

Chapter 6

The Post-Medieval Period Research Agenda

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Introduction

The post-medieval archaeology of the North West is most significant for offering an alternative narrative to that constructed in much of midland, eastern and southern England. It is a narrative that is intimately connected with an expanding Atlantic economy and the environmental and socio-economic conditions that led to the onset of industrialisation. Nevertheless, some of the period's key defining characteristics are national developments such as the Reformation and Dissolution and the extension and intensification of agrarian activity in response to population growth. The archaeology of the Reformation and of proto-industrialisation are both significant but neglected areas of research in the region (Gaimster & Gilchrist 2003; Barker & Cranstone 2004). Some English landscape archaeology and history has tended to focus on lowland arable regions ignoring, or failing to appreciate the significance of, upland pastoral areas. In particular, knowledge is lacking on topics such as grazing management and stocking regimes from medieval times onwards, and the impacts that variations in these had on vegetation and erosion. Variations in the nature and intensity of upland farming both through time and geographically at any period are far from being clearly understood.

Despite the evident benefits of post-medieval archaeological research in the North West, the geographical focus of development, and the dominance of resources by the South East, has meant that post-medieval archaeology in England has had a considerable southern bias until very recently (Gaimster 1994, 287; Newman 2001, 1). One area of research that has generally lagged behind developments elsewhere has been material culture studies, in part because of inherent deficiencies in our knowledge of local material culture consumption and production in the region.

Since artefact studies, especially ceramics, dominated post-medieval archaeological research until at least the 1980s, it is not surprising that the post-medieval archaeology of the region remains under appreciated. Research into regional ceramic production and consumption is of central importance in the construction of research frameworks for the whole period. The development of ceramic technology and its contribution to the economic development of the region is poorly understood. The role played by the region in the evolution of the ceramics industry in the British Isles is unclear. The absolute dating of much of the ceramics from the region is based on too few independently dated sites such as those associated with the Dissolution or the Civil War. In many cases ceramic types, such as Cistercian and Yellow Ware are crudely dated to the 16th and 17th century respectively. There is no research directed towards the establishment of an agreed set of regional ceramic chronologies, nor have there been local studies examining the relationship between the changing natures of ceramics and developing culinary and social practices.

In other areas of artefact research, such as clay pipe studies, the basic work of cataloguing, establishing chronologies and identifying origins is further advanced, allowing research into the social context of the objects. A notable regional example of such work was the comparison of the clay pipe assemblages at Norton Priory (Ch) country house and the adjacent village. These showed distinct differences that appear to be related to social standing and wealth (Davey 1985, 164-66). Similar projects throughout the region would be useful, especially those allowing comparisons between urban and rural communities. The clay pipe has been used as an exemplar of how post-medieval material culture should be used to illuminate an array of aspects of contemporary life, so that



Fig 6.1 17th-century silver coin board from Congleton, Cheshire (Cheshire County Council).

a story is told that includes but moves beyond the simply economic sphere of life. *‘The humble clay pipe can be ‘read’ in a whole series of different ways, placed into a series of different contexts, and can be found to be as complex in its meanings as any historical document or literary text’* (Johnson 2002, 202).

In towns particularly, the past removal of later archaeological deposits in projects more interested in earlier remains may have hampered the contribution of excavation to the study of the period. In some places where more durable buildings began to be constructed, and waste was removed to the hinterland, late medieval and post-medieval urban deposits survive only at shallow depths and are thus easily damaged during redevelopment. This is not true in all towns and cities, however. The post-medieval period shares other characteristics with the 14th and 15th centuries, not least the steady growth of a commercialised, consumer society (see Johnson 1996); an essential precursor to future industrialisation. The late medieval and post-medieval periods are an era of transition, of a change from subsistence to a capitalist economy and society. Too rigid a distinction between the periods can obscure details of adaptation and overlap (Gaimster & Stamper 1997).

Buildings archaeology

The region has been at the forefront in many aspects of the recording and examination of standing struc-

tures. Less work of note has been forthcoming on the meanings and context of the architecture, however, than on the recording of details. As elsewhere, much of the archaeological evidence for elite lifestyles is contained in the standing fabric of their former houses. To date there has been little examination of the evolution of elite housing in the region that sets these structures in their social context. Equally, there have been few studies seeking to extract meaning from design that transcend functional descriptions (Locock 1994, 7-12; Johnson 1993). It is entirely possible that messages contained in the architecture, layouts and circulation patterns of the North West’s elite houses, are quite different to those of the houses of the South East that were closer to the Court and the generators of power, patronage and fashion. The North West lay far from a centralised authority, remote from fashionable influences, adjacent to an unsettled border and was very different in its socio-economic structure to the south. Consequently, to dismiss the North West’s polite post-medieval architecture as merely conservative and/or parochial is to underestimate the potential of the resource for revealing the concerns and attitudes of the region’s ruling class.

The early post-medieval period witnessed the rebuilding of many high status homes in response to changing living requirements amongst the elite; new estates made available through the Dissolution of the monasteries, and many newcomers to the ruling

class. New building styles also arrived in the region in the early post-medieval period. Whether this process can be regarded as a 'great rebuilding' or as a series of 'great rebuildings', inspired by different social groups, is open to question. It did begin a gradual replacement of the medieval building stock with houses that can be regarded as more obviously modern, a process that continued into the 18th century. Chronologically this process was both geographically and class related (Newman 2001, 57-62) but probably peaked for the rural landed classes in the later 17th century in most areas. It is of course also related to fluctuations in population size, relative wealth and consumption patterns (Taylor 1992). Clearly this process of building replacement is much more complex than envisaged by earlier researchers (Hoskins 1953; Machin 1977), but we have not yet developed the archaeological methodologies to consider the issues of post-medieval rebuilding in the region.

Not all higher status medieval buildings were replaced; many were merely adapted and extended to meet new demands. Standing building analysis and excavations have revealed this process at Old Abbey Farm, Risley (Ch) and Denton and Dunkinfield Halls (GM). There remains a need for similar investigations elsewhere in the region as well as for the full publication of the results from Denton and Dunkinfield as they, unlike Risley, had rich finds assemblages (Heawood *et al* 2004; Nevell & Walker 2002).

The datable housing stock of the region is one of the resources that can aid the understanding of the socio-economic context out of which industrialisation grew in the 18th century. In many areas the erection of, and major alterations to, gentry, yeoman houses and some urban middle class houses were commemorated by datestones from the 16th through to the 18th centuries. Dendrochronology also has a role to play and the taking of samples from well dated houses may help to improve the future use of the technique. What is clear, however, is that the houses of the majority of the labouring classes do not survive from the 16th and 17th centuries. Docu-

Fig 6.2 Remains of the 17th century Clegg Hall, Rochdale (GMAU).



mentary and cartographic evidence indicates that at least until the early 17th century, the majority of non-elite houses throughout the entire region, with the exception of parts of the uplands, were either timber framed or made of cob (clay) walls. Indeed timber and clay continued to be important building materials for the labouring classes well into the 18th century. Not only does this reveal something of the extent of later replacement of non-elite houses, but it indicates that below ground remains may often be ephemeral and difficult to identify. A recent evaluation of the former site of a clay walled building at Newton Arlosh (C), demolished as recently as 1976, failed to find any evidence of the building (NPA 2004).

In order to better understand the nature of lower status houses and their occupying households, there is a need to examine well preserved, and if possible well documented, house sites, as with those situated in the park of Rufford New Hall (L). There is also a requirement for more regional surveys of vernacular architecture to complement those undertaken for Cumbria, the Fylde and some other areas. Yet though the recording of standing buildings is important in its own right, work in Manchester has demonstrated how much greater insights can be achieved through a multi-disciplinary approach to understanding sub-regional building trends. *'Whilst there remains a need for rigorous and comprehensive archaeological recording of the traditional buildings of North West England, the surviving building stock in the upper Mersey Basin would seem to suggest that meaningful conclusions could be drawn when wider documentary evidence is employed'* (Nevell & Walker 2002, 9).

Initiatives

- 6.1 The available data set should be greatly enlarged. Stratified artefact sequences from both small towns and rural settlements need to be collected, in order to establish the character of ceramic use throughout the region and to create the basis for socio-economic interpretation.
- 6.2 Unpublished ceramic groups, especially those from areas with no previous evidence, should be published as a priority. The relevant grey literature should be made generally available.
- 6.3 A common terminology for regional ware types needs to be devised so that ceramic types can be objectively compared both within the region and beyond. The Medieval Pottery Research Group regional type series should be extended to include all ceramic types from this period.
- 6.4 A concerted effort should be made to create regional syntheses, whether by period, ceramic

type or class of site.

- 6.5 Methods should be developed to extricate and understand the motivations behind the desire to invest in 'rebuilding' in the region.
- 6.6 Elite houses need to be studied in their social context.
- 6.7 The extent of surviving structures from the 16th and 17th centuries should be mapped throughout the region and surviving elements of proto-industrial settlements. This would inform conservation policies and enable characterisation of the resource in order to examine the nature and impact of new monument types in the transition from medieval to Georgian patterns of living.
- 6.8 Sites of well preserved house remains and their environs should be targeted for excavation.

Environment

There are many unanswered questions relating to the impact of the Little Ice Age on settlement patterns

and farming regimes, especially in relation to intra-regional variation. Within the North West different chronologies of settlement expansion and retreat can be identified at local scales (Appleby 1978) but more research is needed to establish broader regional patterns. The impact of severe short-term runs of bad weather on upland farming has been demonstrated for parts of the Southern Uplands (Whyte 1981) but little work of this kind has so far been done for the North West. Documentary information indicates both active duneation and coastal retreat during the post-medieval period but there has been little landscape archaeological research targeted at these phenomena, or at identifying areas of significant coastal change and resultant consequences for the local settlement pattern.

There are numerous lowland and upland peat deposits which contain good preservation of post-medieval deposits, despite the impacts of extraction and desiccation. Little work has been undertaken to date, though the North West Wetlands Survey provides a useful assessment of potential for the lowland peats. Throughout the region during the post-medieval period there is a need to investigate improvements in plant and animal varieties through the use of palaeoenvironmental remains. As well as being

Fig 6.3 Excavations on the site of the 17th century Newton Hall, Merseyside (National Museums Liverpool).



used to reconstruct rural and urban environments, palaeoenvironmental analysis outside the North West has been used to illuminate improvements in animal husbandry and to indicate dates for the earliest introduction of new plant species (Giorgi 1997; 1999).

Initiatives

- 6.9 Landscape archaeology projects should be undertaken to investigate the impact of the Little Ice Age and the effects of coastal change.
- 6.10 Sample appropriate deposits for palaeoenvironmental evidence wherever possible to gain information on the exploitation of plants and animals, especially in relation to changes in consumption.

Settlement and Landuse

Rural and coastal exploitation

In general there is a perception within the region that post-medieval rural studies have suffered from a regional concentration on industrial remains. It may also be the case that there has been too much emphasis on visible upstanding remains, rather than hidden below ground evidence. Another criticism is that archaeological research in the period has followed an agenda defined by the documentary record, rather than following its own agenda. The most significant post-medieval industry was agriculture. Little survives in the way of farm buildings from before the 18th century. The documentary record is very partial and there was a huge diversity of activity across the region that remains largely under researched. The process and chronology of enclosure is not fully appreciated before the 18th century, yet it produced the most significant landscape and economic change during the period. Moreover, it is seen as a physical expression, like changes in vernacular architecture, of cultural and social change (Johnson 2002, 204).

Agriculture

County-based Historic Landscape Characterisation (HLC) projects in Cheshire, Lancashire and Cumbria have distinguished those landscapes that pre-date parliamentary enclosure. Nevertheless, pre-parliamentary enclosure and wetland reclamations are imperfectly understood, especially in relation to chronology and the wider impact on the environment of wetland drainage and conversion to agriculture. Waterlogged deposits associated with existing and former drainage ditches have the potential to provide datable sequences of changes in local land use and ecology

There is considerable evidence on the ground in

Cheshire for post-medieval agriculture consisting primarily of field boundaries and ridge and furrow. Cumbria too has good surviving evidence in some areas. The evidence of 16th and 17th century land division and enclosure in upland Lancashire is under-appreciated and at risk with the degradation of marginal upland farming landscapes. In Cheshire and parts of Lancashire clay and marl production were obviously important since there are or were marl pits in nearly every field. Marl was needed to improve arable land, and although some pits may have been dug for clay for bricks and pots their distribution may be another indication of the extent of arable crops.

Before the 18th century documentary evidence for what crops were grown is not prolific from the region. This lack has not been mediated by palaeoenvironmental evidence because of a lack of excavation and adequate sampling on rural settlement sites. Information concerning animal husbandry and the development of local breeds is also lacking and to redress this larger bulk soil sample sizes are required because of the poor survivability of bone in acid soils.

In general there is little regional evidence for agricultural improvements or agrarian intensification beyond that of field systems and reclaimed landscapes. Documentary research has shown how different the evolution of the agrarian landscape was, particularly in the uplands, to that of the 'champion' areas of the midlands and southern England. The approach to the archaeological study of this evolution must be regionally focused and not dictated by perceptions regarded as truisms yet largely irrelevant to large parts of northern England (Newman 2005, 212).

Fishing

A survey of the medieval and post-medieval fishing industry in England (Barrett *et al* 2004) did not mention a single site from the North West, though it is clear from elsewhere in the country that fish, especially deep sea fish, formed an increasingly important part of the diet in the post-medieval period. A number of communities that grew to prominence later in the industrial period, originated as fishing villages. Fishing would have formed an important component of the economies of most coastal and estuarine settlements in the region and remains may survive in settlements such as Lytham (L).

On rivers, fishing weirs, especially salmon coops, could take the form of complex structures involving the creation of artificial islands as at Corby (C), but these have been little investigated to date. The coastal fishing industry is evidenced as preserved fish traps in intertidal deposits in areas such as Morecambe Bay.



Fig 6.4 Multi-period earthworks, including those from the post-medieval period, at Dalton, Cumbria (Cumbria County Council).

Initiatives

- 6.11 Non-site specific palaeoenvironmental analysis, perhaps as landscape transects, should be undertaken to examine the ecological changes brought by agricultural improvement. These would be of most value when closely linked to the documentary and topographical study of landscape and settlement.
- 6.12 Examine and map pre-18th century enclosure across the region using the county HLCs as a starting point.
- 6.13 All post-medieval deposits should be targeted for the systematic recovery of shellfish remains and fish bones. They require analysis to record size, shape and parasitic infestations in order to establish location of sources and any seasonality of harvesting.

Rural Settlement

The post-medieval period saw increasing specialisation and hence regionalisation in farming. Archaeology through programmes of historic landscape characterization may be beginning to map and analyse these regional variations. HLCs and the regional settlement survey undertaken by Roberts and Wrathmell (2002b), are based primarily on mid-19th century

mapping. Such mapping originated after the impact of industrialisation had distorted traditional settlement patterns, so that the underlying pattern of post-medieval settlement is somewhat obscured.

Some types of settlement site such as isolated farmsteads and hamlets are nationally less well studied than villages. Upland farmsteads, abandoned at various periods from the 17th to the 20th century, represent an under-researched archaeological resource. Farmstead abandonment, especially in an upland context, is a well known phenomenon in the post-medieval North West. Evidence comes almost entirely from upstanding remains and to a lesser extent documents. There has been little archaeological investigation of below ground remains which would help refine dating and theories about cause of desertion. Excavation of deserted farmsteads and isolated cottages is urgently needed as they offer much potential for studying the material culture of individual households, especially important where it can be contextualised through appropriate documentary evidence. Many abandoned farmsteads survive as ruins or below ground sites, especially in the reservoir water gathering areas of Bowland and east Lancashire, and there are significant numbers of similar sites in the Lake District and north Pennines. Their analysis would provide a more complete picture of the nature of settlement evolution in the region, especially in the uplands.

The below ground remains of isolated habitation

sites are far less obvious than those of nucleated settlements and in some areas they can be difficult to identify. This is particularly so in wood pasture areas, where such settlements were frequent, especially in areas that have been subsequently afforested. In the East Midlands one approach advocated for locating and dating settlements in wood pasture regions is the American rapid survey technique of shovel probing (Courtney 2001, 50). This might prove useful in areas such as the Lake District low fells, the Pennine fringe or the Bewcastle Wastes (C). Though successful in locating historical sites in the USA it may be difficult to achieve results in north-west England, where early

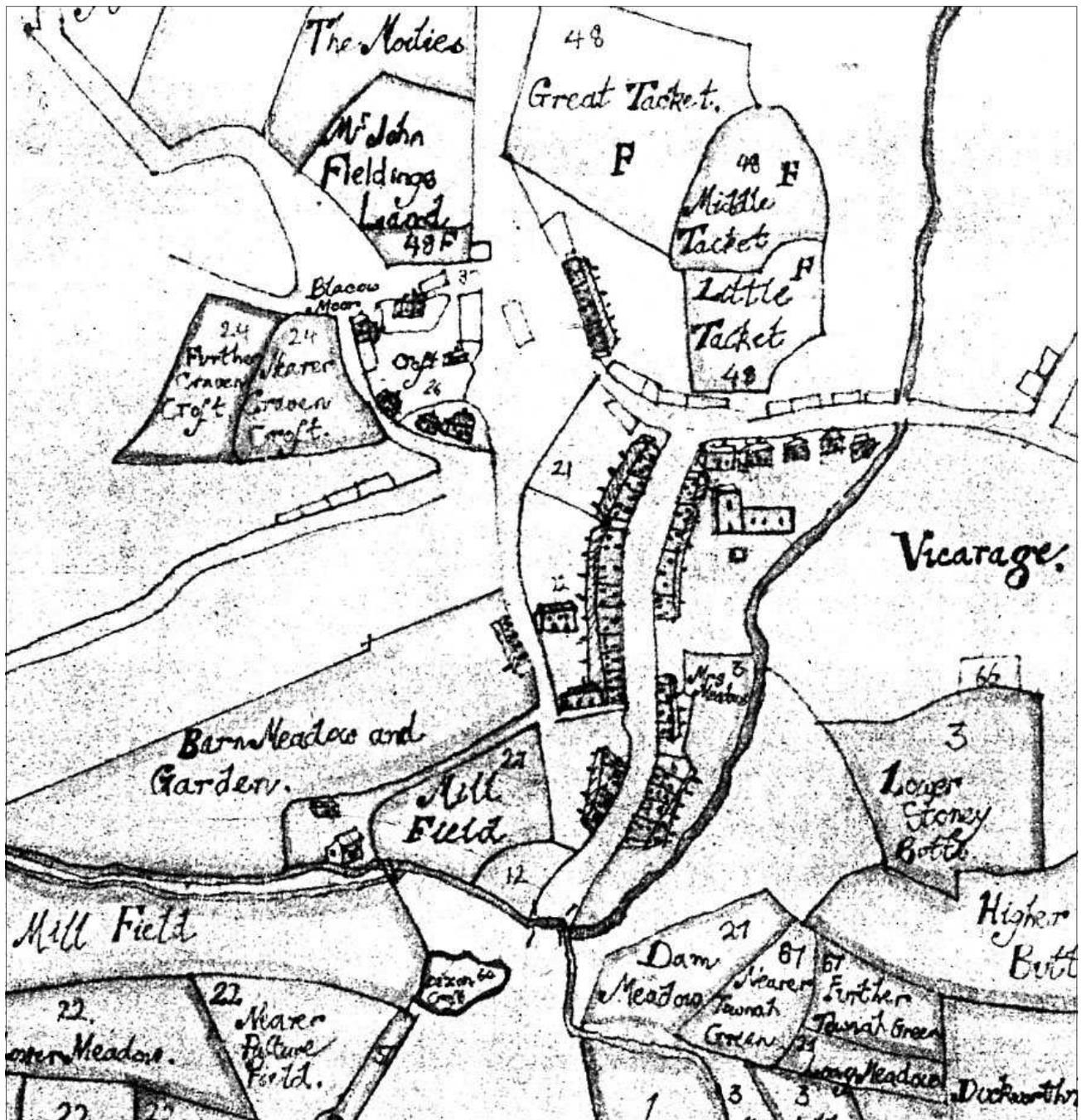
post-medieval sites especially appear to have a low level of surviving material culture and were built using primarily organic materials.

Initiatives

6.14 Regional survey of farmstead creation and abandonment would help refine the regional settlement pattern identified by Wrathmell and Roberts, as well as improve the county based characterisation programmes.

6.15 Excavations of abandoned farms and cottages

Fig 6.5 Map of the Blackburn area in 1739, prior to industrial expansion



should be a high priority, especially where the ownership or tenancy is documented, in order to study the material culture of individual households.

The Urban landscape

The transition from medieval town to post-medieval, as exemplified by the early Georgian town, is still poorly understood. Within the region this national situation is made worse by the concentration of research on certain types of evidence and in a few specific places. The post-medieval archaeology of towns in the region has been dominated by the study of standing buildings. At the regional level, the value of Chester's archaeological evidence is perhaps that much of it is traditional excavation data and finds that complement the studies of standing buildings elsewhere. As a city and provincial centre, however, the evidence from Chester may be atypical of most urban development in the region. Outside Chester the excavation of significant post-medieval deposits is confined to a few towns like Lancaster, Kendal (C) and Carlisle, though little relevant work has been published from these towns. The lack of excavated sites was highlighted in the Extensive Urban Survey (EUS) reports for Cheshire, Cumbria and Lancashire. For example in Macclesfield (Ch), there is only one excavation known to have been undertaken before 2001, and that was inadequately recorded. Yet Macclesfield is an important medieval and post-medieval centre with particular significance for the early onset of industrialisation. The absence of excavated data is not necessarily compensated by good documentary survival, for example the 16th and 17th century plans of many towns such as Congleton (Ch) are not even known from maps.

For the most part there is little archaeological evidence from the region before the later 17th century to indicate the population growth and increasing living standards within towns that have been inferred from elsewhere (Gaimster 1994, 294). There are many outstanding questions concerning urban life and behaviour in the region. It is generally assumed that levels of consumption were higher within towns than in the countryside (Courtney 1996, 92), but this remains to be tested archaeologically within the region. How did production in the countryside link with increasing densities of town dwellers? Similarly, what does the material culture of households, the development of layout, cooking facilities and artefacts associated with food preparation reveal about developing patterns of consumption? Without addressing these types of questions it may be difficult to accurately identify the trends and elements that distinguished the future industrial towns from those that failed to develop early in the Industrial Revolution (McNeil & Nevell 2003, 107). Building upon Trinder's (2002) model for

local market towns, an initial attempt has been made to categorise the major urban characteristics of the pre-Industrial Revolution town in the Manchester area (Nevell 2003b). This model needs to be developed and applied throughout the region.

The potential to combine good documentary evidence, such as that contained within probate inventories, with detailed studies of buildings, has been successfully used in towns like Bristol and Norwich. It allows the identification of distinct lifestyles and potential area and social comparisons of groups of contemporary inhabitants (Leech 1999a, 45). Where there is good documentary evidence it is important to reconstruct the social archaeology of individual buildings, as has been done so successfully at Staircase House in Stockport (Ch).

Unfortunately, it is more difficult to do this with poorer households and the urban poor of the 16th to early 18th centuries remain largely archaeologically invisible. A developing area of research nationally is the study of civic buildings and spaces and the changing use of social space within towns. Notable studies elsewhere have been an examination of the Leicester's market space (Courtney 1998) and of Bristol as a 'processional' landscape (Leech 1999b). Similar studies are still awaited in the North West, though the EUS data, at least in Cheshire and Lancashire, provide a basis for research. Towns like Chester, Preston and Lancaster may have potential for this type of examination.

Initiatives

- 6.16 Using models such as that proposed by Trinder (2002), attempts should be made to identify the post-medieval elements that may have distinguished the future industrial towns from those that failed to develop early in the Industrial Revolution (McNeil & Nevell 2003, 107).
- 6.17 Changes in consumption patterns should be examined across the region and between various social groups.
- 6.18 An urban atlas charting and categorising the growth of towns across the region would assist in examining the transformation of towns from small medieval markets into the variety of urban forms that began to form in the late 17th and 18th centuries.

Religion, Ritual and Ceremony

The period witnessed the greatest recorded shifts in Christian belief and was dominated by the consequences and conflicts precipitated by these changes. The elite particularly displayed their religious affiliations both subtly and explicitly through their posses-

sions and memorials, yet little archaeological research has been carried out into these issues (Newman 2001, 177-82).

The impact of the Reformation

In common with many other regions, there has been little research undertaken on the post-Dissolution land market and its impact on the landscape. A combined archival and landscape study of the estates gained by a major regional beneficiary of monastic suppression, such as Nicholas Holcroft, may prove very instructive in identifying how a single entrepreneurial aristocrat exploited the opportunities presented by the Dissolution.

Cataloguing the elements of medieval monastic material culture that were adopted and adapted on such estates, would illuminate the mind set of the mid-16th century 'new nobility' and indicate research avenues to be followed relating to estate differences across the region.

Places of worship

It may seem surprising, in a period in part defined by the Reformation, that so little work has been undertaken on places of worship. Few new churches were erected, however, in comparison to preceding and proceeding periods. This in itself is indicative of the strong pressures for conformity and against independence in the late 16th and 17th centuries, despite the diversity of religious belief. Even so, there were significant changes to fabric and fittings in response to liturgical changes but these have often been obscured by 19th century developments.

The period witnessed the erection of the earliest dissenter meeting houses, but for the most part dissenting congregations met in domestic or agricultural buildings. There has been little work to identify these buildings and none to examine the impact of these uses on such structures. Some bespoke buildings were erected, such as by the Society of Friends, with an especially good surviving concentration in north

Fig 6.6 Gravestone in Prestwich Churchyard, reading 'HEERE LYETH THE BODIES OF THE CHILDREN OF THOMAS COLLIER RICHARD MARY JOHN AND MARTHA WHO WERE BURIED BETWIXT THE FIRST AND TWELFTH OF DECEMBER AO DMI 1641' (Egerton Lea)



Lancashire/south Cumbria, but whilst these buildings are well known and listed they have been little studied archaeologically. Other early meeting houses may survive as reused or adapted buildings, as with the recently identified former Presbyterian chapel in Carnforth (L) or as below ground remains. There is a need both to identify such sites and to record and analyse them. At present archaeology is contributing little to the understanding of the nature of the emergence of dissenting congregations in the region. Without such research it is also impossible to measure the full social significance of the emergence and development of a multiplicity of non-conformist places of worship and ancillary buildings in the 19th century.

Burial

Elite burial monuments have long been an object of study by art and cultural historians, and there have been a number of significant contributions in the North West. The study of 18th and 19th century non-elite burial monuments is nationally a growing area of important research (Mytum 2000), yet less work has been undertaken on the far rarer 16th and 17th century monuments, though the value of studying such memorials has been made clear by the work of Sarah

Tarlow in Orkney for example (1998; 1999). Whilst there are no large concentrations of such monuments in the region, there are examples of mainly 17th century grave markers across the North West. Usually with text carved in relief and lacking much iconography, they have the capacity to enlighten attitudes to death, the human body and religious belief. Until the 18th century few outside the elite marked their burial places in a permanent fashion. This move towards ‘owning’ the burial space needs to be theorised in the context of Johnson’s (1996) concept of closure as applied to domestic space as well as the wider landscape. Other than relative wealth what ‘marked out’ those who were using burial memorials before the 18th century? Many of these monuments are protected by designation, but not all have been identified and the compilation of a regional corpus would be a first step towards examining their social significance.

Christian burial is a symbolic act. No large post-medieval assemblages of human remains have been excavated in the North West, and thus archaeology has contributed little in the region to the study of the changing character and health of the local population during the period. Nor has it contributed through a study of coffin fittings and burial furniture. Studies of post-medieval burials are extremely rare nationally, but where undertaken have produced remarkable

Fig 6.7 Friends Meeting House, St Helens, founded 1679-92 (National Museums Liverpool)





Fig 6.8 Tatton Old Hall, Cheshire (Cheshire County Council).

insights relating to health, diet and a range of other issues, as demonstrated most notably and recently at the Bullring excavations in Birmingham (Brickley & Buteux 2006). Cemeteries with good documentary information, particularly biographical details, are of especial significance for providing detailed information on the nature of populations and changes within them over time (Mays *et al* 2002). The range of analytical techniques that can be used to gain information from human remains was covered in detail by Mays (1998b) and has been recently reviewed by Brickley and McKinley (2004). The legal and ethical context for excavating human remains in Christian burial grounds has been set out in a document prepared for the Church of England and English Heritage, which clearly reveals a dichotomy between the needs of church liturgy and archaeological science (Mays 2005). The need to deal with remains sensitively and the general lack of redevelopment threat within most Anglican cemeteries will continue to limit opportunities for investigation within Anglican burial grounds. The redundancy and sale for conversion of many non-conformist meeting houses, many of which had attached burial grounds, places their cemeteries at greater risk, though the threat is greatest in association with 19th century rural chapels rather than earlier meeting houses.

Secular display

One of the most spectacular examples of secular display was the garden, often in combination with a landscape park and of course a mansion. Indeed garden space may be regarded as an extension of the space within the mansion. Together, they were one of the principal ways in which the upper classes displayed their wealth and prestige (Williamson 1995). Above all we need to view these structures and landscapes not just as functional entities and architectural extravaganzas but as key aspects of the archaeology of power. How do these elite features reflect changing ideologies and concepts of status, affiliation and identity, particularly at a county and regional level?

There are good examples of surviving elite landscapes throughout the region but most originated in or were extensively remodelled during the later 18th and 19th centuries. One very good exception is Levens Hall (C), where there is nationally important evidence for the adoption in the late 17th century of French landscaping techniques, such as the use of the ha-ha (Neal 2004), decades before their wider dissemination by British landscape pioneers like Charles Bridgeman and William Kent. Levens also features another aspect of 17th century garden design, in examples of some of the earliest surviving aesthetic

planting (Williamson 1999, 247), which, as the winter storms of 2005 have demonstrated, are highly vulnerable. The analysis of relict vegetation and the palaeoenvironmental evidence for past plantings should not be ignored in favour of the 'hard landscaping' elements of earthworks and buried structures. Current research at Levens and at Lathom Castle (L) has the potential to considerably enhance our knowledge of the development of post-medieval elite display. Further programmes of similar work targeting early regimes of landscape design around elite houses should be carried out elsewhere in the region.

Initiatives

- 6.19 Combined documentary and landscape studies should be undertaken of landed estates gained as a result of monastic suppression to identify patterns of adoption and adaptation of monastic remains and estate organization.
- 6.20 An identification survey is needed across the region of buildings and spaces used by early dissenting congregations.
- 6.21 A regional gazetteer should be prepared of pre-18th century burial monuments.
- 6.22 Study of burial monuments and burial practice should look to address the possibility of gender specific attitudes to death (Harding 1998, 210-11).
- 6.23 Opportunities should be taken to examine burial groups especially where there is good associated documentary data.
- 6.24 The architecture and material culture of estates owned by recusant families and areas where Puritanism and later dissent-dominated, should be examined to see if differences are evident that can be related to religious practice and allegiance.

Technology and Production

Industrialisation

The North West is a key area in the study of the process of industrialisation. Recent work by economic historians has highlighted a consumer-led industrious revolution as a precursor to the Industrial Revolution (de Vries 1993, 1994) and this concept has merit as a context for archaeological research into industrial development in the 17th to early 18th centuries. Consequently, industrial activity during the period was reorganised, increasingly commercialised and specialised, and became more responsive to con-



Fig 6.9 Little Marton Mill, Lancashire (UMAU).

sumer demands. One physical aspect of these changes appears to have been the increase in workshops. This form of industrial organisation had been present since the Middle Ages (Grenville 2004), but appears to have grown significantly in the 17th and 18th centuries. Much research is required to examine the relationship of the domestic dwelling and workshop (Grenville 2004, 37) and other than for the textile industry (Timmins 2004; Timmins 2005) neither domestic nor workshop working has been examined in detail within the region.

During the 16th to 18th centuries industrial work appears to have become less gender specific and to have relied increasingly on female and child labour. The coincidence between late 17th century areas of widespread dual employment, with wider family involvement, and 19th century areas of industrial growth is remarkable and seems to be a major factor distinguishing those areas that would most successfully industrialise (Newman 2003). These are not features accounted for in the model developed for the industrialisation of Manchester's towns (Nevell 2003b, 43), but it may be possible to expand the model to take account of these trends.

Archaeology has a major role to play in the understanding of early industry through combining studies of landscape evolution with changes in material culture, to explore the relationship of social structure, agrarian organization and early industrial develop-

ment. Industries grew within a framework of existing land ownership and social structures and, at least within Manchester, the region has been the centre of pioneering work on the relationship between local social organisation, industrialisation and its physical impact (Nevell & Walker 1998, 1999, 2004a). The landscape context of many industrial processes remains under appreciated, as do the linkages within the landscape between various industries. Industrial location was influenced by the impacts of one process upon another; thus an analysis of water-powered sites in northern France noted that fulling had to be situated upstream from tanning because of the effects of the latter's waterborne pollutants (Guillerme 1988, 99).

There is a need to appreciate that industrial landscapes emerged from often rural landscapes formed within an agrarian social context with deep roots (Cranstone 2003, 219). Considerably more information is required on the origins of specialist industrial settlements and especially on the development of farmsteads into folds dependant on textile production. The region has benefited from recent studies of the rural origins of industry (Nevell & Walker 2004a; Newman 2004), but further work is required. Much remains to be examined concerning the living conditions and material culture of industrial workers in the late 17th and early 18th centuries, especially in comparing how these may have differed from agricultural workers. Were distinctions emerging, given that much industrial employment was part-time within the context of a dual economy? Was domestic and communal space used differently in settlements with emerging industrial functions? Another area of research with significant potential is the role played by the great landed estates as encouragers of technological innovation and early investment into industrial

activity, especially within their own estates (Palmer 2005a). Indeed the whole area of experimentation and innovation is archaeologically under-researched (Cranstone 2004, 317-8) and within the region there are key sites that featured in the post-medieval development of industries, including those relating to chemicals, iron manufacture and textiles.

The process of industrialisation is a key social concept for the period and as such is primarily concerned with the reforming of society rather than the narrow confines of technical development and processes of production. Yet, there remains a need for detailed studies of methods and techniques of production (Cranstone 2004, 315-6). An understanding of the technology of industries is essential to an appreciation of their wider social context and their relationship with and impact upon the environment. As Cranstone has stated, *'the challenge, surely, is to develop and use approaches that genuinely increase both our knowledge and understanding of industrialization and production in their own right, as well as integrating them into broader social and economic concerns'* (2001, 184).

Industries

The region has considerable potential for examining the impact of imported technologies in the 16th and 17th centuries. The current projects to examine the copper mines opened by 16th century German miners in the Lake District, a previously little investigated topic (Cranstone 2001, 200), should lead to a much better understanding of contemporary mining technologies and conditions. Nationally, there are few documentary descriptions of processes before the end of the 17th century and few industrial sites have been excavated of any type. A high priority needs to be given to the retrieval and analysis of structures and process residues from early post-medieval sites (Crossley 1998, 219). The North West has potential for illuminating the early post-medieval development of a number of key industries including glass, iron, lead and salt.

At Muncaster Head (C) the analysis of residues from a water-powered bloomery identified the use of high-quality haematite ore and unusual technological features (Bayley & Crossley 2004, 18). North Lancashire and south Cumbria have numerous sites associated with the pre-blast furnace application of water power to iron manufacture (Newman forthcoming). Some of these sites have unique documentary descriptions of processes but there is a general lack of archaeological excavation and sampling. There has been limited coordinated research undertaken to date, but it has highlighted issues surrounding the definition of site types and the way this causes problems of recognition, identification and prioritisation for archaeological curators and potentially for researchers (Newman forthcoming). The analysis of

Fig 6.10 Excavation of the Sefton Mill race wall, Merseyside (National Museums Liverpool).



hammerscale particularly may enable the variety of site types to be refined by distinguishing between those that only produced iron and those that produced iron wares. Residue analysis and further excavation of sites in the Mersey Basin has the potential to illuminate the development of the glass industry, including the technologies imported from abroad (Bayley & Crossley, 2004, 20-1). Likewise the north Pennines have potential for recognising and examining the technologies of pre-19th century lead smelting, a subject little examined through fieldwork outside Derbyshire (Bayley & Crossley 2004, 20).

Little field evidence has been recorded in the region for the post-medieval coastal salt industry, though some sites such as those at Whitehaven (C) and Workington (C) have been destroyed as a result of either coastal change or development. There is some documentary evidence for processes but as with the water-powered bloomery industry the information this contains requires checking archaeologically. Surveys of locations are still required as coastal salt working sites are both under-represented and thinly described within the local SMRs. A proposed identification survey of the salt industry along the Solway and west Cumbrian coasts will assist in addressing this gap and similar surveys are required around Morecambe Bay and along the Fylde Coast. The benefits of these surveys in understanding the landscape context of coastal salt production have been demonstrated elsewhere, as in Lincolnshire (Grady 1998).

There are two major regional gaps in our knowledge of post-medieval industries, one concerns the development of watermill sites, especially those that later became the focus for factory scale development, and the other is the pottery industry. The Society for Post-Medieval Archaeology (SPMA) recognised in 1988 the lack of investigation of post-medieval pre-Industrial Revolution mills such as corn mills. Most of our knowledge is based on documentary sources and surviving above ground remains, though these sources could be better utilized to provide a landscape analysis of the use of water power as has been done for the Sheffield area (Crossley 2004). Work in Manchester and Carlisle is beginning to address these issues but there remains much archaeological research to be undertaken on the regional development of water power in the 16th to 18th centuries.

Another major gap in regional knowledge concerns the lack of archaeological evidence for the production of pottery. With the exception of a mid-18th century coarse ware site in Prescott (M) and a possible white salt-glazed stoneware production centre in Chester, no production units have been seriously investigated and published. Although a number of small production groups have been recovered from contractors' trenches in Liverpool, none of the sites has been subject to detailed archaeological investiga-

tion. The identification of the products of the region's potteries remains extremely insecure. Without basic information on regional pottery production it will remain difficult to engage in a wider study of the industry, to examine processes such as the adoption of imported technologies and the impacts on production of consumer demands (see Courtney 2004).

Animal residues

Analysis of animal residues associated with industrial processing, such as bone, horn or even preserved hides in waterlogged contexts has been little undertaken in the region, with the exception of Chester. The potential of urban waterlogged deposits in Cheshire especially, but also possibly in towns like Carlisle, needs to be exploited. The North West has excellent organic preservation in urban contexts through waterlogging, though aside from Chester and the Cheshire salt towns the post-medieval potential has yet to be demonstrated. Environmental research in towns would shed light on animal husbandry, trade, urban-rural hinterland relationships and industries such as tanning, leather working, bone and horn handle and comb making, lantern pane making and glue manufacture (see Ervynk *et al* 2003; Albarella 2003). Investigations of assemblages across the region may provide data on the species being processed, for example, horses were used in tanning in Chester. At tanning sites, zooarchaeology should not be undertaken in isolation but in combination with archaeobotanical and archaeoentomological studies, the benefits of this have been demonstrated elsewhere, as in York (Hall & Kenward 2003, 122-3).

Initiatives

- 6.25 Early industries should be studied in relation to their landscape setting.
- 6.26 A range of scientific analytic techniques should be applied to the most common regional and inter-regional products in order to allow positive identification of products from different centres.
- 6.27 Early workshops need to be identified and studied especially with respect to their impact on work organisation and social and gender relations.
- 6.28 The industrial worker settlements require identification and examination.
- 6.29 Experimental and pioneering sites should be examined for evidence of innovation.
- 6.30 Environmentally-informed designs for urban

excavations of former industrial areas are needed to ensure that the full potential of palaeoenvironmental analysis is used to inform examinations of industrial processes.

- 6.31 Excavations of rural tanneries should be a priority.
- 6.32 The study and publication of archival material from Carlisle especially, but also other towns like Manchester, Lancaster and Kendal is required.

Trade, Exchange and Interaction

Internal market and trading patterns cannot be satisfactorily described and interpreted until sufficient data is available. Very much more material from sites spread geographically though the whole region will be needed before any satisfactory patterns can be identified.

For pottery, the most frequently recovered artefact, there is a lack both of an agreed ware terminology and of a means of accurate identification. The establishment of trading patterns remains, therefore, highly speculative. The data that is available is predominantly from a few major centres such as Chester and Carlisle. For much of the region there is a glaring absence of evidence from small towns and for most types of rural site.

Artefact distributions

The origin of some wares is unknown and it is difficult to be precise about the origin of those types that were produced at more than one production centre such as black wares. Even in Chester, which has the best studied assemblages of post-medieval pottery, dating of the principal types is largely dependent on evidence from outside the city and is often quite broad, for example yellow glazed wares are dated as 17th century. The range of vessels forms within ware groups has not been detailed nor tied into a chronological framework although a current project at the site of Brown's department store in Chester does have the potential to provide this information. Within Chester there is scope for relating documentary evidence for traded goods with the large post-medieval finds assemblages from the city.

The distribution of post-medieval pottery outside Chester is unclear and is largely limited by the extent and range of excavation that has taken place. Field-walking and the finds from pipeline construction in western Cheshire tend to produce large quantities of post-medieval pottery particularly dating from the mid-17th to early 20th centuries. Imported wares are rare from these assemblages, which for the earlier period are dominated by blackwares, slipwares, mottled wares and yellow wares. How far these assemblages are representative of pottery use in nearby settlements or are a result of night soils being carted

Fig 6.11 Pack horse bridge at Hockenball Platts, Chester (Cheshire County Council).



out from Chester is unclear. Assemblages of post-medieval pottery have been excavated in Nantwich (Ch) but are unpublished. Recent work in small towns in east Cheshire, as at Knutsford, has produced assemblages of post-medieval pottery including 16th/early 17th century types.

Outside of Cheshire few significant assemblages have been recovered and analysed. Although meaningful assemblages have been recovered from Carlisle none have been published. Other towns too, like Lancaster, Kendal (C) and Cocker mouth (C), have significant potential to inform a developing research agenda.

The difficulties of using material culture, especially pottery, to analyse patterns of trade are well known and relate not only to post-discard processing and preservation but also to the 'constraints and motivations which affected the acquisition of goods by individuals' (Courtney 1997, 104). Even so, to understand patterns of consumption and thus trade at a micro level, and to appreciate the access of individual families to material culture, it is necessary to examine the archaeology of households (Courtney 1996, 91-2). Only by comparing individual rural and urban households can differences in access to goods be noted. Were there differences in coastal and inland areas dependant on inadequate road transport facilities?

Ports and markets

There has been little work to establish the hinterlands of the numerous market towns and villages spread throughout the region. Nor have there been archaeological studies of individual market areas within settlements. Again the various county EUS projects provide a good starting point for an archaeological study of market areas and market facilities. Very little is known about the region's ports in the 16th/17th centuries, outside of Chester, though there have been some studies of aspects of post-medieval port development at Liverpool and Whitehaven (C).

There were a number of other coastal and estuarine ports and numerous minor creeks, none of which have received archaeological study. The potential of many will have been compromised by later development but at sites such as Skippool and Wardleys, the harbour for Poulton-le-Fylde (L), relatively undisturbed deposits may remain.

In Chester there is considerable potential for further archaeological discoveries, particularly in relation to the pre-canalisation port and for ships and ship-building facilities at various in-filled inlets and locations along the estuary frontage. Recent work on Liverpool's earliest dock facilities may also elucidate the impact of seaborne trade and the onset of globalisation. Indeed throughout the North West there is potential for studying the early impact of Atlantic trade on social development. Moreover, the North West

can be compared with other regions such as the South West, where a marked impact appears to have occurred earlier.

Initiatives

- 6.33 Improve the regional knowledge of ceramic vessel form and fabric type chronologies.
- 6.34 Analyse and publish thus far major unpublished assemblages of post-medieval artefacts.
- 6.35 A high priority must be the excavation of well documented house sites and their environs with artefact recovery and plotting a priority within the excavation design. Subsequently, an intra-regional study of selected households should be undertaken based on documentary and excavated evidence.
- 6.36 Market spaces and early market halls should be studied to understand the physical development of markets and their relationship to their urban or proto-urban settings and their hinterlands.
- 6.37 Target for investigation ports where little is known, study Chester and Liverpool together to see how/why one took over from the other. Lancaster Quay, and the other Lancashire ports, should be reviewed to understand the early development of port facilities.

Defence, Warfare and Military Activity

The region, especially in the north, remained an area of active military activity during the period. The Anglo-Scottish border continued as a zone of conflict until 1603. A number of skirmishes, minor battles and sieges took place in the region during the English Civil Wars and afterwards the prevalence of Catholicism amongst the region's gentry encouraged support for the Jacobites. Local Jacobitism and the proximity of Scotland ensured that the region figured strongly in the Jacobite uprisings of the early 18th century. Throughout the period Carlisle remained an important military centre having had its defences refurbished in 1542 (McCarthy *et al* 1990, 172). This relatively continuous engagement with military matters and sporadic conflict is in marked contrast to the rest of England during the period (Coad 2005, 224).

Fortifications

Castles ceased to be built after the Middle Ages but their post-medieval use, often evidenced by physical developments in the fabric, is an important aspect of their history (Wood 1996, 148). Some castles continued to have a military function into the Civil War. In



Fig 6.12 Probable late post-medieval cannon found during development of St Paul's Square, Liverpool (National Museums Liverpool).

the case of Lathom (L), a late medieval elite house rather than a fortification, its military function only commenced in the Civil War.

With the notable exceptions of Lathom and Beeston (Ch) there has been a lack of interdisciplinary research into the fate of the region's castles during and after the Civil War. What was the degree of slighting and the scope of rebuilding after the Restoration (Wood 1996, 148)? Civil war defences in the North West as nationally, lack documentary sources and little archaeological research into the subject has been undertaken in the region (Coad 2005, 230).

The claim that fortified bastle houses went out of use by the early 17th century (Whyte 1999, 268) has been shown to be incorrect and a recent survey indicates that at least bastle-like structures continued to be built into the 18th century (Ryder 2002). Whilst this survey and other overview surveys such as Perriam and Robinson's gazetteer of Cumbrian fortified buildings (1998) are useful, there is a lack of individual building survey and analysis.

Few of the recently discovered bastles have been surveyed in detail. Moreover, most of the better known fortified houses have not had modern detailed surveys or much analysis of internal space usage and movement flows or of their post-medieval adaptation and development.

The relative lack of farm modernisation since the 19th century, however, in areas like the north Pennines, ensures good survival of evidence, though many buildings lack the protection afforded through listing.

Battles and sieges

No archaeological investigations have been undertaken of post-medieval battlefields within the region, though there is an absence of well preserved major conflict sites, hence the lack of registered post-medieval battlefields in the North West. Nevertheless, the region features the last major military engagement to be fought on English soil, the second battle of Preston in 1715. Neither this engagement nor the earlier battle of 1648, have received any archaeological analysis. Whilst subsequent urban development negates the use of the full suite of archaeological survey techniques used on post-medieval battlefields like Naseby, in Northamptonshire, combined documentary and topographic analysis with some limited below ground testing could yield valuable insights. Similarly in Cheshire, the First Civil War battles of Nantwich, (1644) and Rowton Heath (1645) could both be researched archaeologically with techniques used on other Civil War battlefields like Naseby and Edgehill. The battles need to be placed into their landscape context to examine how and why terrain and features within the landscape were used. An archaeological approach to battlefields, and a specifically landscape-based one which emphasises the place rather than the event, can illuminate the attitudes and motivations of the participants (Carman 1999; 2005). In addition to the last battle on English soil, the last serious skirmish between two organized military forces took place in the North West, at Clifton, near Penrith (C), in 1745, during the young pretender's retreat back to Scotland and eventual defeat at Culloden. Topographical analysis and metal detector surveys may assist in identifying the precise location of this engagement and thus define a conservation strategy for any remains.

During the English Civil Wars the region witnessed a number of sieges, perhaps most notably of Manchester (1642), Liverpool (1644), Nantwich (1644), Carlisle (1644-5) and Chester (1645-6). There have been a variety of projects in Chester that have revealed evidence probably connected with its siege but no co-ordinated research has been undertaken of the type applied to the siege of Leicester (Courtney & Courtney 1992). A similar review of Chester's evidence would be beneficial. Like Chester, Carlisle is one of the most besieged towns in Britain. Not only was it besieged in the Civil War but it also suffered a siege in 1745. Again fragments of evidence relating to these events have been recovered but a systematic review is long overdue.

Initiatives

6.38 Examine castles for their post-medieval use and adaptation.



Fig 6.13 Remains of the late 16th or early 17th century house Crake Trees, Cumbria (Andrew Davison).

- 6.39 There is a requirement for up to date detailed record surveys of fortified houses and bastles.
- 6.40 Regional or county studies are required of the post-medieval use and modification of fortified houses to meet changing requirements and socio-cultural developments.
- 6.41 Archaeological surveys and reviews, using a multi disciplinary battery of techniques, are required to examine the nature of the archaeological remains associated with the region's battles and sieges.

Future Research Directions

Post-medieval archaeological study offers exciting opportunities for future research in the region. Particularly significant themes for the region are the impacts of both the Reformation and resistance to it on the development of the landscape, the responses of an upland and frequently marginal area to changes in social structure and agrarian organisation, and the beginnings of industrialisation. The region's completed and ongoing EUS and HLC projects provide excellent baselines from which to develop further work to examine the development of towns and the

modernisation, rationalisation and expansion of the agrarian landscape. They may also contain clues to the origins of the region's principal industrial areas.

The North West reveals a different developmental story to that of much of the midlands and southern England, but with its Atlantic links it also differs from the North East. These make it a prime region for comparing and contrasting with areas like the South West or central Scotland. To realise its full potential, however, significant gaps in the current knowledge base need to be addressed. Above all our knowledge of the region's ceramic production and consumption is inadequate. Publication of past projects has been poor and too little emphasis has been made of the regions strengths in relation to the period. These include the excellent palaeoenvironmental resource contained in some towns and in some peatlands, the local potential of dendrochronology for absolute dating, the huge largely rural resource of vernacular domestic buildings and well preserved largely post-medieval landscapes in the uplands. There is a need too to theorise our approach to the post-medieval period and to approach our evidence with a specifically archaeological agenda, though one that acknowledges the contributions of other disciplines to that agenda.