Setting the Scene: the Mesolithic in Northern England

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Introduction

Any short paper covering such an enormous subject, especially in the company of scholars much more qualified than the author to approach it, is likely to commit many sins of omission or, worse, crass generalisation. This paper will, therefore, cover a limited aspect of Mesolithic studies in the north of England: the problem of planning and co-ordinating strategies for identifying, evaluating and analysing Mesolithic sites and materials. This approach arises from the preparation of a research design in 1993 (ASUD 113) in which a project was proposed (though never funded) to provide a long term management strategy for the Mesolithic period in the north.

It may well be asked to what extent an understanding of hunter-gatherers and their landscape sets the scene for the Neolithic period, in which the first and most profound agricultural revolution took place. After all, once Mesolithic people saw what a plough or kraal could do they would surely never have looked back; at least, that is the view of a sort of culture history which has the Roman Empire falling the day the Goths overrun Rome in AD410. More subtly, it reflects the 'contact' view of prehistory exemplified in Golding's *The Inheritors*: the primitive group, coming into contact with a 'superior' group for the first time either adapts quickly or is wiped out.

Traditionally, the terms Mesolithic and Neolithic have been applied to a linear chronology with indeterminate boundaries rather than, in a more modern view, to social, economic and technical thresholds by which communities' 'progress' may be measured. In the former definition, technical progress operated on a ratchet principle: once a certain level of agricultural or pastoral competence had been reached, or imposed, a community became Neolithic. If this definition is now generally accepted as at best overly simple, the latter may reflect a trend towards a non-linear view of cultural change. In this view communities of differing technical and social expression may co-exist spatially and chronologically, and their interaction may be termed transitional. Progress is seen as a tendency, rather than a deterministic imperative, and the terms used by archaeologists to name prehistoric periods can be regarded as more convenient than meaningful. The Neolithic, then, could not commence either in fact or in historical narrative as a revolution without origins in the Mesolithic.

For the sake of convenience it may be said that the term Mesolithic applies in Northern England to archaeological evidence for human communities from their earliest post-glacial recolonisation (in or around the 10th millennium bc) up until the first evidence for relatively settled agrarian economies towards the latter half of the 4th millennium bc. This is a vast period, characterised by a progressively warmer but fluctuating climate, and a rich and varied landscape exploited by hunting and gathering groups operating within a non-sedentary, mobile context.

The problem of the Mesolithic

Those acute problems of identification, evaluation and protection which affect the archaeology of the Neolithic period are all more pronounced for the Mesolithic. In the first place, it is now recognised that topographic changes in the last 5,000 years have been profound, so that many sites have either been destroyed or rendered archaeologically invisible. Sea level changes have, in general, resulted in the raising of coastal sites in the west and their denudation in the east. This has been caused both by global sea level fluctuations and by isostatic readjustment following the last glaciation. Sites on the west coast such as Eskmeals (Bonsall *et al* 1989) can only suggest equivalents on the east coast which are now submerged under the North Sea. Estuarine sites have suffered the same fate.

Changes in upland areas have been equally profound, with extensive areas of the north sheathed below blanket peat bog, in some places more than 4m deep. In such circumstances the recognition of Mesolithic sites generally only occurs as the result of chance or during stripping activities which are themselves disastrous. If Neolithic sites frequently only leave subtle traces such as artefact scatters, they also occasionally offer highly visual evidence in long barrows, henge monuments, stone

circles and rock art. There is also strong evidence in the pollen record of clearance episodes, cultivated plants and their associated weeds. Mesolithic sites, except in rare and celebrated circumstances, have left very little indeed, not only in terms of what they offer for interpretation, but also as visible beacons to attract the interest of the archaeologist. The archaeologist has great difficulty not only in getting at such sites, but also in knowing where to look for them in the first place. This problem is exacerbated in those lowland areas thought to have been favoured by Mesolithic communities - river and lake edges especially - although Weyman (1984, 45) notes that there is still a very clear concentration of Mesolithic activity along rivers in the North-East. Many such sites have either been masked by colluvial or alluvial deposits, or buried under peat which has subsequently been extracted or drained, destroying the enormous potential for organic remains which such depositional environments possess. In other areas modern agricultural, industrial or extractive practices have damaged or destroyed the lithic scatters which frequently offer the only evidence for hunting and processing sites. Ironically, our extensive knowledge of lowland sites has resulted from such disturbance, whereas the lack of modern ploughing activity in the uplands has spared the sites but spoilt the chances of the archaeologist.

Within the modern context of contractual archaeology and developer funding these problems are made worse because of the difficulty in evaluating and protecting such sites under current interpretations of Planning Policy Guidance (PPG16: DoE 1991). It is extremely difficult for development control officers, whose Sites and Monuments Records are generally very poor for the Mesolithic period, to justify to developers the evaluation of possible Mesolithic sites on grounds of topographic association or organic preservation, for example. Mesolithic materials frequently occur on archaeological sites where evaluation work has been ordered on other grounds, but rarely are sites explicitly evaluated because of their potential for retrieving such material, which may now form the bulk of new information being collected for the Mesolithic in the north. Indeed, recent excavations by the University of Durham in Darlington Market Place (Carne and Adams 1995) revealed an intact Mesolithic or Neolithic land surface with structures and lithics just 1m below the surface of the modern market.

Young (1994) and others (Adams 1991; Kristiansen 1985) have recently emphasised the effects which archaeological practices themselves have on the formation of the archaeological record - notably in the distribution of fieldworkers specialising in particular periods. That the Mesolithic period in the north is so poorly represented seems to have at least as much to do with the lack of systematic fieldwork conducted in the region on this period as it does on the real distribution of Mesolithic material. Young himself (1987) has attempted to redress the balance and more synthetic works by Smith (1992) and others have raised the collective archaeological conscience to encouraging levels. Individual projects in the Vale of Pickering (Schadla-Hall 1987) and at Eskmeals (Bonsall *et al* 1989), and a reappraisal of the faunal evidence from Star Carr (Legge and Rowley-Conwy 1988), probably the most famous Mesolithic site in the world, should have prompted more systematic research over the whole region. Such a study is now being undertaken by Lancaster University.

Nevertheless, as Young (1994, 7) notes, the archaeological effort in the north is still dominated by medieval and, more especially, Roman interests partly at least as a result of regional academic traditions. A single stark fact illustrates the context of Mesolithic studies as a whole: as Smith (1992) points out, there are only 300 radiocarbon dates for the Mesolithic and earlier periods in Britain.

Even if the unattainable should be attained and archaeologists possessed the whole potential data set for the Mesolithic period, enormous problems would remain. Of all the social, religious and economic behavioural possibilities of an ecologically, spatially and chronologically diverse group of peoples, the evidence retrieved by archaeological techniques allows us to reconstruct a minute proportion. Stone artefacts are by far the largest group of materials, followed by bone, and yet it is clear that wood and plant technology must have been dominant, so that we shall generally remain ignorant of the technical and behavioural diversity of Mesolithic people. If we rely too heavily on ethnographic parallels there is a great risk of compromising diversity for the sake of plausibility. Fortunately for students of the Neolithic, such problems begin slowly to diminish in the context of sedentary, agricultural communities. It should not be forgotten, however, that in relying on archaeological evidence alone an injustice is done to both Neolithic and Mesolithic communities. Evidence from around the world, particularly of African Bushmen and Australian Aborigines, strongly suggests that a key component of existence in these remote periods is the nature and extent of peoples' relationship with their landscape. Surviving creation mythologies indicate that naming the landscape (in terms of topography, flora and fauna) in songs relating to the journeys of ancestors may have provided strong territorial and migratory structures for mobile communities. It remains to be seen whether prehistoric rock art may reflect a graphic expression of such a relationship for these periods (Bradley 1994 and this volume).

The Mesolithic landscape and environment in the north

With these problems in mind it is still possible to offer tentative parameters for the environment of early hunter-gatherers in the north. For Britain as a whole the most recent and authoritative guide is that offered by Smith (1992) but on a regional scale Higham's (1986) survey is probably the best. For the North-East Weyman's (1984) survey remains the most detailed.

By 8000 bc the north of Britain was supporting

flora and fauna indicative of an improving, though fluctuating climate. Hazel, birch and pine, pioneer species of true forests, were only reaching Upper Teesdale, for example, by 6800 bc (Higham 1986, 16) and it may be suggested that in the Cheviots recolonisation took somewhat longer. By the end of the 7th millennium bc, though, it is thought that the general climate was milder than at present. It would be a mistake, however, to view the post-glacial environment of the north of England as an unbroken swathe of forest. Sea-level changes, short-term fluctuations in sea temperatures and rainfall must all have contributed to a wide range of vegetational types and density, as must periodic natural and/or artificial fires. After 6000 bc the climate became wetter with rising sea levels and marginal areas, especially for developed woodland, would have become more so. There is evidence of increased podzolisation of soils and formation of peat, especially on poorly drained uplands, by 5000 bc and increasing thereafter.

The fauna of the northern Mesolithic is defined by two parameters: the survival of species into the post-glacial, and the migration of species from continental Europe before the inundation of the North Sea land bridge around 6000 bc. From this landscape mammoth and woolly rhino had already disappeared, bison had disappeared or has become invisible because its remains are very like those of wild cattle, and larger species of deer seem to have generally declined with the spread of dense deciduous woodland. However, smaller species, such as red and roe deer and wild pig were clearly exploited heavily by Mesolithic communities. Smaller mammals, a wide range of birds, fish, cetaceans and seals were all exploited regularly or irregularly, along with bees for their honey. Most authors stress that despite the gathering of berries, nuts and shellfish, such communities were dependent for a majority of their dietary intake on the products of hunting. It must not be forgotten that humans also had competitors for all their nutritional resources: birds for shellfish, berries and nuts, but primarily carnivores and in particular the wolf for species of game.

Archaeological evidence for the Mesolithic

Archaeology does offer a few firm positive pictures of the northern Mesolithic. From the end of the Upper Palaeolithic until the middle of the 7th millennium bc there was a relatively stable population practising non-sedentary subsistence along the coasts and estuaries of the northern counties, and on favourable sites in the uplands: what Tolan-Smith (this volume) calls an extensive, rather than an intensive strategy. One common feature of virtually every ethnographic study of hunter-gatherers is a broad social structure in which families or task groups are at the lower end and tribes are at the top. A range of collecting or hunting tasks are likely to have been carried out either along the line of a seasonal route, or within reach of a base camp where a few families would periodically have formed a band. Breeding partnerships would have been conducted mostly outside the band to ensure genetic integrity. It is thought that family groups may have been temporary, lasting only a few generations, with bands and tribes being progressively more stable and long lasting. Attempts to model hunting and gathering strategies for northern Britain on ethnographic parallels have so far failed to convince because there is no part of the world, historically, where conditions have been similar to those which prevailed in post-glacial Britain. In addition, the British landscape may be said to be more topographically dense than many other parts of the world and the effects which this may have had on territory size can only be guessed at.

Technology was based heavily on wood and plant fibres and on animal products such as bone, antler, hide and hair. Surviving lithics reflect the poverty of natural flint sources north of the North York Moors and Wolds (Weyman 1984, 49) and east of Langdale in Cumbria. Worked stone would generally have been either poor quality or scavenged from chance findings on beaches or of glacial erratics. Until roughly the first quarter of the 7th millennium bc a broad blade technology predominated (bearing in mind the dangers of typological assumptions). It may be significant that the first date for a narrow blade technology comes from Filpoke Beacon in Co. Durham close to the end, as Higham (1986, 20) notes, of the inundated land corridor to continental Europe. Burgess (1984, 128-9) has associated the introduction of this new technology with the displacement of communities from the flooding North Sea Basin, and suggests that a rapid rise in population occurred in the north between the 7th and 6th millennia bc. He notes that in Northumberland there are almost no known early (*ie* broad blade) sites, but that there are more than fifty late Mesolithic sites. Again, caution must be used here. In the Cheviots, for example, there are very few known Mesolithic sites (Davies 1983) but the Cheviot environment must have been more favourable to early communities than the northern Pennines, where there are many. Peter Topping has recently recovered Mesolithic material from the Cheviots, near Linhope at the head of the Breamish Valley (Topping 1991), so there is yet hope.

Unsurprisingly, the best evidence for Mesolithic activity comes from those areas where field work has been most intensive and systematic. There are, therefore, three oases of comparative knowledge in the north: Eskmeals, in Cumbria (Bonsall *et al* 1989), where a raised beach provided a relatively sedentary community with both coastal and estuarine resources; the Durham Dales, Teesdale and Weardale (Coggins 1986; Young 1986), where a concentration of determined fieldwork has shown the potential for the uplands of the whole region; and the Vale of Pickering (Clark 1954; 1972; Legge and Rowley-Conwy 1988; Schadla-Hall 1987), where some of the most important Mesolithic archaeology of north-west Europe has been emerging from the peat since the 1950s. This last area, where communities were based around a post-glacial lake (Lake Pickering) from possibly the 10th millennium bc onwards, offers a striking example of the

difficulties posed in trying to understand and reconstruct Mesolithic activity at the smallest meaningful scale - that is, the ecological region. Since the discovery of Star Carr, a lakeside 'base camp', threats from County Council rubbish tips (at Seamer Carr), agricultural drainage and reclamation and road development have destroyed or shrunk vital deposits of peat and the organic artefacts contained within them, but at the same time offered a unique archaeological opportunity to examine what is effectively an intact (but vulnerable) Mesolithic landscape.

Planning, management and conservation issues

In 1991 English Heritage, in *Exploring Our Past* (HBMC 1991), identified the transition from the Upper Palaeolithic to the post-glacial period, and the subsequent transformation of hunter-gatherer populations into pastoralists and farmers as being among nine key changes in our past which remain poorly understood and which require co-ordinated study within defined regions. This is particularly relevant for Northern England which contains landscapes of European significance for the period. However, the region still lacks an adequate academic and strategic framework for such a study. The last general survey for planning purposes, Archaeology in the North (Clack and Gosling 1976) covers only Cumbria and the North-East and has been rendered largely obsolete by more recent work.

Unlike later prehistoric and historic populations, hunter-gatherer groups moved annually over very large areas, exploiting a series of different resource territories. Moreover, the basis of these seasonal movements changed considerably between the 8th-6th millennia bc and the 4th-5th millennia bc. To understand the processes involved in the post-glacial recolonisation of the north and the development of farming we need information relating to all the different components of these much larger and shifting territories. It is not sufficient, as for some later periods, to rely solely on the evidence afforded by better preserved landscapes and sites, as these constitute only certain kinds of resource territory among many. This argument applies with equal force to conservation strategies. As well as safeguarding representative sectors of important landscapes such as the Vale of Pickering and the Eskmeals raised shoreline, it is equally essential to protect complementary site types and territories in adjacent areas even if their state of preservation is far less good, because without them there can be no overall understanding of hunter-gatherer groups, or their evolution into agricultural populations. The evidence simply does not respect modern administrative divisions because the scale of these archaeological territories is much larger. It can, therefore, only be planned for within a much wider framework.

Evidence for early human settlement in Northern England is much more widespread than archaeologists have allowed. Wymer's (1977) Mesolithic Gazetteer is now very largely out of date and gives only a partial indication of the relative density of material in different regions. This is true both of areas where discoveries have previously been made, and elsewhere. As expected, the recent Northumberland Coastal Survey and the North-West Wetlands Survey have brought to light a wealth of information relating to all periods, including earlier prehistory, although these still have to be integrated in to the wider regional picture. Equally, other recent surveys and syntheses, for example in the Wear Valley (Young 1984), in the Tyne-Tees lowlands (Haselgrove and Healey 1992) and that in progress in Tynedale (Tolan-Smith, this volume) have demonstrated that both extensive and intensive Mesolithic and Neolithic concentrations can survive in almost any part of the landscape. Unlike the exceptionally well-preserved sites in the Vale of Pickering many of these sites are of individually unremarkable character, often comprising no more than a scatter of lithic artefacts in a secondary context, but they may nevertheless provide the only relevant information about particular resource zones which were exploited seasonally by hunter-gatherer groups or which perhaps formed the heartlands of early agricultural development in the north of England.

Without specifically targeted surveys (*eg* Holgate 1985) most sites of these periods are, however, difficult to identify and thus extremely vulnerable. Normal evaluation techniques are not appropriate. Yet, as *Exploring Our Past* makes clear, the survival of such sites is almost everywhere endangered by modern development - mineral and peat extraction, urban expansion, agriculture, afforestation or natural erosion - and the resource is diminishing at a rate which is difficult to quantify or qualify. The author's own experience of evaluative fieldwork, conducted under the auspices of PPG16, is that Mesolithic material is likely to be present on a substantial proportion of sites which have been targeted as vulnerable for other reasons. Since statutory protection can only ever provide a solution in a tiny minority of cases and new fieldwork on the scale that would be needed to identify the whole of the resource which is currently at risk is clearly not feasible, the long-term answer must lie in a well-informed planning process. This would rely on accurate and constantly updated information on areas which have been shown to have a high potential for preserving the remains of early communities.

The transition from the Mesolithic to the Neolithic

Much of the scant evidence for the transition of human communities to a more pastoral, settled existence comes from pollen, which shows that during the 4th millennium bc humans were deliberately clearing areas of forest (Higham 1986, 32). The Elm decline, which dates to a similar phase, may have associations with clearance or with the procurement of fodder, although it may well have had other, natural causes. In the lowlands cereal cultivation

has been identified in isolated areas such as Barfield Tarn in Cumbria (Higham 1986, 35) as early as c.3390 bc. In the uplands there is little evidence of clearance before 2000 bc although this surely is a matter of invisibility rather than absence.

Traditionally, the transition to the Neolithic in Britain, associated as it is with a radical change in both economic strategies and material culture, has been seen as the result of a population migrating from continental Europe. Such a hypothesis is difficult to accept unequivocally for several reasons, especially in the north, although undoubtedly migration did occur to an unknown extent.

Firstly, Mesolithic communities, travelling over large parts of the region and with knowledge of boat building, should not necessarily be seen as parochial and conservative. Coming into contact with pastoral or arable strategies from Europe or Ireland (where the earliest dated Neolithic site has been recorded for the British Isles) they may have adapted new techniques within an overall nomadic or transhumantic strategy. Secondly, the technological or psychological leap from hunting to pastoralism may not have been either as dramatic or as initially complete as has been thought. As Higham (1986, 40) points out, recent experiments have shown that the taming of wild ungulates is surprisingly easy. Changes in strategy are likely to have been due to a number of factors, not least a rapidly changing ecological scenario. It is unlikely to be mere coincidence that, in the northern counties especially, reuse of Mesolithic sites by Neolithic communities is so common. Where information is gathered on a more detailed and systematic level, subtleties within the overall picture, although by no means susceptible to simple explanation, do emerge, as Tolan-Smith's paper in this volume amply demonstrates.

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