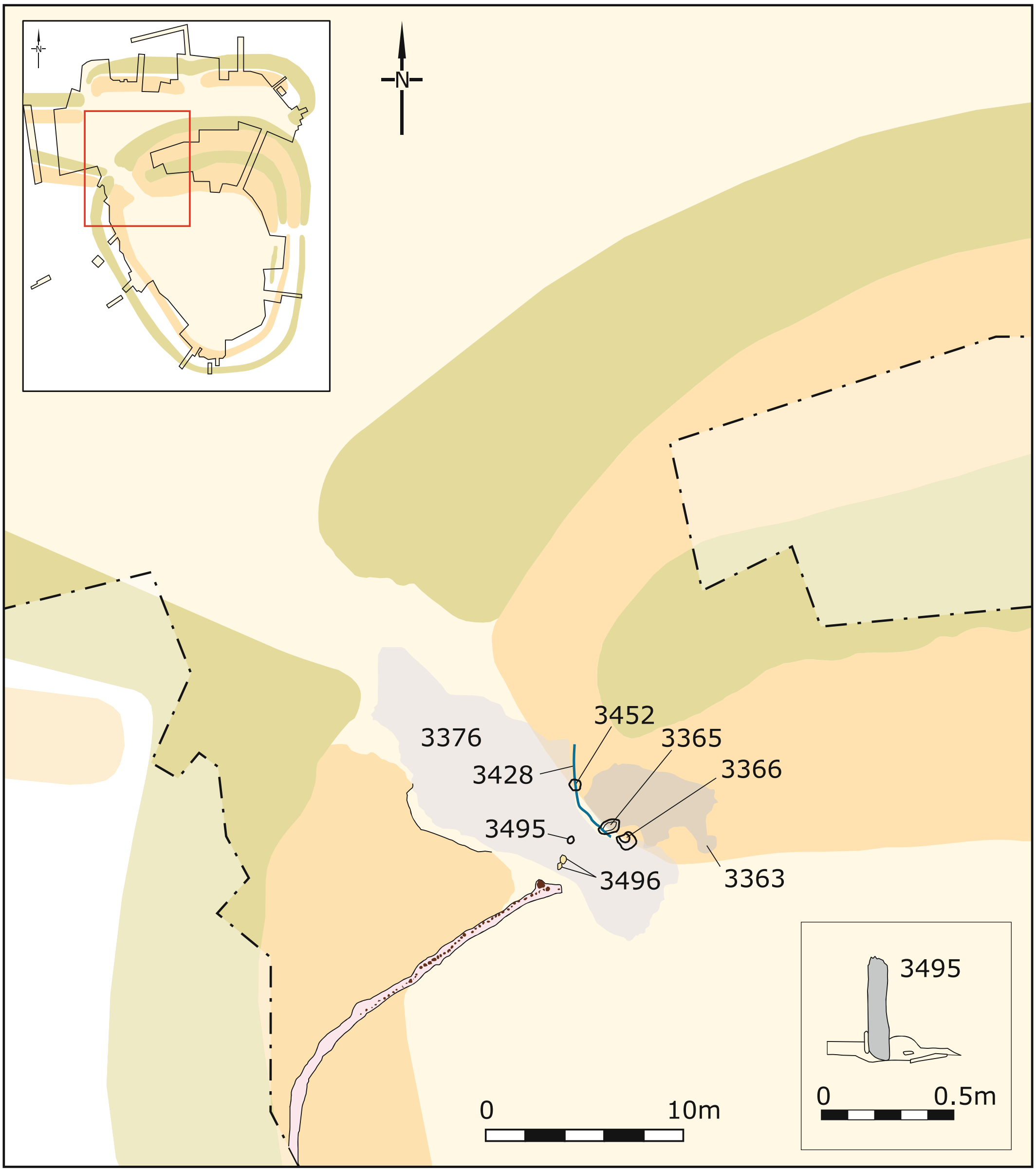

Fig. 13.1 Plan of Period 4 timber gate

No postholes accompanied this feature, yet it would only have been effective on the actual line of the door frame. Slight evidence was recovered, however, for the setting of door posts that must have relied on their weight and some tying into the masonry walling each side to be effective. On the west, two quartz blocks 3496 may have wedged the base of the timber in position. On the eastern side, an undercut to wall face 3428, in the section that subsequently collapsed, suggests the position of the other timber. Indeed, the late collapse of this wall may have been in part caused by the strain placed on the already unstable wall by the gate structure.

Fig. 13.2 Door stop 3495 protruding from surface 3376 and marking the central point of the Period 4 gate

13.1.2 Timber Revetment on the Eastern Side of the Entrance

As the rubble continued to accumulate and the ramparts on each side eroded, an attempt was made to reduce this and perhaps also to provide some indication of control at the entrance. This survives only in the form of three unevenly spaced postholes, 3452, 3365 and 3366, on the eastern side of the entranceway, though shallow features on the other side may well have eroded away. The northernmost posthole 3452 was the best preserved, 0.35 m deep and 0.5 m in across, with vertical packing stones in situ and a post impression 0.2 m in diameter. Postholes 3365 and 3366 only survived to c. 0.2 m deep, and varied in shape. Whilst 3365 was oval, 0.6 m by 0.9 m, 3366 was more square in plan, though with an impression at one side which suggested a timber c. 0.2 m in diameter was placed there.

The postholes run roughly parallel with the convex wall face 3428. They cut through the rubble held in place by wall 3428, but there is no direct stratigraphic relationship between the postholes and the wall. Rather, layer 3363 seals these features and also butts against the wall 3428, which indicates that the topmost surviving courses of the wall were still visible through the rubble, but it would not have been effective at this stage. The new line of posts was placed more to reflect the surface topography of the rampart and entranceway at this time, though that was derived from the position of earlier structures. Certainly the placing of posts so close to the wall would have structurally weakened it, and so it is likely that they are a later revetment rather than a timber element above a functioning rebuilt wall 3428.

These features would seem to represent the last attempts at defining any structural elements at the entrance during the Iron Age.

13.1.3 Period 5: No Gate

After the attempts at revetting identified in Period 4 were abandoned, a layer 3363 was formed which contained some rampart collapse. This survived over the most of the eastern side of the entranceway, varying in thickness up to 0.5 m. It was mainly a brown silty clay loam but contained eroded shale fragments and a few larger slabs. On the east, it merged into the modern topsoil, as the ground sloped down gently to the west. Layer 3363 slowly accumulated whilst settlement continued beyond the inner defences in the annexe part of the fort throughout the Roman period, and into which the last entrance structures were constructed (see Chap. 13).

The gradual build-up of layer 3363 may have taken many decades or even centuries to form, as movement through the entrance could have created as much erosive effects as either the laying down of stones or wash from the surrounding ramparts may have accumulated deposits. It is noteworthy that, for all the early investment in entrance structures, it would seem that the later phases of occupation of the fort did not require any formal entrance structure at the main access point to the interior. It is in this light that the subsidiary side entrances to the west and east require consideration.

13.2 Side Entrances

Most attention has been devoted to the main entrance in the northwestern portion of the earthwork circuit of the fort, but it is likely that other, side entrances were also in operation at the fort. These were not obvious before excavation, though access onto the terrace round the south and west of the site could be gained by following a postmedieval field bank. This cut obliquely across the western slopes, and then round the southern edge of the promontory. Access to the promontory could also be gained from the east where a more definite path ran beside the same field bank as it descended to the valley floor. It is noteworthy in hindsight that the positioning of the field bank, though constructed so long after any permanent settlement on the site, suggests the location of both probable side entrances. This implies that such lines of approach must have been perpetuated over many centuries, probably by animal tracks and footpaths. These were then made concrete in the landscape by the creation of the field banks when enclosure took place.

Despite extensive excavations in the two probable locations, no gate structures of any kind have been located, but there is other evidence to suggest that side entrances were indeed present at both locations, one on the east and the other on the west. Many surveys of forts have noted the presence of subsidiary entrances, but few have been investigated. The lack of major structures at these locations raises interesting implications for the role of all the access points to the fort and the earthworks between them, which are considered in Sect. 15.4.4, but it is necessary to consider the evidence for such access points here.

13.2.1 The Western Side Entrance (Figs. 13.3 and 13.4)

The rampart that ran from the northwestern entrance along the western edge of the promontory clearly terminated at a point where the rear stone revetting ends in a clear squared terminal formed a corner holding back the rampart terminal (see Sect. 8.2). At this point there would have been an access route into the site, though little trace survives, and this issue is discussed further below. The smaller rampart to the south did not survive in the limited area excavated at this point, in part perhaps because of the late Roman/post-Roman ditch 3306, though it may have been lost in the slumping of the scarp, as was

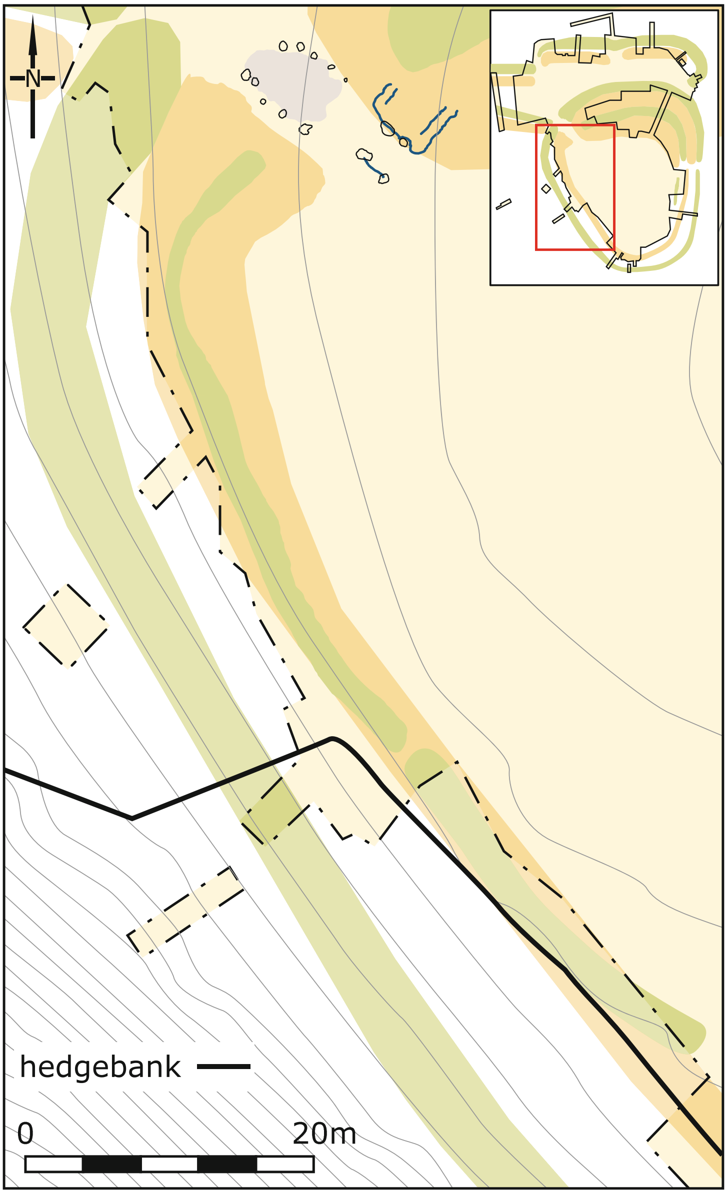

Fig. 13.3 Plan of western side entrance

the fate of the equivalent rampart on the east (see Sect. 10.1.1.2). The historic field bank, on which a protected tree stood, inhibited further excavation here to explore these alternatives, but the rampart survived at the southern tip of the promontory (see Sect. 10.1.1.1) where the underlying shale bedrock rose closer to the surface and prevented slumping of the original scarp slope. Nevertheless, the rampart terminal that did survive indicates the location of the western side entrance.

The ground surface where the entrance would have been located was quite worn, and had an oval feature cut within it that indicates that at one stage the entrance would have been out of commission, though the date of this feature is uncertain and it may have been a corn drying oven located at this spot

Fig. 13.4 Western side entrance from the south

after the fort had been abandoned; it will be further reported upon in the volume discussing the interior and the late Iron Age and Roman period settlement. Even with this intrusive feature causing some disturbance, it is clear that any gate postholes would have survived, even if in a truncated state, in the area close to the extant rampart terminal. The lack of structural features at the western entrance is of itself significant. The location of the Iron Age entrance at this point is reinforced, however, by two other pieces of information, both from later in the history of the site. The first is that the late Roman or post-Roman western ditch 3306 was definitely interrupted so that a small entrance could be accommodated at this location, before continuing as 2583. This suggests that, despite the severe erosion of the prehistoric earthworks, as discussed in Chap. 14, an access route into the fort area at this point continued in use through the late Iron Age and Roman periods, to be marked in the subsequent refurbishment. This route and division of the landscape was further indicated by the much later historic field bank, associated with enclosure in the eighteenth century, and marked on the 1843 Tithe Apportionment map for Nevern parish and subsequent Ordnance Survey maps. The historic bank that runs round the southern tip of the promontory on the edge of the scarp suddenly turns and runs down the scarp slope, perpetuating the entrance location and being completely unrelated to the natural topography or the terrace feature.

The excavations down the scarp slope and across the terrace indicate that a ditch, 4230, ran along the contour of the promontory at this point, though not across the whole width of the terrace. This ditch was also traced in the south and east (see Sect. 10.1). However, on the west the scarp shaped to form the terrace had become unstable and slumped downhill, filling the ditch. This was later recut, but only within the slumped material, leaving the outer part for the terrace intact. This is in contrast to the arrangement at the southern promontory tip where there was no terrace beyond the ditch (Fig. 10.2), and this was also replicated on the eastern side of the fort (Fig. 10.7).

Two alternative interpretations of the positive and negative evidence can be proposed for the functioning of the entrance. The first is that some form of steps or bridge up to the entrance was provided, set at the bottom on the part of the terrace not taken up by the ditch. The upper part leaves no trace because either it did not require earthfast timbers, or these were lost from the early phase with the slumping, and later through subsequent erosion. The second is that there was an oblique path up the scarp, lost in the slumping into the ditch and in subsequent erosion. Bridges are unknown across ditches in the Iron Age (Avery 1993c, 162–63), so the sloping path interpretation is perhaps more plausible. It also then does not require a complex structure leaving no physical trace at the base of the slope or at the top. Moreover, the line of the path may have been mirrored by the later field bank. However, this does not explain the width of the terrace, nor how those going down the oblique path would then cross the ditch, since at some point they would still find this an obstacle.

The role and functioning of an entrance without any obvious form of blocking or access control is discussed further in Chap. 15.

13.2.2 The Eastern Side Entrance (Figs. 13.5 and 13.6)

The eastern side entrance is postulated immediately south of the large inner rampart terminal on the northeastern portion of the site. It shares many of the positive and negative types of evidence that apply to the western side entrance.

The large northern rampart definitely terminates at this point. It does not appear to have been badly eroded, and although its outer face is against the hill slope its rear is well set back on gently sloping ground. Substantial rear revetment walling survived, but there was no trace of this turning at the terminal, though its profile remains much more distinct and complete than is the case for the rampart on the west.

The smaller rampart that ran round the southern part of the promontory had been completely lost to slumping downhill along the northern part of the eastern side of the promontory, but its rear survived a little to the south (see Sect. 10.1.1.2). However, traces of the rampart would have survived if it had joined onto the larger rampart, as it would have had to turn away from the steepest part of the scarp to join the other terminal and, despite the damage cause by the late Roman or post-Roman ditch 4477, it would have remained in situ either side of this cut. This suggests that there was a gap south of the existing rampart terminal, one that matches that already described for the west.

The other evidence relates to the reoccupation of the fort discussed in Chap. 14. Here, a short length of ditch 4477 was dug along the stretch of perimeter where the entrance is postulated. It does not run far to the south, suggesting that the original rampart still survived sufficiently at that stage to mark the edge of the site. The necessity for this ditch suggests that there was a gap to close and, given the site topography this cannot have been caused just by erosion. Therefore an access point on the eastern side of the site is likely.

Many postholes, hearths and stakeholes survived from the palisaded phase in this area (see Sect. 3.2.3), and it might be thought that a side entrance would have led to the creation of a small hollow way through this gap, which would still be visible. Moreover, given the use of paving in small cobbles or shale slabs elsewhere, some surfaces would be expected. Unfortunately, no such deposits survived, these early features being found directly beneath the topsoil. It could therefore argued that the use of this access point had indeed worn away any deposits, or prevented their formation. It is possible that the late ditch 4407 had cut away any gate features, but it is more likely that there never were any, at least of a form that were earth fast. As with the western side entrance, the most likely positions for any gate timbers would have been hard against the rampart terminal, and forward of where the ditch was dug, and so would have survived. It would seem that the eastern access point was only marked by a gap between where one form of rampart stopped and another began.

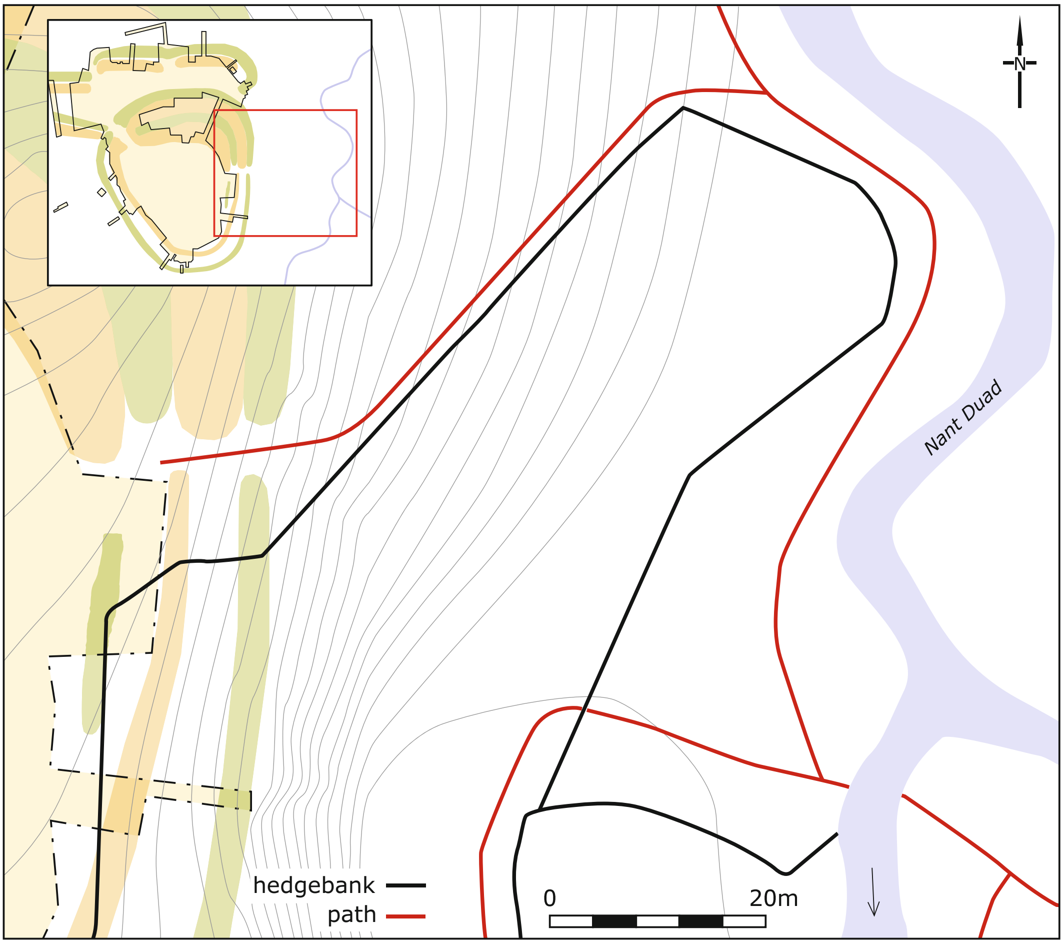

Fig. 13.5 Plan of eastern side entrance

Evidence for an access point at this location on the earthwork circuit also comes from later evidence, both categories as seen on the west. The first is that the late Roman or post-Roman ditch 4407 terminates in a position that indicates an access point between it and the upstanding northern rampart terminal. If this had to be completely closed off, the ditch would only have had to continue for a further couple of metres or so and any entry into the fort at this point would have been prevented. At this point of the circuit the Iron Age rampart survived at upstanding earthworks that could be reused, unlike on the west where erosion and the build-up of internal deposits against the rear of the rampart had hidden its original line, hence the digging of a much longer ditch. This was not necessary on the east, where the original earthworks could be integrated into the subsequence plan. Nevertheless, the entrance point remained.

The other indication of an entrance at this point derives from cartographic evidence. Although the small Iron Age rampart to the south has completely eroded downslope at this point, the modern field bank followed more or less the same course along the later edge of the southern portion of the promontory, yet it dramatically alters its course at this point, and runs at an angle across the contours down into the valley below. This boundary is marked on the 1843 Tithe Apportionment map for Nevern parish and subsequent Ordnance Survey maps. Beside this field bank is an established path, and this may have been the route down into the valley used from Iron Age times, where it joins a legally defined public footpath that runs along the stream at this point.

Fig. 13.6 Eastern side entrance. The rampart terminal is in the *right* foreground and the footpath down the eastern slope of the promontory runs across the *bottom* of the picture

The lack of features within the entrance area is similar to that on the west, but the access route is less problematic here, as the original ditches seem to have left a causeway against the promontory scarp at this point, and the line of the field bank and path are less steep. Indeed, the continued use of the path indicates its relevance, though this may in part be because the cottage of Pant Glas was built in the valley on this side of the promontory, and so the maintenance of a convenient route onto the promontory was more important in the nineteenth and twentieth centuries on this side than on the west where a more gradual, but wider route was provided that wound its way up onto the promontory spine beyond the outworks entrance discussed below.

13.3 The Outworks Entrances

The discussion of the outwork ramparts and ditches, and their general layout and sequence, was discussed in Chap. 10. Here the nature of the entrances—or at least, points of access—that were created in their design are briefly discussed as a prelude to the general discussion of Chap. 15, and to provide a comparison with the side entrances of the main fort discussed above and in contrast to the major architectural investments discussed in Chap. 12.

Fig. 13.7 Northwestern outer entrance. Simple gateway and the two ditch terminals, the western at an early stage of excavation. No trace of the inner ramparts survived at the entrance

13.3.1 The Northwestern Entrance (Figs. 13.7 and 13.8)

The position of the northwestern entrance to the fort lay immediately west of the surviving outworks rampart that is still visible running across the saddle of the promontory. The extant remains are not only denuded, but the westernmost portion has been completely ploughed away, making the exact position of the entrance only visible through excavation. The rampart on the western side of the entrance is also completely invisible on the surface, as is its outer ditch. The entrance has therefore been defined from the position of the ditch terminals, which have both been excavated.

Two postholes indicate the position of a simple gate that would have been placed between the rampart terminals, giving an access route into the annexe area that was 2 m wide; the causeway between the ditch terminals was of a similar width. This simple gate is in stark contrast to the various more complex gate structures at the entrance to the main fort.

Small areas of metalled road surface, composed of small fragments of stone, survived the later agricultural activity in patches where it was well compacted into the surface of the subsoil. It was similar to the earliest phase of surface within the main entrance, suggesting it was part of the initial design, and other patches survived in a line along the contours of the promontory before turning up through the main entrance. This suggests that a metalled road stretched from at least the outer gate to the inner one; whilst the protection of the fort's inner rampart terminals allowed later surfaces to survive there, none were noted elsewhere, but they would have suffered from ploughing and erosion down the promontory slopes, and so it is not possible to decide whether such an extensive roadway was maintained.

The postholes at the outer gate showed no evidence of timber replacement or any recutting, suggesting that the timber gate lasted only for a relatively short time, after which a gap in the earthworks alone marked the outer access point on the northwest. In this regard this entrance became similar to that to the northeast (see below). However, it is likely that this access point remained the most important for the main fort, and presumably the annexe. The route into the fort remains to this day along the

Fig. 13.8 Ditch terminals of the outer entrance. *Top*: eastern ditch terminal. *Bottom*: extended excavation of western ditch terminal, viewed from the gateway

line established perhaps even when the *chevaux-de-frise* was constructed, and certainly once the outwork ramparts and ditches were created. From which direction most people approached the fort's outworks gate is unknown, however. It is likely that whilst some may come up from the valley, others may have come down from the extensive plateau to the north where most agricultural activity—both arable and pastoral—linked to the fort must have taken place.

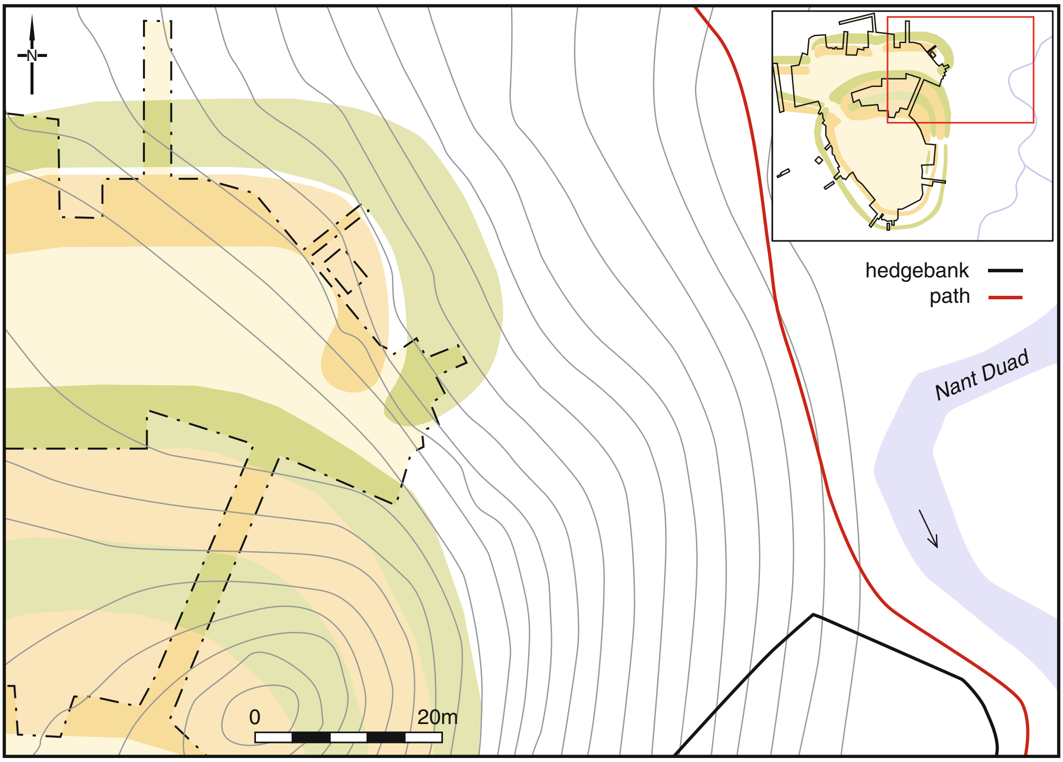

Fig. 13.9 Plan of northeastern outer entrance

13.3.2 The Northeastern Entrance (Figs. 13.9 and 13.10)

The surface indications of any rampart and ditch forming the outworks on the eastern side of the site had been completely levelled by agriculture and erosion, but the slight traces on the eastern side of the saddle across the promontory allowed the positioning of trenches to trace the denuded rampart and completely infilled external ditch 1737 round to the west (see Sect. 10.3.2). In the final season of excavations in 2008 the area between the outer rampart, scarp and ditch of the main fort and the excavated ditch terminal of the outwork was revealed with an earthmover removing a large amount of spoil from earlier excavations and the topsoil from this area. This revealed an extensive area of the subsoil surface which was carefully cleaned a number of times. The line of the outer ditch for the main fort was confirmed, but not a single cut feature was found in the area between it and the outwork ditch.

The gap was only 3–4 m at its narrowest, but to the east the outwork ditch 1737 swung away to the east and north, and the main fort ditch 1562 swung east and south, creating a wide but apparently featureless approach. Nevertheless, there was a clear access point on this side of the outwork, and the outer ditch could easily have been continued southwards to join the fort ditch, rather than turning inward and being expanded.

There was clearly no gate structure at this point that required any earthfast posts, but the access here must have looked dramatic and impressive when first constructed. The combination of a relatively small ditch combined with scarping of the natural hill slope and the construction of the outer rampart of the main fort on top of this would have created a substantial southern side to the approach, and the size of the clubbed terminal, and presumable the substantial end of rampart adjacent to this using all the excavated material, would have formed a northern side different in character but at least as visually effective.

Fig. 13.10 Photograph of northeastern entrance. Figure on *left* is within the clubbed ditch 1737 terminal, and the figure on the *right* is in a trench cutting through the outer ditch of the outer rampart of the main fort, with scarping for that rampart behind her

How long the massive earthworks were retained on this side of the fort cannot be easily determined. The outer ditch to the fort was recut following slumping of the scarp (see Sect. 9.7.1), indicating maintenance of this perimeter feature for some time. In contrast there were no clear recuts noted in the fill of the outwork ditch terminal, and the deep layers of clean primary fill suggest little occupation or activity generating burnt clay or charcoal in the vicinity. On the other hand, the fine nature of the silty fills do not suggest that the rampart formed from thick clay and various gravels through which the ditch was cut was allowed to slump back into the ditch. This suggests that the earthworks remained stable and substantial for some considerable time; a small amount of Roman period ceramics found in a number of cuttings of the outworks ditch 1737 confirms that it was filled by about 1 m, and rather more at the deep northeastern terminal, but it would still have formed a significant defining feature for the settlement. Although it would seem that the outer ditch of the main fort had become completely filled by the late Iron Age when the interior was abandoned, the scarp and outer rampart above would have been a prominent earthwork, as they are to this day. It is therefore likely that the northeastern entrance route, albeit without any timber gate, was visibly defined by earthworks on both sides throughout the Iron Age and indeed through the Roman period.

13.3.3 The Northern Entrance (Fig. 13.11)

The outwork bank and ditch that covered the *chevaux-de-frise* and provided a boundary across part of the spine of the promontory, was slightly convex in plan. Initial assumptions were that the rampart originally ran across the whole of the saddle, and excavation to the east defined the line of the rampart and ditch there, even though the rampart only just survived. However, excavations in the centre of the perimeter line on the northern outworks revealed a complex sequence of ditch cutting and intercutting already discussed above. Of relevance here is that at some phases, and probably much of the time, there was indeed an entrance here that allowed access into the annexe area. As with the northeastern entrance, however, there was no evidence any gate structures with earthfast posts. It is possible that gate posts set

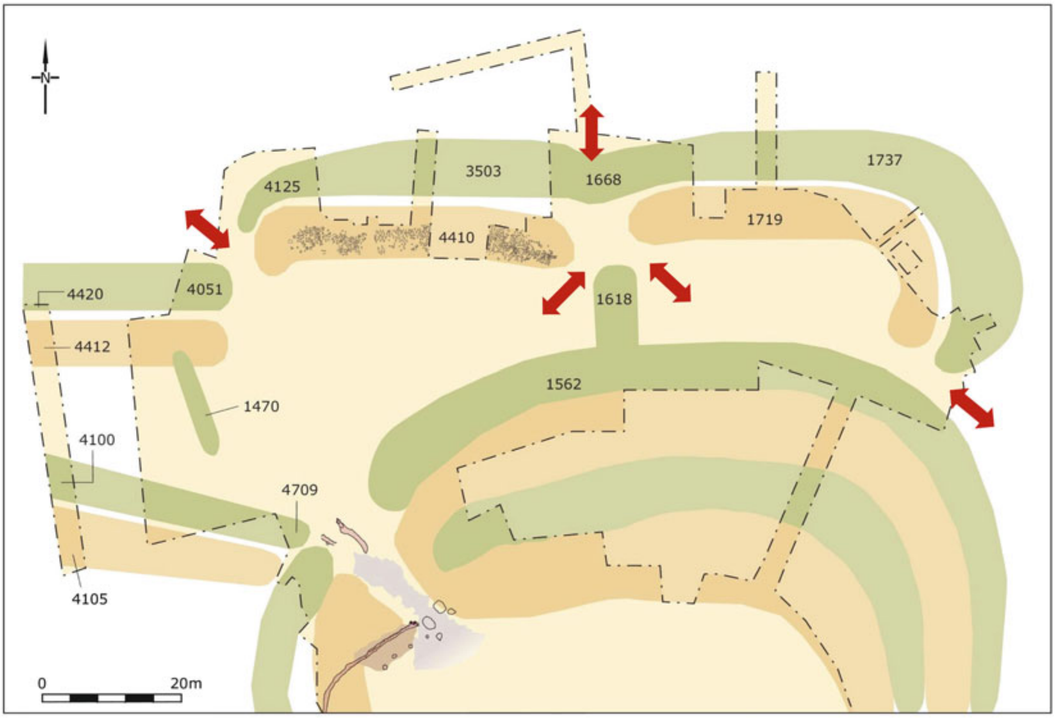

Fig. 13.11 Schematic plan of access points into the annexe

forward between the ramparts would have been removed in the frequent recutting of the external ditches, but there certainly were no gates controlling access into the eastern and western divisions created by ditch 1618 that ran north–south across the annexe area.

13.4 Conclusions

The main northwestern entrance shows a sequence with a first phase of stone architecture, discussed in the previous chapter, followed by maintenance for an unknown length of time and then neglect that led to gradual, yet substantial, collapse. At some point there was then a major refurbishment, sweeping away rubble and with new walling creating a different architecture. This then also was maintained and then neglected, and once more the entrance route became evermore cluttered with stone. Various efforts at retention of material, and construction of timber gates, occurred; there may have been more of these than left any trace as evidence was extremely ephemeral, but the impression is one where access continued but any form of monumentality was unnecessary.

Archaeologists concentrate on the visually impressive, with the associated investment of labour and resources, and have fewer techniques for evaluating and considering long periods of decline, neglect and inaction. Yet these very attitudes and behaviours—the not doing anything for decades—are just as culturally important as those where things were done. Do the monumental phases represent times when the populace at Castell Henllys were particularly important, and if so to what extent and to whom were they signalling this power? Do the two stages of walled architecture reflect intermittent access to experts who could design and build such edifices, and that at other times the community did not have the expertise to maintain them? Or do the two phases of investment represent unusual moments in an overall narrative of limited intervention. The most substantial was near the beginning of the history of the site and could be seen as an accompaniment of the overall sculpting of the hill, the enclosing of settlement and creation of place. Its formation may have been as important as its continued use. The second phase also led to reworking of the rear revetment wall on the west, but otherwise was more limited (unless some of the ditch recutting across the main fort ditches and the outworks all took place at this time, in which case the investment was substantial and the reworking of the sculpted landscape a significant one). Otherwise, however, the image is one of living within a monument rather than greatly maintaining, modifying, enhancing that monument. This does not, however, mean that the monument was not still potent, powerful and important; its very being and even its decay could signal the patina of community, continuity of living, and security of the lived landscape within and around the site. The frequently relaid entrance surfaces, patchy and largely formed from fallen walling and extremely hard to assign to phases, nevertheless tell of a story of pragmatic maintenance, continued traffic and recognised significance of this access route into and out of the fort. That the stone architectural features became no longer structurally effective may not have altered their symbolic role, though it is equally possible that uniquely significant cultural issues associated with gates, guardchambers and control of access were important at the two phases of major investment, and were irrelevant at other times. Alternatively, like the buried *chevaux-de-frise* beneath the outer annexe rampart, the hidden features could have retained power and significance long after their physical presence could no longer be discerned, the rubble enclosing powers and forces that may have protected the settlement and community without the need for overt symbol.

The power of stories, myths and genealogies compiled over the generations may have outlived the crumbling ruins but protected and held together society no less effectively. Archaeologists should be sensitive to the non-monumental but meaningful, and aware of the power of the old over the new.

Chapter 14
An Epilogue: The Late Roman or Post-Roman Refurbishment

Abstract The hillfrot on the promontory was reoccupied and refurbished in the late Roman or post-Roman period, when the annexe settlement appears to have been abandoned. A simple stone and timber gateway was constructed, and an inner revetment constructed, all with newly quarried stone. On the eastern and western sides of the promontory, lengths of ditch were dug, with uneven bases suggesting gangs and the priority of obtaining material for a rampart, now gone as the ditches were rapidly refilled, presumably at the end of this brief phase.

The Iron Age occupation within the fort at Castell Henllys probably came to an end in the first or second centuries BC, though it may have continued to have roles which have left no structural or artefactual trace. Settlement shifted outside to the north (see Sect. 2.1.2), and continued there until probably the fourth century AD, though with the loss of access to Roman finds dating becomes problematic, and so a final date of abandonment remains uncertain. What is significant, however, is the density of activity and the number of cut features and the accumulation of occupation and refuse layers that contain Roman artefacts including ironwork and ceramics. These are notable by their absence from within the fort, even in those areas where a steady accumulation of deposits had taken place throughout the Iron Age occupation of the promontory. There is no evidence, therefore, of any structures continuing or being built during the Roman phases represented only tens of metres away in the settlement. The presence of a human bone, probably the mid-shaft of a tibia, from the fill of ditch 2684 discussed below, and dated probably to the first century BC (see Table 2.1), may suggest that after the occupation the old fort interior was used for disposal (though not burial) of human remains, as it was already fragmentary by the time it became deposited.

The earthworks around the perimeter of the fort appear to have been allowed to decay during the final phases of occupation within the site, and continued to degrade during the centuries that the interior was unoccupied. The Iron Age entrance was completely buried under collapsed rubble, and a humic topsoil had formed over the surface. The western rampart by the entrance remained as only the slightest of rises and was completely invisible along the western side of the promontory, with the long-term deposition of occupation material and some revetment wall collapse to the rear, and the rampart sliding into and completely infilling the ditch in front to the north and slumping down the scarp on the west. The earthworks to the east of the entrance survived much as they do today, and it would seem that the two side entrances had continued to function as access points up to the promontory, even though no structural or artefactual evidence of activity was found from anywhere in the interior that would belong to the Roman period, even though sufficient artefacts were arriving and being deposited at the settlement site in what had been the annexe area of the Iron Age fort. It was therefore to a long-abandoned partial earthwork that the builders of the last phase of activity on the site came, to utilise both the existing earthworks and the natural setting, but also to enhance these with some features of their own.

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The refortification of the main fort is evidenced by fragmentary remains of walling at several places around the northern defences and by one and possibly two ditches. The evidence for the entrance is substantial, but the dating of the phase is extremely problematic. This matter is reviewed in the discussion of all the late evidence which is thought to belong to this phase (see Sect. 14.4.2), but the lack of ceramics and closed samples for radiocarbon dating is frustrating. Nevertheless, the evidence suggests considerable effort in refurbishing the defences, even if the use was short-lived. It would seem that the defences were then slighted; no positive evidence for this came from the entrance area because of the lack of surviving overlying stratigraphy, but it is unlikely that this occurred here also.

14.1 The Northwestern Entrance (Figs. 14.1 and 14.2)

For all the evidence of abandonment of settlement, and indeed the inaccessibility of the fort interior from within the late Iron Age and Roman period settlement to the north in what had been the annexe to the fort, it is clear that a route onto the promontory had been maintained. When the time came for

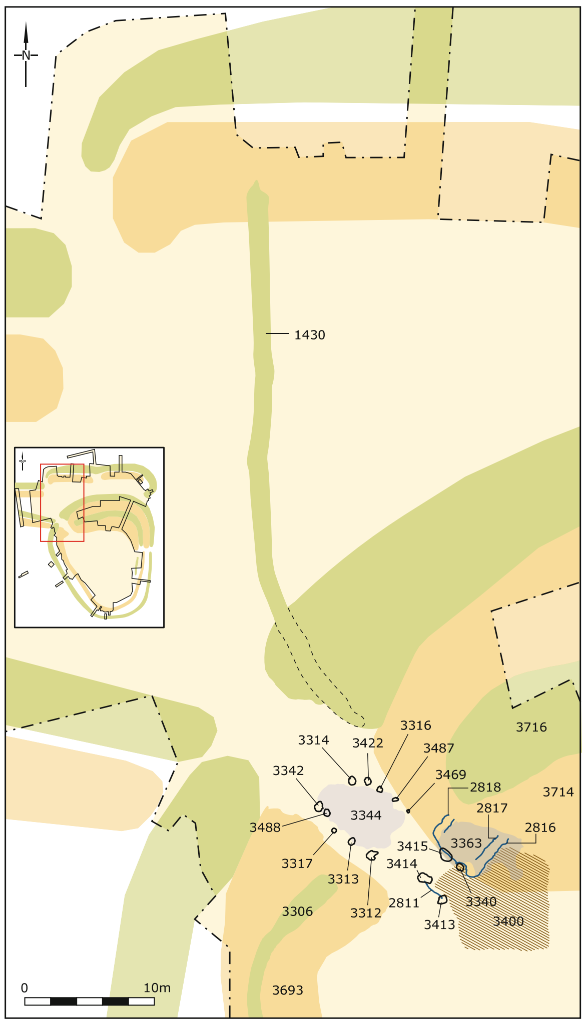

Fig. 14.1 Plan of period 5 entrance, final phase of the late Roman or post-Roman period

Fig. 14.2 Views of the late gateway. *Top*: from the exterior northwest. *Bottom*: view from northeast and above

refortification of the most secure part of the promontory, the same point for the main entrance was selected, even though the ground surface gave no indication of the exact location of the now well-buried previous gateways.

14.1.1 The Timber Gate

The evidence for a gate, which cut through the accumulated shale debris 3400 and wash layer 3363 and was associated with stone walling (see below), was conclusive. The postholes were dug through the substantial rubble of 3400 and represent considerable efforts to ensure earth fast posts at the gateway. The main gate was constructed using two uprights, the western one set in posthole 3414. This feature was oval, 1 m by 0.6 m, and 0.75 m deep. Substantial stones were packed in the pit; the timber would seem to have been removed and the hole filled in, though a possible location and size of post can be suggested. The posthole predated the wall 2811, but it is likely that the post contained within the hole was standing when the wall was constructed, and the wall was built up against the timber. The eastern upright 3415 was also set in an oval posthole, 1.2 m by 0.7 m, and 0.65 m deep, and cut through wash. The packing of quartz and shale did not indicate the size or shape of the post, and the timber may also have been removed. Walling 2818 ran over the eastern edge of the posthole, and it is likely that the timber upright again sat against this wall face.

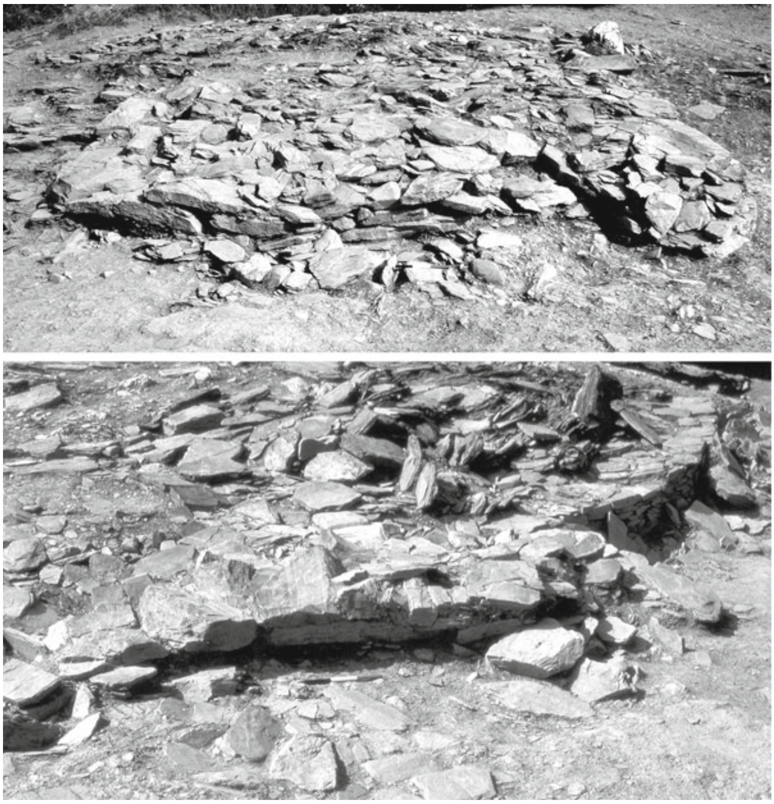

Fig. 14.3 *Top*: gateway walling 2816, 2817 and 2818 on the East. *Bottom*: gateway walling 2811 on the West

Rear uprights were also present. The post on the western side was well preserved, with a roughly circular posthole 3413, 0.65 m across and 0.6 m deep, again with packing stone displaced by the removal of the timber. The wall 2811 again overlay the edge of the posthole, suggesting that it was built up to the original upright. The eastern rear post was only indicated by less substantial evidence, and was not set in a substantial posthole. A small depression, 3340, filled with tightly packed shale, may have marked the base of a post on the rear eastern side. The face of wall 2818 was disturbed at this point, but the concave shape of the surviving rubble fill suggests that a timber may have been placed partly within the wall. As with the other gate timbers, this may have been removed, and this would explain the state of the wall and rubble at this point.

The timber gate may have been based on three or four posts, though the latter is more likely. The front two postholes were more substantial and so probably supported the actual gate. With four posts it is likely that there was a timber tower, though it is possible that the rear posts merely supported a timber structure which helped hold in place both the drystone walling and the gateposts to the front.

14.1.2 The Stone Walling at the Gate (Figs. 14.2 and 14.3)

Stone walling at the entrance survived on both sides, though only a very short stretch was still in situ on the western side of the entranceway. Nevertheless, the stratigraphic location of the walls, their position in relation to each other and the postholes described above, and their distinctive character of construction all points to their contemporaneity and part of a larger design found elsewhere at the site (see Sect. 14.2).

Western wall 2811 was constructed between the posts set in postholes 3413 and 3414. It was built on a slightly concave line, and its length of 2.4 m did not extend beyond the timber uprights. It may have originally been more extensive, as was the case with the eastern walling, but it was very close to the surface and further traces of walling elsewhere would have been easily destroyed. The wall stood only one course high for most of its length, and never more than two courses, and was made of roughly laid shale blocks. Some of these were thick, and cut in a manner different from those of earlier phases. Little of the material held in place by the wall survived. A spread of clean loam with much small shale gravel, 2812, was deposited against the wall face in the entranceway and may be all that remains of a surface laid down at this time. Above this layer, but much more extensive, was a spread of large flat slabs with some smaller shale fragments and fire-cracked rock, 2746. This was probably a surface, rather than scatter from the walling following final abandonment. It certainly gave the appearance of a rough surface, but as shale tends to lie relatively flat and can create the impression of a laid surface, its deliberate creation is a tentative interpretation. Its edges were indistinct immediately beneath the topsoil, and its extent could not be defined on plan.

The walling on the eastern side of the gateway was both more extensive and more complex. It was initially thought that more than one phase of walling was represented, and careful examination of the stonework and the infill behind the various wall faces suggested that a one phase or two phase sequence was possible. Indeed, the two phase model may represent the initial construction followed by an almost immediate extension, as not deposits built up against any earlier wall faces prior to the additions within this late period.

Wall face 2817 ran east–west towards the rear of the rampart, and survived to a height of 0.35 m and 4 courses. Its line could not be traced for more than c. 2.5 m, with the western end becoming fragmentary. It may have turned north but could not be traced along the western entranceway area, but could have continued westwards and joined onto the western wall 2818 where the wall face has been damaged. Slight traces of a wall face were located again running east–west further north, and this could have been a contemporary parallel front element of the wall, but this had been largely lost in the expanded wall structure. The alternative, single phase interpretation is that wall face 2817 may have been a working face and perhaps internal stabilising feature to hold back the relatively unstable fill of silty loam, shattered shale and occasional larger shale rubble. The traces of a parallel wall face on the outer slope of the rampart would have had a similar role. The nature of the infill behind the wall suggests that it may have been derived from contexts similar to that of 3363. As such, it represents a clearance of much of the deposits which built up during the abandonment of this part of the site.

The western outer wall face 2818 ran parallel with the inner face and 0.8 m out from it, and this ran through the entrance passage, although damaged where a possible upright had been. The wall stood to 0.3 m in height and up to 3 courses, and was, like wall 2816, poorly constructed. It again included distinctive large, thick blocks of shale.

The wall on the southern, interior face, 2816, survived to 0.35 m and up to four courses. The line of the walling did not follow along the contours of the rear of the rampart, but ran up it and then stopped with a large quartz boulder. This wall was later than wall face 2817 and was an expansion of the structure to the rear of the rampart, encasing the earlier wall and giving support to the southeastern timber in the gateway. Whether this should be considered as a separate phase or merely a development in the single construction process is uncertain. Layer 2812 butted up to the southern wall face, and was the sealed by collapse from the wall, 2822, the spread surviving to a distance of c. 0.8 m from the wall face. Below layer 2812 was 2814, similar to 2812 but less humic and more compacted. This spreads through the entranceway to the north.

Other stratigraphically late walling found around the interior of the fort was placed at a much higher location on the rear of the rampart (see below, Sect. 14.2). Such masonry would not seem to have been a direct continuation of wall 2816, even if of the same phase and serving the same function

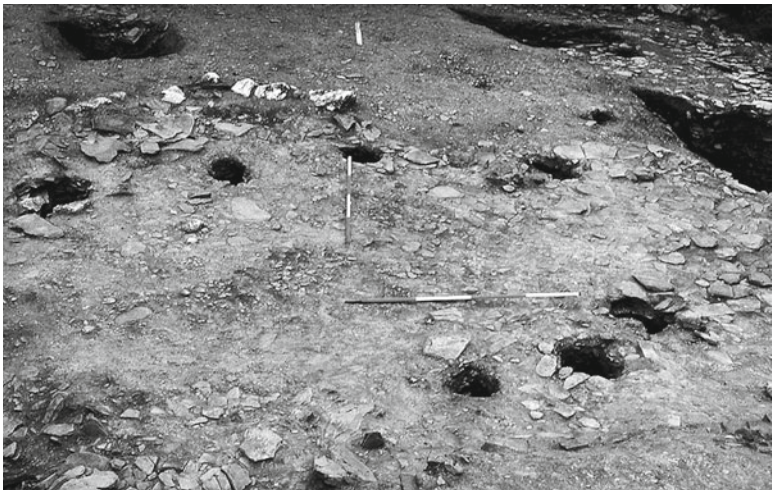

Fig. 14.4 Late postholes at the entrance, viewed from the east

(Fig. 14.5). The use of thick blocks of shale, unlike anything quarried in the Iron Age, demonstrates that this material was not robbed from the now-buried Iron Age defences, but must have been freshly quarried from the promontory slopes to create the walling. This suggests a significant investment and some attempts at an architectural presence, rather than just a hurried and poorly organised refortification using robbed material from the Iron Age structures, though some of the Roman period native buildings did incorporate larger blocks, and these may have been the source of the facing stones.

14.1.3 The Gateway Approach

Beyond the main gateway, the stratigraphic association of late features with the stone and timber gate is not certain. However, all the postholes that are discussed here belong to the latest point in the stratigraphic sequence in the gateway approach, and make sense as part of a timber fenced approach to the gate (Figs. 14.1 and 14.4). It is possible that some or all represent a different, late entrance structure, and this was discussed at length whilst the excavation was ongoing, though no firm conclusions could be drawn. They could belong to a date before or after the timber and stone gate, though there is some stratigraphic evidence to support contemporaneity or even a later date. It is most likely, however, that they belong with the gateway as minor differences in the stage at which the postholes were defined and identified in the very loose and unconsolidated material immediately beneath the topsoil probably reflects the challenges of excavating this material rather than sequential ordering in the past.

Surface 3344 was found outside the gateway on the sloping approach from the north. It extended c. 6 m along the entranceway, and was up to 0.1 m thick. It was made up of many fragments of shale, varying greatly in size, and set in a soft, loose silty clay loam matrix. As such it is very similar to 2746 in the gateway itself, and may well be contemporary. Given that its extent was clearly demarcated on the sides of the entranceway, it is reasonable to be confident that this deposit was intentionally laid down as a surface. This may give greater confidence for the similar interpretation of 2746.

A line of postholes on each side of the entranceway was noted on cleaning up the surface after the topsoil had been removed by machine. Posthole 3313 may have cut layer 2814, and many of the postholes (3312, 3313, 3342, 3316, 3422) have a relationship with surface 3344 which suggests that they had been dug before it was laid down, but that their timber posts were in place when the surface was in use. Others such as 3314, 3488, 3487and 3469 cut 3344, and 3317 had no relationship but were just beneath the topsoil and so are probably of this phase. The arrangement of posts suggests a rough pairing either side of the entrance way, though the postholes do not form a perfectly straight line on each side. The varied shape of the postholes may reflect partial loss due to erosion, and also the type of material into which they were dug; some cut through relatively soft material, others through more shaly rubble. The northernmost posts, 3342 and 3314, were amongst the largest. Posthole 3342 was 0.55 m in diameter and 0.65 m deep, with a roughly 0.3 m square post pipe and impression; 3314 was les substantial, being 0.35 m deep. It is possible that these mark an outer gate. On the western side, all the postholes were c. 0.6–0.7 m deep, apart from 3488 which was only 0.2 m. On the eastern side, they varied between c. 0.45 and 0.7 m, apart from 3469 that was a mere 0.15 m deep. All the postholes had stone packing, and together could have supported a substantial wooden fence. Where the packing survived in place to suggest the size of the timbers, most were c. 0.2 m across. The other posts probably represent an attempt to revet the refurbished ramparts either side, and directed traffic up to the timber gate with its drystone walling at the entrance itself.

The alignment of the fence lines, and the surface 3344, all point towards the latest gateway with its stone walling, suggesting that they form part of a single phase, which would join with surface 2746. It is always difficult to phase features that are stratigraphically the latest in an area, but these have sufficient coherence in character and in plan to give as much confidence as one could expect in the circumstances. None contained any artefacts or charcoal suitable for radiocarbon dating.

14.1.4 A Ditched Approach

Another possible feature linked to the gateway approach is a ditch that connected the outworks with the northern rampart of the main fort. Ditch 1430 ran from the rear of the northern outwork rampart 1498, roughly north–south. Its southern terminal could not be traced; it ran into the top fill of ditch terminal 1469, but whether it ran further towards the entrance is uncertain. The ditch appears to have been dug to prevent access to the farmstead established in the annexe area with the abandonment of the main fort. This settlement had been defined on its western edge by a ditch that was first created probably in the late Iron Age, but which was recut on a number of occasions. This ditch had an undug causeway that allowed access into the farmstead to the west, but ditch 4036 was excavated to block this access and direct all traffic up into the promontory fort once more. Ditch 4036 was not of a scale to suggest any defensive quality, but it reestablished the old route to the fort that had been out of use for perhaps half a millennium. It suggests that most of those intending to enter the fort through the main gateway approached the site from the northwest, again just as they had done in the Iron Age.

The full implications of all the elements identified as belonging to this last phase of occupation of the fort are discussed below.

14.2 Rear Revetment Walling

The reoccupation of the promontory fort led to the refurbishment of the main northeastern rampart, with a rear revetment wall being added. It is possible that this held in place additional deposits to heighten the rampart, but the wall does not survive to any great height and no clear additions could be identified at any point in the excavations.

The most substantial walling for this phase survived at the entrance, though even here it was fragmentary (see above). Nevertheless, other small elements of similar walling have been noted at various points on the inner face of the northern ramparts, always the stratigraphically latest feature and never surviving to any height. Despite careful sieving of all associated deposits behind such walling, no artefactual dating evidence has been forthcoming, with only few flecks of charcoal that appeared to be residual.

West of the main trench through the earthworks, area excavation of the rear portion of the rampart investigated the early rear revetment wall (Fig. 14.5 top) and also located and recorded some late revetting. This wall, 4573, consisted of a single course of three large stone blocks covering a length of 1.6 m, and being 0.15 m thick. This is far thicker than the earlier phases of drystone walling anywhere on the site, and the exterior face of the blocks was smooth. These stones sit above wall core 4574 and just beneath the surface under a thin turf and topsoil layer. The extent of decay of the earlier defences is visible in many of the excavations, and was particularly noticeable at the southeastern terminal of the inner northern rampart, where clear evidence of refurbishment was identified. At a very high level, cut into wash eroded off the rampart, was a low wall made of thick blocks of shale and some large water-rolled pebbles. Most of the wall only survived to a single course, though beyond the excavated area to the north where only topsoil was removed, several courses were visible. The wall was set on a thick layer of wash from the rampart that itself lay above the rubble tumble off earlier revetment wall (Fig. 14.5 bottom).

Fig. 14.5 Late rear revetment walling with large shale blocks, overlying tumble from earlier walling with thin slabs. *Top*: wall in the central portion of the northern rampart. *Bottom*: wall marked by a single course of thick slabs on the southeastern part of the northern rampart; note the completely buried earlier rear revetment wall with thin shale slabs construction, partially revealed on the right

14.3 The Ditches Along the Sides of the Promontory

Whilst the northern rampart was clearly visible and could be refurbished with at least interior stone revetting, the ramparts on the east and west were no longer visible because of the gradual build-up of occupation debris during the Iron Age occupation on these sides. It seems likely that some elements of the earthworks constructed round the southern tip were still visible, however, and these—combined with the steepest scarping around the south—meant that refurbishment of the defences only took place along portions of the western and eastern sides of the promontory.

14.3.1 The Western Ditch 3306 (Figs. 14.6, 14.7, 14.8, and 14.9)

A long length of ditch has been excavated on the northwestern and western side of the site that can be associated with this phase. It was excavated over a number of seasons, and where possible linear as well as cross sections were recorded. It was also possible to produce a measured linear profile of a 21 m length of the ditch from its southern terminal northwards. As a result, this ditch can be described in detail, and its infilling considered in the same way as the construction of the northern rampart, though ditch fills can be problematic to interpret.

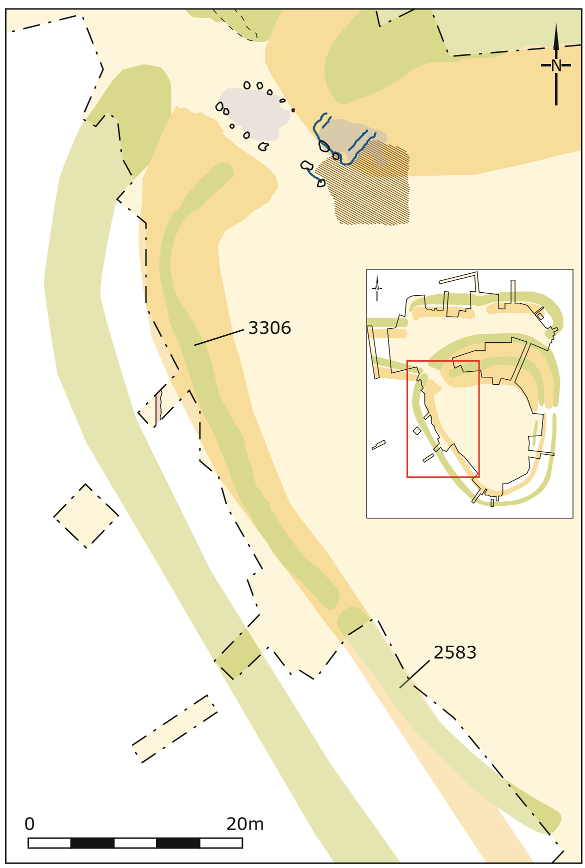

Fig. 14.6 Plan of western ditch 3306 and 2583

Fig. 14.7 Western ditch 3306 with its uneven base. *Top*: general view from southern terminal. *Bottom*: sections showing stony infill and variable depth of the ditch compared with section in the image above

The ditch began cut into the gravel rampart 3693, with a rounded terminal lying southwest of the entrance walling. As cut through the gravel, the ditch was steep-sided, with a narrow flat bottom and a uniform overall depth. The ditch curved round following the contours of the hill, but did not mirror the line of the original rampart. By this time the original earthworks would have been completely invisible on this side of the site because of erosion and slumping at the rampart front and, more importantly, infilling to the rear. The infilling had proceeded to the point where the ground surface ran smoothly slightly downhill from the centre of the site and over the top of the surviving rampart, before a sharp break of slope at its front and the scarp beyond.

Ditch 3306 ran at an angle to the original rampart, curving back to be aligned over the rear revetment walling for much of its length, before swinging further to the east and so inside its line. The selected position for the ditch therefore involved the ditch diggers in removing large amounts of stone. If the ditch had been slightly to the west it would have cut through only the clay and gravel rampart, to the east through build-up behind the rampart and the subsoil. Its actual route meant that it cut through part of the rampart, the rear revetment walling and tumble from the wall, some build-up deposits, and natural subsoil. The shape of the ditch will be described and discussed in detail below,

Fig. 14.8 Cist 3460 set in the base of eastern ditch 3306. *Top*: general view. *Bottom*: detail view

but it would seem that it was primarily a quarry for material that could be used to make a bank. The infilling sequence does not make it clear on which side of the ditch this bank may have been placed, as material entered the ditch from both sides. This may suggest that there was an inner bank and a small counterscarp bank.

Once running north–south, ditch 3306 widened and had a varied profile, though always with steep sides and a flat base. The southern terminal of this stretch of ditch was steep and rounded in plan (Fig. 14.7). Usually the sides were straight and at a slight angle, but they could be nearly vertical or with a more rounded profile. For most of its length, away from its northern terminal the base of the ditch was dug through clay. Here the base of the ditch varied slightly in width, but most noticeable was the way in which the base varied in height. Some lengths were relatively deep c. 1.5 m, but there were segments that were dug to a medium or shallow depth of c. 0.5 m, with near-vertical faces suggesting

Fig. 14.9 Western ditch southern length, northern terminal. Note how the ditch is buried under the historic field boundary sitting on a developed soil level that seals the ditch

steps. These undug portions could indicate that the ditch was unfinished or, more likely, that the steps allowed easy access in and out of the ditch, perhaps only during the removal of the necessary amount of spoil needed for the small banks being constructed.

It is possible that each deep section represents a particular work gang and the steps were at the end of each working area. The sections were roughly of similar depth and width, with the undug step elements separating the portions allocated to each team. The 21 m long stretch of ditch would suggest the presence of three gangs, having lengths of about 6 m, 8 m and probably 8 m each. These would be suitable for a team of two to four individuals to work digging and removing the deposits in baskets.

Ditch 3306 cut through the soft gravel material of rampart 3693 had no undug portions, but the gravel would not have been stable enough for steps to be left in place. Therefore no gang divisions were visible here. If similar work divisions were in place, then the total ditch length of 45 m would suggest about five small gangs for ditch 3306, and a further two or three gangs for the southern length 2583 and 470.

In one of the deeper parts of ditch 3306, an arrangement of shale slabs 3460 was found, some still set on edge and the others fallen in situ (Fig. 14.8). It appeared to be like a stone-lined posthole when first uncovered, but on further examination seems to have been a small cist-like structure. One thin slab 0.6 m long marked one side, with smaller stones used for the other sides. The near-vertical stones had been pushed into the clay subsoil in the base of the ditch, and no cut was noted higher in the ditch fill, though a large shale slab 0.71 by 0.30 m was fund at a slightly higher level close by, and this may have originally been the covering slab. The internal size of the cist was probably 0.35 m by 0.55 m originally; its fill was a uniform relatively stony clay. The function of the cist is unknown; no staining suggested a deposition within it, but it probably had been intended at least to contain something. It may have been constructed as the ditch was about to be backfilled.

The ditch continued further south beyond the terminal of 3306. The northern terminal of the next stretch, 2583, was found just in the excavated area, but only c. 1 m was excavated, indicating a relatively shallow segment here of only 0.9 m (Fig. 14.9). For most of its length, however, it lay below the historic field bank and has not been excavated. Its southern terminal appears to have curved to the

Fig. 14.10 Eastern ditch 4477. *Left*: view from south; northern rampart *top left*. *Right*: view from the north; historic field bank in the background

east, however, and was partially excavated in 1982 as 470, when its full significance was not appreciated, and it was thought to be a pit. The partial excavation suggests now that the ditch reached a depth of at least 1 m, and it was definitely turning away from the steep edge of the promontory at this point.

14.3.2 The Eastern Ditch 4477 (Figs. 14.10 and 14.11)

A ditch similar to that described above has been found in a short length on the eastern side of the site. One edge of the ditch was located in 1984 but its significance only became clear when excavations extended to the east in 2002 and to the south in 2004. Whilst the northern terminal was defined, the ditch ran under the historic field bank and had ended before the cutting through the Iron Age defences further south, which means that the eastern stretch could not have extended as far south as that on the west.

Ditch 4477 had steep sides, a relatively flat, wide base, and was originally dug with a definite square end. In these respects the feature was well designed and defined, but its base indicates that it was either never finished or that it was more a quarry for materials to form a bank than it was a significant ditched feature. As with 3306 to the west, the base of the ditch varied in depth, being most substantial at its square terminal. To the south, steps and unexcavated ridge in the base probably indicate that a couple of construction teams were involved in its construction, but there may have been only one and it was only dug for a short length, mainly perhaps to create the context for the narrow side entrance into the fort, or was even unfinished on this side. The fill of the ditch, a mixture of clay layers near the base, charcoal-rich deposits and then more stony layers, may represent that material thrown back into the ditch from the bank to level the area, but more than was the case with 3306, the

Fig. 14.11 Early stage of excavation of northeastern terminal. Note how the late ditch 4477 cuts into the rampart terminal, and so would have blocked any side entrance for this final use of the site

deposits give an impression of a longer period of infilling and less of one single event. Nevertheless, the freshness and integrity of the ditch bottom and sides suggests that it was not open for long, based on observation of weathering process on the site over a number of years during the excavations. Unfortunately, the debris within the charcoal layer, including slag, suggests that it was derived from the Iron Age deposits in this part of the site through which the ditch was dug rather than activities contemporary with the ditch itself. The same problem confronted the obtaining of secure radiocarbon samples for 3306.

Unlike the western ditch, it would seem that ditch 4477 did not have a break to create an entrance, but cut into the denuded terminal of the rampart (Fig. 14.11), sealing off access on the eastern side. That this was necessary could, however, argue that such a route existed and required to be blocked. The route certainly was used in later times once again, after the short life of ditch 4477 that was rapidly infilled.

14.4 Discussion

The diverse and spatially spread pieces of evidence described above provide sufficient to allow some discussion of the nature and significance of this phase.

14.4.1 The Defensive Scheme Including the Entrance

The form of the refurbishment work can be seen to have modified the eroded prehistoric earthworks to make them effective, leaving most of the naturally defended sides to the south and east unaltered. The details of the previous defences had been forgotten, and the plan was based on the earthwork as it survived at the time. The main entrance was revived in the same place as before, because the eastern ramparts were still visible. The western rampart was no longer upstanding, so a ditch and presumably a bank made from the soil was needed from close to the gateway on that side

The ditches along the sides of the promontory suggest that side entrances, probably little more than animal tracks up the hill slope and into the fort, were still known on both the east and west. The ditch on the east is a relatively short but continuous length, and running up onto the terminal of the main inner rampart suggesting that this access point was to be closed off. In contrast, the western ditch seems to have a deliberate gap left for access. The location of the fibula near the ditch terminal may indicate a casual loss by someone either using or guarding the side entrance, or it may have been thrown in, on its own or on clothing, at the time that the defences were slighted. In such a context, it may be seen as an ending of the *Romanitas* and the dynasty that had ruled the area for generations.

The stonework used for the inner revetment of the northeastern ramparts does not seem to have been matched with external revetting. None survived in situ, and the limited ditch excavations have not recovered large, thick characteristic blocks from high in their fills. It would seem, therefore, that only a low internal wall was provided, perhaps holding back a loose gravely fill found on the surface of part of the northern rampart. This seems a considerable amount of effort for minimal military gain, and may suggest that more human presence and activities were within the refurbished fort than the absence of structural evidence for buildings would suggest. Indeed, the obtaining and use of the thick shale blocks is itself of some interest. The building material for the gate and revetment walling may have been taken from Roman structures in the adjacent farmstead. The two known structures on that settlement with stone, a roundhouse and a drystone wall that divided the settlement in two, do not use such blocks, though another building may have existed that has been completely destroyed by robbing and then ploughing. The dividing wall only survived where it had subsided into the Iron Age ditch and so was below the level of the plough. The alternative is that the stone was freshly quarried, perhaps from the sides of the promontory itself. In either case, the collection and transport of the stone for an interior enhancement of the fort is notable. It reflects considerable planning, skill in building in stone (though not as great as the original fort builders centuries earlier), and a desire to enhance the monumental nature of the site, even where the results were not massive.

It is also possible that some of the slight, late ditch recuts seen in the outer ditch of the main fort and in some of the outworks could have belonged to this phase, but there was clearly no major recutting of the northern outer ditch as the Roman period refuse layers remained intact over half way up the fills. Nevertheless, small scale refurbishment might have occurred. Certainly the scale of the albeit intermittent interior walling, as well as the western and eastern ditches, suggest a serious attempt to refurbish the fort, albeit briefly.

14.4.2 Dating

There is clear evidence for a refurbishment of the promontory fort long after the previous defences had fallen into decay and their location was no longer certain, but the date of this phase is problematic. No artefacts have been recovered from the very limited deposits associated with the rampart revetments, and no artefact or intact charcoal deposit could be associated with the late entrance walling and infill.

The stratigraphically late outer postholes that may relate to this phase contained no datable material, and are merely the latest features in this area that also on plan basis would make sense with the late entrance walling. The small ditch 1430 that runs across the northern part of the promontory to the eastern side of the entrance is also not well dated. It contains in its higher fills a large amount of Roman period material, including Samian and black burnished ware, but there is a very wide date range amongst this, and its location in the top, levelling fills of the ditch suggest that the artefacts came with the deposit as part of the final, deliberate, infilling of the ditch, perhaps scraped up from the accumulated refuse in the stockyard that lay to the east of the ditch in the Roman period. The latest date for an artefact from the feature is second to fourth AD, but this could be much earlier than the time of deposition in the ditch context. Layers low in the ditch fill produced small amounts of burnt bone, burnt clay and fire-cracked rock, all similar to those from deposits of all periods on the site.

The lack of definitely late internal features further frustrates dating. The late ditches on both sides of the site cut through charcoal-rich layers, and so contain tip lines and fragments of charcoal that have probably come from much earlier deposits. Nevertheless, there is very limited erosion and silting in the ditches, suggesting that they were only open a short period of time, and then filled in. Some sections suggest this was partly natural though most, especially on the west, indicate deliberate backfilling. Some of the charcoal may well again have come from the deposits used to fill in the ditch at this time, and so not relate to the date of the ditch cutting or filling.

From the western ditch come two important artefacts that give a *terminus post quem* for the phase. These are both Roman finds and, as no others have been found from all the excavations within the fort, it is reasonable to see these as related in some way to activities associated the late refurbishment rather than being residual buried artefacts that entered the ditch in the way that much of the charcoal may have done. However, they may reflect activities in the interior during the reoccupation and may have been brought in from the settlement to the north and were already of some antiquity by this stage.

The first discovery was a brooch [SF 3673], highly decayed, but surviving at all because it was pressed into the clay side of the ditch near its southern terminal next to the possible western side entrance. Despite the poor condition of the fragments, a drawing made before moving the artefact, combined with the surviving pieces, allows identification as a Polden Hill type brooch, datable to the later first century AD. A second find [SF 3457] came from within the fill of the ditch half way along the ditch. This is a small sherd of Roman redware, possibly Severn Valley ware, but only datable to the period second to fourth century AD, but nevertheless suggesting a later date than the production period of the brooch.

The dating evidence suggests at least the late third century AD for the external ditch that approaches the entrance from finds in the upper fills of this feature, though these may relate to activities within the outer settlement rather than the date of the refurbishment of the fort itself, which could be much later than this. Artefacts of early medieval date are extremely rare in this part of Wales. The only well-dated example of metalwork was the Goodwick brooch, found on the beach at Fishguard, but as the sand for this beach was brought from elsewhere, even this is not a secure find spot. No imported pottery or glass, as found at Longbury Bank in south Pembrokeshire (Campbell and Lane 1993), has been found in the area. In contrast, the continued use of Roman goods into the early medieval period is attested by a Roman brooch recovered from a grave at Llanychaer churchyard in the Gwaun valley, dated by radiocarbon to 747-1067 AD (Murphy 1987). In the early medieval period aspects of *Romanitas* were still being appreciated in north Pembrokeshire.

The range of artefacts on the Roman period Castell Henllys farmstead, and the use of stone walling there, suggests selective acceptance of some features of Roman culture, albeit heavily adapted to local contexts. A number of brooches from the Roman period settlement outside the Castell Henllys fort suggests that some items were obtained that could then be curated for considerable periods if required. The find from the Llanychaer grave shows that other nearby communities were maintaining aspects at least of Romanised dress. The brooch from the late fort ditch was certainly an old item by the time it was lost as the dating of the Severn Valley sherd shows, but whether this was only a matter of a century or several is unclear. Even the ceramic sherd may have belonged to an heirloom by the time it was broken and the fragment entered the ditch fill; other pottery vessels on the Roman farm show signs of repair, indicating either intermittent supply, or continued use long after Roman ceramics could be obtained. Both the brooch and pottery vessel could have been of some antiquity but high symbolic value when entering the archaeological record.

Romanitas continued into the early medieval period, and the Roman features on some of the earliest inscribed stones, such as the Vitalani stone from Nevern (Edwards 2007), highlight this cultural trait. Some consider that one aspect of Roman culture, Christianity, was reintroduced into western Britain in the early medieval period (Knight 2006) rather than continuity in the region from the Roman period, but there is significant support for the continuity model (Thomas 1994; Petts 2003), though what this involved, and on what scale, is hard to discern with the fragmentary evidence thus far available. It is therefore very possible that the Castell Henllys refurbishment took place either late in the Roman period or in the post-Roman period, and with elements of the Roman cultural repertoire, as first acquired in a native context and then perpetuated following the demise of Empire, to expire at Castell Henllys in an archaeologically detectable but enigmatic and chronologically uncertain form, as with much evidence for this period in Wales (Edwards et al. 2011).

14.5 Conclusions

The evidence from Castell Henllys for a late refurbishment is very strong. In all cases the stratigraphy is similarly high in the sequence, immediately below the modern topsoil. The structure of the walling in various places and the distinctive form of the ditches on both sides of the interior of the fort along the top of the promontory scarp links the various elements that cannot be stratigraphically proven as contemporary by their displacement across the site. Frustratingly, the walling contained no finds, and the only charcoal in the ditches clearly derived from the much earlier occupation layers through which they were cut; dating such charcoal through radiocarbon was therefore inappropriate. The upper fills of ditch 1430 contain Roman finds, but they could equally well derive from the deposits elsewhere in the annexe area and do no more than provide the vaguest of a *terminus post quem*.

The possible dating options have been discussed above, but would seem to point to a late Roman or post-Roman context; one within the period where regular imports were being introduced to the native Roman farmstead is unlikely given the paucity of Roman finds from the promontory fort interior, including in the highest refuse layers on the west of the site, the ditch fills, and the rampart wash layers contemporary with the late fragments of internal revetment walling. The ways in which this late refurbishment can be interpreted, and the wider context into which it may fit, is in part dependent on date but also the theoretical stance taken on interpreting in this case not only archaeological but also historical sources. The options are therefore presented alongside those for the earlier, Iron Age, phases in Chap. 15, revealing the ways in which resilient data is placed alongside assumptions, and formulated into interpretations within a variety of theoretical positions.

Part V
Conclusions

Chapter 15
Context, Function, Meaning

Abstract The sequence from palisaded settlement through enclosed with stone entrances, to enclosed with limited control of access, abandonment and brief reoccupation can be now outlined and given a provisional chronology based on radiocarbon dating, likely length of life of timbers, and the time required for gateways to collapse. The process of gateway burning can be compared with vitrification where forts are located on different geology. The sequence of entrances and the stone guard chambers are briefly compared with those at other hillforts. The role of the palisade and *chevaux-de-frise*, and later the earthworks and gateways, can be considered from a range of standpoints, based on theoretical position and the types of analogies and assumptions made about the Iron Age. One view emphasises a military function for hillforts, and another a community social role for enclosure and monumentality. Alternative narratives illustrate these different perspectives, and both could be argued and supported by the excavated evidence.

15.1 Introduction

After many years of excavation, the skeleton of the Castell Henllys monumental carcass has been laid bare. The anatomy of the earthworks and of the palisaded phases that preceded them have been unearthed, measured and recorded. Now the ways in which the various parts articulated one with another, and the changes in these parts and their relationships with each over time, have been elucidated as far as our current techniques allow. Though created by techniques derived from archaeological traditions set in time and space, and with data perceived and collected through the varifocal lenses of shifting theoretical perspectives over the decades, a certain resilience in the data has been presented in the previous chapters.

As evidence has accumulated, many questions have been raised, and not a few at least partially answered. Many of those that relate to the particular issues have been discussed in the chapters, with examples including resourcing the palisade settlement, the stability of deposits in ramparts, or the ways in which the gateways were constructed and fell into disarray. In this last chapter, some of the general issues need to be addressed. For those who have dutifully struggled through the particular data and arguments, some form of recompense is deserved; for those wishing to discover the answers to Castell Henllys without the detail have rapidly arrived at this point, and wish to find the conclusions that almost 3 decades of fieldwork have produced. Emphasis here is on the construction, maintenance, use and abandonment of the monumental defining features of the middle to late Iron Age settlement; a second volume examines the interior structures, the settlement shift to the annexe and the Roman period native occupation, and the overall issues of reconstruction, lived experience, and current heritage interpretation of the site. However, even the monumental aspects are more than sufficient for consideration, and not every aspect of the evidence has been covered in this book.

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Likewise, some interpretations have been left to one side here, to be integrated into the second volume. However, this publication is timely; Iron Age studies are confronting issues regarding assumptions about the past that are challenging some of the long-held images of later prehistory. Whilst some of the strands of dissatisfaction have been visible for a while, only in the last few years have these been well embedded in data-rich studies, rather than in agenda-setting but not necessarily well-supported arguments. Castell Henllys can contribute to these debates, though undoubtedly the evidence will also be used for new and as yet unforeseen interpretations in the future.

15.2 Sequence

It is useful at this point to summarise the narrative sequence of Castell Henllys, offered as far as possible without high-level interpretation, before considering what this narrative might mean.

In c. 410 BC the first features were dug on an unoccupied inland promontory in southwest Wales. The site selected for settlement lay 6 km from the sea, up a steep-sided valley from the wide estuary of the river Nevern at what is now the small town of Newport. The Nevern had a number of tributaries, and it was on one of these, the Nant Duad, that the promontory of Castell Henllys lay. Well separated from the plateau areas to the north, the ground dipped to a low point, with a spring (on the northern side of the small modern road that runs along the valley side and forms the northern boundary of the present National Park property), before rising slightly as the promontory narrowed. On the eastern side of the promontory, with its steep slopes to the flat, narrow and boggy valley bottom below, was a natural knoll, a relic of the glacial material that cloaked the top of the promontory but which did not survive on the plateau areas and was buried under silts and bog in the valley below. The site was naturally attractive as it was neither exposed to the strong winds of the plateau nor severely affected by flooding and frost that afflicted the valley floor. It was also a dramatic landscape setting, visible from the plateau areas on both sides of the Nevern valley, and from along the valley up the Nant Duad tributary to the north, and from along the main Nevern valley to the west. It was also visible from the top of Carn Ingli, the mountain south of the Nevern estuary and which had been a focus for settlement and activity from Neolithic times onwards (Hogg 1973).

15.2.1 The Palisaded Settlement

A settlers' camp was established with a number of scoops dug on the promontory so that temporary structures could be erected. Also, a series of craft activities including the working of iron and copper alloy, took place on the eastern scoops. Around this base an enclosing palisaded was constructed, the palisade running round the edge of the promontory at a point just before the natural slope of the ground dipped sharply away on the west, south and east. The palisade was carefully made, with a continuous foundation trench and with ample use of stone packing for the relatively slim timber uprights. The line of the palisade on the north is uncertain. It certainly veered around the natural knoll, but its line thereafter is problematic, and various options have been discussed (Chap. 6). What is certain is that an elaborate entrance was constructed in the northwestern corner of the enclosure, and that this underwent a series of raid changes, each only lasting a few years. During these phases, a gravel rampart 3693 was constructed on the western side of the entranceway, with material derived from ditch to the north, but there was no equivalent earthwork to the east. Throughout the palisade phases there were undoubtedly asymmetries to the enclosure of the settlement and the arrangements in the entrance that do not make for any easy interpretation. These issues were very clear as excavation proceeded, and large areas of buried soil were revealed beneath the later ramparts that should have preserved evidence for the nature of enclosure on the eastern side of the entrance.

The development of the palisaded settlement proceeded with the intermittent requirements of ritual activity, visible archaeologically only by the occasional structured deposition. The presence of low mounds of soil under what became the northern rampart and under the southern rampart also, may have been by-products of mundane minor earthmoving activities but could also have been linked to symbolic acts around the periphery of the settlement. That there were no visible votive deposits within the palisade trench does not mean that there were none, but the use of pig bones and antlers in the one part of the site where the thick clay rampart layers could create conditions for preservation merely highlights how much could have been lost from elsewhere. It is unlikely anything as important as moving to a new settlement location, and the long, drawn-out process to settlement building with many attendant logistical challenges, would have been achieved without the appropriate spiritual accommodations, whatever they may have entailed.

The scale of the palisaded settlement remains uncertain, but one timber roundhouse had to be demolished when the later ramparts were constructed, and it is likely that the settlement expanded up to about eight roundhouses during this time. This was the typical estimated settlement size throughout most of the Castell Henllys occupation, with a central, eastern and western line of structures, each two or three in number.

Beyond the palisaded settlement itself, and halfway across the saddle towards the natural spring, one additional feature was constructed. This was the *chevaux-de-frise* which formed a low but visually distinctive boundary on the highest part of the saddle ridge at this point. Although only preserved because it was sealed beneath a later rampart, there is no indication that it was ever more extensive (and was not present beneath the rampart further to the east). The *chevaux-de-frise* lay 40 m north of the outermost part of the entrance, and would have deflected those approaching one side or the other. Presumably the intention was to direct approach past the western (and indeed visually more impressive) terminal of the *chevaux-de-frise* as the last stage of the access route before to the main palisade enclosure entrance was reached.

The palisaded settlement lasted for perhaps 40 years during which it matured from a pioneering group to a full settlement, presumably with a full range of skills, ages and genders. This represents a full generation, so by the time that the palisade phase came to an end very few members of the community would have arrived as adults, more would have arrived as children, and most would have been born and grew up there.

15.2.2 Building the Earthworks

The established settlement was enclosed, but only by a palisade which was both coming to the end of its natural life perhaps after about 40 years, and only provided a limited physical form of boundedness. The *chevaux-de-frise*, whilst still intact, did not necessarily continue to impress. It is likely that there had always been the intention to construct earthwork perimeters to the settlement, but only at a certain stage of stability in population and subsistence could the resources required for its construction be applied to such a massive task.

The earthwork circuit was clearly carefully planned, and was probably commenced c. 370 BC. It ran round the promontory just at the point where the ground began to slope away but before the steep-sided valley slopes were reached, though these were to be carved and ditched despite their already substantial angles. On the north, the natural knoll (which may or may not have held some special significance) was to be incorporated into the earthworks, creating the backbone for the most massive sections of both the inner and outer rampart on the northeast, and onto which the eastern terminals could be efficiently added. Elsewhere, the inner rampart was positioned just as the ground began to slope towards the north, running from the knoll westwards to join with the outer rampart to form the eastern side of a complex stone-lined entrance that overlay the numerous earlier palisaded access points. There were also to be outworks, replacing the *chevaux-de-frise* and creating an outer annexe

Fig. 15.1 View of Castell Henllys from the south, across the valley

area and marking off access at least to the western slopes of the promontory. This was the plan, but how it was achieved was complex and varied (Fig. 15.1).

Before any construction could proceed, some foundation rituals were undertaken. A pit was dug at the foot of one of the posts east of the entrance complex, and into these a number of sacrificial offerings were placed. Whether these were human or animal is unknown, and how many different creatures were represented is equally uncertain, but their bulk certainly was the equivalent of at least one human being in terms of the decay and settling within this pit as revealed in the depression found during excavation. Some of the unused spoil from the grave cut then became the starting point for the rampart construction.

Although the knoll was to be an integral part of the earthwork, and it may have held particular significance given that many of the structured depositions that are known were made in the lee of this mound (and any made on it would not survive), this was not the starting point of construction. Nor was this over the burial pit, which was only gradually covered as the rampart grew in area and height, gradually stretching to its full width and expanding both eastwards towards the knoll and westwards towards the entrance. The rampart as it approached the entrance was never very massive and never much more than 1 m in height. Likewise the gravel rampart to the west, already in existence from the late palisade phases, was not heightened and made more monumental despite the elaboration in stone that was invested at the entrance. In contrast, the earthwork grew in size as it was built eastwards, at times in an apparently regular pattern of even tip lines from west to east and the northern, ditch-edge southwards, but even then dramatically altered by clay layers with a steep albeit temporary terminal before building proceeded further. As the knoll was approached the earthwork was largely formed out of the undisturbed natural, with the ditch being carved out to create a largely natural outer rampart also, with further scarping and ditching beyond to create the curve of the earthwork to the south. Within the interior of the fort, the old ground level was cut away so that much of the inner lower levels of the rampart were made from the natural gravel, until the ground fell away in the east where it was necessary to start again to construct the last length of rampart to the eastern terminal.

The creation of the inner and outer northern rampart was the product of one group of workers, at times possibly split into two working both eastwards and westwards, but largely as a single team. Whether separate groups dug the ditches, others moved the spoil, and yet others built the ramparts, or whether individual members dug, carried and dumped their spoil is unknown, but the former seems more likely. The ditch digging required certain skills and tools, and those with them were best kept employed on these tasks whilst the less skilled moved the spoil and those knowledgeable in rampart building arranged the layers to gradually build up to form the rampart of the desired shape, size and, particularly significant, internal construction. That this was a simple dump rampart belies the complexity of the constructional process, and the potential implications this carries for social organisation, symbolic engagement, and pragmatic knowledge of soil mechanics. Unfortunately, the two cross-sections through the outer rampart are insufficient to allow detailed understanding of the construction of that earthwork.

15.3 Their Mistakes or Our Misunderstandings?

The main northern rampart has been unpicked and understood in great detail, and it is only because of this that the matter of the overcut ditch was both shown to be more than a minor indiscretion at one point in the circuit, and that the issue of planning and control in massive earthwork construction was perhaps more problematic for the original builders than might have been supposed. It is not possible to conceive of some arrangement that made the digging of the ditch as found a necessary prior condition for the earthwork construction. Nor does it represent some failed plan that was completely abandoned when the new and to be completed scheme replaced it. Not only is the ditch digging not easy to explain, but also the derivation of the soil that accumulated in the ditches requires explanation. The stratigraphic analysis of the rampart shows that at a relatively early stage both near the entrance and further to the east the rampart was beginning to fill the ditch, when if the material from the ditch had already been placed in the rampart it would already have been of some size by the time this infilling began. The conundrum that the stratigraphy reveals is one that was much studied in the field, and all possible options were explored as excavation and recording proceeded. Just as the extensive excavation revealed that there was no easy solution to the northern line of the palisade, so the excavations along such a length of the rampart found no place where this early ditch spoil was used.

The most likely explanation for the ditch digging as it was initially undertaken was that it was a source of material that was taken from the ditch and stored awaiting instructions on what to do with it. It seems that the ditch was dug by those not understanding how the earthwork was to be constructed, nor exactly where. Archaeologists tend to confer on past actors great foresight, organisational ability, and the ability to always make the right decisions. Sadly past human actors were as fallible as we are today; the excavation director who has never made a strategic mistake, the digger who has never overcut a feature and the planner who has never misplaced a feature on the drawing film has either done very little or is delusionally unaware of their weaknesses. There may have been a good reason for the original digging of the ditch where it was, but it is hard to believe that this was so that it could be at least partially backfilled. There may have been pressures to start work, there may have been delays in the arrival of the experts, or it is possible that the incorrect alignments were laid down by the initial surveyors. Whatever the reasons, archaeology can identify past mistakes with all that they reveal about knowledge limitations and communication problems, as much as the numerous successfully completed projects, of which the ramparts, ditches and entrance were to become.

The problem of the overcut ditch was solved with such structural integrity that the ramparts have not subsequently collapsed and this suggests experience on the part of those involved in the resolution of the problem. Given that a long generation had already passed at the palisaded settlement where almost no rampart building had been taking place, it is understandable that the ditch digging was undertaken by those not appreciative of the implications involved. This makes it likely that the rampart designers were not residents of Castell Henllys, but brought in for the purpose. They may or may not have been the same specialists involved with the gateway design, but it is possible that they were at least part of the same team.

There are many other enclosed settlements in the region, and the builders could have been locally available with this as a skill handed down the generations and applied whenever needed on the appropriate terms. The alternative is that they were specialists moving through the region advising as they went, or that they were specially brought in from far away, using long-distance contacts along the seaways and potentially into northeast or southeast Wales, where a number of sites with guard chambers are known (Bowden 2006). However, local Pembrokeshire sites such as Clegyr Boia (Williams 1952) suggest that there may have been other sites with guard chambers in the region, even though the elaboration at Castell Henllys is so far unique for west Wales. Nevertheless the range of monumental earthworks within which other such entrances could remain buried is considerable (Driver 2007a). The arguments for and against specialists are best framed within a discussion of the guard chambers, discussed below.

15.4 Investments in Stone: The Entrance Ways

One of the most surprising and notable features of the Castell Henllys excavations was the discovery of such a complex, multiphase entrance for an inland promontory fort that occupies only an acre (0.5 ha). As one of the few completely excavated entrances carried out to modern standards, it has revealed the same concerns over partial excavation that the extensive rampart excavations have exposed. Only the complete examination of the whole entrance complex at one time by area excavation could accurately reveal the extent of the structures, and even with poor stratigraphic associations between the main entrance and the other features to the north, and the damage inflicted on the walling during reworking of the site, it has still proven possible to offer some overall framework of the designs (Fig. 15.2).

15.4.1 The First Stone Gateway

The first stone gateway involved the construction of a double gate structure in timber, each flanked by a pair of semicircular stone guard chambers. Although the walling close to the timber posts was lost in the later refurbishment, the whole was clearly a coherent structure with slots in the walls that could have allowed timbers to be slid out of the way or down to hold the doors in place. This suggests some level of concern at keeping the door closed, the doors being hung on the rear pair of the front four doors, in other words not at a point that would have prevented those outside reaching the first pair of guard chambers unless there were multiple sets of gates (which is indeed possible). These are issues to be further explored in the discussion of reconstructions and practical uses of the gates in the subsequent volume. Just as the palisade gateways underwent a number of changes, there were some significant structural changes of the first stone phase, notably post replacement, including invasion of the space within some of the guard chambers, in maintaining some form of structural integrity for the gateway. The outer features on the causeway between the ditch terminals indicates that at least the western ditch was already becoming partially infilled, as the route up to the entrance shifted slightly to the west. The group of postholes may indicate an outer gate, and certainly there was fencing either side of the approach. Further to the north, it is likely that the shallow features identified in this part of the entrance would not have survived, so whether they stretched beyond the ditch terminals is unknown.

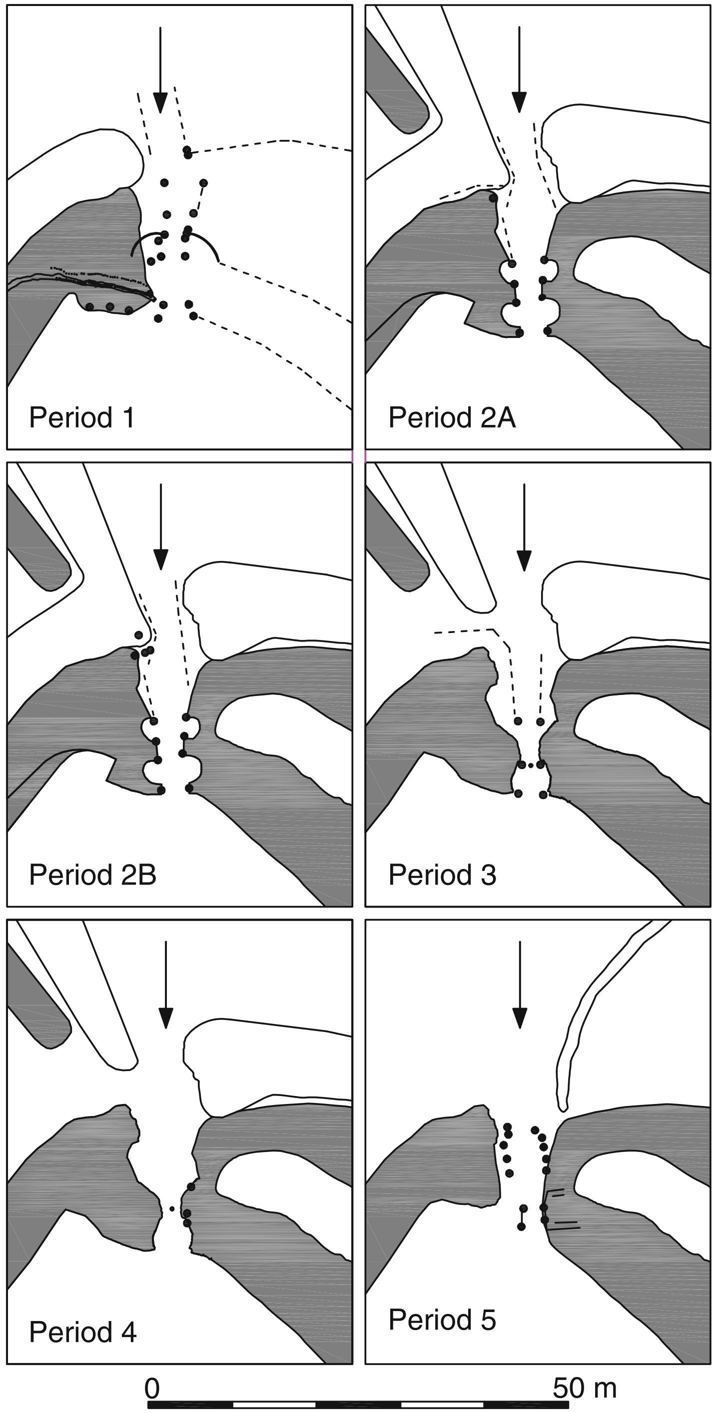

Fig. 15.2 Periods of the entrance at Castell Henllys; note all palisade phases are shown together on Period 1

It is likely that the initial use and then structural refurbishment would have taken all of the middle part of the fourth century BC, and this was followed by a period of neglect and collapse during which walls gradually fell down and the entranceway filled with rubble. The laminar form of the shale created surfaces on which traffic could pass, and it was very difficult to differentiate between shifted and arranged shale surfaces from naturally falling material. It would seem that small-scale, limited investment in maintenance of the route was undertaken, but generally the easy replacement of drystone slabs back onto the wall tops did not occur, and no more coherent rammed surfaces were created during this time. Even though much of the rubble was cut out in the refurbishment for the next period of gateway rebuilding, enough survived to demonstrate this restricted maintenance regime.

15.4.2 Fiery Intervention: Vitrification by Another Name

Before the second refurbishment, but quite when in the period of neglect it is uncertain, the outer western guard chamber and outer wall was set on fire. The in situ masonry was heavily reddened in places, but the most heavily burnt material, and that which was exposed to the highest temperatures, was all broken up by this process and the subsequent deliberate or accidental spread of the material. As a result, all evidence for the actual setting and operation of the burning has been lost; all that is left is the detritus that exhibits unequivocal evidence that very high temperatures were reached. The debris from this event was found in quantities in the area of the gateway and the guard chamber, but was also found more widely scattered, including in the ditch fills of the ditch terminals downhill from the entrance. After the event, it does not seem that the burnt materials received any special treatment. The burning event must have been the focus of interest, not any physical product of the event.

The area affected was very restricted, and did not entail wider deliberate destruction of the walling; that which was swept away in the cut to create the space for the later stone entrance phase still left much (albeit buried) walling in place. Moreover, the burning could have happened at an earlier stage in the life of the entrance, and following the burning most of the rest of the walling could still have been largely intact. There is no evidence of any destruction in the entrance area overall, nor that any of the major timbers were destroyed by fire.

Hillforts with vitrification are known from Wales as well as from other parts of the Britain, Ireland, and several parts of Europe including France, the Iberian peninsula and Sweden (Díaz-Martínez et al. 2005; Kresten and Ambrosiani 1992; Mackie 1976; Ralston 2006).

Understanding and dating the processes that created these vitrified masses of rock, some still cemented in place, others scattered as fragments, has a long if not particularly successful history involving experimental archaeology and various scientific analytical techniques (Brothwell et al. 1974; Childe and Thorneycroft 1937; Friend et al. 2007; Kresten et al. 1993a, b; McHardy 1906; Ralston 2006; Sanderson et al. 1988; Youngblood et al. 1978). The temperature required for vitrification appears to be c. 1,150 °C, and this can only be achieved through the concentrated and controlled application of charcoal-fuelled heating. Experiments with large amounts of wood have proven unsuccessful, and unpublished experiments by Don Brothwell to heat the Castell Henllys shale to a point where the bubbling appearance could be replicated have thus far failed. The Castell Henllys material does not show vitrification as such, but this is because of the geological composition of the shale. Here the rock has become a slaggy mass, in one case becoming viscous such that a timber impression could be left in the rock, presumably pushed into the material when it was in this state. Most known cases of intensive burning have produced the glassy vitrified material, but it may be that other highly burnt material has not attracted the same attention and may be more common. Its presence at Castell Henllys suggests that the activities that create vitrification may occur not to deliberately create the glassy effect, but that is a by-product of activities that presumably had a symbolic—social and perhaps ritual—purpose. The alternative is that it was hoped that the Castell Henllys burning would produce vitrification, but the unsympathetic geology meant that this failed. This is unlikely—the properties of the stone must have been well known and its incorporation in hearths meant that its reaction to heat, albeit at lower temperatures, would have been known. There can be little doubt that this was a deliberate act of intense heating and destruction, but limited to one place and one time in the whole history of the site. What caused this action remains completely obscure, but it must in some way be associated with the abandonment of the formal, monumental power of the first stone gateway, and may have presaged the period of neglect during which the rest of the walling collapsed.

15.4.3 The Second Stone Gateway

Following the clearing away of rubble, the new stone gateway ignored most of the previous walling except for the northeastern guard chamber which cleaned out and into which the convex outer wall of the entrance complex turned. The heavily burnt and damaged northwestern guard chamber and any walling beyond was encased in the later convex wall on the western side and a single pair of very shallow guard chambers were erected between four posts which were built into the walling. The post-holes were dug and the posts erected before the walling was constructed round them—an effective integrated design but not one able to easily cope with rotting posts and gate maintenance. The shallow nature of the guard chambers features is noticeable, and Cunliffe's later descriptor of these features as recesses seems particularly apposite here. Thus the rebuilt entrance was transformed from four semi-circular spaces to two concave recesses.

The gateway survived in use for a while, but it is clear that problems arose as the posts rotted. Some of the walling has slipped in a way that suggests that the integral timbers began to lean at an angle which suggests that they no longer formed a coherent structural whole. If the superstructure had been well maintained and jointed, the rotting off of uprights would not have led to subsidence, so this suggests that the gate was no longer functioning; leaning uprights would make the hanging and movement of gates impossible. This was presumably already difficult by this point as rubble collapse inhibited the swinging of the gates.

15.4.4 Entrances, Guard Chambers and Wider Comparisons

The guard chambers at Castell Henllys are amongst a small number excavated in modern times. Bowden's recent (2006) review of the evidence highlights interpretive issues, and these will be further explored in the following volume when the entrance and guard chamber reconstruction options are considered. Here it is worth merely examining the plan form of the Castell Henllys entrance in various phases compared with other hillforts.

The most notable feature is that the Period 2 pair of double guard chambers is unique in British hillfort studies, but it is also notable that the scale of the whole entrance complex is similar to other hillforts. That these site parallels were far more impressive in their size of enclosing earthworks and of site area is noteworthy. The level of investment at Castell Henllys, despite its small size, is directly comparable to many much larger hillforts. This would suggest that this is the scale of architecture necessary for whatever the functional roles of such entrances fulfilled. These roles could be military, social display, control of human and animal movement, or ritual activities whilst moving through liminal space. It also suggests that the resources necessary to plan, commission and build such features were available to those at Castell Henllys and that this was the case on two separate occasions (Fig. 15.3).

The dating of the Period 2 guard chamber phase of c. 370 BC would sit well within what is known of the chronology of construction for similar features in the Welsh Marches, with the shallow guard chambers of Period 3 perhaps being constructed in the first half of the third century BC. The rebuilding Period 2b suggests a number of decades between each of these structural events, and then there needs to be a period of gradual collapse before Period 3 (and with the burning or vitrification at some point in that time); if each of these were given a 30-year span, that would make Period 3 c. 280 BC, giving that then a further 30 year life for its gate before it began to collapse, and then further rebuildings and the simple timber gates seen in Period 4 lasting until the abandonment of the fort occupation in the late second or early first century BC.

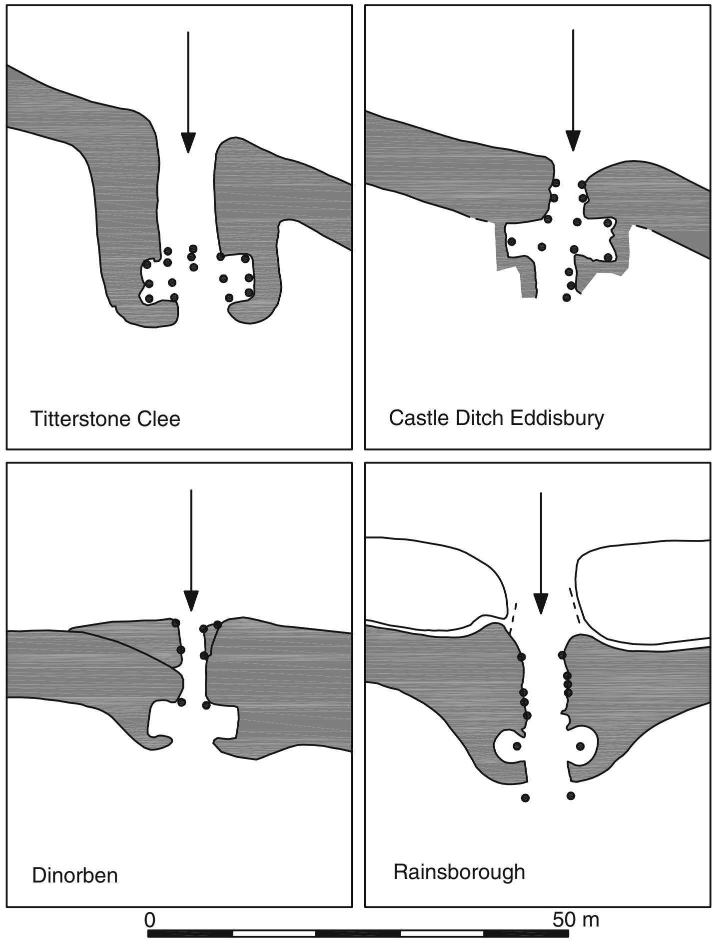

Fig. 15.3 Comparative hillfort entrance plans with guard chambers

15.4.5 Other Ways In and Out

The main entrance to the fort in the northwest was undoubtedly the main focus from the palisade period onwards, but at least in the earthwork phase the presence of two side entrances is significant. Not only are these without any elaboration at any time but they also nevertheless would have served valuable practical uses in allowing movement down into the valley to both the east and the west.

The very contrast in levels of investment and physical barriers to access can be compared with the main entrance, but this is mirrored in the access points within the annexe. It is unclear whether the central northern access was ever marked with a gate because of the numerous changes in plan at that point, but the eastern access point never had a gate, and the main northwestern causeway between the two ditch terminals only had a simple timber gate at one phase, presumably when first built. It would seem, therefore, that physical barriers to access and egress to the annexe areas or indeed the fort interior were not essential. Whether temporary blocking with timbers could be achieved remains uncertain, but it would have been hardly difficult or involving much resource to place gates supported on posts set in stone-packed postholes at any of these points. Moreover, in most cases the level of survival

Fig. 15.4 Plan of Castell Henllys earthworks and original contours

of other features or the height of the subsoil when compared with the buried soil beneath adjacent ramparts demonstrates that structural gate postholes would have survived and been easily identified (Fig. 15.4).

The many breaks in the perimeter earthworks were never blocked or controlled by gates. This has implications for the interpretation of the fort functions as a whole, and also the role of the main entrance, both in the palisade phase and in the two stone phases when elaboration at this point alone was so high.

15.5 Motivations for Monumental Enclosure

The arguments for and against the scale and type of violence in Iron Age Britain is discussed below, but here it is important to consider the physical nature of the earthworks and what they would and would not allow, and how they would have appeared from outside the fort. The scale and complexity of the construction, and the evident care in the placement of the line of first the palisade and then the perimeter and outwork earthworks, cannot be other than seen as a designed monumentality that should serve one or more functions. It should be assumed that the slopes of the promontory were cleared; keeping them in this state would have been easy using sheep to graze the steep slopes.

The palisade would have prevented easy access, but was not a major impediment to anyone with serious intentions or break in. The size of the uprights, and the presumed wattle fencing that it supported, could have been easily broken down, though only after the steep slopes of the eastern, southern or western sides of the promontory had been scaled. The nature of the enclosure on the northern, most easily approached side is less clear, however, and what role the *chevaux-de-frise* might have had is uncertain. The northwestern entrance complex, it would seem with more than one gate in each phase, would have been an impediment to easy access. The occupants could have used the advantage of height to throw stones or spears down on those approaching on the steep slopes, but would have had few natural or man-made advantages on the northern approach.

The palisade would have been a visually impressive boundary, easily visible across the valley and from the plateau to the north, which would also have given an impressive vista of the *chevaux-de-frise* and the northwestern entrance complex. From all directions, views across the valleys or from the higher plateau scarp edges would give distant but impressive views of the settlement perimeter and the interior.

The earthworks literally built upon the framework established in the palisade phase, but instead of enclosing the natural knoll within the settlement the earthworks incorporated this mound within the boundary itself in terms of the inner northern rampart. This and the outer rampart, each with an external ditch, used the slopes of the promontory (including the albeit gentle slope away from the promontory interior to the north as well as to east and west) to further enhance the visual impact of the earthworks. It is notable how both inner and outer ramparts rise to their greatest height at the knoll on the northeast, falling away in both directions to the eastern terminal and the main entrance in the northwest. The rampart begun in the palisade phase on the west of the entrance was not further enhanced. The ramparts around the entrance were in fact always relatively low when viewed from inside the fort, though the impression from outside, because of the lie of the land, would have been more monumental. It is notable that there is no palisade on the top of the inner rampart, though one was present for at least part of the line on the outer one, though there was no evidence of a palisade on this rampart near the northwestern entrance. The top of the main rampart was flat and broad, with a similar profile for the rampart on the west. This would have been ideally suited for use as a walkway, either by guards or those moving rapidly round the perimeter. The broad rampart top would have been an ideal location from which to launch sling shots on those to the north, northeast or west.

The southern part of the promontory perimeter was marked by the construction of a rampart, largely further out towards the natural scarp than the palisade, though this is less clear on the west. The rampart was made from deposits dug from the promontory sides, enhancing the already steep slopes, and also by digging a ditch which, at the southern tip at least, cut through shale bedrock. Even when the ditch filled up, it remained as a managed terrace. On the southeastern-most point of the circuit the shale bedrock was cut through, forming a small knoll which created dead ground for those approaching in that direction from the valley below, but presumably the earthwork builders desired the curved southern promontory top, rather than diverting to go round the knoll, with the consequent large scale quarrying necessary to carry the ditch round this feature. The rampart round the southern portion of the site was small—less than 1 m high—when viewed from the interior, but from the exterior the impression was of a rampart 3 m high with a ditch precariously dug out of a steep slope beyond. On the west at least (and perhaps originally on the east) the terrace was much wider than the ditch itself, further creating a visual effect. If a defensive role is invoked for the terrace it would be that it provided a clear space on which any attacker would have been completely exposed to anything thrown down from the significant height of defenders on the ramparts above.

15.5.1 The Outworks

Probably less than half the manpower invested in creating earthworks was devoted to the main fort itself. The rest was directed towards the outworks to the north where some of the ditches were the deepest dug at the site, and the massive ramparts were not aided in their formation by the incorporation of natural features as benefitted in inner fort rampart. Archaeologists focus on those earthworks that immediately surround settlement, but this may not be how Iron Age constructors or occupants viewed them. The outworks not only were massive in construction, creating an outer annexe enclosure which was itself split in two, but were also substantial on the western slopes. This was probably the main approach to the fort from the west that came up from the valley floor or the lower slopes of the northern side of the valley, close to where the historic Newport to Cardigan road now runs. The outer earthworks have suffered badly from agricultural activity in historic and modern times, so it is not possible to ascertain whether the size of the ramparts were maintained throughout the Iron Age, but the nature of the later ditches that ran up onto the earthworks suggest that they remained major earthworks throughout the occupation of the fort. Moreover, the ditch maintenance through cleaning and recutting was at least as intensive and in some cases more so than for the ditches enclosing the main fort, and when the outer ditch of the fort filled up completely, the northern outwork ditches still remained as visible features; the fate of the western ditches is less clear, partly through limited excavation and also because of their distance from the Roman-period settlement which reduced the likelihood of capturing datable artefacts in the fills.

15.5.2 Neglect and Abandonment

Once the ramparts were constructed, there is little indication that any were ever refurbished throughout the whole Iron Age occupation. There may have been small-scale maintenance that has left no trace, and the outworks are generally so degraded from historic ploughing that only the lower levels of the original construction survive, so whether they were refreshed is not known. However, the main rampart on the north and the excavated lengths on the west and south all indicate a robust continuance but no modifications. The only exception is the two phases of rear revetment stone walling on the west, running round from the entrance. When the eastern walling was installed is slightly unclear, but its position partly up the rear slope of the rampart matches that of the earlier phase on the west. The walling was clearly placed in a cut, and so was not assembled as the rampart was constructed, but it could have been added as soon as the earthwork had consolidated. In all other respects, the earthworks appear to have remained as they were, functioning in whatever roles they held, but not requiring any change. The collapse of most of the eastern rampart around the steep side of the promontory may have occurred during the Iron Age, or much later; that is unclear. If it did occur during the occupation, no efforts were made to create a replacement. As the slumping and infilling of the ditch on the west led to a recutting of the ditch and modification of the scarp slope, it is probable that if the eastern rampart had collapsed during the Iron Age some form of remedial work would have been carried out. The short length of the later ditch on the east, compared with that on the west, might suggest that the earthwork was still upstanding at this time otherwise this ditch would have run further south, but as it gets shallower as it runs south it may be that there was no time to dig this feature further.

The ditches associated with the ramparts did receive periodic attention. The main rampart and the various outwork ditches were all recut on a number of occasions. This suggests that although the ramparts remained stable and intact, the natural processes of ditch filling were counteracted by some cleaning, though rarely did this involve recreating the original scale of the features. It is impossible to ascertain whether the ditch cleaning formed sustained periods of activity across the whole site or ad hoc work on different stretches of ditch over time. Nevertheless, it is clear that most of the recuts must have been in the first half of the occupation of the site as the outer ditch of the main fort was more or less completely filled by the time that the settlement shifted into the annexe, as a number of buildings were constructed largely on the line of the ditch. Also, the Roman-period refuse deposits in the outer annexe ditch were also relatively high up, suggesting a largely infilled earthwork by that stage. It is possible that the recuts largely relate to activities soon after the initial construction of the earthworks and the first stone entrance, with a second bout of activity at and soon after the second stone entrance was constructed, involving a new phase of investment in the fort architecture.

The Northwestern entrance received two phases of intense investment, discussed above, but otherwise was also neglected. There were ineffective efforts and rebuilding and consolidating revetment walls, but largely the walling was allowed to collapse after each phase of building. It is unlikely that each major structure would have suffered collapse soon after erection, but it seems that if there were any maintenance this was not continued for long. Just as it was the construction of the ramparts that mattered most, the same seems to have been the case with the stone gateways. There were clearly timber gates, even if postholes were hard to dig through the rubble and so they may have been at least partly timber framed on sills, but there is little indication of any attempts at elaboration as sweeping away some of the rubble to create a new construction surface would not have been difficult. Despite continued use as what would seem to be the main access point, there was no attempt at any monumentality in the last part of the Iron Age occupation.

The earthworks of the main fort were left to the elements from the late second or early first century BC, and it would seem that no structures were maintained within the interior. The annexe area became the focus of a vibrant, albeit smaller, settlement, but even during that period of occupation the enclosing outwork earthworks received little attention.

15.5.3 Brief Revival

At some point in the late Roman or post-Roman period, however, the fort itself was once more refurbished. A timber approach to the entrance led to a simple timber gate set in walling made with newly quarried, thick slabs of shale. Slight refurbishment of internal revetment of the northern rampart survived at a number of locations, suggesting that this was continuous even if never many courses high. On the east and west sides of the promontory, ditches were dug presumably to provide materials for a small rampart to enhance the eroded Iron Age features, though no trace of this rampart survived. The ditches were clearly only open for a short period before they were infilled, including material such as early revetment walling that had been unearthed when the ditch was dug, and presumably piled up as part of the rampart. The western ditch ran round close to the entrance, suggesting that the earthwork on this side of the fort was already not very visible, largely because of the interior build-up of deposits that had occurred during the fort's earlier occupation. Some later ditch recuts, never very substantial, might suggest some slight refreshment of the main fort ditches on both the north and west; nothing particularly significant seems to have been carried out on the outworks, though a stratigraphically late and possibly associated ditch was dug across the annexe from the outer northern annexe rampart southwards to the entrance complex, completely closing off access to the annexe area.

The context of a late refortification is hard to assess because of the lack of dating evidence. Features are associated because they are all stratigraphically late, and together do present a coherent attempt to refresh the main part of the site. How the revival should be interpreted depends on one's view of late

Roman and post-Roman Britain, and particularly the socioeconomic state of areas such as west Wales during and after the demise of Roman administrative and military control of Britannia. It is noteworthy, however, that only through extensive excavations could these various slight traces be identified and assembled, indicating a scale or organisation and desire for renewed monumentality that whilst not on the scale of South Cadbury (Alcock et al. 1995) carries with it some of the same air of ambition and purpose. There may have been internal divisions caused by economic disruptions, though to what extent these affected peripheral settlements where only a limited range of Roman material culture seems to have been in use is unknown. The ending of taxation may have brought economic advantages that outweighed the collapse of long-distance trade networks. Of more importance was probably the breakdown of a higher order of law enforcement, and the reoccupation of the fort might be seen as indicating a return to traditional small-scale polities that retreated back to their ancestral bases; whether other settlements were abandoned or continued can be very hard to discern in a largely artefact-free archaeological horizon.

One interpretation can see the stimuli for change as largely internal, dealing with instability and reformulated power structures to replace the higher-order Roman administrative systems the tentacles of which would have previously reached out to all parts of the province. The other sees external threats and indeed arrivals as significant in promoting change. It is clear that north Pembrokeshire and south Cardiganshire are areas that experienced the arrival of an Irish population, possibly only a warrior elite, possibly a larger movement with families, and that these successfully integrated with major local dynasties and created a creolised society with Romanised and native Irish elements (Thomas 1994). The dating of the stones with Irish as well as Latin inscriptions demonstrates full integration by the sixth century (Edwards 2007), but when the process began could easily be in the fifth or even late fourth century. If the Irish arrival is seen as a major factor in settlement shift, which would seem likely, then the reoccupation of Castell Henllys could represent the native population wishing to create a focal point from which to negotiate and if necessary resist this infiltration. It would seem that the need for this centre was short-lived; either an accommodation was peacefully worked out, or a military defeat was the outcome. Whatever the reason, the settlement pattern shifted to open settlement within estates that continued into the Middle Ages. The major power centre shifted to (or was retained only at) Nevern halfway between Castell Henllys and the sea, on a site that was probably an Iron Age inland promontory fort similar to Castell Henllys but since modified by the Welsh and Normans into a motte and bailey castle (Caple 2009). The importance of the Nevern site in the early medieval period is indicated by the importance of the early church and its sequence of carved stones; some may have come from the neighbourhood but still demonstrate the elite investment in the area and there is no doubt that this was an early ecclesiastical foundation and by the tenth it century was receiving considerable secular investment (Edwards 2007). By this time, Castell Henllys was an overgrown earthwork, overlooking but not actively dominating the early church site of Meline in the valley below (Boon & Lewis 1976).

15.6 Narratives

The interpretations of the basic forms and sequences identified at Castell Henllys can be many and varied. With the site long interpreted to the public first by a private entrepreneur and then by the Pembrokeshire Coast National Park, and with the personal emphases placed on the type of desired past by their various on-site interpreters (with or without the approval or awareness of their employers), there have already been many versions of the Castell Henllys past. The public, viewing the excavations and seeing the site, its setting, and the reconstructions, have formed their own view of the past which they have shared with friends and family. Students excavating together have speculated with varying degrees of associated knowledge and logical rigour about what the evidence might mean. The parallel and contrasting narratives of lived experience will be discussed in the following volume, but here concentration shall be placed on the founding of the settlement and on the construction of the earthworks.

The problem with interpretation is that the inferential chain rapidly becomes one that is formed with links of assumption. Archaeologists often rely on several forms of inference to help construct interpretations, and these are more or less explicitly admitted. The most important is the use of analogy, in a range of types. Analogies come in the form of comparisons with recorded living systems, with which to animate the past static archaeological remains unearthed by excavation. These may be ethnographic parallels, such as those for New Zealand pā when considering hillforts (Armit 2007; Fox 1976) or African tribal groups when considering enclosed settlements (Bowden 2006), where aspects of these living systems either create similar physical remains to those found archaeologically, or where aspects of behaviour or belief could have been similar to those operating in the past. The criteria for selecting these parallels vary, but often include those such as environment, level of technology and expected equivalence in social complexity. There are many arguments as to why ethnographic parallels are problematic, yet their conscious use and more often unconscious inspiration infuses much of archaeological discourse. For some, awareness of all types of logical possibility is what matters, not that any particular set of circumstances and combination of material culture and practice has ever occurred before. For others, knowing that a particular combination was effective at a particular time and place for particular reasons which can be inferred also in the past gives the analogical inference strength.

Another major source of analogy comes from the historical record, and here the Classical sources referring to groups beyond the Mediterranean world and so contemporary with Iron Age Britain have long held a particular attraction. Combined with an application of the social structures and belief systems preserved in early medieval Irish sources, greatly influenced by the work of Jackson (1964), they create a powerful web of material that forms a framework for many interpretations (Hingley 2011). These sources combine with aspects of material culture—notably La Tène art which is conveniently present in both the fringes of the Classical world and in both the late prehistoric and early medieval Irish cultural traditions. They create a package of what is normally seen as a Celtic past that provides a pan-European framework onto which any variation in time and space can be laid.

These inferences are seen as more reliable by their supporters than the ethnographic because they are tied (in general terms) to the same regions as those where the archaeology was formed, and by people not that separated in time from those actors (Cunliffe 2005, 2013; Hawkes 1931; Megaw and Megaw 1986, 1989; Wheeler 1943). For some, there are also important linguistic continuities which can be used to infer social and ideological structures that are intrinsically Celtic, a preserved way of seeing and ordering the world that can be discerned from the language (Karl 2010, 2011). For the detractors, the detailed contexts of the historically attested groups are seen as unique and particular, and indeed the nature of the archaeology associated, for example, with the Irish early medieval period is not similar in many respects to that recovered from the British Iron Age, and therefore the relevance of the parallels is questioned (Collis 2003; Hamilton and Manley 2001; Haselgrove 1986; Hill 1995b; Hill and Cumberpatch 1995). The Celtic model provides a framework within which a male-dominated hierarchical social structure of chieftains and warriors dominate society. Control of long-distance trade and craft production is linked to raiding, feasting, boasting and domination of a largely submissive and accepting population engaged in agricultural production of surpluses to support the elite which also includes entertainers and ritual leaders linked to the Druids in popular culture. The extent to which archaeologists exclude these elements from their interpretations varies (James 1999; Sharples 2010), but affects the type of social structure envisaged, and the importance of violence in the interpretation of the evidence (Fig. 15.5).

The arguments for interpreting hillforts as having a significant defensive military role are based on the assumption that violence was a recurring threat during the Iron Age. The evidence for this comes in a number of forms, but what this implies about the frequency of conflict, its social context, and how far it would affect decisions to construct and maintain hillforts, is less clear. There is no doubt that there was a certain amount of interpersonal violence that included the use of weapons, as seen in burials with trauma (Boylston 2000). But these are restricted in number and could have been

Fig. 15.5 Sling experiments. *Top*: Newport sands with experiment under way. *Bottom*: range of slings used in the experiments

acquired through fights as much as through more formalised warfare. Even ritualised killings, at first identifiable in various forms of bog bodies and foundation deposits at sites and structures, are less conclusive on close examination than might be first assumed (Green 1998). A range of weapons are known, some highly elaborate and others simple products, and these include swords and their scabbards (Stead and Lang 2006), knives, spearheads, shields and sling stones (Brown & Craig 2009; Cunliffe 2005; Finney 2006). Again the role of these items is far from clear, from personal protection through use in hunting to status symbols associated with a warrior ideology or ritual activity where some form of military force is displayed or invoked. Warfare could be a purpose for many of the weapons, but their relative rarity does not easily demonstrate extensive military activity. Nevertheless, the presence of many sling shots, notably in the large hoard associated with the Period 2 stone entrance, but also in small caches elsewhere as well as single finds from across the site, meant that we conducted experiments at Newport beach that demonstrated the ease of use and the distance and accuracy that could be rapidly achieved after only a few hours' practice. What was most notable was the low level of technology and investment required in the equipment, the equivalence of gender in firing the sling, and the trajectory that was clearly a parabolic curve that meant a nearly vertical landing, though with a small amount of horizontal movement still present on impact (Fig. 15.6).

The nature of Iron Age warfare, however frequent or rare, is equally difficult to ascertain. No scholars imagine large armies operating over considerable distances and on campaigns that lasted months if not years. Avery (1986, 1993a) probably represents the strongest modern support for standing professional military forces, but the assumption that violence and so warfare was an ever-present

Fig. 15.6 Sling experiments. *Top left* and *right*: rear views of sling action. *Bottom left*: side view of sling action. *Bottom right*: impact of sling shot in sand

possibility is espoused by Armit (2007; Armit et al. 2006), and even where the military role of guard chambers is challenged, the idea that hillforts had at least a partial military role is not questioned (Bowden 2006). Others, however, consider that the military aspect is of no great importance at all (Lock 2011; Miles et al. 2003) and many archaeologists have become increasingly cautious regarding the place of warfare within Iron Age society in general, and as a cause for the design and construction of hillforts in particular (Cunliffe 1991a, b, 2005; Sharples 2010). However, the use of not only the word hillforts but also the term defences to describe the perimeter earthworks implies a role that includes the military, and the lack of easily applied descriptors to the earthwork features encourages at least a veneer of militarism even if the bulk of the interpretive text implies ambivalence. The scale of the investigation at Castell Henllys allows some review of these issues with regard to one particular site that, in earlier generations, would be seen as eminently defensive, and with a clearly selected siting for the purposes of military protection.

One of the main difficulties with analogy and inference in the British Iron Age has been the destruction of the dominant Wessex model that provided a blueprint for chronology and patterns of cause and effect that could then be applied in diluted form elsewhere in Britain. The creation of narratives and explanations in one well-studied region, also fortunate in having numerous closed deposits in pits and a ceramics-using culture that generously largely deposited its refuse in geologies that preserved metals and faunal remains, meant that a richly detailed explanation could be provided that was tied into whatever dominant ideas the archaeologist preferred about how the Iron Age operated. However, as research in other regions has shown that the Wessex narrative is not applicable elsewhere, and indeed as more work in Wessex shows that even its narrative is less and less coherent and localised, alternatives become visible, the application of analogy from one set of Iron Age regional contexts to another also becomes problematic. On the one hand no one doubts that there were local, regional and some long-distance contacts throughout later prehistory, but their frequency, power of interaction and scale of cultural exchange that they might have engendered is far from clear. Ironically, as our data from the Iron Age has grown in amount, chronological and geographical distribution and quality, our ability to articulate the data into meaningful patterns, associations, causal chains and interpretations has been negated by the problems of comparison across diverse regional histories. All may yet settle to a new level of clarity, but at present the fissioning to the local is evident. In interpreting Castell Henllys this is not necessarily a problem, building up from the excavation data that allows the formulation of a site-based biography, but attempting to place the particular narrative in a wider perspective immediately highlights numerous levels of assumption, some at least of which one should acknowledge.

Another important issue regarding interpretation is that of scale, whether viewed from the point of view of the actor, with events, actions and reactions being central, or whether the view is a more distant society-wide broad sweep through time and space with wider environmental, demographic and socioeconomic forces at play. What therefore is brought forward as an explanation can vary in scale and extent, and this is possible even at the level of a single site. Bearing all this in mind, what follows are two contrasting narratives about the site. At points they intersect, but they are not mutually self-supporting; at times they are contradictory. Many more of these narratives could and probably will be written, and written in different styles and formats. From the evidence, none are untrue; how close any may be to the past reality remains for the reader to decide, though on what grounds I leave them to ponder. Each could be expanded into much longer narratives, with greater detail linked to Castell Henllys and also set in the immediate landscape of settlement and the wider landscape of changes happening over a broader front. These, perhaps, will be told in other places, but what is here at least shows how varied might have been the past. They are not told from personal perspectives, but these will be included in the lived experience narratives linked to the second volume.

The two origin myths are offered as examples that sit at points sympathetic with current emphases in Iron Age interpretation—the Celtic militaristic hierarchical model and the community-building more egalitarian model. However, options could range from an extremely violent conquest marked by genocide of any native peoples through various degrees of slavery, bondage and serfdom to completely indigenous peaceful collaborative venture in an egalitarian society. Immigration into an empty landscape is less likely as there is no evidence of clearance of trees and the creation of tree holes on the promontory in the significant areas of buried soil uncovered, so we can assume an at least partially managed pasture and scrub. The absence of any known early Iron Age settlement is due to problems of observation with regard to open settlement, and indeed there are many forms of palisaded and enclosed settlement now identified from aerial photography that might fill some of this chronological gap, with Berry Hill Camp being a site that was albeit only briefly occupied in the period prior to the Castell Henllys occupation (Murphy and Mytum 2012).

In both these origin myths gender roles are not highlighted, and neither are different class-based differences in perception, experience and action beyond the various building blocks of the societies as envisaged in the models. These potential varieties of experience and agency are easier to explore in the daily practices considered in the subsequent book, but they could have been highlighted here. The reader is left to decide on the age and gender of the warriors or council members, their perceived or actual ethnicity, their language and their wider cultural repertoire. Perhaps the reader does not imagine such categories as necessary as they read the myths, or they populate the narratives with distinctive types which make for them a comfortable and credible past.

15.6.1 Origin Myth 1

Here we have a story where elements of the Celtic package are applied, with hierarchical somewhat warlike bands arrive, inspired not only by the culture-historical models of the twentieth century (Hawkes 1959) but also the recent interests in population movements and tight chronologies now available through AMS radiocarbon dating available for some parts of prehistory and early history (Cunliffe 2013) that have brought events back into considerations. Whilst this scenario is not overly violent, there is a level of coercion and inter-group violence endemic within the society which provides a motor for initial changes and which keeps the settlement in dynamic equilibrium.

15.6.1.1 Starting Off

The band of warriors beach, their couple of craft on Nevern sands, aware that their scouts from the previous year had searched the coast and up the river valleys to find suitable locations for settlement. Frustrated by the limitations of succession in their homeland to the east, they are anxious to establish a new community in a largely unexploited landscape where scattered, disorganised groups live in shifting temporary settlements with a mixed, though largely pastoral economy but where extensive woodlands are partially managed for timber and firewood. Slowly they crept along the lower edges of the valley sides, away from the boggy areas but not easily seen amongst the spring growth of the deciduous woodland. They would be soon noticed, but whether there would be any response was uncertain.

By the end of the day the chosen spot was reached—a spur in the valley that commanded good views of the immediate terrain in all directions, with running water in the valley below and a spring on the spur under 100 m away. Grazing animals had kept the tree growth on the promontory top to a minimum; the slopes were more wooded, but even here the cover was relatively open. Camping on the eastern slope minimised their visibility, and the first settlers could begin to construct a temporary camp. With the warriors were a few craftsmen and those who knew how to read the landscape and identify those places where dangerous spirits lived and where propitiation was necessary to ensure survival and success.

Supplies were limited, and the threat from the local people ever-present; negotiations for peaceful coexistence or a show of force to subdue them from an early stage was necessary. The band set off and approached the open settlement of a few roundhouses, singing traditional choruses and waving their albeit limited range of weaponry. The young men from the settlement came out and paraded in front of them, shouting back and waving their few spears. After a skirmish, however, they realised that they were both outnumbered and without the necessary skills; their scattered kin were too far away to come to their aid in time, and some form of accommodation was the best solution. Agreements were made for the supply of foodstuffs, assistance with the location of key resources for the new settlement, and they revealed the location of their sacred places. The local population became subservient to the promontory dwellers as protracted conflict could not have been sustained, and cattle, families and livelihoods would be threatened by resistance. These were not the only groups moving into this land; a number of scouts had been seen in recent times, and others were apparently setting up similar settlements along these valleys and the coast. These groups were not all on good terms with each other;

being allied with one at least formed some sort of protection both against other incoming groups but also some of their traditional rivals who occasionally made forays into their territory to raid animals and try to carry off the women.

15.6.1.2 Making the Palisade

The settlers established their base and sent messengers back home to send further supplies and families. At the same time, the work on the palisade began, undertaken by some of the newcomers and the indigenous people who were put to work to collect the coppiced timber and quarry the stone from the promontory slopes to use as packing in the palisade. As a symbol of their belonging to the group, and their allegiance to the newcomers, the indigenous peoples brought rocks from their fields in order that the *chevaux-de-frise* could be built across the spine of the promontory. The incomers arranged the stones to create order from the mass of rocks, varying considerably in size, shape and colour, to create a magical and visible barrier in the space between the settlement and the spring. With the slopes of the promontory cleared of the few trees and scrub, the settlement stood proud and visible to all around.

The incomers were not themselves productive in agricultural terms; rather, they controlled the scattered farming population, protecting them from other incoming groups and their raiding, and at times making forays into neighbouring territories to show that their presence should not be taken for granted. Castell Henllys was their highly visible home, a symbol of the territory and peoples that they controlled, and it was these subservient groups that maintained and physically built most of the structures that were erected. The palisade acted as a protection against rapid raiding, by day or night. It was easy to patrol, and everything inside was safe. Any raiders had to face passing the *chevaux-de-frise* and the entrance funnel, or climb up the steep slopes of the promontory from which safe and speedy escape was also difficult. From the protection of the palisade, spears, rocks and insults could be hurled, sufficient to keep the small marauding rival bands away from the settlement; if they took advantage of those in the indigenous settlements, revenge on the equivalent settlements could be swiftly put in place. If bragging rights were really at issue, some form of combat in the open would be arranged, but always such that the underlying social structures were not undermined by individual or group ambition.

Entry into the palisaded settlement was restricted. The incomers and their families lived there, but others had to approach with caution and respect, and enter through various gates and a fenced entranceway to enter the settlement itself. That was a world not available to the indigenous peoples except on particular occasions for selected individuals. Moreover, the approach route kept changing, these adaptations brought about by successive redesign of the entrance complex linked to whichever inhabitant was in charge. Amongst the warrior class there was competition for supremacy, some wishing to confront and dominate other fort builders in the area and others favouring a peaceful cohabitation, some wishing to take more young women for more wives from the indigenous peoples and others desiring to keep them compliant with a more benevolent style of control. As time passed, these men died or became too old to be physically dominant, though their experience and status as pioneers ensured that their voices continued to be heard. Their tales of land-taking and community formation were told and retold, and the new generation realised that the settlement was reaching a point where the ultimate designs of the colonists could be realised. More and more roundhouses were built in the interior, more families occupied these, and the population now stabilised not through further migration but by internal growth.

At one stage, labour was again drafted in to dig a ditch and create a gravel rampart on the western side of the entrance, but the efforts did not extend to any other part of the perimeter, and gradually the power structure solidified and consolidated, with a simple hierarchy that created a stability even if not equality and equanimity amongst all the inhabitants. The moulding of the hill had begun, and plans were laid for a more ambitious scheme.

15.6.1.3 Making the Earthworks and Stone Entrance

Once the plans were drawn up for the construction of the earthworks, a sacrificial ceremony was held in which a pit was dug next to an upright post, and sacrifices were placed within the pit. We do not know whether these were animal or human, but they could have been representatives of the settlement, the fertility of the community's territory or could have been captured trophies given as an offering in preparation for this major transformation of the settlement. The rituals could have been private and restricted, secret knowledge used in the necessary propitiation of spirits, and providing protection for the generations to come. Or it could have been a public ceremony, attended by all those within the community, or even with many of the subservient peoples present to witness this great beginning. Once buried and the turf replaced, the process of earthwork construction could begin; quite when in the sequence of construction other structured depositions were made is unclear, but all seem to have been made shortly before that part of the rampart that sealed them was constructed, and with the first layers sealing in the offerings carefully placed so as not to move the crucible off the infilled posthole or antler pick from its stone setting, for example.

The ditch was begun with requisitioned labour, supervised by the inhabitants as they awaited the arrival of the specialist fort and entrance builders known through kinship links with those to the east. A considerable amount of material was removed from the ground by these teams of workers, though possibly their passivity belied their resistance, and they may have deliberately overcut the ditch digging along the southern edge, to literally undermine the whole operation. Appearing to enthusiastically embrace the monumentalising tendencies of the elite fort residents, they may have overstepped the laying out lines to create a void where the rampart should have run. Either this or the leaders did not know exactly what was required.

Whatever the reasons for the mistake in planning, once the distant kin arrived, with full of knowledge of guard chambers and dump rampart construction methods, the problems were overcome and the materials collected from the ditch digging began to be laid down in a series of deposits, starting from near to the foundation pit and expanding from the spoil left from its digging. The work gangs may have changed in size and composition as they came in shifts from continuing the work in the fields and with the animals, and maintaining provision of water, firewood and other supplies for the fort inhabitants. It is likely that the experts resided for many months to complete the project, building the rampart east of the entrance, extending that to the west down the western side of the promontory, and organising the quarrying of stone and cutting of the necessary gate timbers before then constructing this complex feature on which, eventually, the gates could be hung. It is also likely that these experts then arranged for the inner revetment wall to be built, again requiring yet more stone to be quarried from the slopes of the promontory, and in the process even further enhancing the steepness of the approach on those sides.

It would seem that all these operations were controlled by people who knew how to build a stable rampart, even over an infilled ditch, and who could control a workforce working as one. It is possible that the southern rampart was not directed by these experts, or if so they chose different working methods. They may have returned home, having completed the internal revetment walling, and the inhabitants were left to organise their commandeered workforce to dig ditches, scarp the slopes and make the smaller rampart round the southern part of the perimeter. Not knowing how best to achieve their aim, they set many gangs to work each on a separate section, digging the ditch and bringing the material up to make the corresponding section of rampart. Only as the work moved towards completion was it clear how varied the construction had become, but the matter was resolved by the application of a unifying and smoothing layer of clayey matrix along the rampart length, creating a uniform shape and appearance.

Behind the entrance tower on the west was placed a large hoard of sling shots, lying on the sloping rear of the rampart. Collected by the subservient population from beaches or streams, and certainly not available from the immediate hinterland of the fort, these formed a huge store of weaponry necessary for the protection of the fort in which all—men, women and children—could participate to fire volleys of shot either far down into the valley below around the promontory perimeter, or to the outer annexe earthworks or beyond from the main northern inner rampart. Whether any inhabitants had spears and swords is not known; such artefacts would not have been lost or deposited—but the scale of the hoard suggests a clear concern with defence.

The incomers built Castell Henllys in that they had it built by others; though relatively small in number, they were able to provide a hierarchical, decision-making structure that overwhelmed the indigenous diffuse power structures and competed with other very small-scale polities scattered along the river valleys. Much time was spent in low level diplomacy, negotiating marriages, exchange of resources and settlement of disputes. As time passed those at all levels within this structure saw their place as inevitable, the system as immutable, and all this was reinforced by the controlling influences of the spirit world and the inevitability of the Castell Henllys inhabitants' superiority as recounted in the origin myths and stories that by now stretched back a number of generations, when life before the arrival of the settlers was unknown, dangerous, and not to be considered as an alternative. The enclosed, monumental world of Castell Henllys was both normal and necessary. The sculptured hill spoke of the power and history, success and domination, and inevitability of the world order as lived on this settlement.

The origin myth could continue with commentary on the continued effectiveness of the earthworks, and on the remodelling of the gateway, but it is worth instead pausing at this point as an alternative narrative for the same segment of the Castell Henllys sequence.

15.6.2 Origin Myth 2

This image of the Iron Age views the past small-scale communities within the region as largely collaborative, following strategies of cooperation across kin groups and with largely peaceful relations with equivalent groups at greater distance. Here the fragility of the subsistence regimes and the limited technologies for food storage makes any change in productive capacity, brought on by slightly increased population or a string of poor harvests caused by poor weather or disease, a threat to security. There has to be a reason for the change in settlement to an archaeologically visible enclosed one, and the old archaeological cause of 'stress' is invoked, a vague, meaningless coping strategy for the archaeologist with an effect without a cause. However, the implication is that whatever meant that the small-scale groups were effective was undermined and that larger, concentrated populations, albeit still of very small size, provided better viability. This might be because it pooled a greater knowledge and skills base, offered greater resilience to demographic irregularities, or allowed certain collaborative actions such as harvesting to be completed in particular places more quickly before the crops could be damaged by bad weather. As we do not possess the 'before' data we can only see the result of agglomeration in the 'after' of Castell Henllys.

15.6.2.1 Starting Off

Tensions were rising within the scattered communities across the steep-sided valleys and open plateau areas of the Nevern valley. The loose confederations of extended family groups were not able to maintain their equilibrium, though the reasons for this breakdown were debated by those involved. Were there more people in the communities? Were there problems with the agricultural regimes? Did the disputes over resources intensify or was this just an illusion? The desire for greater solidarity was growing, and the response was clear. At the seasonal gatherings where extended kin met and exchanged news and goods, where marriages were arranged and ritual acts were performed, it was agreed that the coming together into larger settlements, more clearly fixed within a territory and marking a place in the landscape, was the best solution to the stresses that the scattered isolated lives threw up.

The landscape and its resources were well known, and shared in overlapping patterns of exploitation within the wider kin group, so a location within this area was required. Given that other groups were also coming together, and would also wish to demonstrate their new level of cohesion, choosing a site that was prominent and equable for settlement was paramount. The inland promontory in the Nant Duad valley was ideal, close to a wide range of resources, well drained, visible and already well known in the landscape, and yet not the ancestral home of any of those coming together to form the new kin group. Together, the site was selected, and volunteers from each farmstead set off to set up the new settlement.

15.6.2.2 Making the Palisade

Easily supplied from their home farmsteads, the settlement builders initially camped on the site to begin clearance of scrub and collection of materials to begin to build the settlement. As other extended kin groups decided how they were to deal with the pressures they felt, the Castell Henllys group determined to mark their settlement clearly with a palisade. This was a traditional form of settlement definition, but this was to be larger and more magnificent than anything that had surrounded the small farmsteads hitherto. Moreover, the location jutting out into the valley proclaimed the kin presence, the rights to the land and resources of the valley bottom and sides, and to the plateau pastures and cropped areas beyond. The resources for the palisade were gathered from the traditional coppiced woodlands, brought in bundles by each family from their own patches of managed woodland. They could gather these seasonally and work on the building of the settlement within the rigours of the agricultural year.

Slowly, over a number of years, and as the settlement builders came and went from the promontory back and forth to their old homes, the settlement began to cohere, and families moved onto the site permanently. In time, the scattered farmsteads were either abandoned or kept as satellite settlements, useful as bases for exploiting slightly more distant parts of the territory, but not the key social or economic nodes of activity. Soon, no one was being born anywhere except Castell Henllys—that was home and the centre of social life.

15.6.2.3 Making the Earthworks and Stone Entrance

The community was now established, bonded together in the daily, seasonal and annual routines necessary for survival and the maintenance of social life not only within Castell Henllys but across the wider landscape. This uniting, yet differentiating from others, was a spur to move beyond the enclosure by the ephemeral and by now dilapidated palisade to a more permanent, solid, clearly monumental definition of the settlement and the landscape beyond.

The whole community came together to work on the main northern rampart, but first the spirits had to be placated by the necessary ceremonies and sacrifices. Given the moulding of the earth, placing offerings within the ground, and on the interface between the old surface and the new upcast was essential. The closing off of some postholes with offerings, and using stone and clay to seal the structured deposition of antler, was witnessed by the community to understand and perpetuate the memories of this momentous stage in the history of the community. Whatever or whoever was buried, whoever provided the items for the other depositions, they represented the wild and the domesticated world, and the craft world; it is possible other offerings represented plants, textiles and other aspects of community and everyday life, but these do not survive.

Stories of earthworks, of hillforts perhaps already begun in the region and certainly accounts from farther afield would have reached the inhabitants through their interactions with their neighbours and perhaps peripatetic traders and specialists. Contacts were made to bring in those who knew how to construct such monuments, but in the meantime the plans for the arrangement were worked out building on the palisade experience, and groups were organised to provide labour whilst maintaining all the daily and seasonal tasks required for survival.

The unity of effort was emphasised by all being involved in the ditch digging, spoil moving, and eventually the rampart building. So enthused were all with the possibilities of creating the monumental enclosure, work on the ditch digging began before any specialists arrived, in order have ready piles of spoil, kept by material dug from the glacial till, so that the rampart building could commence as soon as the experts gave their instruction. Unfortunately, when the experts arrived the early efforts had been partly misdirected, but solutions were found and the ditch infilling rapidly began after the special initial rampart deposits were placed near the burial pit, and after a while the post marking this could be removed as the rampart grew in width, length and height. Over time, the communal efforts bound together the families and generations as the layers of rampart were placed and consolidated. The efforts required to quarry and build the stonework were easy enough that an elaborate entrance could be constructed, involving more chambers than those of other groups whose impressive structures were recounted by travellers to the site and the expert builders who stayed with the community.

What was most important was that the hill should be shaped, reworked and formulated so that the community was safely enclosed, protected from all those hidden forces that lay in the wildwood and in lonely places. Burying the *chevaux-de-frise* under a massive earthwork with outer ditch transformed one communal, shared experience and monument into another, one even more visible from a distance, better able to direct and control access to the site and particularly, with the other outworks, to the annexe area, whatever functions and purposes it served. The result of all these efforts was that not only did the community come together in the building, but also created a unifying symbol that could be seen by all those around. The spirits were dispelled, and the local neighbouring polities impressed by their distant views, from any direction, of this massive working of the land into a new form that symbolised the powerful unity of purpose of the Castell Henllys inhabitants.

Once erected, the generations occasionally cleaned the ditches but had little to do to maintain the ramparts. They provided opportunities for parading, ceremonies, and views of the surrounding landscape—whether all under control of the inhabitants or dominating the views of neighbouring groups we do not know. Certainly all those passing by would not be other than impressed, and anyone wishing to enter the site would be expected to approach through the annexe and in through the major entrance, which needed maintaining until it fell into disuse when all knowledge of what to do to continue its effective working was lost over the generations.

Why do the earthworks give the impression of a military arrangement to modern eyes yet would not have done so in the Iron Age? Why indicate that these lines were chosen for visual impact? What should be made of the massed hoard of sling stones? The first point is that such investments do not create effective military features against most of the raiding bands that were the most likely form of threat. At dead of night such groups could easily scale the slopes; there was not even a fence to negotiate. Moreover, the side entrances were left open and exposed, easily reached by well-worn paths from the valley below. The requirement was to enclose; that was the psychological, cultural and spiritual necessity. The monumental nature of this enclosure was a social need, both in its creation as a uniting force, and as an enduring symbol of identity, unity, coherence and protection. The sling shots represent a store of weaponry that could have been used to deter and keep at a distance those not welcome, but may also have been used in hunting and in herd control. Their collection and storage may have as much as been part of a symbolic, communal sharing as much as a military necessity. Moreover, when the entrance was remodelled, the sling shots were buried; if defence were still a major concern, why not retain them (no equivalent hoard replaced them), and if the entrance reworking indicates military threat, why then lose such an important armoury? If the inevitability of the military component is discounted, other arguments and ways of seeing motivation and function can arise.

The earthworks enclosed the settlement, yet also displayed it to the world around. The placing of the ramparts where they were meant that the maximum amount of interior could be viewed from outside, the ever-changing profile of the northern rampart setting off the rows of roundhouses within, the slope of the promontory top ensuring that their numbers and appearance could be clearly seen from a distance.

15.7 Conclusions

Castell Henllys provides us with a complex story, all set within a period of less than three centuries within the Iron Age, with its subsequent brief swansong after the settlement shift into the annexe area. The monumental investment in earthworks and northeastern entrance was presaged by a timber palisaded phase with its associated *chevaux-de-frise*, with both this and the guard chambers demonstrating that the site was within the wider cultural swim despite the limited artefactual evidence of contacts. Castell Henllys may lie on the western edge of what is now conceived as Britain, but it was then on the western seaway routes that allowed contacts north and south, and round to northeast and southeast Wales and the Welsh Marches by sea. From nearby Carn Ingli not only Snowdonia in North Wales but also the Irish Wicklow Mountains can be seen; Castell Henllys was even visually linked to a much wider world. In local terms the site was a monumental investment that created a powerfully evocative place in the landscape, formed through massive investment of labour and materials and which endured for centuries. We have discovered much about the process of settlement formation, from initial colonisation and establishment of place, early enclosure in timber, and the replacement after a period with earthworks. Castell Henllys has provided insights into the process of settlement creation that with be further developed when the roundhouse reconstructions are considered, but here the need to define and enclose is the focus of attention.

The origin myths given above show some of the alternative ways in which the past can be evoked from the Castell Henllys evidence, and yet others could have been offered even by this author at this time. If I had to choose from these narratives, my current feeling is for the second of these, though most of the current public site interpretation would derive more from the first. Over the period of excavation, the team's impressions of the communal/defensive debate have shifted back and forth, and rarely has there been unanimity. And perhaps there was no unanimity in the past—some may have seen the earthworks as uniting through their construction and use, others may have desired them as a militaristic statement; that there could be different past perceptions, motivations and alliances of interest groups is so frequent in contemporary contexts in all types of society, perhaps we should assume a similar diversity for the past rather than invoking some monolithic unified attitude in the Iron Age. The possibility of sabotage in the ditch digging may be a sign of resistance that so rarely can be seen.

Archaeologists can view from the remote future the actions of people in the past, evaluate causes and effects and propose motivations and internal and external dynamics in individual people, family groups, and larger sociopolitical entities. We excavate deposits, working and living on sites that we investigate, and begin to obtain some sense of place, but this can never allow us to fully appreciate the uncertainty, excitement, challenge and motivations of those whose efforts have attracted us to these places millennia later. However, our unpicking of actions and processes have provided us with images and narrative chains of stratigraphic evidence that at times relate to short periods of time—such as construction phases—and to longer periods beyond the conscious experience of past individuals, such as the erosion and decay processes. We therefore have a privileged and unique view on this place that was so special for so many people over several centuries, and which is being made special again through excavation, reconstruction and public interpretation. At one level, Castell Henllys was just one of many Iron Age settlements; at another it was and is unique. The results of the original inhabitants' labours, and those of all who have worked on the excavations in recent decades, can now offer the world something that is both linked to its singular space and time, and which at another can represent aspects of Iron Age life, culture and achievement at a wider level.

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