# Towards an Agenda for the Neolithic of Northern England

## Jan Harding, Paul Frodsham and Tess Durden

### Introduction

A recent discussion has charted the changing definitions of the term 'Neolithic' from the early work of Lubbock through to more recent interpretations (Thomas 1993). It lucidly argues that during this long period it was generally believed that the Neolithic was a unified and homogeneous entity, but that the concept should now be 'broken down, and recognised as something fragmented and dispersed, localised in its effects, with no overall direction or intention behind it' (ibid, 390). Such a conclusion is certainly reiterated by the recent recognition that the evidence for the Neolithic differs across the regions of the British Isles, and that it would therefore be wrong to perceive the period as characterised by a general sequence which was equally applicable from area to area (eg. Bradley 1984, chapters 3-4; Bradley and Edmonds 1993, chapter 1; Bradley and Gardiner 1984; Harding 1991; Loveday 1989; Pryor 1984). However, while evidence can be easily cited to demonstrate that the Neolithic should not be seen as an entity or process of fixed meaning, it has seemingly been more difficult to consider such variation over and above the simple comparative differences which can be identified across the British Isles. This realisation has not yet developed into detailed discussion, and there seems little chance of it doing so until much fieldwork is undertaken to address the present disparity in both the quantity and quality of evidence from region to region. It should therefore come as no surprise that while recent interpretative accounts acknowledge the fragmentary nature of the Neolithic they continue the traditional focus upon those intensively studied parts of England and Scotland, of which the Wessex chalkland and Orkney are the most important examples (notably Barrett 1994; Thomas 1991; Sharples and Sheridan 1992). These recent publications demonstrate the potential for the interpretation of the evidence already available, but the reader of these accounts would be hard pressed to find detailed discussion of direct relevance to other regions. Most noticeable by its absence is northern England, or the 'No-Man's Land' referred to in the title of this volume. (Barker 1981, 1).

This continuing predilection towards those areas which have long acted as the empirical foundations for our

reconstructions of this period constitutes the background to this concluding contribution. The more specific aim of this paper is to outline key areas of discussion which are of intrinsic importance to the Neolithic of northern England. It is suggested that the present inequalities in the available evidence can only be rectified through future programmes of research and campaigns of fieldwork, and that these will depend to a large extent upon transforming attitudes to the management of the archaeological resource.

While the Yorkshire Wolds can be considered along with the Wessex chalkland as one of the 'core areas' of past archaeological investigation, it should not be assumed that this implies that northern and southern England are equally represented in terms of the evidence. While neither the chalklands of Wessex nor the Yorkshire Wolds are actually representative of neighbouring landscapes, it is also apparent that these two areas have not benefited from similar levels of archaeological interpretation. Recent large-scale projects, for example, have been undertaken in the vicinity of major monument complexes located in Wessex (Barrett et al 1991; Richards 1990; Whittle 1993), but such intensive fieldwork is sadly lacking on the Yorkshire Wolds. The evidence from the latter area is therefore seriously inadequate when considered alongside the level of available information from the Wessex chalkland, and it also compares unfavourably with Orkney and other parts of Scotland. However, while the Yorkshire Wolds is a poor relative of Wessex in this respect, other parts of northern England are relatively destitute in terms of recent and systematic archaeological investigation (Annable 1987, 83; Higham 1986, 3). This presents a particular problem in areas such as the Lancashire Plain, much of the Eden Valley in Cumbria, and the lowlands of North Yorkshire.

The focus of recent interpretative accounts reflects the unfortunate reality that much of northern England is either relatively understudied or too often appears to be a 'blank area' in regard to this period. As a consequence, the area can too readily be classified as no more than an additional geographical backdrop for those processes recognised to the south, or in the worst scenarios, thought to be a 'backwater' of only limited value to the prehistorian who is currently reconstructing the Neolithic. The region is therefore considered to be without a distinct character

and identity, and this is despite the striking geographical differences which exist between many parts of southern and northern England. A brief examination of the relief is enough to illustrate the importance of this observation, and it seems inconceivable that such a simple but unchanging factor would not have played a major part in structuring the long-term history of social groups during later prehistory. In the north there are a series of major topographic contrasts between large expanses of upland, low-lying vales with impressive river networks, and coastal estuaries and basins, which are not evident elsewhere in England (Barker 1981, 2; Higham 1986, 7-8). This marked opposition between distinct upland and lowland landscapes must have framed the everyday experience of many groups and would have surely been embedded in local mythology and belief. It would have structured the region into naturally defined boundaries and pathways, and this is apparent even in the relatively flat plains and vales located immediately to the east and west of the southern half of the Pennines. The implication is that any account of the Neolithic in northern England must consider the distinct topography of the region as providing a unique framework for social history.

The potential influence of the landscape on the Neolithic of northern England can perhaps be best appreciated by briefly exploring the implications of such topographic contrasts for our general interpretations of the period. This can be clearly illustrated by the economically-orientated view of the period which regards the term 'Neolithic' as synonymous with the beginning of a reliance upon mixed farming. In these models the emphasis is upon a standard economic package of practices and resources, yet in northern England it is clear that these are far from consistently represented across the region. Accounts repeatedly propose that there are a number of 'core areas' which have a relatively high agricultural potential and which produce evidence for extensive plant and animal domestication in association with Neolithic settlement (eg. Burgess 1984; Hawke-Smith 1979; Spratt 1990). It is equally noticeable that many of these areas are generally surrounded by expanses of upland, which are often considered to have been economically peripheral to any arable system. These areas of high altitude are either thought to be sources of grazing or localities from which additional resources were provided by hunting and gathering activities (Barker 1981, 6; Hawke-Smith 1979, 177-8; Hicks 1971, 662; Higham 1986, 48; Spratt 1982, 125-6). An exception to such models is the relatively lowlying chalklands of North Yorkshire, but the impressive Neolithic monuments from across this area suggest that the wolds are exceptional in many respects. It therefore seems that rather than a standard farming package spread evenly through space and time there are marked geographical contrasts in the importance of arable staples, animal husbandry, and more traditional economic practices. While we certainly need to reassess the common assumption that when domesticates are found in the archaeological record they must necessarily have been a significant part of dietary practices (cf. Entwistle and Grant 1989; Moffett et al 1989), it is important to emphasise that the differing roles played by these resources and practices may have been at least partly structured or constrained by variations in the basic topography, the quality of the soils, and the levels of precipitation throughout northern England (Higham 1987).

The influence which may have been exercised by the topographic contrast between lowland and upiand in northern England is also apparent when we turn to those more recent and definitive definitions of the Neolithic. These see the period as characterised by a standard package of ritual practices and material symbols which transformed and enriched the social life of indigenous gatherer-hunters. In this sense, these interpretations belong to the same stable as the more traditional viewpoints. They assume an homogenous set of ideas, spread evenly across time and space, which resulted in fundamental changes in the way the world was perceived. The most striking manifestation of this transformation was monument building, but the distribution of these sites is extremely discontinuous and can again be related to basic topographic contrasts. During the early Neolithic it appears that the low hills which rise to form the upland massifs of the region were the preferred location for long barrows (Annable 1987, 101, map 25; Higham 1986, 70; Kinnes 1992, fig. 1A. 18-23; Manby 1970, 5). Subsequent monument types more clearly illustrate a division between high and low altitudes (Annable 1987, 106, map 26; Barnatt 1989, fig.60 & 61; Burl 1976, fig.3). The distribution of the known henge monuments across the central and northern parts of the region cluster across particular low-lying landscapes to the east of the Pennines, in the lower Eden Valley of Cumbria, and the Milfield Basin in north Northumberland. In contrast, the majority of the smaller stone circles - which unlike the larger examples are admittedly thought to be later in date (Barnatt 1990, 23, 25; Burl 1976, chapter 4) - are commonly found on the more elevated fells such as those which surround the Lake District mountains. A similar contrast is evident across the southern Pennines, where two large henge monuments are located on the high limestone plateau some distance from the more elevated gritstone moors where the majority of stone circles are to be found (Barnatt 1990, fig.1). The distinction is also emphasised by the groups of surface rock carvings which are concentrated across the hills of north Northumberland, North and West Yorkshire, the Cleveland Hills and County Durham (Bradley 1991). What the evidence therefore appears to indicate is a heterogeneous set of cultural symbols across the lowlands and uplands of northern England, and it is possible that this variation may not simply occur on account of the available raw material to be found across these differing landscapes. It may be that specific ceremonial places and practices were deliberately associated with particular landscapes.

It seems that there is a tangible link between the intrinsic physical nature of northern England and the desire to consider the Neolithic as a period which is characterised by variation from area to area. The striking topographic differences between northern and southern England suggest that the processes which were at work

across the Wessex chalkland and adjoining landscapes should not be seen as uniformly applicable to the north. Rather, the Neolithic of the region can perhaps be fragmented into local sequences which were partly structured by the distinct topography of individual areas (Barnatt 1989, 211-226). Large expanses of upland and an impressive network of rivers divide the region into a complex patchwork of what must have been partly selfcontained traditions. The well-documented concentration of monuments and settlement across the Peak District is surrounded by high moors (Barnatt 1990; Bradley and Hart 1983; Garton 1991), whereas further to the north the Pennines are flanked by key monument complexes in the low-lying vales of North Yorkshire (Burl 1991; Dymond 1964; Thomas 1955; Topping 1982) and the Eden Valley (Annable 1987, 109-10; Higham 1987, fig.3.1b; Soffe and Clare 1988; Topping 1992). Concentrations of monuments and settlement from elsewhere in Cumbria are confined to the limestone hills, whereas further to the west the central lakeland mountains separate the coastal plain, apparently much favoured for Neolithic occupation, from other areas of lowland (Cherry and Cherry 1987b; this volume). To the east of the Pennines the Yorkshire chalklands, with their rich range of Neolithic evidence, are topographically distinct from the low-lying landscapes which surround the wolds (Dymond 1966; Manby 1974; 1988; McInnes 1964), and a similar point can be made for the nearby North York Moors (Spratt 1993). Such a pattern is also evident further to the north where both the Durham coastal plain and the Milfield Basin are partly encompassed by expanses of upland. Each of these lowlying landscapes is associated with a sequence of impressive monuments and considerable evidence for settlement (Harding 1981; Miket 1976; 1985; Newman 1976; Waddington, this volume; Young 1984; 1987).

## Themes and Questions

The existence across northern England of a number of key landscapes which are separated by dramatic topography might also account for the traditions of prehistoric research to be found throughout the region. This sense of local identity has led to the development of strong relationships between specific areas and the work of individual researchers. This is, of course, as it should be, yet with the exception of Annable's (1987) The Later Prehistory of Northern England such a tradition of prehistoric research has not recently been complemented by a more general conceptualisation of the shared characteristics or differences of the archaeological record between areas. The Neolithic may indeed be 'something fragmented and dispersed, localised in its effects', to return to the recent comments by Julian Thomas (1993, 390), but this is not to say that there are no shared themes or patterns around which local-based research can be integrated. The introduction to this present contribution briefly suggests that topics such as the significance of local topography for the Mesolithic-Neolithic transition, or the relationship between specific forms of upland and lowland monument,

may be possible examples. Unfortunately, the general absence of research from across northern England which tacks between both the local and more regional scales of investigation may actually have reinforced the continuing emphasis upon the Wessex chalkland. The key themes, potentials and problems of the archaeological record from the latter region have been considered in the literature (eg. Brathwaite 1984; Renfrew 1973; Thomas 1984), thereby providing individual programmes of study with a more developed and dynamic backdrop. It may therefore be that the most effective manner by which to further interest in the Neolithic of northern England, and consequently illustrate points of difference with the evidence to the south, is by outlining some key themes which are applicable to this region.

A notable example of a general theme or pattern which warrants extensive research concerns the dynamic of the Mesolithic-Neolithic transition across northern England. As already mentioned, local-based studies have identified a contrast between those areas which readily adopted practices generally associated with the Neolithic, and those which seem to have continued what is perhaps a more traditional way of life. This general separation may be placing too much emphasis upon what is extremely limited chronological evidence and the perceived importance of domesticated plants and animals, but it does highlight the possibility that distinct landscape forms across northern England may possess contrasting histories. It is therefore unfortunate that this dichotomy all too often relies upon a restricted range of evidence. The identification of what are assumed to be the 'core' agricultural landscapes of the early Neolithic rarely engages with any detailed evidence from settlement sites, but is generally dependent upon the known distribution of surface flint scatters from across a specific area. It is assumed that where there is a large degree of continuity in settlement between the Mesolithic and Neolithic then there was widespread adoption of agricultural practices and resources, particularly if there is evidence for extensive clearance during the late fifth and early fourth millennia BC. However, it is rarely the case that palaeoeconomic assemblages are available to demonstrate such conclusions (Stallibrass and Huntley, this volume), and while information from pollen diagrams is extensive in areas such as Cumbria and the central Pennines it is relatively absent from many other landscapes, particularly in Northumberland and the vales and wolds of North Yorkshire (Burgess 1984, 132; Higham 1986, 15, fig. 1.3). It is therefore apparent that our appreciation of the Mesolithic-Neolithic transition is limited by a series of problems which are shared by many parts of northern England, and since it is unrealistic to expect marked improvements in the available data from all areas across the region, a more targeted series of proposals may be the best way to proceed. This would obviously depend upon developing an approach by which local sequences could be placed within a more regionally inclusive scale of investigation. This is a long-term undertaking and would have to include more than just the intensive study of those landscapes which have already witnessed significant levels

of fieldwork. Large parts of northern England have received little archaeological attention in the past, and as the contributions in this volume by *Adams* and *Tipping* illustrate, this may have important implications for the consideration of upland areas. It may be that the patterns of early Neolithic settlement from across these landscapes are somewhat different from those presently envisaged: a suggestion supported by the possibility that an unknown proportion of the region's 'Iron Age' enclosures, such as Gardom's Edge in the Peak District (*Barnatt*, *this volume*) or Carrock Fell, Cumbria (Bradley, pers.comm), may in fact have originated as Neolithic sites.

The development of a more holistic approach to the Mesolithic-Neolithic transition in northern England becomes particularly important when we consider the possibility that the southern part of the region saw more extensive activity on either side of the chronological divide than seems to have been the case elsewhere. It has been suggested that in the southern half of the region the presence of more populous groups on both sides of the chronological divide led to the relatively extensive utilisation of both the lowlands and uplands (Higham 1986, 22ff). This is clearly demonstrated by settlement evidence and pollen diagrams from the hills of the North York Moors and the Peak District (Atherden 1976a and b; Bradley and Hart 1983, 180; Spratt 1993, 27ff, figs. 12, 28 & 29; Tallis 1991; Taylor et al 1994). On the other hand, with the generally more hilly terrain to the north and west of Yorkshire any evidence for intense levels of activity during the late fifth and early fourth millennium BC is presently restricted to the more low-lying landscapes. although there is evidence from the upper reaches of the river valleys which penetrate the Pennines and the Northumbrian uplands. These areas include the coastal plain of south west Cumbria, the limestone hills to the east of the Lake District mountains, the coast and river valleys of Co. Durham and Tyne and Wear, and the basins and low fells of Northumberland (Annable 1987, 30, 44; Burgess 1984, 129ff; Cherry and Cherry 1987; this volume; Cummins and Harding 1988, 78-9; Haselgrove and Healey 1992; Tolan-Smith, this volume; Weyman 1984, 40ff; Young 1984; 1987). It is also noticeable that there is presently little evidence for extensive deforestation - with the possible exception of a few particular areas along the Cumbrian coast - from these landscapes before the latter half of the third millennium BC (Pennington 1970; 1975; Powell et al 1971). It may therefore be apparent that the relationship between the different landscapes of northern England could have also depended upon more general variations, and this should perhaps come as no surprise if we consider the topographic and climatic differences between the north and west and the south and east of the region (Higham 1987). While it may be misplaced to overstate such contrasts - particularly in view of the problems encountered by fieldwork across the uplands of northern England - it is apparent that a regional scale of analysis may generate a more dynamic framework for individual programmes of study. At the very least it highlights the major limitations of the existing evidence.

The adoption of such a general interpretative

framework would also serve to shift the study of the Mesolithic-Neolithic transition beyond its exclusive focus upon the relationship between settlement patterns and economic resources. The monuments of the early fourth millennium BC have played such an important part in our perceptions of the early Neolithic, but all too often in northern England these sites have been considered apart from the other contemporary strands of evidence. This has obviously placed an unnecessary restriction upon our study of social trajectories or histories, a problem which has certainly been exacerbated by the more or less complete absence of recent excavation except for those long and round barrows in eastern Yorkshire (notably Brewster 1984; Coombs 1976; Manby 1963; 1976; 1980; Vyner 1984). However, even a brief investigation of the present distribution of these monuments may offer an important insight into the social processes developing during the early Neolithic. It is noticeable that while long barrows are generally located throughout the region they are not always found in areas which have produced evidence for early Neolithic settlement. The greatest number of these monuments are to be found across the Peak District and the hills of eastern Yorkshire (Kinnes 1992, 1A.18 and 20), and both are upland landscapes to the south of the region which are known to have been extensively exploited during this period. It is striking, on the other hand, that despite the levels of settlement documented for south west Cumbria there are few known long barrows, while on the other side of the Pennines. across the low hills to the north of Cleveland, there may be a complete absence of these sites (Bradley and Edmonds 1993, 150. fig. 7.9; Masters 1984, fig. 4.1). Their present distribution is therefore concentrated across particular landscapes, and while this may overstate the 'real' archaeological pattern, it does suggest important contrasts in the social strategies which were developing across northern England. However, if the majority of long barrows were located to the south of the region it is also noticeable that this is the same area from which the most complex early Neolithic monument foci have been recorded (Barnatt 1989, 151-155; Bradley and Edmonds 1993, 198). The most obvious example is the unique configuration of cursuses at Rudston (Dymond 1966), while the lesser known complex at Hastings Hill in Tyne and Wear consists of a causewayed enclosure which adjoins the end of a cursus monument (Newman 1976). The obvious conclusion, therefore, is that the Neolithic may have developed in a different manner on either side of the Pennines, or between the north and south of the region, and this is reiterated by the distribution of late Neolithic monument complexes and stone circles.

A similar distinction across northern England can be illustrated by the distribution of early Neolithic round barrows (both chambered and unchambered). There are concentrations of excavated round barrows in both eastern Yorkshire and the Peak District which have been dated to the early Neolithic, while smaller numbers of such monuments, again with some evidence for early origins, are also known from around the Hasting Hill complex and the Milfield Basin (Annable 1987, 99-100; Burgess 1984,

138-9; Harding, this volume; Manby 1958; Kinnes 1992, fig.1A.2; Manby 1970, 14-18). However, these commemorative mounds - which often cover articulated individual burials - are all too often ignored, despite the evidence they offer for the development of diverse funerary traditions during the fourth millennium BC. This is perhaps surprising when it is considered that similar sites from outside the region generally have later dates, and are certainly not found in such numbers (Barrett et al 1991, 85; Davies et al 1985; Jackson 1977; Piggott and Piggott 1944, 74-5; Richards 1986-90, 26; Thomas 1954, 314). It would therefore be appropriate to consider these monuments as local manifestations of a phenemenon which may have its origins in northern England, and which played a significant role during the early Neolithic. Future research could focus upon the development and relationship between the differing burial traditions, and the potential of such an approach has been partly illustrated by the re-examination of the evidence for Neolithic round barrows in eastern Yorkshire (Harding, this volume). It is also of importance to ascertain the extent to which the concentration of these monuments across two areas of upland can be matched in other parts of northern England. Is it possible that the relatively high numbers of round barrows in eastern Yorkshire and the Peak District simply results from intense levels of antiquarian excavation, or is there a 'real' archaeological pattern which requires interpretation? If the latter can be demonstrated it would suggest a shared dynamic between communities in both areas, but exactly what social processes were at work? These questions provide a suitable framework for the observation that the round barrow tradition of burial in both eastern Yorkshire and the Peak District appears to have culminated in the construction of the so-called 'Great Barrows', in the latter case apparently through the modification of earlier chambered sites (Barnatt 1990, 26-7, 29; Manby 1988, 64-5). These physically striking round barrows are well recorded in both these parts of northern England, and while their topographic siting is clearly different in the two areas it is again of importance to question why these monuments are to be found across these landscapes and not apparently elsewhere in the region?

The round barrows, and their associated form of burial, may therefore represent a funerary tradition which directly links a number of discrete landscapes throughout northern England. This suggestion should not, however, come as a surprise. This would only be an admission that the Neolithic of the region consists of nothing more than independent local sequences between which any connections are simply a product of the large-scale processes which typify the period across the British Isles. It is clear, on the other hand, that different parts of northern England may have been linked by specific and complex social processes. If the Neolithic round barrows indicate similar social trajectories in eastern Yorkshire and the Peak District a more direct relationship has long been demonstrated between the former area and the Cumbrian mountains by the concentration of Group VI axes across the Yorkshire chalklands. While this specific

theme will be discussed a little later in this contribution. it is worth noting at this stage that the lowlands adjoining these two areas may also be linked by a particular form of monumental enclosure (Bradley and Edmonds 1993, 160-1). On the western side of the Pennines, at Long Meg and her Daughters, a large stone circle is abutted by an irregular pear-shaped ditch which is impressive in size and apparently interrupted by at least two entrances (Soffe and Clare 1988, fig. 1). On the other side of the Pennines, in the Vales of Mowbray and York, similar enclosure layouts are recorded, again in association with other large monuments. The outer and inner ditches of two of the Thornborough henges clearly differ in character, with the former possessing a more irregular and segmentary outline, while one of the outer ditches at the Newton Kyme henge has a similar appearance (Harding and Lee 1987, 311, 315). These enclosures are in clear contrast to the other ditches with which they are associated, and it is worth noting that there are other parallels on the chalklands to the east. The 'Great Barrows' at Duggleby Howe and Wold Newton 284 are each encircled by a large interrupted ditch (Kinnes et al 1983, fig. 7, 104), and the link with Long Meg is perhaps reiterated by the two large round cairns which may have existed within the interior of the stone circle, adjacent to the apparently earlier ditched enclosure (Soffe and Clare 1988, 553). However, while these enclosures are both striking and unusual in appearance, they have seen a general absence of fieldwork. The only exception is Duggleby Howe, and although the mound here appears to date from the beginning of the later Neolithic there is no reason to assume direct contemporaneity between this and the surrounding ditch (Kinnes et al 1983). There is, in other words, little evidence on which to discuss the possibility that these enclosures represent a distinct phenomena of later Neolithic monument construction which linked the area immediately to the west of the Pennines with eastern Yorkshire. Similar arguments and problems are encountered when the cluster of at least seven henge monuments in the lowlying vales of North Yorkshire are compared with the two henge monuments located on the other side of the Pennines in the Eden Valley. These sites are all large and there are other morphological similarities between the monuments in Yorkshire and those at King Arthur's Round Table and Mayburgh (Harding and Lee 1987, 102, 107, 109, 308ff; Topping 1992). The superficial evidence again suggests shared traditions on either side of the Pennines, but unfortunately there is little direct evidence on which to develop this important argument.

If the relationship between classes of monument from across northern England is somewhat problematic the same can also be concluded about their connection with the wider landscape, or more specifically, local patterns of settlement. This is an area of research which has been largely ignored, although recent and on-going investigations at Thornborough and Milfield have employed fieldwalking to explore the relationship between monumental foci and surrounding patterns of human activity. While there have been large-scale projects across northern England in the past, these have generally focused

on the association between surface scatters and general topographic or geological zones. The patterns and codes which may have structured the relationship between settlement and monument have not been a theme within this research, despite the successful investigations recently undertaken across the Wessex chalkland (Barrett et al 1981; Holgate 1987; Richards 1990). These projects, notably those at Cranborne Chase and the Stonehenge Environs, have demonstrated the complexity of available information. Similar approaches to the evidence in northern England could therefore aim to explore whether such structuring patterns were at play across the region, while also demonstrating that detailed interpretation is not only possible on the archaeologically wealthy southern chalklands. There are certainly many candidates for such landscape-based research projects. The fieldwork must include limited excavation to improve our chronological understanding of monuments which are still generally dated by comparison with the well known sites of southern England. Notable candidates include the low-lying henge group of Mayburgh and King Arthur's Round Table in the central Eden Valley, and the similarly rich lowland environment of the nearby complex of Long Meg and her Daughters (Annable 1987, 109-10; Higham 1987, fig.3.1b; Soffe and Clare 1988). Even those more extensively studied landscapes, such as that around Rudston, would greatly benefit from such a holistic approach to the archaeological evidence. While the distribution of complex flint and stone artefacts from around this monumental focus have been repeatedly discussed (Manby 1974; Pierpoint 1980, 273), there has been little systematic research on the landscape in its entirety. Such an approach is particularly important when one considers that there is, as yet, little information about the chronology of this unique collection of monuments (Dymond 1967; McInnes 1964).

If occupation patterns around important monumental foci are little understood it is equally apparent that the more general dynamics of settlement during the fourth and third millennium BC must be more fully investigated. It seems unlikely that there would not have been important transformations during the Neolithic, and in some parts of the region there was an apparant expansion of settlement during the latter half of this period. This has been documented within the gritstone uplands of the Peak District, the Cheviot uplands, and the Eden Valley (Barnatt, this volume; Bradley and Edmonds 1993, 150; Tipping, this volume). These areas could have assumed increasing importance during the later Neolithic, and it is noticeable that this process may have been complemented by a greater nucleation of settlement across landscapes which had been of previous significance. The latter process is illustrated by the widely reported concentration of high prestige artefacts around the cursus complex at Rudston, and this may indicate a convergence of settlement on this low-lying and fertile valley and on the surrounding wold tops (Bradley 1993, fig. 32; Henson 1989, fig. 1.4; Manby 1974; 1979, 77, fig. 10; 1988, 56; Pierpoint 1980, 271-5). A similar conclusion is possible for the area around Arbor Low on the limestone plateau of the Peak

District. There is a concentration of complex artefacts around this henge monument, and while there appears to have been an increase during the later Neolithic in the use of chert, the scatters from around Arbor Low illustrate that more exotic raw materials were of greater importance (Bradley and Hart 1983, 186). The available evidence from northern England may therefore indicate that certain areas witnessed the more extensive exploitation of particular landscapes, including the hills located between low-lying areas and the more elevated uplands (Annable 1987, 271). This process could have been related to the increasing importance of key valley bottoms and river basins, many of which have been damaged by subsequent fluvial activity. It is certainly apparent that during the later Neolithic there was a general shift in the pattern of settlement, and this may have led eventually to the extensive occupation of the uplands which is so widely reported for the early Bronze Age. However, the lack of extensive fieldwork across many parts of northern England means that such a sequence is as yet only applicable to small parts of the region, and the more detailed discussion of these processes is limited by the quality of the evidence in areas where such settlement patterns have been recorded. There is, for instance, a striking absence of appropriate radiocarbon dates for all areas. As a result, it is difficult to assess the social dynamic behind these changes, including whether there was a growing tendency for sedentary occupation during the later Neolithic. Indeed, the issue of mobility versus permanent occupation should be central to discussions of the Neolithic, and much further research is required in this field.

This contribution has outlined a number of themes which in the opinion of the authors warrant extensive programmes of research. Investigations of these themes often start with the local study area or individual site, but such work must also be employed for a more general appreciation of social and political processes across northern England. However, if such thematic discussions have generally failed to orientate research priorities in the past, there is one notable exception which clearly illustrates the link between specific and general scales of analysis. It appears that the Group VI source at Great Langdale was pivotal to at least some of the exchange networks which appear to have played such a significant role in northern England, and the study of this 'axe factory' by Bradley and Edmonds (1993) demonstrates how intensive work at a specific site can dramatically increase our understanding of processes at work over a much larger area. Their stimulating discussion of stone axe production and exchange revolves around the small-scale excavations which were undertaken at the source itself, and they explore the implications for areas further afield, notably the Eden Valley and eastern Yorkshire. The significance of such exchange networks, and therefore their presentday analysis, should not be underestimated. The topographic closure of different areas throughout northern England, discussed in the introduction to this contribution, would have surely added to their social importance. While the exact mechanisms of exchange remain little understood, it is apparent that any attempt by social groups to transcend some of the striking landscapes of the region would presumably have required much physical and perhaps symbolic effort. This may have enhanced the status and prestige of the journey and any returning artefacts. Alternatively, if these items were moved hand-to-hand between communities their passage across such distinct landscapes as the Pennines would have added to their 'exotic' value. It is, therefore, not surprising that these exchange networks flourished throughout northern England, and such a simple observation must clearly underline the need for further studies on the extent and nature of connections between different parts of the region.

The fascination over the years with the distribution of the Group VI axes has dominated our understanding of exchange networks in northern England. Their occurrence in large numbers on the Yorkshire and Lincolnshire Wolds (Clough and Cummins 1988, map 6; Cummins 1979, fig.8; Manby 1979, table III) illustrates the importance of these artefacts, yet the detail of recent explanations for this skewed distribution have perhaps unwittingly created the impression that the scale and extent of contact across northern England is now well appreciated. Such confidence would, however, be misplaced. The Group VI source must also be considered alongside others which were of importance to Neolithic exchange networks. There is certainly a need to assess what, if anything, was moving in the opposite direction to the stone axes, and this must surely depend upon the more extensive geological sourcing of raw materials in northern England (Durden, this volume). Such a programme could assess whether the unsourced worked flint found to the south of the Eden Valley did in fact originate in central and eastern Yorkshire. It is also essential that such a scientific programme be extended to the study of other potential exchange networks throughout the region. Principal to this must be the identification of the geological sources for the flint which were exploited throughout Cumbria, Northumberland and the Peak District, particularly since the uncharacteristically high quality of some of the worked material may again suggest the presence of imports (Annable 1987, 64-5; Garton 1991, 18; Henson 1989, 11; Higham 1986, 52, 58; Vine 1982, 15-6; Weyman 1984, 49). Furthermore, it is easy to forget that throughout north east England only 30% of known stone axes are of probable Group VI origin, and this figure is considerably lower in areas such as northern Northumberland (Annable 1987, 53, map 14; Manby 1979, 73). When it is considered that the source for much of the remainder is unknown it becomes clear that the petrological examination of stone axes, and indeed other classes of artefact, should be a priority. The systematic mapping of these items by their raw material source would provide a more complete picture of the patterns of exchange throughout northern England, and should be complemented by an extensive dating programme. The present lack of a chronological scale for the introduction and circulation of all except those axes made of tuff from the Great Langdale source seriously limits any insight into the dynamic of exchange systems. It is currently

impossible to discuss in any level of detail the increasing or decreasing popularity of individual sources through time, yet such discussions may be crucial in explaining why the stone axes which are known from specific areas often appear to be made of a distinct raw material.

This paper does not attempt to present a comprehensive assessment of our state of knowledge, or to classify what should be our most urgent priorities over the coming years. Rather, the themes which the authors feel are the most interesting and accessible in terms of social history have been considered separately from numerous other significant problems and questions. These could include, for instance, the need to improve our chronological understanding of the pottery sequence in northern England, particularly in areas other than eastern Yorkshire (Annable 1987, 89). As with other categories of material culture in the region, there is certainly a need for a programme of radiocarbon dating. It may then prove possible to examine the relationship between the differing styles of pottery across nothern England, and to define more precisely the contrasts with the better known typologies to the south and north. Similarly, it would be extremely useful to source the raw materials employed in the manufacture of some of this pottery - as undertaken for a limited number of sherds from the Cumbrian limestone uplands (Cherry and Cherry 1992) and Milfield Plain (Gibson 1983) - and thereby producing further information about the relationship between scattered social groups throughout northern England (Higham 1986, 62-3; Phillips 1981, 33). It is also evident that there is much scope for developing our appreciation of the range of high prestige artefacts which are such a distinctive characteristic of the archaeological record in northern England. It is incongruous, for example, that there is such a limited number of radiocarbon dates for the extensive series of high prestige items known from areas such as the Yorkshire Wolds (Kinnes et al 1983, 98). An improvement in our understanding of the chronology of these artefacts would provide us with an insight into the dynamic behind the introduction and circulation of these artefacts (cf. Bradley and Edmonds 1983, 54, 203). It would clarify whether they were introduced sequentially, as suggested by Thorpe and Richards (1984, 71), and at what rate the exchange systems diversified during the later Neolithic. The significance of rock art to Neolithic communities throughout much of northern England, and the changing role of this through time, is another issue which requires much further study, and one which promises valuable results if approached using suitable methods. Finally, the processes by which the Neolithic eventually gives way to the Bronze Age (coupled, perhaps, with a questioning of the relevance of conventional chronological terminology) are also in need of much further investigation.

It is important to emphasise that all the themes which have been discussed in this contribution are concerned with the character and chronological rhythm of social and political processes which 'stretched' across wide spans of space and time. The focus of interest, therefore, has been upon the long-term dynamics which linked and structured the differing landscapes of northern

England. These include the relationship between the process of change in each of the bracketed local sequences, as well as the association between types of topographic zones or between different categories of evidence. This approach therefore attempts to complement the local sequences of specific areas with an improved general framework by which to appreciate the archaeology of the region. This should serve to enhance the status of northern England in Neolithic research by providing a more complete picture of social history throughout the period. It is therefore the opinion of the authors that the above discussion represents a coherent agenda which may remedy the prevailing image that northern England is somehow 'peripheral' to the south. Such an approach could also have a direct bearing upon the intensity and nature of fieldwork at a local level. As already mentioned, it takes no more than a brief examination of the literature to illustrate that while there are marked differences in the quantity and quality of evidence between northern and southern England, there are also clear inequalities across the former area itself. However, a more integrated scale of analysis would draw attention to such limitations and highlight the specific potential of different areas and categories of evidence.

# To Dig or not to Dig? Managing the Neolithic in Northern England

Before closing this brief consideration of future possibilities with regard to the Neolithic of northern England, it is important to consider the need for the development of sensible long-term conservation policies to complement the research work discussed above. Recent years have witnessed the development of conservation archaeology, with an increasing emphasis placed on the preservation of archaeological deposits in situ. The recognition of the need for comprehensive conservation policies is to be welcomed, but we must guard against allowing the pendulum to swing too far in that direction and must continue to ensure that adequate resources are allocated to research. In many cases it is not possible to institute adequate conservation programmes without a degree of research to enable an understanding of the nature and condition of the resource. However, it is also necessary to ensure that a suitable sample of sites are conserved to enable future fieldwork which could employ methods and theories not yet available to answer questions which we have not yet even begun to ask. What is needed, therefore, is a healthy combination of conservation and research, with each contributing towards the other, and priority should be given to projects which are designed to combine elements of both. Many of the issues touched upon in the following discussion are by no means relevant only to the Neolithic, and have been discussed in greater detail in a recent paper by one of the writers (Frodsham 1995).

It is a fundamental argument of this paper that there is little point in preserving every Neolithic 'site' if

we don't make more of an effort to understand these sites. On the other hand, however, it would be futile to direct excessive resources to research work in a few particular areas while important sites elsewhere were being destroyed or damaged due to inadequately funded conservation measures or more direct threats such as gravel extraction. This may appear obvious, but all those involved in conservation archaeology with genuine interests in research will testify that such a balance is increasingly difficult to strike in practice. The point is perhaps well illustrated by recent events at Scorton, North Yorkshire (Topping, 1982), where 85% of a poorly understood monument has been destroyed by gravel quarrying without any archaeological recording (Neil Campling, pers. comm.). Today's planning regulations should ensure that such situations do not occur in future, but permission for gravel extraction on this particular site was granted long before these regulations were introduced. Given this situation, it seems unfortunate that Local Authority Archaeologists, academics, national heritage bodies and local amateur societies appear to have been incapable of getting together to organise some form of fieldwork exercise before the monument was destroyed.

Today, all developments requiring planning permission are subject to the guidelines laid down in 'Planning Policy Guidance: Archaeology and Planning' (PPG 16), published by the Department of the Environment in November 1990. When properly applied, PPG 16 can lead to the protection of important archaeological remains and to the discovery and investigation of interesting sites. However, the direction within PPG16 that important sites (both scheduled and unscheduled) should be preserved in situ wherever possible carries several dangerous assumptions, as well as being arguably anti-intellectual in its basic foundation (Biddle 1994, Frodsham 1995). There are many sites for which a case can be made for preservation in situ in preference to 'destructive' excavation, but there are many more sites for which the chance to excavate in advance of development should be regarded as a once in a lifetime opportunity which it would be unprofessional in the extreme to turn down. The paper in this volume by Nick Tavener illustrates the point: would the remains investigated at North Marton really have been better off sealed indefinitely beneath the A1 or left undisturbed through the re-routing of the road? Of course they wouldn't. The knowledge which this investigation will add to our understanding of the Neolithic in North Yorkshire, including the ability to help predict the probable locations of similar complexes elsewhere, is priceless. The assumption that we should preserve everything in situ as better excavation and post-excavation techniques may be available one day is certainly questionable, especially as we cannot be certain that PPG 16 type policies will be operational into the distant future.

Sites and monuments records should act as the local indices for archaeological information, but the SMRs are only as good as the information held within them. SMRs should be a lot more than simple distribution maps, and careful analysis of them should enable the prediction of previously unrecorded archaeological

deposits. To take a relatively obvious example, the distribution of burial mounds may relate in a particular way to the location of settlements, so if patterns can be recognised in such distributions then the possible settlement locations can be properly examined if they are ever hallmarked for development. The possible locations of such sites should be shown on SMR maps in addition to the locations of all known sites. Such work can only be effectively undertaken through regular interchange between SMR officers and academics, and this should be in the interests of both and certainly of Neolithic studies as a whole. Such discussion should lead to more comprehensive SMRs, leading to further fieldwork in advance of development and, where relevant, restrictions on development to enable conservation. In addition to their development control work, several local authorities are now moving towards the adoption of integrated conservation policies based on the systems which have evolved in the National Parks over recent years. It is essential that accurate information relating to the Neolithic is made available to the officers responsible for drawing up such integrated conservation agreements, and the best way of ensuring such information is available is through consultation between SMR officers and those academics best qualified to speak on the Neolithic of the areas concerned.

Most of what are deemed to be our most important archaeological sites are legally protected as scheduled ancient monuments (SAMs). While there are many problems with scheduled monument legislation, not the least of which is how to decide which monuments to include on the schedule in the first place, the scheduling process remains the best available method of protecting sites from damage. However, while the act of scheduling a site offers it some protection from future damage or destruction, there is a continuing need to protect sites from natural deterioration. This need for positive management must be linked to the assessment of the current condition of sites, and such assessment work can also be of considerable academic potential. The recent investigations at the Coupland Enclosure in the Milfield Plain (Clive Waddington, pers. comm.) provide a good example of such work. The small-scale excavation here was designed to investigate the origins and development of what is potentially one of the most important monuments in northern England, and to assess its relationship to the linear monument (previously interpreted as a cursus) which passes through it. The results are of considerable interest in this respect (Waddington, forthcoming), but they also clearly demonstrate that the archaeological deposits within the scheduled area are suffering serious damage through the regular ploughing of the site. It is unfortunate that more funding was not made available for this project, and in future such projects combining research with management must be afforded a higher priority and adequately funded. Indeed, excavations at key sites such as Long Meg, Mayburgh, Coupland and Thornborough in conjunction with fieldwork to examine their surrounding landscapes as discussed earlier in this paper - must be actively encouraged, with the aims of furthering our

understanding of the monuments and the people who built and used them while at the same time gathering important information relating to the future conservation of buried deposits. In addition to work at these key Neolithic sites, programmes of investigation at a selection of supposed Iron Age/Romano-British cropmark enclosures throughout lowlands of northern England, and a similar investigation of supposed Bronze Age round cairns in the uplands, may well prove that a proportion of these originated back in the Neolithic. While some may argue that it doesn't really matter if a site is incorrectly labelled as long as it is adequately protected (for example, many Neolithic burial cairns may currently be scheduled as Bronze Age) there is in fact a need to investigate a sample of these sites, rather than simply conserve them indefinitely, if we hope to further our understanding of the Neolithic. There is also a continuing need to ensure that Neolithic studies do not become divorced from prehistoric studies in general, and that we keep our minds open to the fact that the dating of many sites remains very poorly understood.

There are considerable difficulties in applying the scheduled monument legislation to certain classes of archaeological site, including flint scatters and sites of high palaeoenvironmental potential which may have no surface evidence of human activity. The conservation of such sites must rely to a large extent on voluntary management agreements between landowners and local authorities (under Section 39 of the Wildlife and Countryside Act, 1981), and funding must be made available for such agreements. In many cases some degree of investigation, to examine the nature and condition of buried deposits, may be necessary prior to the concluding of such an agreement, and funding must also be found for this. The same type of management agreements are often the best way of ensuring the conservation of a monument's setting, as while a monument itself can be scheduled the surrounding land, which may hold important clues to the development of the monument, cannot. Such agreements can include conditions relating to the control of ploughing, rabbits, tree planting and any other form of ground disturbance, and, where relevant, can be drawn up to include provision for public access and the interpretation of sites to visitors. The issue of public access and interpretation of Neolithic sites is important, and it is not something which we are currently doing very well in this region. The potential for management and access agreements at a wide range of visually impressive sites, including stone circles, henges and rock art complexes, is something which local authority archaeologists, academics and national heritage bodies and must work together to realise in years to come. Efforts to increase public awareness of archaeology are justifiable in their own right, but there is an added bonus in that the increased level of public interest generated through the ability to visit sites on the ground should help to raise support for further research in the future.

While the designation of SAMs is essential to help protect them from damage, this legislation must never be used to preclude justifiable archaeological investigation in favour of long-term conservation. It is accepted that our

understanding of Neolithic society is likely to progress as much, if not more, through developments in the theoretical understanding of existing data than through the acquisition of new data, but there will always be a need for more fieldwork to further our understanding of particular issues. The onus must be on the excavator to justify his or her excavation, but throughout many areas of northern England so little fieldwork has been done in relation to the known stock of Neolithic field monuments that we should be actively encouraging suitable fieldwork projects rather than worrying unduly about conserving everything for the future, especially in view of the fact (as already noted above in relation to developer-funded fieldwork) that we have no guarantee as to the resources or policies which will be available for archaeology in a hundred years' time. While we do not seek to impose the above observations on research priorities for the Neolithic on anybody, we hope that they may go some way towards the provision of a strategy against which applications for funding, and, where relevant, applications for consent to excavate at scheduled monuments, can be measured. This will be a vast improvement on the current situation, whereby experienced fieldworkers are actually excluding scheduled monuments from their projects in view of the administrative problems associated with their investigation.

While the excavation of scheduled monuments for research purposes will continue to provide alarm for some, there can be no argument against 'non-destructive' survey work such as topographic or geophysical survey at such sites. Consequently, as a starting point, we should aim to ensure that good quality large-scale topographic surveys are available for all upstanding scheduled monuments dating from the Neolithic by early in the next century. Ideally, such surveys should be undertaken by professional bodies, but local programmes of survey work could be set up to involve amateur societies and students if a certain amount of professional guidance can be made available. Such work is often of considerable academic value, but it is also crucial from the management angle to enable monitoring of sites over time. Recent examples of important survey projects include Topping's (1992) work at the Penrith henges, the Northumberland National Park/Archaeology Practice (University of Newcastle) 1996 survey of the Dour Hill 'long' cairn, and several examples of rock art recording (such as the various publications of Stan Beckensall and the work of the Ilkley Archaeology Group). It is important to stress, though, that such surveys, however detailed, will often be insufficient in themselves to allow detailed interpretation or adequate management strategies to be drawn up, so we should not be at all afraid of taking the investigation of sites a stage further where this is justified. The Dour Hill survey, for example, is regarded as only an initial stage in the attempt to establish a better understanding of long cairns, and their relationship with a number of possible Neolithic round cairns, throughout the uplands of Northumberland.

Four of the contributors to this volume have chosen rock art as their major theme, reflecting the recent

welcome trend to integrate rock art studies with other archaeological evidence. Given that rock art sites can be seen above ground, and no deposits are buried within them, it might be assumed that their management would be relatively straightforward in comparison to the majority of Neolithic sites which consist largely of buried deposits. However, this is not necessarily the case and very little is being done in northern England with regard to the conservation or interpretation of the known sites (although the Peak District and Northumberland National Parks have recently instituted measures to help protect and interpret rock art sites, at Gardom's Edge (John Barnatt, pers. comm.) and Lordenshaws (Frodsham et al, 1994) repectively).

One of the current authors has recently considered the management of rock art sites in some detail, and it is perhaps worth quoting the following passage here: 'Most are in upland areas where the likelihood of damage or destruction through human interference is relatively slight, but nevertheless they illustrate a number of issues of relevance here. For example, while the most complex examples are scheduled as ancient monuments, the phenomenon as a whole will never be understood by studying these alone. There is a need to study the simple examples as well as the more complicated, yet these simple, relatively unspectacular examples are not protected in any way. The schedule certainly does not contain a representative sample of the surviving sites. What should be done to rectify this imbalance? Is it enough to simply record all the carvings and then not worry if some examples get destroyed? Should such recording consist simply of photography, or should we make use of expensive laser techniques so that future rates of erosion can be measured? Regardless of whether or not the rock art sites are scheduled, they will continue to deteriorate through natural erosion, and eventually (not too far into the future judging by the current condition of many examples) they will disappear. Should we remove some of the originals and place them in museums, perhaps placing accurate casts on the original sites? Or should the originals be buried in situ and have replicas placed on top of them? Does the average member of the public care whether he or she is confronted by an original or a replica, and if it is a replica should we say so on an information panel or not bother? Is it satisfactory to conserve such sites within small clearings in forestry plantations, when one of the keys to their interpretation may lie in the views originally obtainable from them?.....Rock art sites did not exist in isolation, and the surrounding landscape still contains fragile evidence (in the form of buried sites or flint scatters) for contemporary patterns of land use. Indeed, virtually every forestry plantation created in north Northumberland since the 1940s has resulted in the disturbance of flint artefacts, and many 'sites' must have been damaged or destroyed. Forestry is not the threat it once was, but landowners are being encouraged, quite rightly, to create new deciduous woodland. Such woodland creation does not provide a sufficient return to allow the funding of archaeological evaluations or excavations, so how should we be addressing such issues from the landscape management point of view? These are all issues which relate equally to many other classes of monument, and which require further discussion' (Frodsham 1995, 82-83). This question of the management of the resource is something which must involve close liason between academics and those responsible with the day-to-day management of the landscape.

### **Conclusions**

The papers presented in this volume have hopefully gone some way towards filling the void between Wessex and Orkney which an analysis of recent publications might have led us to believe existed during the Neolithic. They certainly illustrate that northern England should not be considered as either a cultural backwater or as secondary to the so-called 'core areas' which have been identified in the literature. The main aim of the volume is to generate stimulating new research projects which further challenge the established perceptions of the area. Many of these perceptions result from the way we currently study the Neolithic, and this is why this paper has considered the conceptual framework for research and attidutes towards excavation and conservation. Put simply, while it is essential to ensure the survival of a sample of sites to enable questions to be answered in future, this must not be achieved at the expense of asking no questions at all in the present: we have an obligation to further the study of Neolithic archaeology as well as to ensure the conservation of archaeological sites.

The relevance of this volume is not confined simply to the Neolithic of northern England. More research in this region would, after all, provide a much needed link between the far better studied areas of southern England and Scotland. There is, therefore, a clear message for all those concerned with the study of this period: resources must now be directed towards further work in northern England so that this area can be set in its rightful place, at the heart of Neolithic Britain.

### Acknowledgements.

Grateful thanks are due to John Barnatt, Richard Bradley, Richard Tipping and Clive Waddington for commenting on a draft of this paper.

#### References

- ANNABLE, R., 1987 The Later Prehistory of Northern England: Cumbria, Northumberland and Durham from the Neolithic to the Late Bronze Age. Oxford: British Archaeological Reports 160 (i-iii).
- ARCHAEOLOGY PRACTICE (University of Newcastle), 1996
  Archaeological Reassessment of the Dour Hill 'Long' Cairn
  Upper Redesdale, Northumberland. Unpublished report for
  the Northumberland National Park Authority.
- ATHERDEN, M., 1976a The impact of late prehistoric cultures on the vegetation of the North York Moors. *Transactions of the Institute of British Geographers* 1, 284 300.

- ATHERDEN, M., 1976b Late Quaternary Vegetaion History of the North York Moors, II. Fen Bogs. *Journal of Biogeography* 3, 115 - 124.
- BARKER, G., 1981 Approaches to prehistoric man in northern England. In G. Barker (ed.) *Prehistoric Communities in Northern England*. Sheffield: University of Sheffield, 1-10.
- BARNATT, J., 1989 Stone Circles of Britain. Taxonomic and distributional analysis and a catalogue of sites in England, Scotland and Wales. Oxford: British Archaeological Reports 215 (i & ii).
- BARNATT, J., 1990 The Henges, Stone Circles and Ring cairns of the Peak District. Sheffield: University of Sheffield Archaeological Monograph 1.
- BARRETT, J.C., 1994 Fragments from Antiquity. An Archaeology of Social Life in Britain, 2900-1200BC. Oxford: Blackwell Publishers.
- BARRETT, J.C., BRADLEY, R.J. & GREEN, M., 1991 Landscape, Monuments and Society. The Prehistory of Cranborne Chase. Cambridge: Cambridge University Press.
- BEWLEY, R.H., 1993 Survey and excavations at a crop-mark enclosure, Plasketlands, Cumbria. Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society 43, 1-18.
- BIDDLE, M., 1994 Challenging the normal presumption, in *British Archaeological News*, March 1994.
- BRADLEY, R. J., 1984 The Social Foundations of Prehistoric Britain. London: Longman.
- BRADLEY, R.J., 1991 Rock art and the perception of landscape. Cambridge Archaeological Journal 1, 77-101.
- BRADLEY, R.J., 1993 Altering the Earth: the Origins of Monuments in Britain and Continental Europe. Edinburgh: Society of Antiquaries of Scotland Monograph Series 8.
- BRADLEY, R.J. & EDMONDS, M., 1993 Interpreting the Axe Trade. Production and Exchange in Neolithic Britain. Cambridge: Cambridge University Press.
- BRADLEY, R.J. & GARDINER, J. (eds.), 1984 Neolithic Studies. A Review of Some Current Research. Oxford: British Archaeological Reports 133.
- BRADLEY, R.J. & HART, C.R., 1983 Prehistoric settlement in the Peak District during the third and second millennia BC; a preliminary analysis in the light of recent fieldwork. *Proceedings of the Prehistoric Society* 49, 177-94.
- BRAITHWAITE, M., 1984 Ritual and prestige in the prehistory of Wessex c.2000- 1400 BC: a new dimension to the archaeological evidence. In D. Miller & C. Tilley (eds.) *Ideology, Power and Prehistory*. Cambridge: Cambridge University Press, 93-110.
- BREWSTER, A., 1984 The Excavation of Whitegrounds, Burythorpe. Wintringham: John Gett.
- BURGESS, C., 1984 The prehistoric settlement of Northumberland: a speculative survey. In R. Miket & C. Burgess (eds.) Between and Beyond the Walls. Edinburgh: John Donald, 126-75.
- BURL, A., 1976 The Stone Circles of the British Isles. New Haven: Yale University Press.
- BURL, A., 1991 The Devil's Arrows, Boroughbridge, North Yorkshire. Yorkshire Archaeological Journal 63, 1-24.

- CHERRY, J. & CHERRY, P.J., 1987 Prehistoric Habitation Sites on the Limestone Uplands of Eastern Cumbria. Kendal: Cumberland and Westmorland Archaeological Society (Research Volume 2).
- CHERRY, J. & CHERRY, P.J., 1992 Further research on the prehistory of the Cumbrian limestone uplands: the ceramic evidence. Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society 42, 13-22.
- CLOUGH, T.H. & CUMMINS, W.A., 1988 The petrological identification of stone implements from the east Midlands: third report. In T. Clough & W. Cummins (eds.) Stone Axe Studies, Volume 2. London: Council for British Archaeology (Research Report 67), 45-48.
- COOMBS, D., 1976 Callis Wold round barrow, Humberside.

  Antiquity 50, 130-1.
- CUMMINS, W., 1979 Neolithic stone axes: distribution and trade in England and Wales. In T. Clough & W. Cummins (eds.) Stone Axe Studies. London: Council for British Archaeology (Research Report 23), 5-12.
- CUMMINS, W. & HARDING, A., 1988 The petrological identification of stone implements from north-east England. In T. Clough & W. Cummins (eds.) Stone Axe Studies, Volume 2.
   London: Council for British Archaeology (Research Report 67), 78-84.
- DAVIES, S.M, STACEY, L.C. & WOODWARD, P.J., 1985 Excavations at Alington Avenue, Fordington, Dorchester, 1984/5: interim report. Proceedings of the Dorset Natural History and Archaeological Society 107, 101-10.
- DYMOND, D.P., 1964 The 'henge' monument at Nunwick, near Ripon. Yorkshire Archaeological Journal 41, 98-107.
- DYMOND, D.P., 1966 Ritual monuments at Rudston, E. Yorkshire, England. *Proceedings of the Prehistoric Society* 32, 86-95.
- ENTWISTLE, R. & GRANT, A., 1989 The evidence for cereal cultivation and animal husbandry in the southern British Neolithic and Bronze Age. In A. Milles, D. Williams & N. Gardner (eds.) The Beginnings of Agriculture. Oxford: British Archaeological Reports International Series 496, 203-16.
- FRODSHAM, P., 1995 Monuments in the Landscape: Some Thoughts on the Practical Management of the Historic Environment. Northern Archaeology 12, 79-89.
- FRODSHAM, P., MILLER, A. & WEIR, A., 1994 Lordenshaws: a management agreement for an historic landscape, in Berry, A.Q. & Brown, I.W., Managing Ancient Monuments: An Integrated Approach. Clwyd County Council.
- GARTON, D., 1991 Neolithic settlement in the Peak District: perspectives and prospects. In R. Hodges & Smith, K. (eds.) Recent Developments in the Archaeology of the Peak District. Sheffield: University of Sheffield (Archaeological Monographs 2), 3-22.
- GIBSON, A., 1983 Preliminary Results of the Diatom Analysis of Clays and Prehistoric Pottery from the Milfield Basin. Northern Archaeology 4, part I.
- HARDING, A.F., 1981 Excavations in the prehistoric ritual complex near Milfield, Northumberland. Proceedings of the Prehistoric Society 47, 87-135.
- HARDING, A.F. & LEE, G.E., 1987 Henge Monuments and Related Sites of Great Britain. Air Photographic Evidence and Catalogue. Oxford: British Archaeological Reports 175.

- HARDING, J., 1991 Using the unique as the typical: monuments and the ritual landscape. In P. Garwood, D. Jennings, R. Skeates & J. Toms (eds.) Sacred and Profane. Proceedings of a Conference on Archaeology, Ritual and Religion. Oxford, 1989. Oxford: Oxford Univesity Committee for Archaeology Monograph No.32., 141-52.
- HASELGROVE, C.H. & HEALEY, E., 1992 The prehistory of the Tyne-Tees lowlands: some recent finds. *Durham Archaeological Journal* 8.
- HAWKE-SMITH, C.F., 1979 Man-Land Relations in Prehistoric Britain: the Dove-Derwent Interfluve, Derbyshire; a Study in Human Ecology. Oxford: British Archaeological Reports 64
- HENSON, D., 1989 Away from the core? A Northerner's view of flint exploitation. In I. Brooks & P. Phillips (eds.) Breaking the Stony Silence. Oxford: British Archaeological Reports 213, 5-32.
- HICKS, S.P., 1971 Pollen analytical evidence for the effect of prehistoric agriculture on the vegetation of N. Derbyshire. New Phytologist 70, 647-67.
- HIGHAM, N., 1986 The Northern Counties to AD 1000. Harlow: Longman.
- HIGHAM, N., 1987 Landscape and land use in northern England: a survey of agricultural potential. *Landscape History* 9, 35-44.
- HOLGATE, R., 1987 Neolithic settlement patterns at Avebury. Wiltshire. Antiquity 61, 259-63.
- JACKSON, D.A., 1977 A radiocarbon date from the Aldwincle mortuary enclosure. Northamptonshire Archaeology 12, 183.
- KINNES, I.A., 1992 Non-Megalithic Long Barrows and Allied Structures in the British Neolithic. London: British Museum Occasional Paper 52.
- KINNES, I.A., SCHADLA-HALL, T., CHADWICK, P., & DEAN, P., 1983 Duggleby Howe reconsidered. *Archaeological Journal* 140, 83-108.
- LOVEDAY, R.E., 1989 The Barford ritual complex: further excavations (1972) and regional perspective. In A. Gibson (ed.) Midlands Prehistory. Some Recent and Current Researches into the Prehistory of Central England. Oxford: British Archaeological Reports 204, 51-84.
- MANBY, T.G., 1958 Chambered tombs of Derbyshire. *Archaeological Journal* 78, 25-39.
- MANBY, T.G., 1963 The excavation of the Willerby World Long Barrow. Proceedings of the Prehistoric Society 29, 173-205.
- MANBY, T.G., 1970 Long barrows of northern England; structural and dating evidence. Scottish Archaeological Forum 2, 1-27.
- MANBY, T.G., 1974 Grooved Ware Sites in the North of England.
  Oxford: British Archaeological Reports 133.
- MANBY, T.G., 1976 The excavation of the Kilham Long barrow, East Riding of Yorkshire. *Proceedings of the Prehistoric* Society 42, 111-59.
- MANBY, T.G., 1979 Typology, material and distribution of flint and stone axes in Yorkshire. In T. Clough & W. Cummins (eds.) Stone Axe Studies. London: Council for British Archaeology (Research Report 23), 65-81.
- MANBY, T.G., 1980 Excavation of barrows at Grindale and Boynton, East Yorkshire, 1972. Yorkshire Archaeological Journal 52, 19-47.

- MANBY, T.G., 1988 The Neolithic period in Eastern Yorkshire. In T.G. Manby (ed.) Archaeology in Eastern Yorkshire. Sheffield: Department of Archaeology and Prehistory, 35-75.
- MASTERS, L., 1984 The Neolithic long cairns of Cumbria and Northumberland. In R. Miket & C. Burgess (eds.) Between and Beyond the Walls. Edinburgh: John Donald, 52-73.
- McINNES, I.J., 1964 A class II henge in the East Riding of Yorkshire.

  Antiquity 38, 218-19.
- MIKET, R., 1976 The evidence for Neolithic activity in the Milfield Basin, Northumberland. In C.B. Burgess & R. Miket (eds.) Settlement and Economy in the Third and Second Millennium BC. Oxford: British Archaeological Reports 33, 113-133.
- MIKET, R., 1985 Ritual enclosures at Whitton Hill, Northumberland. Proceedings of the Prehistoric Society 51, 137-148.
- MOFFETT, L., ROBINSON, M.A. & STRAKER, V., 1989 Cereals, fruits and nuts: charred plant remains from Neolithic sites in England and Wales and the Neolithic economy. In A. Milles, D. Williams & N. Gardner (eds.) The Beginnings of Agriculture. Oxford: British Archaeological Reports International Series 496, 243-61.
- NEWMAN, T.G., 1976 A crop-mark site at Hasting Hill, Tyne and Wear, NZ 355541. Archaeologia Aeliana 4, 183-84.
- PENNINGTON, W. 1970 Vegetational history in the north-west of England- a regional study. In D. Walker & R. West (eds.) Studies in the Vegetational History of the British Isles.

  Cambridge: Cambridge University Press, 41-79.
- PENNINGTON, W., 1975 The effect of Neolithic man on the environments of north-west England: the use of absolute pollen diagrams. In J.G. Evans, S. Limbrey & H. Cleere (eds.) The Effect of Man on the Landscape: the Highland Zone. London: Council for British Archaeology (Research Report 11), 74-86.
- PHILLIPS, P., 1981 Welcome back, material culture: prehistoric technology and society in northern England, c.3500-1250 b.c.
   In G. Barker (ed.) Prehistoric Communities in Northern England. Sheffield: University of Sheffield, 27-40.
- PIGGOTT, S. & PIGGOTT, C.M., 1944 Excavations of barrows on Crichel and Launceston Downs, Dorset. Archaeologia 90, 47-80
- PIERPOINT, S., 1980 Social Patterns in Yorkshire Prehistory.
  Oxford: British Archaeological Reports 74.
- POWELL, T., OLDFIELD, F. & CORCORAN, J., 1971 Excavations in Zone VII peat at Storrs Moss, Lancashire, England.

  Proceedings of the Prehistoric Society 37, 112-37.
- PRYOR, F.M.M., 1984 Personalities of Britain: two examples of long-term regional contrast. Scottish Archaeological Review 3, 8-15.
- RENFREW, C., 1973 Monuments, mobilisation and social organisation in Neolithic Wessex. In C. Renfrew (ed.) The Explanation of Cultural Change. London: Gerald Duckworth, 539-58.
- RICHARDS, J., 1986-90 Death and the past environment. The results of work on barrows on the Berkshire Downs. *Berkshire Archaeological Journal* 73, 1-42.
- RICHARDS, J., 1990 The Stonehenge Environs Project. London: English Heritage Archaeological Report No.16 (Historic Buildings and Monuments Commission for England).
- SHARPLES, N. & SHERIDAN, A. (eds.), 1992 Vessels for the Ancestors. Edinburgh: Edinburgh University Press.

- SOFFE, G. & CLARE, T., 1988 New evidence of ritual monuments at Long Meg and her Daughters. *Antiquity* 62, 552-57.
- SPRATT, D.A. (ed.), 1982 Prehistoric and Roman Archaeology of North-East Yorkshire. Oxford: British Archaeological Reports 104.
- SPRATT, D. A., 1993 Prehistoric and Roman Archaeology of North-East Yorkshire. London: Council for British Archaeology (Research Report 87).
- TALLIS, J.H., 1991 Forest and moorland in the southern Pennine uplands in the mid-Flandrian period. III. The spread of moorland- local, regional and national. *Journal of Ecology* 79, 401-15.
- TAYLOR, D.M., GRIFFITHS, H.I, PEDLEY, H.M. & PRINCE, I., 1994 Radiocarbon-dated Holocene pollen and ostracod sequences from barrage tufa-dammed fluvial systems in the White Peak, Derbyshire, UK. *The Holocene* 4, 356-364.
- THOMAS, J.S., 1984 A tale of two polities: kinship, authority and exchange in the Neolithic of south Dorset and north Wiltshire. In R.J. Bradley & J. Gardiner (eds.) Neolithic Studies. A Review of Some Current Research. Oxford: British Archaeological Reports 133, 161-76.
- THOMAS, J.S., 1991 Rethinking the Neolithic. Cambridge: Cambridge University Press.
- THOMAS, J.S., 1993 Discourse, totalization and the 'Neolithic'. In C. Tilley (ed.) *Interpretative Archaeology*. Oxford: Berg, 357-94.
- THOMAS, N., 1954 Notes on some Early Bronze Age grave groups in Devizes Museum. Wiltshire Archaeological Magazine 55, 311-32.
- THOMAS, N., 1955 The Thornborough Circles, near Ripon, North Riding. Yorkshire Archaeological Journal 38, 425-45.
- THORPE, I.J. & RICHARDS, C., 1984 The decline of ritual authority and the introduction of Beakers into Britain. In R.J. Bradley & J. Gardiner (eds.) Neolithic Studies. A Review of Some Current Research. Oxford: British Archaeological Reports 133, 67-84.
- TOPPING, P., 1982 Excavation at the cursus at Scorton, North Yorkshire 1978. Yorkshire Archaeological Journal 54, 7-21.
- TOPPING, P., 1992 The Penrith henges: a survey by the Royal Commission on the Historical Monuments of England. Proceedings of the Prehistoric Society 58, 249-264.
- VYNER, B., 1984 The excavation of a Neolithic cairn at Street House, Loftus, Cleveland. *Proceedings of the Prehistoric Society* 50, 151-95.
- WEYMAN, J., 1984 The Mesolithic in north-east England. In R. Miket & C. Burgess (eds.) Between and Beyond the Walls. Edinburgh: John Donald, 38-51.
- WHITTLE, A.W.R., 1993 The Neolithic of the Avebury area: sequence, environment, settlment and monuments. *Oxford Journal of Archaeology* 12, 29-50.
- YOUNG, R., 1984 Aspects of the Prehistoric Archaeology of the Wear Valley, County Durham. Unpublished Ph.D Thesis, University of Durham.
- YOUNG, R., 1987 Lithics and Subsistence in North-Eastern England. Oxford: British Archaeological Reports 161.