PREHISTORIC PERIOD

INTRODUCTION

ANY attempt to survey within restricted limits the present state of knowledge of Welsh prehistory is inevitably embarrassed by the quantity of material available. Here I have tried, not to give a catalogue of finds or sites, but to summarise our prehistory in terms of the successive cultures of which it is composed. Even with this limited aim, selection has been inevitable; and the result is in any case far from complete both quantitatively and qualitatively. The most serious gap is our ignorance of pre-Iron Age settlement sites: until these have been found and excavated by modern methods our view of the economic and domestic aspects of culture must be far from complete and I have said little about them here.

THE PHYSICAL BACKGROUND

As a result of recent work the form and features of Wales and their effect on human settlement are now well known. Geologically composed almost entirely of Palaeozoic rocks extensively masked by glacial deposits, Wales is predominantly a country of upland plateaux and ridges, the 600-foot contour enclosing more than three-quarters of the total area, while there are extensive regions above 1,500 and even above 2,000 feet in height. The upland itself falls into two parts: the true mountains of Snowdonia (up to 3,560 feet) and of Cader Idris (2,929 feet) in the north-eastern zone of igneous rocks; and the smoother rounded hills of the Ordovician, Silurian, Old Red Sandstone and Carboniferous series. Space will not allow of prolonged discussion of the variations in the different parts of the upland interior. The determining factor in their human usefulness apart from the question of access is at the present time conditions of surface drainage: the plateaux and broader ridges and many of the more gradual slopes are too often waterlogged and inhospitable with a peaty soil of varying depth and a coarse grass-heath vegetation.

The central massif is fringed almost everywhere by a zone of foothills of medium height (400-800 feet) which varies in surface character according to local conditions. Much of it now is enclosed and cultivated, but large areas in the more rocky districts of west and north are little different from the higher ground, except that in the drier parts gorse and bracken predominate, with patches of scrub and sometimes fairly extensive areas of stunted woodland. This intermediate area is well developed in the west, and in the north-east in Denbighshire and Flintshire; its somewhat featureless surface is often broken by steep-sided valleys and in places is diversified by higher hills and ridges (up to 1,200 feet) which also retain their upland heath- or moorland character.

Finally there is the coastal belt itself, with its related valleys. It is a zone of undulating country much broken by streams, its low hills and pene-plains

rarely achieving a height of 300 feet; its sheltered valleys still well-wooded, their floors alluvium-covered. The valleys of the larger streams penetrate into the upland, providing ways through it and sheltered habitation sites, with limited room for tillage and pasture on the valley flanks and—as time went on—on the valley floors. Here the 'good' lands of the limestones and the 'medium' loams developed by other rocks are important as the foci of settlement. The former have been found in the so-called Vale of Glamorgan, where they are free from drift; the latter have been shown to be important in Anglesey, but their effect elsewhere will only be seen when a soil-map of Wales is available with the soils grouped according to their human potentialities.

Finally the upland massif is defined on the east by the widely drift-covered valleys of Dee, Wye and Severn, which bridge the transition from the Highland to the Lowland Zone. Here again the lower land was not exploited until a late date, though there were occasional river-side settlements in favoured places; but the sub-montane areas of intermediate height of the border counties came into use at a fairly early period. These valleys have long provided for movement north and south along the face of the Palaeozoic zone; and since their main streams and many of their tributaries rise in the Welsh mountains they create ways into and through them, with suitable sites for defended settlements on hills and knolls when times were uncertain.

The valleys would seem to have been significant for prospective settlers moving along the streams or valley flanks, with the ridgeways acting as connecting links and through routes from one area to another. They functioned thus throughout the Dark Ages (as Sir Cyril and Lady Fox have shown in Glamorgan) and medieval period into very recent times. The siting of strongholds at crucial points along them in the latter period is paralleled in the Early Iron Age: though the distribution of hill-forts in the Marches suggests irresistibly incursions up the valleys, and while the siting of hill-forts is essentially governed by terrain, some of them do command strategic points where the hill-roads descend to cross valleys and rivers.

Coastal Changes in the 'Human' Period

It is common knowledge that the face of the country as we see it to-day has altered in several ways in geologically recent times. Topographical changes have been slightest in the upland, the harder rocks of which resist erosion; in the coastal area, however, there has been a series of changes which has played an important part in influencing human settlement.

Recent years have seen gradual additions to our knowledge of these coastal phenomena.

The evidence is most abundant at present on the south coast, where it has been discussed and conveniently summarised by Dr F. J. North. The sequence opens with a pre- or inter-glacial phase of land-submergence: it was followed by a period of uplift which, according to Professor O. T. Jones, must have

involved a rise in the land of at least 150 feet. This figure is based on the presence of a buried river channel in the lower Tawe valley at a depth of 130 feet O.D.; it would have added many miles of low-lying land to the south coast of Wales.

As to exactly when this elevation took place there is still uncertainty: it followed the retreat of the ice and presumably the cave-dwellings of Palaeolithic man looked out over its land-surface. Equally we do not definitely know when the following submergence began, nor have we a clear picture of the stages by which it took place. In time, however, the drier parts of the area acquired a tree growth.

In the eastern part of the Bristol Channel successive layers of peat have been observed in the deposits which accumulated as the land sank. At Barry the lowest of four such layers represents a minimum subsidence of 54 to 56 feet: it may have been much more. At Port Talbot the minimum is 44 feet; in the Tawe valley 70 feet. These lower surfaces lack archaeological dating at present; but pollen-analysis is beginning to fit them into the scheme of forest history. Two such results at present create something of a problem, while providing an insight into the conditions in these areas. At Jersey Marine, Mr H. A. Hyde has diagnosed a Boreal peat at a depth of only 5 feet above Ordnance Datum, while at East Moors, Cardiff, a peat at 8 feet is of Sub-Boreal date. In archaeological terms the first can hardly be later than mid-Mesolithic; the second is probably Bronze Age. There is here, therefore, a considerable variation in date between two levels within three feet of one another, a variation which is presumably due to the generally unstable conditions on the coastal fringe.

The peat at East Moors is in fact much more closely comparable in position with the overlying blue silt at Jersey Marine. Mrs Williams has published a bronze palstave of early Middle Bronze Age type which was found in the silt at 8 feet above Ordnance Datum, its level therefore agreeing quite closely with that at East Moors. The axe was associated with human bones, but the conditions of the find as well as general archaeological considerations and the natural circumstances indicate accidental death rather than formal burial. The discovery is of great importance as that of the first unequivocally dated artifact in association with the South Wales coastal deposits.

Away from the Bristol Channel even less is known. I have pointed out elsewhere that the submerged surface of the Pembrokeshire peninsula, of Mesolithic date, cannot yet be related to those to the east. In Cardigan Bay Dr Godwin and Professor Newton have recorded a post-Mesolithic (i.e. post-Boreal) peat which continues beyond low tide at Borth. The peat directly overlay the boulder-clay. Finally, at Rhyl, Dr North has placed on record Mr T.A. Glenn's observations of two beds of peat alternating with clay; and to the extent that a polished axe and bronzes were associated (at different levels) with these upper layers (at 2–4 feet below sea-level) there is general agreement between North and South Wales.

The last phase in this process is represented by the sand-dunes, which are a striking topographical feature of the Welsh coast, and which, in the south, have been studied by Mr L. S. Higgins. They are, as he shows, inseparable from the processes of erosion and submergence above summarised and while the accumulated alluvium prevents the entry of the sea into our low-lying rivers, so the dunes protect the alluvial flats by forming a natural sea-wall to shut out the highest tides. The evidence marshalled by Mr Higgins shows that dune-formation had begun on the present areas in the early Bronze Age, subsequent activity in the Early Iron Age and Middle Ages being due to disturbance of existing deposits, not the creation of new. For with the formation of the alluvial flats the levels seem to have been stabilised at least by late Iron Age (Glastonbury) times; and subsequent activity has consisted of artificial reclamation by the building of sea-walls and dykes for which in the Roman period the Goldcliff, Monmouthshire, centurial stone is convincing testimony.

Throughout the Stone and Bronze Ages, therefore, we must visualise, however imperfectly at present, extensive and variable changes in our coast, in which a belt of marshy and wooded country of unstable character was lost to the sea but was partly replaced by alluvial flats as the Bronze Age advanced. The effect of these alterations on sea-borne movements cannot yet be seen clearly; that they exercise some kind of control seems likely, and several writers have pointed to the part that they may have played (for example) in the most important of all our maritime colonisations, that of the megaliths.¹

Man and the Forests

The last aspect of environment is vegetation, and here at last pollen-analysis, in which Mr H. A. Hyde has played a leading part, has begun to provide us with a solid foundation on which to build. A degree of caution is necessary at this early stage, but the indications are that there is a considerable measure of agreement in the forest sequence not merely in different parts of Wales, but also between Wales and other parts of north-western Europe. Mrs Megaw's pollen-graphs at Ellesmere in Shropshire agree with those of Godwin, Mitchell and Hyde at Tregaron; and while the earliest (Arctic) phases are not present they agree also broadly with those of Jessen for Denmark and Ireland. It would be impossible to discuss the details here even were I competent to do so; but the following table summarises the position, and for the rest I must content myself with drawing such archaeological morals as the present evidence allows.

¹ I feel, however, that I must voice my distrust of attempts to apply the principle in detail and above all to extend it for the remote past with data collected under modern conditions. This seems to me to be a dangerously unscientific application of scientific material. In a recent discussion of megalith movements Dr Margaret Davies has made use of modern tide-speeds, though present evidence indicates that in Wales at least coastal changes, which might be expected to affect off-shore currents and deposits, went on well into the Bronze Age. The acceptance of the general probability is surely all that is scientifically possible in the present state of knowledge.

Artifacts dated by Natural Science		Whattall (Salop) canoe	Llangeitho (Cards.)			Nores Sites in italics in the	archaeological datuig columns are non-Welsh The Zones of forest history are those de- vised by Godwin and	Mitchell for Tregaron.
Botany	Changes	nes G, H, J red increase rch. res of Blm. es of Blecch. level wood-		following climatic change Sub- der to antic antic	has and ni gais lA ni əss ltA lo ba	Decline of Pilatter increased. Borceal. Sudden increamaximum at e Mixed Oakwo Mixed Oakwo Lime) domina	Zone E Pine- Birchwood Beginning of mixed Oakwood.	Zone D Birch- Pinewood (Birch dominant)
	Archaeo- logical dating		Llynfawr and sword cauldron	Whixall, Salop, Pal-	stave Early Bronze Age sites in Fenland	Neolithic A in Fenland	Late Tar- denoisian in Fenland	
Absolute		50 B.C.	500 B.C.		2000 B.C.	2500 B.C.		8000 B.C.
ogy	Archaeo- logical and Botanical dating	Glastonbury Lake Village	Merthyr Mawr ; Castlemartin	Palstave, 8 ft. O.D. Jersey Marine	Sub-Boreal peat 8 ft. O.D. Cardiff	? Neolithic level 4 ft. below O.D., E. Barry Docks	Boreal peat c. 5 ft. O.D., Jersey Marine	
Geology	Coastal	Stabilisation of land and sea at pres- ent level	÷s	o notion of slams dund dunk band dunk!	peat bec Present	nbber	submergene oast-lands	
	Climatic Phases	Sub- Atlantic (moist and cold)		Sub- Boreal (warm and dry)		Atlantic (warm and	Boreal (warm and dry)	Pre-Boreal
Archaeological Ages			Early Iron Age	Bronze Age		Neolithic	Mesolithic	

The palaeo-botanical evidence therefore indicates that until well into prehistoric times a large part of Wales must have been covered with woodland to heights well above the modern tree-level. Mr Hyde's records at Craig-y-llyn above Llynfawr at 1,600 feet show a forest development which is paralleled by those of the valley peats. While more work is needed on upland peats, superficial observations of tree remains in high-level deposits in the Black Mountains and elsewhere are sufficient to suggest that *mutatis mutandis* the conditions at Craig-y-llyn are likely to be of fairly general application. In upland and lowland alike, pine and birch woodlands were gradually superseded (in late Mesolithic times) by mixed oakwood, which would have varied in character according to local conditions, but which has continued as the essential basis of Welsh forests down to modern times, though Hyde has shown that the high-level woodlands (in which at this time birch was a dominant) were 'swamped out' by the climatic deterioration at the dawn of the Early Iron Age.

The opposition which such vegetation presented to the early settler would have varied according to local conditions. On hill-sides and valley-flanks and in places of unimpeded drainage it would have been less than in the more sheltered and wetter parts. Nevertheless, already in Neolithic times, the first megalithic colonisers attacked the lower lands rather than the hills. They were the people whose encroachments on the forest covering mark the first steps in the production of our modern man-made landscape; and their clearings were developed and extended successively by later peoples.

Only in Bronze Age times was there much settled occupation of the upland interior, and while the greater dryness of the Sub-Boreal phase may have encouraged this, the fact remains that the forest-history does not reflect any pronounced change. The upland interior must have been at all times the resort of hunting and pastoral communities, some of which may have been backward or refugee; but the main centres of life lay then, as they have done ever since, at lower levels.

The effect of Topography and Geography on Early Welsh Culture

This variation as between upland and lowland is a constant feature of Welsh culture: it has been demonstrated amply in Glamorgan by Sir Cyril and Lady Fox. All recent work has emphasised the control exercised by topography in canalising settlement; and the part played by the central massif in dividing north from south has also been emphasised. Here, finally, the influence of external factors must be noticed. The distinctness of north and south is emphasised in early times by the more regional character of the centres of culture upon which Wales drew. North Wales turns to Derbyshire and Yorkshire, south to Wessex and the south-west; and various factors such as accessibility give the south-east advantages over the rest and have turned it into an extension of the Lowland Zone, which it continued to be in Roman and in medieval times.

These are the separatist tendencies. On the landward side topography exercises a unifying influence through the great valleys already mentioned, along which there was movement from both north and south as well as from the English Midlands. The retarding effect of the natural obstacles on cultural movements from the east has long been recognised: when these are in operation Wales tends to lateness and backwardness. The other unifying influence is that of the sea-traffic of the west (which also flourished until recent times) which brought in new ideas from 'Atlantic' Europe, and tended to create a single cultural province out of the countries fringing the Irish Sea. When vigorous movements like those of the megaliths were involved Wales then might benefit comparatively early. But her natural attractions did not equal those of her neighbours; and her culture is of interest less for its wealth than for the blending, under the influence of her own structure, of contributions from the greater centres of culture outside her boundaries.

THE PALAEOLITHIC PERIOD

The 'Cave Period'

To a large extent here I can only repeat what I have written elsewhere. No major work on Palaeolithic caves in Wales has taken place since Professor Sollas re-excavated Paviland in 1913. Professor Sollas' work established the fact that the phase of most intense occupation at Paviland was the Aurignacian and the middle Aurignacian in particular; and what is true for the richest cave in Wales remains true for Wales generally. But it was left for Miss (now Professor) Dorothy Garrod in 1926 to draw together the evidence of a hundred years' work on these problems, and to present us with a picture of the cave period, not merely in Wales, but in Britain as a whole, which clarified immeasurably a situation in which there were many dark places.

Outside Wales, work on the period had been proceeding steadily both in Derbyshire and in Somerset, in the Marches too at Ross-on-Wye. Armstrong's finds in Derbyshire in particular emphasised the isolation of the British culture, demonstrating that what is now known as the Gravettian phase of the Aurignacian continued to develop independently. It lacks the Continental artistic achievement, expressing its individuality instead through a distinctive flint industry. Professor Garrod called this industry the Creswellian and this is now its generally accepted title.

Some hint of the presence of this culture in Wales had already been recognised by Mr A. L. Leach at the Hoyle, Pembrokeshire, in 1918. The series found by Dr Hurrell Style at Cat's Hole Cave, Monkton, Pembrokeshire, in 1907 was more conclusive. It consists of a few flint points with battered backs, the most distinctive Creswellian type, which, good as they are in themselves, were not unnaturally overlooked for the small hoard of bronzes, including the very rare saw, which was found at the same time,

These finds are sufficient to link south-western Wales with the English caves as parts of one cultural region; but there has been nothing in recent years to suggest any modification of the accepted idea of the environment in which these early inhabitants of Wales lived. The evidence for this is almost purely palaeontological. It points to a uniformly cold, dry climate with tundra vegetation and a predominance of hoofed grazing animals like horse and reindeer; and on the basis of this evidence it is generally assumed that the

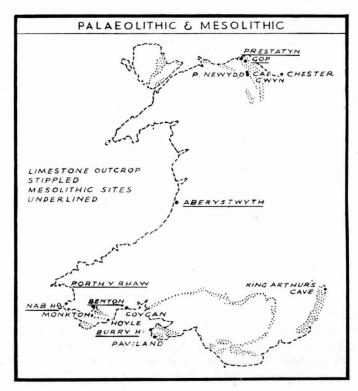


Fig. 1. The chief cave-areas of Wales (with sites mentioned in the text); and Mesolithic sites.

beginnings of human life in Wales followed the maximum of the last glaciation of the Pleistocene Ice Age.

At the same time, the possibility of an occupation at some time before the final retreat of the ice remains to be decided.

In 1884-7 Dr Henry Hicks carried out excavations at Cae Gwyn near St. Asaph, Flintshire. The cave was found to have two entrances, of which one, discovered during the work, was sealed by glacial material. A 'bone earth' which produced a middle Aurignacian scraper, as well as Pleistocene animal remains, was found to extend out of the cave through the entrance and

beneath the glacial deposits, a flint flake being found in it just inside the entrance. The discovery caused much controversy at the time, but is now accepted as an indication that the ice returned to the area after Aurignacian man had lived in the Vale of Clwyd caves, its re-advance being due to one of the last fluctuations in the final glacial episode.

Pre-Aurignacian Man in Wales

But while none of the finds so far described is of pre-Aurignacian character whatever its relation to the movements of the ice-sheet, two sites in the south and one in the north suggest the presence of Middle and Lower Palaeolithic man respectively.

More than fifty years ago Mrs M. E. Cunnington picked up during a visit to Paviland a flake implement of Levalloisian type. Scarcely less interesting than its form was the material of which it was made: this was a brownish 'chert' not unlike the well-known chert from Broome in the Axe valley of Devon, which was used throughout the south-west as a substitute for flint in Palaeolithic times.

Another site in South Wales has produced implements of similar appearance. In Coygan cave, near Laugharne, Carmarthenshire, the work of the late Herbert Eccles added to previously found animal remains several flake implements of white carboniferous chert. The discovery was never properly published; but additional excavations were undertaken in 1933 and provided the first modern picture of the deposits in the cave, although they produced no further implements. The deposits had accumulated in the normal cold conditions of Upper Palaeolithic times and there was interesting evidence that mammoth had been breeding in the locality; but there was no means of relating the implements to the other material, and they may be quite separate from the bones.

Thirdly, at Pont-newydd near St. Asaph in 1872–4 Professor McKenny Hughes found a series of implements of felsite some of which look remarkably like Lower Palaeolithic hand-axes. The fauna from this cave includes the warm-loving type Rhinoceros merckii. But the conditions of association introduce an element of uncertainty. On the other hand, while the well-known Lower Palaeolithic flake from Chester has long been suspect because its find-spot allowed for its introduction at a later date, finds of hand-axes at Kidderminster and elsewhere to the south can hardly be mere coincidence. More limited deposits and less exploitation, as well as fewer watchers, make it unlikely that finds of this period will ever be recorded in large quantity from the area; but the conclusion that man in late Acheulean or 'Mousterian' times did actually live in the middle Severn valley can now be said to be inescapable and his northward extension into the Chester–north-east Wales are a strong probability.

These rare discoveries, however, are in themselves some confirmation of the part played by the lack of supplies of suitable flint in restricting settlement at a time when large implements were the normal equipment of man, even when we allow for the inadequate documentation of the area. The quartzite and felsite of Pont-newydd and the chert of Coygan were poor substitutes for flint; the foreign chert of Paviland could have been little better, in spite of its interest to the modern archaeologist as far the earliest importation of a foreign material or implement into Wales for human use. In the pre-cave period, as in the cave period itself, the colonisers of Wales were probably neither numerically strong nor culturally advanced.

THE MESOLITHIC PERIOD

In 1862 Professor Babington described discoveries of the Kjökkenmödding culture in Denmark with the object of drawing the attention of members of the Association to the possibility that a similar culture might be found in the coastal districts of Wales. But little was done in this branch of archaeology until many years later, when an interest in surface-flint industries began to emerge.

Much of this was flint-collecting pure and simple and most of the flints so assembled have now little more than a typological interest. It was left to two geologists, Messrs T. C. Cantrill and A. L. Leach, working independently, to reinforce mere finds with observations which could enable fuller use to be made of these results as general understanding of the period grew. Cantrill and Leach worked mainly in South Pembrokeshire and Carmarthenshire. Their papers show what may be gained from this tedious and now somewhat despised sport of flint-collecting, the value of which lies not merely in the significance of the flints themselves as the only dating medium in certain conditions, but in the fact that even for later periods like the Bronze Age such finds do something to fill out the picture of contemporary life and to augment the distributional evidence which is provided by the rarer and more impressive types of artifact and monument.

The rising temperature and increasing dampness of the Boreal-Atlantic climatic phase created several changes in human environment, encouraging in particular the afforestation of the country and eliminating in one way or another the late Palaeolithic herds of game animals. The effect on the human population has often been stated. Briefly, man became a food-gatherer, fisherman and hunter of small game; the characteristic 'fossils' of the period were small flints which had once been mounted in handles or shafts of bone or the now abundant wood.

Native Industries

These changes are seen within Britain and without. They affected the native Palaeolithic culture, so that in our own cave sites a microlithic industry appears. King Arthur's Cave at Ross-on-Wye, though outside Wales, may be cited as the best instance of this phenomenon: here hearths above the

Palaeolithic levels show a predominance of small flint implements with a post-Pleistocene fauna which included Deer, Pig, Horse and Ox. Within Wales itself the evidence is not at present as definite, though microliths have been found in small numbers at Paviland and Monkton and in a larger group at the Gop Cave in North Wales. On none of these sites are there present the distinctive forms which belong to the foreign microlithic industries next to be considered.

Intrusive Industries

The foreign industries were evolved in two regions in south-west and northern Europe, their two chief expressions being called Tardenoisian (from La Fère-en-Tardenois in France) and Maglemosean (from Maglemose in Denmark). They are distinguished from the native industry by the presence of the so-called micro-burin, a waste product in the technique of making of small points, and by the fact that in the later phases the points themselves assume more definitely geometrical outlines. In addition, the northern cultures developed a 'heavy' industry, evidently under the need for dealing with timber. It includes perforated discs or hammer stones and especially ground or chipped axes, the latter sharpened by the distinctive method of removing at a blow a single transverse flake from the cutting-edge of the implement.¹

These industries as at present known in Wales are confined to the clifflands or to places within easy reach of them. The place of the known sites in the light of present understanding of the position has already been defined: Burry Holms as early Tardenoisian (if not an open-air site of the 'ultimate' Palaeolithic), Aberystwyth and Nab Head as late Tardenoisian. To these have been added more recently a rich site at Prestatyn, Flintshire, discovered by Mr Gilbert Smith and published by Dr J. G. D. Clark. Here is the usual range of microlithic forms, in flint or in a local carboniferous chert, and the presence of 'micro-burins' leaves no doubt as to the affiliations of the industry. A significant feature of the discovery was the fact that the flints lay under and partly in a bed of calcareous tufa, which itself overlay the boulder clay. Dr J. Wilfred Jackson has explained the tufa as having been deposited at a time of heavy rainfall in conditions of impeded drainage. The evidence thus suggests the damp climate of Atlantic (late Mesolithic) times.

In the south-west, however, there is a hint, in the presence of heavier tools, of the existence of other elements beside the Tardenoisian. A pick from 'Castell-pocha,' a site as yet unlocated in North Pembrokeshire, was the first hint of it; Nab Head produced another small one and more recently from the same site Mr Leach has published perforated discs and a ground axe. Since then a pick of local rhyolite has been found at Benton, overlooking

¹ The Maglemoseans also had a rich bone industry and a developed art of which at present there is no sign in Britain generally.

Milford Haven, and I have seen another, now in private possession, from Porth-y-rhaw, near St. Davids. According to present opinion, such axes should be due to Maglemosean influence: they do not appear to occur in the pure Tardenoisian industry. They are met with also, though not in large quantity, in the Mesolithic of northern Ireland; and in some way as yet unexplained both groups must indicate a link with the Mesolithic people of Northern Europe.

The Welsh sites are less rich than those of other parts of Britain, and the conditions in which they have occurred so far have not, except to a limited extent at Prestatyn, provided the correlations with environmental evidence which have been forthcoming in the Fens. Such correlations are now much needed in Wales and any future discoveries should receive the attention of natural scientists as well as of archaeologists familiar with the products and problems of the period. In addition to the larger concentrations of implements suggesting definite sites, the surface-flint industries show a marked Mesolithic colouring. That the south-west best illustrates this feature is probably due to the accident that, as I have already stated, this area has received most attention in the past; but here at least there must have been a comparatively large Mesolithic population, even if it was not as richly equipped as the colonies further east.

There is a growing tendency to-day to ascribe to the Mesolithic people, whether within or outside Britain, a much greater part in subsequent developments than used to be allowed. Whether they added anything to later life in Wales has yet to be discovered, though microliths seem to have continued in use. Their way of living certainly went on through the Neolithic and into the Bronze Age, as the mixed character of the very widespread surface flint 'industries' shows. But the sites are known only from the flints: they are loosely spoken of as 'open,' but no one has yet undertaken the excavations, thankless and difficult as they would be, which might produce traces of their dwellings and enable their true character to be determined.

THE NEOLITHIC PERIOD

Towards the end of the third millennium B.C. the effects of the great economic and social developments which had been taking place in the east began to make themselves felt in Britain. The Neolithic now has a significance and a clarity which it did not enjoy even thirty years ago. It has ceased to be a sort of prehistoric dark ages with a duration to be estimated in millennia: its span has been reduced to a few hundred years, and it has become a phase of extraordinary activity in which new arts, fostered in the favourable conditions created by the development of agriculture, were spread far and wide throughout Europe.

The new settlers came to Britain by two main routes: overland, across Europe; and coastwise, by way of the Mediterranean and Atlantic sea

routes from the south and west. While, therefore, newcomers from the Continent were settling in the south-east of Britain, Wales received a share of the series of vigorous colonisations, which were impinging on the western coasts, and which gave her, in her megaliths, her most impressive, and for the majority of people still her most characteristic, ancient monument.

The pages of early issues of Archaeologia Cambrensis contain many accounts of these sites. But the same limited series of monuments tends to appear again and again; and while there have not been wanting those to urge the desirability of a systematic survey as a step towards the elucidation of the problems that beset them, it was not in fact until recently that such a survey was achieved, to provide for the first time a comprehensive picture of Welsh megaliths. To it have to be added a number of excavations which have given a more complete understanding of individual sites, while the body of non-Welsh work enables us to assess with some accuracy the place of Wales in the Neolithic scene.

Here I do not propose to attempt a detailed description of Welsh megalithic 'culture.' The coastwise distribution of the monuments with concentrations in the western peninsulas of north and south and in Anglesey is sufficiently well known, with the inland group of the Brecon Black Mountains as the only considerable exception to the general rule.

The first point which must be emphasised, however, is the now generally accepted separateness of burial chambers on the one hand and stone circles on the other. Recent discoveries have somewhat complicated the situation with regard to the latter, but in Wales at least they have not yet been dated earlier than the Bronze Age and they are therefore more appropriately described below.

The relationship to chambers and circles of the standing stones (whether the latter occur singly, in groups or in alignments) is less clear. They have a wider distribution than either; but remain very much an unknown quantity. Of two excavated examples, one at Glynllifon had a cremation with a somewhat anomalous Bronze Age pot at its foot; the other, at St. Nicholas, Glamorgan, yielded no finds at all.

On the other hand, much has been done to outline the main classes into which the burial chambers fall, and to demonstrate the external sources and connexions of the different groups.

The South-eastern Long Barrows

In the first place, there is a broad distinction to be drawn between the south-eastern group which is found mainly in the Glamorgan coastal plain and the Brecon Black Mountains, and the more westerly series of Carmarthenshire, Pembrokeshire and Caernarvonshire and Anglesey. The south-eastern group belongs undoubtedly to the Cotswold–Severn tombs—a series which was introduced by bands of settlers who entered the country by way of both shores of the Severn estuary, their immediate source of origin being Brittany.

In Gower in particular occur two examples of the transepted gallery which is one of the chief Breton forms. The first observation that this type of chamber was associated with the appropriate long mound at Parc-le-breos is due to Dr Daniel: ever since the chamber was examined many years ago it has been shown with and accepted as having a round or oval mound. In Gower, therefore, probably an early colony of long-barrow builders is to be recognised; and

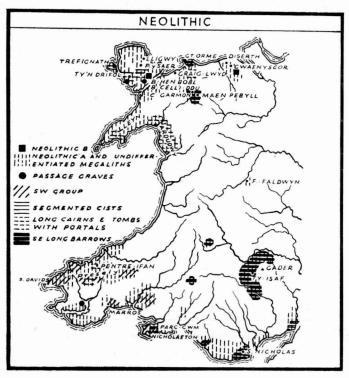


Fig. 2. The distribution of Neolithic culture-groups, based on chambered-tomb types and pottery.

(Note.—Stone axes, which would much extend the general distribution, are not shown. Some are possibly not of Neolithic date).

another Gower site, recently discovered by Mrs Williams, with a closed chamber in an elongated mound, may mark the ultimate degradation of the type.

The Vale of Glamorgan group also forms a uniform series in which the burial form is the long barrow with square or oblong chamber in the east end of the mound opening at one end into an outspreading forecourt between drystone walls. Once again, we have a small and probably quite distinct group, specialising in this type of monument, which centred on the St. Nicholas area and one or two other places to the west. It is also probably of fairly early date.

To the Cotswold-Severn complex also belong the megaliths of the Brecon Black Mountains. They were first described as a group by Mr Crawford and their distribution and other aspects have received attention since. The chambers of several have produced in addition to human bones small quantities of Neolithic and beaker pottery. From their inland distribution and the cist-like character of some of their chambers they have been thought to be of comparatively late date, but while it is no doubt likely that they represent a secondary movement inland, the full-scale excavation of Ty-isaf by the

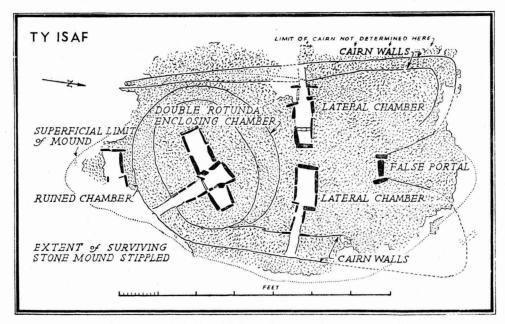


Fig. 3. Ty-isaf (Breckn.) Long Barrow: plan as excavated. (Based on *Proc. Prehist. Soc.*, 1939, pp. 119-42 (Grimes)).

Brecknock Society in 1938 provides sufficient warning of the dangers that may attend too positive a pronouncement on them from their present visible features (Fig. 3).

For Ty-isaf proved to belong to the well-known Cotswold type with false-portal and lateral chambers set back to back in the mound behind it, though with the addition of a modified transepted gallery enclosed in its own double rotunda in the rear part of the mound; and while some of its pottery was of beaker and Bronze Age date, this was secondary: there was an abundance of Neolithic A pottery (pl. 1, A) with the burials in the chambers themselves. While, therefore, some of the Black Mountains long barrows may be late and while it is also likely that they will display features not to be found elsewhere, the Neolithic character of their setting is unmistakable.







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PLATE 1. Neolithic and Beaker Pottery from Wales

- A. Neolithic A bowl from Ty-isaf (Breckn.) Long Barrow. $(\frac{1}{3})$ B. Wessex B Beaker from Penderyn (Breckn.). $(\frac{3}{8})$ C. Wessex B Beaker from round barrow at Talbenny (Pemb.). $(\frac{1}{2})$. Photographs by the National Museum of Wales

Two, possibly three, other sites seem to belong to the south-eastern group, though Dr Daniel would place them with the western long cairns to be described later. These are Capel Garmon, Great Orme, and Maen Pebyll, all closely related to the Conwy Valley, so that on distributional grounds there is justification for Dr Daniel's view.

But typologically their features are those of the south-east, though Great Orme has its own peculiarities, The outline of Maen Pebyll clearly betrays its resemblance to the wedge-shaped core of the Cotswold cairns, with the in-turning horns at the 'east' end.

In Capel Garmon the likeness is even more pronounced. Mr W. J. Hemp's excavation here revealed not only the wedge-shaped plan but also a false portal of unmistakable south-eastern descent, which is quite unlike the highly characteristic portal of the north-western long cairns. Whether or not I am right in seeing it as one of the same series as Ty-isaf, its chamber is a developed transeptal gallery which, like the chamber in the body of the mound at the latter site, opened through the side of the cairn. I believe, therefore, that these members of the Conwy Valley megaliths are to be linked with the Cotswold–Severn series, though whether the colonisation which they represent took place by way of the sea direct from Brittany or overland from the south is not yet clear. The latter seems the more likely, for there is other evidence for contacts between the two areas at the same time.

In sum, therefore, it may be said of the south-eastern long cairns that their distribution and typology betoken settlement by small and probably distinct groups, those on the south coast being probably early, the others later and secondary. But all are essentially 'Neolithic' in character: from each group has come Neolithic A pottery, although all show evidence of use by the early Bronze Age Beaker folk as well. As to the physical character of these people the evidence is less complete: so far the type is consistently that of the comparatively small dark, long-headed 'Neolithic' stock.

Western Megalithic Groups: Round Cairns

Turning now to the western groups, two main series can be recognised, according as their cairns are long or round, though it does not follow that all long- or all round-cairned forms are necessarily due to only one colonisation.

At the head of the round-cairned series comes Bryn-celli-ddu. Here Mr Hemp's examination related the already well-known passage-grave, with its central polygonal chamber and approach-passage to a round mound which contained an elaborate arrangement of ditch and stone circles. Behind the chamber was a 'ritual-pit' and the stone with sinuous ornament. But actual finds were few and not very significant for dating purposes.

Bryn-celli-ddu remains at present the type-site for the round-cairned passage-grave in Wales. It is the most completely known, and it bears the

closest resemblance to other members of the group in Brittany, Ireland and elsewhere. One or two others are known, as well as a couple in south-west Wales; and it is clear from these that the group of Neolithic peoples whose custom it was to build this type of tomb colonised West Wales, in both north and south. Whether they came from Brittany or from Ireland remains to be seen, though the larger tombs occur in the north.

The majority of the western megaliths have now lost so much of their covering mounds that their form and extent cannot be determined from a superficial examination. There are, however, a few chambers, simpler than those already described in that they lack the passage-approach, with definitely circular mounds.

Once again, more is known of those in the north than in the south, where one of a series of chambers at Marros in Carmarthenshire is the best-preserved example (though there are others in Gower). The group was examined by John Ward but produced no very distinctive finds; the best-preserved member of it displays a simple rectangular chamber, its size and shape clearly dictated by the now displaced capstone, in a roughly circular or oval cairn about 38 feet in diameter. The features of the cairn have not been examined.

In Anglesey, two more sites, Pant-y-Saer and Bryn-yr-hen-bobl, must be regarded as belonging to the same series. The excavation results from these two sites are such as to be difficult to summarise within the limits of this publication. Both cairns contained internal walls which were planned formally in relation to both mound and chamber to provide an entranceapproach; but in both the excavators thought that actual entrance had been obtained indirectly from the side, thus apparently introducing yet another variation on the theme of the false entrance as one of the devices used by the megalith builders to protect the chambers themselves from marauders. The famous double portholes at Bryn-yr-hen-bobl are now, however, recognised as natural features artificially modified; and the other remarkable part of this site is a platform-like extension, 330 feet long, from one lobe of the mound, which appears to be contemporary with it and produces in plan an inescapable impression of phallic symbolism. Both sites were satisfyingly rich in cultural material, some of it secondary: Pant-y-Saer yielded Neolithic A ware and characteristic leaf-shaped arrowheads; at Bryn-yr-hen-bobl both Neolithic A and Neolithic B were present and apparently contemporary, but Neolithic B was the more abundant. Here, too, were a number of complete and broken stone axes, in which the material from the Graig-lwyd axe-factory on Penmaenmawr was well represented. The relationship of these sites to the passage-graves is not yet clear: they may be derivative and represent a local deviation from the original passage-grave form or they may mark a separate movement—it must in any case be remembered that at present they are known only in isolation.

Western Long Cairns

The western long-cairned groups are also known only from their superficial characters. They are best represented in Anglesey, Caernarvonshire and Merioneth, where there are two distinct types: the segmented cists, of which there are two unmistakable examples—Presaddfed and Ty'n-drifol in Anglesey; and the long cairns with end-chambers, which are found mainly in the districts of Lleyn and Ardudwy.

The feature of the first of these groups is its elongated chamber, divided by cross-slabs into a series of cist-like segments, which at its outer end is normally provided with a tall portal at the crest of a crescentic façade of upright stones. Better-preserved examples outside Wales have been found by excavation to have internal peristaliths, and sometimes external ones also to their cairns. Whatever the origin of the type, the area of north-east Ireland-south-west Scotland was that in which it flourished in Britain; and while the North Wales examples might be due to an independent movement, the most likely explanation at present seems to be that they represent a secondary settlement from the northern Irish Sea area, as one of a series of movements which touched also the Isle of Man and the Pennines.

The Irish evidence has led Professor Estyn Evans and his co-workers to quite definite conclusions as to the way in which these segmented cists developed: they believe that the multi-segmented examples are the earliest and that as time went on the number of segments was reduced, leaving in the end a simple oblong chamber which retained its H-shaped portal, with or without the crescentic façade.

There can be little doubt that the Lleyn-Ardudwy long cairns are the result of some such development, for the chamber-and-portal arrangement is characteristic of all of them. But whether they were due to development in Wales, or whether they are evidence of a second immigration from the north yet remains to be seen. From the fact that the distributions do not coincide, the second explanation seems the more likely at the moment: the segmented-cist group colonised Anglesey in small numbers, the builders of the end-chambered long cairns the western coastal districts of the mainland.

In the south the same movement is represented, though in slightly different form. It is at least possible that several of the Pembrokeshire monuments may prove to be segmented cists when excavation has given us more complete knowledge of them: but in any case the later type of end-chambered long cairn is represented by Pentre-ifan, which retains also (though in reduced form) the crescentic façade. Here recent excavation has revealed the remains of a long cairn, about 130 feet overall, with an internal peristalith and other features such as ritual pits and the deliberate blocking of forecourt and portal which have been found in other megaliths. Amongst the small quantity of finds were several fragments of Neolithic A pottery, from the long disturbed chamber.

In the south, therefore, as in the north, this long-cairn group displays characters which link it with other groups around the Irish Sea, whose coastal regions tended throughout the megalithic period (and again in later times when western cultural activity was in the ascendancy) to form a single cultural province.

In the above summary of Welsh megalithic trends I have concerned myself almost entirely with the results from excavated sites and have made no attempt to discuss wider problems of typology, believing as I do that until selected examples of the less distinctive forms are known more completely from excavation, conclusions drawn from their visible remains are likely to be in the highest degree misleading. While in a general way the simpler, less specialised forms of burial chamber are probably derived from one or other of the distinctive types described above—Dr Daniel has, for instance, suggested that simple chambers of rectangular form are derived from the long cairns, polygonal chambers from the passage graves—the number of variations is such, and the gradations from one form to another are so slight, that any attempt at overall classification soon begins to lack reality.

The Distribution of the Neolithic and Its Mutual Relations

In their more general aspects, however, one interest of the megaliths lies in the information they afford as to the distribution of the Neolithic colonisers. The marked feature of their distribution is their neglect of the upland interior: only rarely when they penetrated inland do their sites occur on the hills; and it is particularly significant that in the Brecon Black Mountains they are found without exception below the modern tree-line in positions which to-day at least would often have supported a fairly heavy forest growth. Similarly, in Anglesey they appear to have a preference for the medium rather than for the light soils. Altogether the evidence suggests a colonisation favouring the lowlands and the foothills, and implying a form of social organisation and a degree of technical equipment sufficiently advanced to deal with quite considerable natural obstacles.

What little is at present known of their settlement sites does not unduly affect this picture. No habitations are known in the megalith areas, but some years ago Mr T. Allan Glenn discovered two open settlements at Diserth and Gwaenysgor in Flintshire, and more recently Mr O'Neil has found traces in Neolithic occupation within the later Iron Age camp at Ffridd Faldwyn.

The first two sites are the more important and Mr Glenn has recently re-examined the material from them as part of his study of the distribution of axes from the Graig-lwyd factory. Both were open sites. The occupation floor produced a quantity of material (though structural remains of dwellings were not recognised) which included many fragments of axes, arrowheads of the fine ogival form characteristic of the period, and quantities of potsherds

from round-bottomed bowls which, though abnormal in some respects, appear to be of Neolithic A type (see below). Apart from the burial cave at the Gop these sites lie away from the megalith areas and while they may be due to movement along the eastern margin of the main mass of the Cambrian mountains, they also indicate that the Neolithic colonisation was more extensive than the distribution of the known tombs would suggest.

At this point a word should be said about the two great pottery groups, Neolithic A and Neolithic B, which provide the main index to the material culture of the time. As the result of the work of Piggott and Childe they have emerged clearly in recent years, Neolithic B or Peterborough Ware as of northern and eastern origin, with a strong hint of Mesolithic ancestry or influence, its ware coarse and thick, the bowls heavily moulded and covered with impressed ornament: Neolithic A, often called Windmill Hill, in which the round-bottomed bowls are altogether more skilled productions technically, tending to make up in variety and refinement of form what they lack in ornament.

From finds at present known of this pottery, the culture represented by Neolithic B was much less extensive in Wales than the other, being confined to the north coastal plain, where (as at Bryn-yr-hen-bobl) these people sometimes made use of the megaliths. The most likely explanation of this distribution appears to be the connexion of the Neolithic B folk with the development of the trade in axes of North Welsh origin (see below). The group is on the whole homogeneous and not enough evidence exists at present to say from what part of England it was derived, though on general grounds the northern province (Yorkshire and Derbyshire) seems the most likely.

Neolithic A, on the other hand, is the pottery of the megaliths: as the above summary shows, it has been found consistently on most of the sites that have been excavated. It is not, however, of uniform type everywhere: the pottery from the western megaliths is different from that of the south-eastern group, which in its turn is different from that of the earthen long barrows of the south and east of England to which originally the name 'Windmill Hill' was applied. It may well be that in due time distinct sub-groups such as those which have been recognised in Scotland will appear in Wales: the material is not yet sufficiently abundant, though in the pottery from the Lligwy burial-chamber in Anglesey Professor Piggott has recognised wares which he thinks resemble some of the Scottish types.

Here I should say in passing that I find some difficulty in subscribing to the view which has been advanced from several quarters recently of a 'megalithic religion' as a distinct element functioning independently of the cultural groups which can be recognised from their material equipment. I regard the megaliths and the pottery as pointers at once to the oneness and to the diversity of western Neolithic culture. The persistence over a wide area of the same

general type of pottery is to my mind consistent with the view that all the megalith-groups have an ultimate origin in the same set of conditions; it is supported by the uniformity of the remaining material, such as the stone tools. On the other hand, the variations in tombs and pottery (though the latter are not yet clearly recognisable) are evidence of local divergences, some of which no doubt began before the types left their original homes, while others are the outcome of later development in which varying local conditions (including at times the presence of other active culture-groups) have played their part.

The variation in megalith-forms, and the variations in pottery-types, would then be parallel expressions of the variation of culture-groups within the framework of Neolithic civilisation. The presence of different types of pottery in the same tomb need not be inconsistent with this, for some kind of peaceable life in which the different people lived quietly side by side, using the same tombs, is attested by the evidence. Such conditions seem to have continued into the Early Bronze Age, though with what preliminaries in the way of internecine strife we cannot yet tell: the intrusive Beaker Folk were in every way a different people from the Neolithic people, but in spite of the fact that they followed the rite of individual burial the frequent finds of their pottery show that they also commonly used the pre-existing megalithic tombs wherever they were found.

Stone Axes

Finally, the development of the petrological study of stone axes has given an added interest and importance to the wealth of Wales in axe materials. The igneous rocks were more than a makeshift substitute for flint: they were a positive asset, exploited and developed by Neolithic man. And because they are so often capable of being closely traced to their sources they are unerring pointers to contemporary movements and their bearing on trade and economic activity.

Up to the present the chief example of this is the Graig-lwyd axe factory at Penmaenmawr, first examined by Mr Hazzledine Warren in 1919. The large-scale axe-production which was carried out on this site (for which the evidence is the vast quantity of broken and unfinished axes, flakes and the like which cover the open mountain side) is sufficient justification for the title 'factory,' and for the belief that Neolithic social and economic organisation had advanced some distance in the development of industrial specialisation.

Mr Allen Glenn's study of the distribution of recognised axes from this site shows them in South Wales and reaching across England into Wessex. Nothing is known of the cultural context of the factory-site itself, but the external evidence is taken to suggest that the development of these resources was to a large extent in the hands of the Neolithic B people.

Evidence for similar exploitation of igneous rocks, though on a smaller scale, comes also from Pembrokeshire, though here no working sites have as

yet been recorded. Axes of material from St. David's Head or Presely have been found as far away as Wiltshire and northern Ireland, as well as in other parts of Wales.

In the reverse direction, axes of flint (and occasionally of chert) must generally be regarded as importations from England. The chert axe from the Gader, Brecon, is already well known, while flint axes have been found in association with long-barrows. This is appropriate enough, in view of the links which the long barrows themselves have with the south-east. On a priori grounds it seems likely that the distribution of flint axes will ultimately be found to be complementary with that of the igneous rocks and concentrated mainly in those regions which lie away from the igneous rock formations. A very considerable advance in knowledge of the Neolithic period and of the processes which gave it its character and quality can be expected when the large-scale petrological survey recently started has been carried to its conclusion.

THE BRONZE AGE

The Beaker People

Whatever the part played by the discovery of metal in precipitating the folk movements of the Neolithic phase, the colonists who came to Britain travelled ahead of the knowledge, and the Bronze Age is taken as opening with the coming of the Beaker people whose distinctive characteristics, physical and cultural, have often been described since Abercromby first isolated them as a cultural entity.

Their burials remain our chief source of information relating to them: of their settlement sites little has as yet been found or recorded. They had a limited equipment which included, in the richer communities, occasional small ornaments of gold and simple metal tools (sometimes actually of copper), chief of which are flat daggers and awls. Barbed and tanged flint arrowheads are generally characteristic: other objects, like the bowman's wrist guard, the perforated axe-hammer and the flint dagger, occur as the particular equipment of distinctive groups.

Their widespread distribution and simple equipment imply a mobile folk, hunters and pastoralists who for some time after their landing maintained an effective overlordship over the native Neolithic people. That they did not themselves introduce the use of metal, however, is indicated by the fact that the distributions of early metal forms like axes and daggers do not coincide with those of the beakers; they show not merely different ports of entry but also a varying incidence in different areas. The assumption therefore is that the Beaker people obtained their metal tools and weapons by trade after they had reached Britain.

In 1912 Abercromby developed the threefold classification of beakertypes, which he lettered, A, B and C, to some extent reflecting a view of the typological development of the basic forms in which all three variants were more or less related and linked by hybrid or transitional forms. More recently, however, these types have been recognised as having a deeper significance as the outward signs of a fairly complex series of movements, involving probably a number of continental centres and spread over a long period of time. In its own way, then, this variation is of the same kind as that of the megalithic colonisations: the variations in the 'type fossils' reflect individual groups

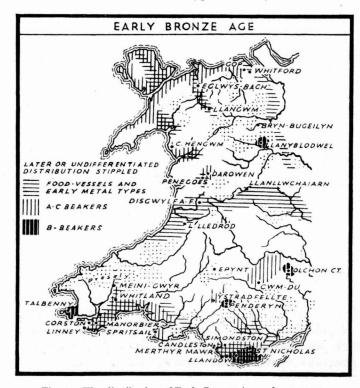


Fig. 4. The distribution of Early Bronze Age culture-groups.

whose basic equipment is essentially the same because they have the same economic background and cultural origin.

The full implications of this view have yet to be worked out for the beakers. Here it must suffice to say that broadly speaking a fourfold division into main groups of A, two types of B, and C-Beaker Folk is recognisable, the B Beakers being differentiated from the others by the possession of a smooth double-curved profile, while the A and C forms are more definitely waisted pots with funnel-shaped necks which are proportionately shorter in the C Beakers than in the A's. The decoration in the last two groups is also more elaborate than in the B Beakers, both classes of which usually employ simple zonal patterns,

the commonest technique being that of the notched or 'hyphenated' impressed line.

As to origins, the Beaker movements are a complicated series. The varieties of A and C were brought to Britain from the Rhineland and northwest Germany. The more globular version of the B type, known as B2, also came from north-western Europe, but the B1 variety which is distinguished by its more refined double-curving profile, is now generally accepted as coming from Brittany. Chronologically, the B-Beakers of both groups are earlier than the A's. The B1 (Wessex) Beakers include in their equipment the tanged copper daggers mentioned above. The axe-hammers and flint daggers of the A-Beakers are a sign of their Nordic connexions. The C-Beaker Folk appear to have no typical equipment, but were seemingly the latest groups to arrive.

Inevitably, though beakers are found in the remotest corners of Wales their numbers are comparatively small and their distribution somewhat disjointed. Those numbers have, however, been very much increased since 1925, when Sir Cyril Fox's study of their distribution appeared: about 35 are now known from the whole of Wales, with the main groups stringing out along the north and south coastal plains and minor extensions into the upland interior. Almost in all cases these finds have come only from burials: exceptions are the Spritsail Tor beaker, Gower, which came from an open hearth site, and the inland find at Penderyn, in the Brecon Beacons, which appears to have had no certain associations; but they do not tell us much of the life and habits of the people.

The largest single discovery remains that of the round barrow at Merthyr mawr, Glamorgan, described by John Ward in 1919, which yielded in all six crouched skeletons of broad-headed type. Three beakers were found with the group, all of A type, and all remarkably uniform in character, the chief motif in their ornament being the reserved bar-chevron against a background of notched lines. The Spritsail Tor beaker already mentioned is a coarser example of the same pattern; and we are confronted, therefore, with a repetition of the megalithic processes, with evidence for a strongly homogeneous group of A-Beaker people colonising Glamorgan, and this time extending For the beaker from Pale-bach takes the pattern into Carmarthenshire; and there is a debased bucket-shaped vessel from Linney, Pembrokeshire, whose crude chevron ornament makes it far the latest member of the group and shows that in Wales the debasement of beaker form and ornament was very like that which took place elsewhere. Parallels in Somerset and Gloucestershire have long made obvious the source of this particular group with a movement across the Severn estuary as the most likely way of approach.

These beakers apart, the A-Beakers of Wales do not as yet fall into categories which allow them to be related directly to the primary centres of

the culture in the east of England. It would be natural to find that while the south coast looked to the south of England the north was linked with Derbyshire and Yorkshire, both of them with important concentrations of A-Beaker colonists. There is a certain colouring of such influence in some of the north Wales beakers, hinting at the origins of their makers; but it is not yet sufficiently clearly defined. The pots themselves are rarely of intrinsic interest, though the Cwm-du, Breconshire, beaker deserves mention as the only handled beaker from Wales: they are almost all of the comparatively late form which Abercromby classified as AII, the natural result of their location on the fringe of the main Beaker areas.

In addition to the beakers, other burials have produced objects belonging to the A-Beaker culture, the chief being the flint dagger from Ystradfellte, Brecon, and several examples of the small simple type of perforated axehammer. Chance finds of similar objects complete the limited picture: a dagger of chert from Merthyr-mawr, a few axe-hammers from the west, in both north and south Wales.

Some of these axe-hammers have an additional interest because of the rocks of which they are made. The outstanding materials here at the moment are the igneous rocks of Presely, including the 'spotted dolerite' which is famous now for its association with Stonehenge: several axe-hammers of these rocks are known from Pembrokeshire and further afield. They attest an Early Bronze Age activity in north Pembrokeshire which is no doubt related in some way to the Stonehenge exploit and suggest strong A-Beaker influence in the area; though that activity is in fact a prolongation of the Neolithic, when north Pembrokeshire also produced and exported polished axes.

Until very recently the B-Beaker group was almost unrepresented in Wales. The globular eastern form does not occur at all; but the smooth-curving Wessex B variety had long been known from Llangwm, Denbighshire: this is a vessel with a more elaborate style of ornament than is usual to the form, a fact which in itself argues a comparatively late date.

More recent finds have added to its numbers. One with the characteristic zonal ornament comes from Penderyn, Breconshire (pl. 1, B). It is better made than two other examples from the Olchon valley of Hereford, but all of them are distinguished by the possession of a collared rim, which is rare in southern England on this form. Even more recent excavations have produced two more B-Beakers from the coastal plain.

Sir Cyril Fox has described one from Sutton 268', one of a group of round barrows in Llandow parish, Glamorgan. Full justice cannot be done to the elaboration of the site here: it must suffice to say that the primary burial had

¹ The larger varieties of axe-hammer, which vary a good deal in form, are probably of different dates, though most of them no doubt belong to the Bronze Age. By the application of the method of pollen analysis to one such example from a peat bog at Llangeitho, Cardiganshire, Mr. H. A. Hyde has established its late Bronze Age date—though in view of the fact that the implement was not accurately recorded at the time of finding the conclusion must be somewhat tentative,

been placed in a subterranean cist beneath a U-shaped cairn,¹ which in its turn was covered with a low barrow of soil, and defined by a rock-cut ditch. In the report referred to the excavator discusses at length the ritual implications of the site, which was enlarged and modified by later users. The beaker closely resembles the Penderyn beaker in its zonal ornament and general form, and once again has the collared rim.

Further west, at Talbenny in Pembrokeshire, the second beaker also has the collar; but its character is coarser and its decoration consists of rough horizontal lines of oblique stabs (pl. I, c). Here the human remains had apparently completely disintegrated. The grave had been covered by a stony heap and the heap in turn by a barrow with stone revetment, the extent of which had originally been defined by a temporary stake-circle or fence. The barrow also underwent alteration in the Middle Bronze Age (see below).

Add to these new discoveries the fragments of an older find, the beaker from the Tinkinswood long barrow, whose zonal ornament places it with little doubt in the B class, and the B-Beaker colonisation of south Wales begins to assume sizeable proportions. Sir Cyril Fox has used the distinctive collared rim to support an argument that the B-Beaker movement paralleled that of the A, coming across the Severn from Wessex; for the collar is a feature which appears only amongst the northern examples of the Wessex B-Beakers, in the upper Thames valley.

But the possibility that it is rather parallel with the Cotswold–Severn long barrow colonisation cannot be ruled out. The long barrows, as noted above, came from Brittany; and a find made on the foreshore at Brean Down across the Bristol Channel shows not merely that an occasional pure Brittany beaker could and did reach the Severn estuary, but also that such characteristic beakers might be accompanied by cruder products which incorporate both the collared rim and the coarse technique in paste and ornament of the Talbenny pot.

One find, however, is not much on which to build and we must look forward to more discoveries to shed light on this problem, noting in the meantime that whatever its manner of approach the B-Beaker colonisation was not only spread intermittently over the south Wales coastal plain, but also penetrated, probably by routes which were used by other people before and after them, up the Marches and into the eastern fringe of the Welsh uplands.

Of the C-Beakers little can be said. Their distribution is scattered and they make up a range of forms some of which are no doubt descendants of A-prototypes, while others are more distinctive and like the Llanllwchaiarn (Montgomeryshire) pot can be recognised as belonging to one or other of the more or less clearly-defined C-beaker intrusions which affected the east coasts.

¹ The form of the cairn is unusual, but two possible parallels can be quoted: Dolpennau, Llangwm, Denbighshire (Ellis Davies, *Denbighshire*, p. 283), and Merddyn-gwyn, Pentraeth, Anglesey (Roy. Com. Anc. Mons., Anglesey, p. li).

The picture, therefore, is one of bands of intruders affecting Wales either direct from their continental homes, as is possible with the B-Beakers of the south, or (more usually) coming from their larger centres on the east and south of England, each group reflecting something of the individuality of the parent settlement.

Stone Circles

Here a word must be said about the stone circles, at least some of which were associated with the Beaker Folk.

The stone circle in Wales is not the affair of impressive masses that springs to mind with the names of Avebury and Stonehenge. Apart from isolated examples which use fairly large stones, the circles in the upland districts are usually composed of small stones which may be difficult to find in the rank ground-vegetation of the moors. They are sometimes accompanied by 'avenues' of equally small stones or by outliers or central monoliths which are generally bigger than the rest.

The many features and problems of Welsh stone circles cannot, however, be discussed here. It must suffice to say that, broadly, they fall into two groups according as the stones are enclosed or not by an earthwork, usually a simple bank which may be composed of material either from a ditch or from surface scraping of the ground round about.

This distinction corresponds with that of the circles which stand at the head of the whole British complex: recent work at Avebury, for instance, has suggested that multiple unembanked stone circles introduced by the B-Beaker people were replaced by the single great embanked circle of A-Beaker times. It cannot be said that in Wales this evidence can be applied, for very little is known of the sites by excavation; and there is certainly nothing to suggest that the distributions of B-Beakers and unembanked circles coincide.

But whatever the cultural and chronological variations, the contrast on the distributional side is clear enough. The embanked circles on present evidence are confined to the coastal lands or to the periphery of the upland; the unembanked circles are found almost entirely inland, with rare examples in the upland fringe of Pembrokeshire, Caernaryonshire and Flintshire.

Excavation has added to our knowledge of the cultural background of three of the circles and it happens by good fortune that they are of diverse types. Mr O. G. S. Crawford planned and excavated the pair of embanked circles at Carneddau Hengwm in 1919. One proved to be a simple earthwork without uprights; the other was a circle of normal type, with an enclosing bank and ditch. Both had certain internal features, including in the first an oval pit thought to have been a grave in which the bones had been

¹ This simple explanation, however, is complicated by the excavation in 1946 of an enclosed timber circle (or rather horse-shoe) at Dorchester, Oxfordshire, which is apparently of pre-Peterborough date. (*Illust. London News*, Nov. 2nd, 1946). Some circles must therefore have been introduced by the Neolithic people.

completely dissolved away; and both produced sherds of the same type of pot which can now be recognised as part of an A-Beaker with 'rusticated' fingernail ornament of a not very common type which has also been recorded in circle-sites outside Wales.

In 1938 I undertook the excavation of the circle known as Meini-gwyr in Carmarthenshire. Here there was no ditch, the bank having been built up of surface scrapings. Only two stones actually survived, but judging from their re-excavated holes the others must have been larger than the average for Wales. Seventeen in all, they had been set up in the inner slope of the earthwork, which had also been provided with an elaborate stone-flanked entrance. Finds were scanty, but a hearth with scraps of pottery on the bank on the south-east side suggested that the site may have gone out of use by some time in the Middle Bronze Age, if not before.

The third site is the circle on Mynydd Epynt, excavated by Mr G. C. Dunning in 1940. This example, isolated in itself, belongs to the upland type with small stones. Its diameter was 55–58 feet and it had originally twenty-seven stones, with a wide gap, probably the original entrance, to the south-west. Unfortunately no datable finds were recovered, although datable evidence may be got from the pollen analysis of peat-deposits on the site. The excavator suggests that once built, the circle was not maintained in good condition for very long. To the west of it a small cairn elaborately constructed of turves and stone yielded two cremation burials, one of which had associations suggesting a Middle Bronze Age date (see below, p. 62).

Finally, with regard to this subject the reader will hardly need to be reminded of the connexion of Stonehenge with Pembrokeshire, convincingly demonstrated by Dr H. H. Thomas's determination of the source of the foreign blue stones in the Carn-meini—Cerrig-marchogion area of the Presely range. The blue-stone boulder from the Wiltshire long barrow known as Boles Barrow is evidence that some part of this activity goes back to Neolithic times, but adds to the difficulties of accounting for the date of the achievement, or for the people responsible for it. These will no doubt be resolved as knowledge of the period in the south-west grows; in the meantime suggestions have been made as to the most likely route to have been followed in moving the stones, and the solution favoured would convey them overland from their source to the head of the eastern tidal arm of Milford Haven, thence by sea to the coast of Somerset (whence a land route along Mendip, or a water way up the Bristol Avon are possible), or even round Land's End to the mouth of the Hampshire Avon at Christchurch—though the latter course seems less likely.

The Early Bronze Age : the Native Element

So far, this account of the early part of the Bronze Age has concerned itself chiefly with the Beaker intrusion and with monuments which appear to have been connected with it.

It goes without saying that the Early Bronze Age was not made up only of this one ingredient. The Beaker People found a vigorous Neolithic culture throughout Britain. In Wales it belonged mainly to the Neolithic A groups centred round the megaliths and it drew its inspiration primarily from its contacts with the rest of the world of Atlantic (and Highland) culture, though in the north there was also a Neolithic B colony (p. 43) whose relationships would have been with northern and eastern England. But here as elsewhere for a time the non-Beaker element was subordinated to the Beaker-invaders, though that subordination would have been less pronounced than in the south and east of England. It was, however, to re-emerge after a period of probably peaceful assimilation; and the result was the achievement which flowered as part of the British Middle Bronze Age.

The non-Beaker contribution had a dual origin: it was due partly to trade and commerce, partly to cultural developments transmitted in a complex of movements linking the various parts of Atlantic and Highland Britain.

Commercially, the foremost influence on Britain as a whole was Ireland, with its rich supplies of copper and gold—and from quite an early date supplies of presumably Cornish tin must have been added to the copper, seeing that many of the early forms are in bronze. Copper and bronze daggers, and in particular copper and bronze axes, of these early types which have been found in Wales are almost certainly of Irish origin; and they are incidental to trading movements which passed beyond Wales into eastern and southern England. Their distribution suggests trans-peninsular or coastal routes in north and south Wales, with small concentrations in Anglesey and on the Pembrokeshire–Carmarthenshire border: with another group in Glamorgan and a string of more scattered finds in central and north Wales, in the upper reaches of the Severn and Wye and the Dee and Conwy valleys. Miss Chitty's map in Fox's Personality is eloquent testimony of the early trade-movements across Wales at this time. Rarer types, like the halberds, and the gold ornaments, complete the picture.

There is at present no evidence that the metal resources of Wales functioned in these developments: native deposits of copper and gold seem to have gone unworked until Roman times. But a part, though a minor one, may have continued to be played at this early stage in the period by the igneous rocks, which were used in the south-west particularly for axe-hammers.

Of ornamental materials other than gold the chief are jet and amber, both, in relation to Wales, of eastern and northern origin. The date of the one or two amber beads from Wales is uncertain; on the other hand, early prehistoric jet from Yorkshire has been found both in Anglesey and in Flintshire. Both of these are finds of long standing, and the latter, consisting of a pair of jet sliders from the famous Gop cave, may be taken as evidence that the Yorkshire jet industry was of pre-Bronze Age beginning, for the associated

pottery belonged to the Neolithic B group. On the other hand, the Anglesey find was that of an incomplete crescentic necklace of flat beads, a definitely early type thought to have been inspired (in its north-eastern home) by the shape of the gold lunula. Here once again therefore the north Wales coastal area in its 'native' rather than in its intrusive Beaker aspect is coloured by continuing contacts with north-eastern England.

While, however, a bronze or copper knife dagger with a beaker (as at Darowen, Montgomeryshire) or with a non-Irish type food vessel (as at Candleston, Glamorgan) points to some kind of economic or trading connexion because of the different sources from which the elements of the association have sprung, the presence in the same 'find' of objects having a common origin within the Highland Zone may be a clearer index to western cultural characteristics.

Most archaeologists are agreed that as a guide to culture-groups in primitive conditions pottery still provides the most sensitive clues. It is therefore necessary at this stage to say something of the pottery types which were developing under non-Beaker inspiration during the Early Bronze Age. Known collectively as Food-Vessels, they fall broadly into two groups, a northern and eastern (Yorkshire) and western (Irish) series, both of which owe a large, if not the dominant part of their make-up to the native Neolithic culture, to which areas outside the British Isles also contributed. The origins and interactions of these different groups are still far from clear, but do not concern us now: the one definite fact that emerges with regard to them in Wales is the strength of Irish influence.

Broadly speaking, Welsh Food-Vessels fall into three main types; one a globular form (Abercromby's Hibernian Types A and C); the second biconical, the two parts divided by a grooved moulding with lugs (Abercromby's Type 1a); the third a bipartite type in which the lower part of the vessel is an inverted truncated cone which carries a hollow neck and variously-moulded rim (Type 3).

The presence of a number of examples of the globular form and in particular of the famous little biconical food-vessel from Manorbier, Pembrokeshire, has long been recognised as evidence of strong Irish influence in the south-west. More recent discoveries in the Plynlimon district have since added to knowledge of this aspect of the subject.

From Disgwylfa-fawr, Cardiganshire, comes a biconical lugged foodvessel of Type 1a which was found in a barrow with a cremation burial and two dug-out canoe-shaped tree-trunks. The last is an unusual find for Wales and its best parallels come from Yorkshire, but Miss Chitty's subsequent detailed analysis of the character of the pot leaves no doubt of its Irish affinities (pl. II, A).

The second vessel, from a barrow on Bryn-y-fedwen, Penegoes, Montgomeryshire, was also found with a cremation. Its form is later and more debased, so that its angularity has been blurred into an almost globular outline; but once again its Irish ancestry is proved by the wealth of analogies

provided by Miss Chitty (pl. II, B).

These new finds, therefore, extend the area of Irish influence in the Early Bronze Age into central Wales. As Miss Chitty says, the pots have a character of their own which leaves no doubt that they were produced in Wales by people with a strong Irish cultural background. The globular food-vessel from Whitford, Flintshire, shows the same phenomenon in the north coastal belt—but here there appears also to be influence from eastern England in the unusual impressed ornament, for which Sir Cyril Fox has adduced parallels in the Fen country.

The more clearly recognisable stream of eastern—or north-eastern—culture at this period appears, however, in the third group of food-vessels outlined above: Abercromby's Type 3 and its variants. Several examples have been recorded on the eastern margin of north and central Wales, their distribution spread through Denbighshire and Montgomeryshire, where they have been found consistently with cremation burials. One only seems to be known from the south, where Ward recorded at Candleston, Glamorgan, a fragmentary pot with a cremated burial in a curious cist of megalithic ancestry, its other association being a flat bronze or copper knife dagger. The presence in the Middle Bronze Age of 'enlarged food-vessels' indicates that the cultural strain represented by the Type 3 pot was stronger in the south than the isolation of the Candleston find would suggest.

For the details of this non-Beaker culture these burials are our only reliable evidence at the present time. In them all the threads are drawn together: the prolonged influence of the megalithic tombs (as the outstanding example of the continuing strength of tradition which is at all times a feature of the Highlands), the products of trade, the contacts of the developing culture in the north and west.

As an instance of the first of these phenomena Corston Beacon may be cited. Here a megalithic cist with a single inhumation burial unusually (for the period) extended had with it one of the early flat daggers which were then reaching west and south coast harbours. The cist is megalithic in the full sense of the word: its form can be traced back to the portal-megaliths described above as one of the distinctive Welsh groups of Neolithic tombs.

Candleston is even more informative in this respect, for here a megalithic cist of the same ancestry has a flat dagger, this time with a cremation-burial and a Type 3 'food-vessel.' Professor Forde, in describing the Disgwylfa burial, pointed out the affinities of its canoe-like coffins with the dug-out burials of Yorkshire, and it may be that here too Irish and Yorkshire influences are joined.

Finally, at the end of the series comes the Llangwm, Denbighshire, find made by the Rev. Ellis Davies, in which a Type 3 food-vessel and an abnormal



Α



В



C D E

PLATE II. Food-Vessels and Pigmy Cups from Wales

- A. Food-Vessel from Disgwylfa-fawr (Card.). (\$\frac{1}{10}\$)

 B. Food-Vessel from round-barrow at Penegoes (Card.). (\$\frac{1}{3}\$)

 C. Pigmy Cup from round-barrow at Breach (Glam.).

 D. Pigmy Cup from round-barrow 287', Sutton (Glam.).

 E. Pigmy Cup from round-barrow at Talbenny (Pemb.).

 F. Pigmy Cup from Bwlch-y-groes (Card.).

- - Photographs by the National Museum of Wales

F

cinerary urn were found with a cremation burial and two segmented beads of faience of Egyptian origin. Here again the all-over ornament of this type of food vessel is unusual and suggests contact with Ireland on the one hand or with the Yorkshire 'food-vase' on the other. Its additional significance is that it attests the overlapping of food-vessel and cinerary forms and that it sets an approximate term on the absolute date of the type. The faience beads are dated in their country of origin to about 1420 B.C.

The Early Bronze Age in Wales is therefore a period of immense activity, of a certain re-forming of the pattern of influences which were to make their contribution to the Middle Bronze Age as the period of fulfilment. Whatever the effect of the Beaker people on the population, they have left little recognisable trace of their presence in the material culture of the time: we have seen the indigenous culture of Wales inspired by native influences from its great centres in Yorkshire (and Derbyshire) and in Ireland; and more pronouncedly than in Neolithic times there is a tendency for north and south, separated by the great mass of the central upland, to look in different directions and to develop distinctively.

The external trading activities of these varied communities are more clearly defined at present than their social attributes. All had their share of the desirable goods, utile and ornamental, in which a widespread traffic had begun—though once again with the uneven emphasis dictated by geography. There seems no reason to dispute the essentially pastoral mobility of the Beaker people. It is not yet clear to what extent the native non-Beaker element contributed to the agricultural prosperity for which in the south at least there is evidence in the next phase (p. 70). Outside Wales it is clear enough that their Neolithic forebears were arable farmers and whatever the contribution made by Middle Bronze Age newcomers some part of the foundations for this prosperity must have been laid by them.

THE MIDDLE BRONZE AGE

The result of the processes outlined above was that by the middle of the second millennium B.G. the stage was set for the development of a true age of metal. The first difficulties involved in a two-way supply of raw materials (copper and tin) were resolved and the transition from metal imitations of Stone Age forms to purely metallic types could now be achieved.

The 'Enlarged Food-Vessel' Culture

Before considering a new movement which if it did not inspire at least much quickened these developments, it will be convenient to glance at the native culture as manifested in the early part of the phase. We have already observed that the dominant element in Wales became in due course (after the absorption of the Beaker culture) that of the Food-Vessels, with its roots in the Neolithic of Ireland and Yorkshire. The Food-Vessel culture, however, was

prolonged at any rate into the early part of the Middle Bronze Age. Its characteristic pottery as known from contemporary burials then became the enlarged food-vessel, employed now not so much as an accessory to the burials, as it had been when the inhumation rite was in vogue, but as a container for the cremated bones. Such enlarged food-vessels occur in both north and south Wales, with Abercromby's Type 3 providing the basic form. Examples from Mwdwl-eithin and Bryn-bugeilyn, Denbighshire, illustrate northern

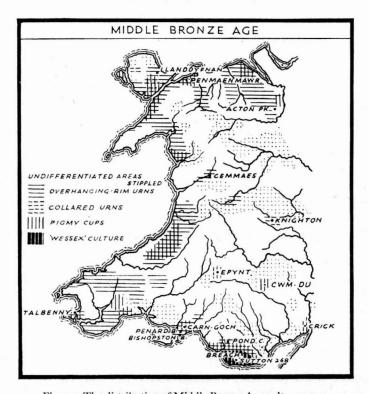


Fig. 5. The distribution of Middle Bronze Age culture-groups.

versions; more recently Professor Daryll Forde has published one from Lower Lledrod, Cardiganshire, and the latest were recorded from the Simondston cairn, Glamorgan, by Sir Cyril Fox.

The Mwdwl-eithin barrow (in which the pot was secondary) was a composite construction of earth and stone with a simple somewhat crudely constructed enclosing stone ring. Lower Lledrod and Simondston on the other hand have all the features to be looked for in western stone-built monuments. The cairn of the former was not examined in detail, but indications of a kerb are recorded and the burial was contained in a massively-built cist. Disturbed

monuments showing the same features are characteristic of all parts of the Welsh upland.

Simondston, on the other hand, is completely known. Its stone-built cairn employed pitched construction, recalling the megalithic cairns; it had a well-made large primary cist with cremation deposits of which the chief accompaniments were the two enlarged food-vessels. One of the stones of the cist was ornamented with cup-markings, which are also a native feature, being characteristic of a number of Welsh burial chambers.

There is therefore evidence for the widespread distribution of this essentially native early Middle Bronze Age culture, but it is of interest to note that at present at least the Irish part of the early Bronze Age does not appear in recognisable form in it, though Irish influence can be seen in later cinerary urns in north Wales. The aboriginal culture, however, was now affected, in the south at all events, by the new set of external influences mentioned at the beginning of this section.

The 'Wessex Culture': Early Pigmy Cups and Cinerary Urns

The new movement was only clearly recognisable in 1938, when Piggott published his study of the 'Wessex Culture.' This is now recognised as the invasion of the first true bronze-using people, who, coming once again from Brittany—the parallelism of the distinctive metal types in the two areas had for some time been recognised—had settled mainly in Wessex, with lesser groups in Cornwall and Devon and up the eastern side of the country in East Anglia and Yorkshire. Their rich equipment includes developed grooved and mid-ribbed daggers, and flanged axes; and in the hoards containing these first appear the most 'metal' of all these types, the early tanged- and socketed spearheads. These are a modification of the simple native tanged spearheads already represented in Wales by the well-known Blaenrhondda and Llanfachreth examples.

The impact of the Wessex culture upon Wales followed what may almost be called normal lines. As in long-barrow and in Beaker times the south coastal plain became something of an extension of the 'English' lowland. The Glamorgan strip was already supporting a flourishing population compounded in varying degrees of Neolithic and Beaker elements to which now 'Wessex' immigrants were added: the existence of this population is testified by the large number of round barrows in the Llantwit Major-Bridgend area, and a number of important excavations in recent years has demonstrated the presence of the new culture amongst them.

Away from the Glamorgan coastal plain there are hints of 'Wessex' influence in scattered places. The small hoard from Ebnal, Shropshire, consisted of ribbed daggers and an early form of socketed spearhead with loops. From Llanddyfnan, Anglesey, comes another small group, this time found in a cinerary urn, comprising a dagger with 'pecked' ornament, a

chisel and a flat axe. The Llanddyfnan urn is of unusual type, but there seems little reason to doubt that it is truly a 'native' product. The bronzes on the other hand have a definitely 'Wessex' look; and here and possibly also at Ebnal some sporadic movement, no doubt of trade rather than of settlement, is indicated.

Of the Glamorgan barrows above mentioned one at Breach Farm near Cowbridge produced the first clear signs of connexion with Brittany. The cremation-pit at the centre of a composite barrow (a clay mound enclosed by a stone kerb of almost megalithic proportions in places) produced the remains of three individuals, a biconical pigmy-cup (pl. II, c), several bronzes (including a flat axe and a small chisel, the latter incapable of preservation), two arrowshaft smoothers and a fine series of worked flints, the most important of which were arrowheads that for beauty of form and workmanship are unsurpassed in Britain. The arrowheads at once recalled the arrowheads frequently found in large numbers with 'Wessex' graves in their original home in Brittany and they are paralleled also by isolated finds in Wessex itself.

The Breach Farm barrow is at the moment the earliest and probably the purest example of 'Wessex' influence in the area. But the barrow form here met with persists throughout the Bronze Age, often with much greater elaboration. Investigations in various parts of south Wales during the last few years have brought out in a remarkable way the features of this type of structure.

The variations between different sites are too many for detailed description: here I can only say that while at Breach the mound was a mixed one, of clay and turf, in some of the other sites turf was the dominant material, erected at times in the form of a straight-sided stack rather than of a bowl-shaped mound, with a stone kerb or surround of varying size and elaboration outside it. Accompanying these features are rings of stake-holes, single or multiple, which are interpreted as the remains of symbolic or ritual huts. Other signs of an elaborate ritual are seen in the generous use of charcoal and in the presence of various pits and hollows, often carefully and elaborately filled.

The impact of the new movement upon the indigenous cultures is clearly marked in several of these sites. The newcomers did not always build themselves new barrows, but often enlarged and modified the barrows of native inhabitants—a circumstance which, in conjunction with other pieces of evidence, suggests that there was extensive coalescence of the different groups. And not only are the modifications of various kinds: they also show something of the progressive stages of the coalescence.

Before examining these sites, however, it will make for clarity if the basic conclusions to which they have led are anticipated here as they affect the burial-pottery. The indications are that there were two phases of immigration, the first of which, characterised by pigmy cups, is probably derived from or related to the 'Wessex' culture using that term in its specialised sense, while

the second and rather later one introduced the earliest forms of collared-rim cinerary urns. The second came also from the south of England, but had its roots in the native Neolithic (from which the collared-rim urn derived) rather than in the intrusive 'Wessex' culture.

Sutton 268', already mentioned for its unusual primary beaker-burial (p. 48), is an example of a barrow enlarged and modified to accommodate burials belonging to the new cultural order, one of which was accompanied by a fine biconical pigmy cup, a flat bronze knife and a small bead, while another was contained in an overhanging-rim cinerary urn. Turf formed a large element in the enlarged barrow structure; the mound was also enclosed by a stone-built kerb like that of Breach and there were traces of the stake-circle which has been mentioned as another feature characteristic of many of the barrows of this series and which are well-represented in other members of the Glamorgan group.

Simpler secondary additions on the other hand were found at Simondston, where the enlarged food-vessel cairn had a series of secondary burials ranged round its southern margin, all of them cremations with ritual accompaniments. The group as a whole was later than the earliest of the new burials at Sutton 268': the chief evidence of date was provided by a cinerary urn with collared rim.

In Pond Barrow, not far away (Fig. 6), Fox had a barrow of the intrusive group similar to Breach, and unadulterated, but also later, for its primary cremation is accompanied by an early overhanging-rim or collared urn. Its mound structure is once again composite, with a central turf-stack covering the small cairn containing the burial (around which was much evidence of ritual acts) and outside that a heaped-up stone kerb. Important individual discoveries were grains of wheat (*Triticum vulgare* or *T. compactum*) and barley in the contemporary ritual deposit, and coal in some quantity (see below, p. 65).

At Crick, Monmouthshire, on the other hand, Dr Savory has excavated a barrow which with its admixture of Food-Vessel and 'Wessex' features hints at a more intimate fusion of the two cultures. The barrow structure was of Wessex type with a composite mound and enclosing stone ring, with the addition of a surrounding ditch which places it in the class of bell-barrows now thought to have been introduced into Britain by the Wessex immigrants. Its cremation pit also was capped by a clay dome of a type recorded at Breach and elsewhere. But the cup-marked stones in the ring are native and so also are the plano-convex flint knives, one of which accompanied a secondary burial.

The evidence for renewed colonisation of Wales in the early part of the Middle Bronze Age is therefore that of material culture, of ritual practice, and of the structural features of the contemporary burial-mounds. These factors seem to have had a varying survival value which is probably only partly related to the fact that the 'Wessex' culture, like that of the Beaker People

before it, was absorbed and lost its individuality in the strongly-persistent indigenous culture. This process clearly took place in Wessex and it accounts for the differences between the two waves of invaders summarised above.

As to the origin and history of the barrows themselves the parallels for these composite structures are to be sought across the Bristol Channel,

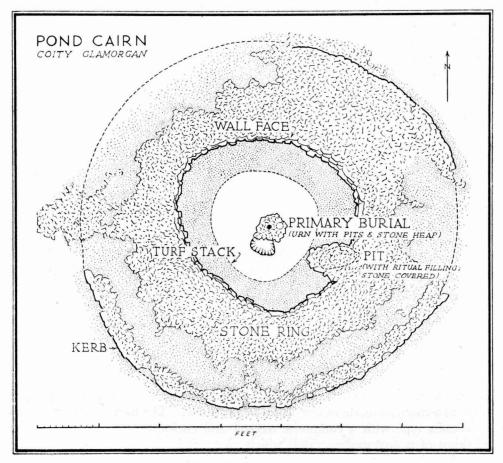


Fig. 6. Pond Cairn, Coity (Glam.): plan as excavated. (p. 59) (Based on Archaeologia, 1937, pp. 129-80 (Fox)).

particularly in Devon. This fact is emphasised in the various excavation reports whose results have been briefly summarised: it has been confirmed by more recent discoveries in Cornwall, where Mr J. K. C. Andrew has now added the missing element of stake-circles to the more readily recognisable turf-and-stone mounds of earlier excavators. Whether the Welsh expression was derived from south-western England, or from Wessex, or whether it came direct

from overseas remains to be seen. For the pigmy-cup group the latter explanation is at least partly possible; but the collared urns would seem to have come from Wessex.

There can therefore be little doubt that composite mounds of the Breach-Pond Barrow type were introduced by the incoming early Middle Bronze Age people. We shall see in due course that in spite of the disappearance of the 'Wessex' culture as such its barrow architecture persisted until well on into the Bronze Age, side by side with the stone cairn (with or without a slab kerb or other peristalith) which remained the chief type in many parts of Wales.

Culturally, however, the associated finds show (as I have anticipated on p. 58, f) that two main groups were involved; and now for the first time also understanding of the pottery forms and of their cultural significance becomes possible. A word on pigmy cups and collared urns is now necessary.

It used to be assumed that pigmy cups were the accompaniment of cinerary urns generally of overhanging-rim type. But the number of pigmy cups to have been found alone has grown considerably in recent years; and the Breach and Sutton 268' examples described above have provided outstanding confirmation of the fact that these small cups have a significance which is independent of the urns. It is, indeed, hardly going too far to write of a 'pigmy-cup culture' as probably the first manifestation of the 'Wessex' culture, at any rate as it affected Wales, meaning by the title a group whose distinctive characteristic was to deposit with the cremated remains of their dead small pottery cups belonging to a limited range of types.

Such cups are a feature of the richest of the Wessex burials and the most outstanding of them, the 'grape' cup and the pedestalled cup, can be closely paralleled in Brittany with the rest of the equipment. These have not occurred in Wales as yet, the chief form here being a biconical cup (or variations of it), the decoration on which is usually incised, sometimes (as at Breach) picked out in colour, and generally of high quality.

Apart from the finds already described, discoveries of unaccompanied cups have been made a number of times in south-west Wales, though the records lack detail. In describing some of these Dr Savory has discussed the origin of the type.¹ He derives it from a biconical cup which is a feature of Western European Neolithic culture and whose immediate home in relation to Britain appears once again to be the western seaboard of France. The 'pigmy-cup culture' then affected the whole of the south Wales coastal area from Glamorgan westward, though whether as the result of a single impact from outside or of a gradual spread from a primary centre in south Wales is still uncertain.

¹ Dr Savory has omitted an element in the decoration of some of the Welsh examples which is probably additionally significant. Several employ fine punctuate dots, which are a dominant feature in Breton 'vase-supports,' themselves claimants to the rôle of prototype of the pedestalled form of pigmy cup.

As with the B-Beakers, there is some sign of penetration into the upland. Mr R. G. Sandeman found a pigmy cup of unusual shallow type at Llanfihangel-cwm-du in the Usk Valley. The cairn here appears to have been of straightforward construction. On the other hand, the small barrow near the Epynt stone circle described above was a composite mound with many of the features of the Glamorgan barrows. Its cremation-burial had with it a small plain cup and a bead of anthracite, which must have been brought by man from at least twenty miles to the south-west. Here the pigmy-cup people are following the line taken by the B-Beaker folk and the long-barrow builders before them. But they (or at least their burial practice) travelled further up the west coast, as the presence of fine pigmy-cups in the coastal area of central and north Wales shows. The sea-ways of the west would thus appear to be behaving traditionally.

Interactions between the native ('food-vessel') and intrusive elements is early recognisable.

It appears, for one thing, in the ornament of some of the earlier pigmy cups, in the form of twisted-cord impressions instead of fine grooved lines. The twisted cord technique is regarded as essentially native in character and its presence on such a cup as that from Sutton 287' (pl. 11, D) presumably indicates either the early copying of the new form by native potters or the assimilation of a native style of ornament by the newcomers. On the other hand, it must be pointed out that twisted-cord ornament is perfectly at home in north-western France, where it is used in a distinctive way on certain of the bell-beakers; and the possibility that it may often be as intrusive as the form cannot therefore be ignored.

In the opposite direction, it would appear that the use of the pigmy cup was also adopted by the Food-Vessel people, for some of these cups are simply diminutive food-vessels. The outstanding example is the cup from Penmaenmawr, which is a reduced version of Abercromby's Type 3 food-vessel.

The second phase of intrusion in the early Middle Bronze Age is of purely native (English) origin. Its distinctive ceramic form is the early 'collared' urn, the fore-runner of the developed overhanging-rim cinerary urn of the full Middle Bronze Age, which, like some of the food-vessels, is derived from the Neolithic B (Peterborough) bowl. Abercromby long ago suggested that the place of origin of the collared urn was the south of England and all recent work tends to confirm that conclusion, though the widespread distribution of the type has also produced much local variation.

The collared urn appears in the Vale of Glamorgan with burial structures which are clearly related to those of the pigmy-cup group, as we have already seen at Pond Cairn. The evidence suggests yet another fusion (outside Wales) in which the re-emerging aboriginal culture represented by the urns has taken over the barrow architecture of the 'Wessex' conquerors,

This, at least, is how the matter appears in south Wales, where the recent excavations above described have emphasised the intrusive character of both of these groups. Controlled work on barrows in central and north Wales has been infrequent in recent years and it will be impossible to draw any conclusions until more has been done. The early collared urn also occurs in the north and its presence in the Marches is indicated by one recently recorded urn from Knighton, Radnorshire, in which form and ornament are both eloquent of its Neolithic ancestry. In any case, the succeeding overhanging-rim urn soon became the universal container, testifying to the basic one-ness of Middle Bronze Age culture in its developed state throughout Britain.

The Overhanging-rim urn and the Later Middle Bronze Age

The overhanging-rim urn therefore marks the fulfilment of the British Middle Bronze Age. Compounded as it was of a number of ingredients, the developed culture might still vary according to the strength of individual elements in different parts of the country. As part of this there is the well-known survival of megalithic practice in the west, while in north Wales several urns display grooves and mouldings with a pronounced food-vessel flavour.

So too the composite mound of turf with stone ring of 'Wessex' origin had long ago been found with overhanging-rim urns at Carn-goch near Swansea. More recently Mrs Williams recorded the same thing in Gower. There at Penard Burch was an elaborately constructed mound closely resembling Carn-goch, five miles away to the north. It was dated by an overhanging-rim urn, of which only the drawing of a part survives. On the other hand, the neighbouring Bishopston Burch, of slightly later date to judge by its primary urn, was of simpler construction, though stones, clay and turf were employed in it. The site had been much disturbed, but produced an overhanging-rim urn; and there were traces of secondary burials also of late Middle Bronze Age date.

Further west, at Talbenny in Pembrokeshire, Sir Cyril Fox had another instance of enlargement of a Beaker barrow (p. 49), to accommodate a cremation with two overhanging-rim urns and a pigmy cup: the surrounding stone ring was enlarged on its south side and the new burial set concentrically in relation to the enlargement in a way not previously recorded. The barrow was also enclosed by a ditch at this stage—yet another feature derived from the Wessex element (see also above, p. 59).

The use of the pigmy cups, however, continued into the overhangingrim urn period and, as already noted, it is this association of the two forms which has received the strongest emphasis in the past. The truth would really seem to be that the pigmy cup when it occurs with an urn-burial is associated with the ritual of the burial itself, the urn serving as the container, or occasionally, as an accessory vessel. The best recent example of such an association is that of the enlarged barrow at Talbenny just mentioned. Here in a collapsed stone structure was a large overhanging-rim urn with cremation and pigmy cup, with a second smaller urn in attendance. The pigmy cup is of the comparatively rare globular type (pl. II, E), of which a cruder example has long been known from Whitford, Flintshire. Sir Cyril Fox has suggested that the form is derived from sheet-gold bowls of Irish origin which have been found in Denmark, but which might equally well spring from the Irish type of globular food-vessel; in either case, Irish influence has already been noted as a feature of the south-west.

The later pigmy cups are not as a general rule of as good quality as the earlier single finds: the forms are generally less pronouncedly biconical and workmanship and ornament are often poorer. They include one or two diminutive cinerary urns.

The evidence thus briefly outlined unravels the threads which make up the pattern of Middle Bronze Age culture in Wales. Derived as it is entirely from burials the view which it presents is now particularly limited, for the complete change in the burial rite from inhumation to cremation and the abandonment of the early Wessex custom of richly endowing even their burnt burials have deprived us of many of the correlations that are essential to any attempt to evaluate the social, domestic and economic life of the time. It can at least be said that recent discoveries confirm earlier ones as to the importance of children in the Bronze Age community; and demonstrate the association of surprisingly elaborate ritual practices with death and burial.

By the early part of the first millennium B.C., however, this distinctively British culture had developed a characteristic bronze industry in which the outstanding forms were the elongated rapier and the graceful and shapely looped spearhead. In axes their final production was the looped palstave. Apart from this basic equipment they possessed a limited range of craftsmen's tools, which include one of the very rare saws, tanged chisels and metalworkers' equipment; with these also are known the two-valve moulds used for the casting of the more elaborate of these types. A small series of hoards like those from Cemmaes, Montgomeryshire, and Acton, Denbighshire, suggest a measure of specialisation in industry which we shall find developed in the next phase. That the Acton hoard at least was the property of a travelling tinker is indicated by the condition of the solitary chisel, which is fresh from the mould, with its casting-seams untrimmed.

Technological developments and the growth of various crafts have long been implicit in many of these finds and the economic and social significance of the mere existence of a Bronze Age has often been emphasised. The most striking addition to knowledge of the economic basis of Middle Bronze Age life in recent years is the discovery of food grains and the associated weeds of cultivation at Pond Cairn. This is the first definite evidence that man in Wales at this time was a farmer growing barley as well as wheat; so that the

agricultural revolution must be accepted as having been well established in the lowland areas by 1100 B.C., if not before. The same site shows him also as the first exploiter of Welsh coal: it was present in sufficient quantity to indicate its deliberate use as fuel.

THE LATE BRONZE AGE

The phenomenon which is generally taken to mark the opening of the last phase of the Bronze Age is the appearance of new, and in some cases revolutionary, bronze implements from the Continent at about the beginning

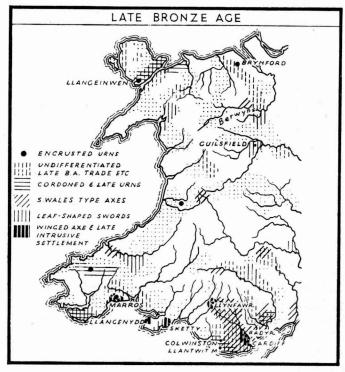


Fig. 7. The distribution of Late Bronze Age culture-groups.

of the first millennium B.C. Though at first based apparently upon trade, the movements which brought them later developed into definite migrations in which new types of pottery appeared also; they were due to the social and economic upheaval and adjustment which marked the opening of the continental Iron Age and in time took on almost imperceptibly an Iron Age character.

Intrusive Movements of the Late Bronze Age: the New Metal Types

The sequence of events as illustrated in the abundant hoards which are the most reliable index of the period is now sufficiently well known. The socketed axes, riveted spearheads, leaf-shaped swords are all types foreign to the native bronze industry, and some of them at least were superior to the native products, technically excellent though many of these were.

These forms are common in Wales both as single finds and in hoards with other attendant types. Hoards like those from Guilsfield, Montgomeryshire, and Glan-cych, Carmarthenshire, are characteristic; and their nature as the possessions of travelling craftsmen is well illustrated by the presence in them of discarded objects, of scraps of bronze, and of unfinished implements.

It is to be noted incidentally that amongst these unfinished implements at Guilsfield the palstave still occurs: the native type was evidently still in demand, though now modified in form and sometimes in ornament, under the influence of the socketed axe.¹ There are other instances of similar interactions between new and old, foreign and native. Hoards of this phase are widely distributed throughout Bronze Age Wales, north and south alike receiving them.

Of the distinctive forms belonging to the second set of movements, the winged axe and the carp's-tongue sword, isolated by Professor Estyn Evans, there had been no trace in Wales until in 1938 Mrs Williams published a winged axe from Sketty Park, Swansea. Dr Wheeler has already drawn attention to the abnormal palstave in the Guilsfield hoard, which appears to imitate the winged form. The same hoard also contains a small square scabbard-tip which may be related to the bag-like chape which accompanied the carp's-tongue sword. But of the sword itself there is no trace anywhere as yet: the group has a restricted distribution in the south-east of England and it seems safe to assume that the Sketty axe and any other finds of the kind that may be made will be due to chance and sporadic movement.

On the other hand, the presence of types linked with the carp's-tongue sword—winged-axe complex still has to be accounted for. The chief of these are the cauldrons of the famous Llynfawr hoard and the tanged sickle of the Llantwit Major hoard—though the latter is a derivative rather than a pure continental type.

Mr Leeds had already in his general study of the cauldrons emphasised their connexion with the carp's-tongue sword group and thought that they reached Britain by the Atlantic route rather than overland. Occurring as they do far more commonly in Ireland than anywhere else, in Wales at least they are likely also to be derived from Ireland.

This probability is strengthened by Sir Cyril Fox's account of British bronze sickles which arose from the unexpected appearance after many years of two important additions to the Llynfawr series. The relationship of tanged and socketed sickles is in itself clearer and there is new light on the Late Bronze Age as a result.

¹ These later palstaves have narrow blades and are sharply modelled. Some, as at Llantwit Major, have a triple rib on the face imitating the ornament on the socketed axes.



PLATE III. Iron Age objects from Wales

- A. Hallstatt iron sword, Llynfawr (Glam.). (Length 9.3 ins.).
 B. Bronze collar of Hallstatt type, Clynnog (Caern.). (Diameter, 5.3 ins.).
 C. D. Crescentic plate with embossed ornament (diameter 7.2 ins.) and three-piece bit (length 11 ins.), both of bronze, from Llyncerrig-bach (Angl.).

Photographs by the National Museum of Wales.

The tanged sickle thus emerges as a new form introduced in the Late Bronze Age and subjected to modifications under the influence of British bronze-technique, one of which produced the Llantwit Major example. Fox has indeed suggested that it was the presence of this simple, more easily produced tanged sickle which arrested the development of the laterally socketed sickle in lowland Britain. In its later phases the socketed sickle appears to be almost entirely a product of the Irish bronze industry, though its development began in the lowland in the Middle Bronze Age. The Llantwit Major and Llynfawr sickles stand at the end of the series, so that typology and association are here in accord.

Some part of the Late Bronze Age revival in the west therefore appears as a kind of reaction to the new influences of the bronze industry centred upon Ireland; and we are accustomed now to the idea of Wales as the recipient of some of these Irish products.

But before considering whether they are due to commercial or to actual folk movement, something more must be said of the latest of the exotic types which bring up the extreme end of the Bronze Age and emphasize the gradualness of its transition into the Age of Iron.

The late date of both the Cardiff and the Llynfawr hoards because of the undoubted Hallstatt character of some of their constituents and (in the case of Llynfawr) of the presence of copies in iron of bronze forms is a commonplace of archaeology. The newly recorded sword from Llynfawr now sets the seal on this matter: it is certainly to be regarded as part of the original find; it is of iron; and it is of Hallstatt type (pl. III, A)—the first to be recorded from Britain. In his re-assessment of the hoard Fox emphasises its diversity of origin, the main strains being continental (the sword, chapes, razor and discs) and Irish (the cauldrons and sickles). He considers that these hoards are due to the revival of the western trade-routes under the stimulus of the demand for Cornish tin and that the new products were attracted to the south Wales coastal fringe by its agricultural prosperity. He suggests, too, that the Llynfawr hoard was really out of place where it was found: that it was, in fact, loot from a raid on a richer lowland settlement by some of the hill-folk.

The hoards therefore illustrate admirably the varied impact of foreign industry on Wales in the Late Bronze Age: single finds of axes of Irish and Breton types serve to emphasise the foreign element. Before examining the native contribution to the Late Bronze Age it should be added that scattered finds of pottery suggest a certain degree of settlement more definitely than is allowable with easily transported metal objects. The knobbed pot from the cave at Radyr near Cardiff is well known and acquires a new significance from its proximity to the Cardiff hoard. Further west, from another cave at Llangenydd in Gower, come bucket-shaped vessels, as yet unpublished in detail, belonging to the same series; and further west again, from Marros in

Carmarthenshire, a shouldered pot which has at least one Irish parallel with leaf-shaped sword associations. An infiltration of people as well as products must therefore be recognised along the south Wales coast. Numerically it was probably slight, but it is once again significant that in only three finds both the south-eastern (continental) and the western (Irish) sources are recognisable.

It is not unnatural that in what has been written above south Wales should appear with greater prominence than the rest of the country: this state of affairs is partly the outcome of the fact that a variety of causes has concentrated work in this area, but it partly reflects both the prosperity of the south Wales coastal area and the significance of its close relationship with the economically wealthier and culturally advanced parts of southern Britain.

Over the rest of Wales, and even in the north coastal districts which supported flourishing communities which received in some quantity the products of Irish trade, only the first of the as yet Late Bronze Age movements presents itself. The leaf-shaped swords are almost uniformly distributed outside the central upland, but of the carp's-tongue swords and winged axes there is no sign. A socketed axe in iron from the Berwyns had long been known and was republished by Dr Wheeler; but it is an isolated find and the variation in its shape suggests rather the survival of a Bronze Age form into a later period than the more intimate relationship of bronze and iron which is implied by the Llynfawr hoard.

So far we have been concerned with the contribution of external elements to the Late Bronze Age in Wales—a somewhat illogical procedure which is only justified by the fact that (as stated at the beginning of this section) it is the first appearance of the foreign types which defines the phase.

The Native Contribution to the Late Bronze Age in Wales

But native culture continued to flourish and develop. It left its mark, as we have seen, on the bronze industry, producing a composite effect in which native types persist; native and foreign are modified in reaction upon one another; and new local variants arise based upon these new contacts.

Sufficient has already been said of the first two manifestations of this process of give-and-take. The south Wales type of socketed axe with the three converging ribs on each face is the outstanding example of the third. The suggestion that this form was associated with south Wales was first made by Sir John Evans; Dr Wheeler gave a preliminary distribution list which confirmed this opinion, and Sir Cyril Fox and Miss Chitty have recently carried matters a stage further with a definitive distribution-map which shows the concentration of the type in South Wales, with a spread to Somerset and Cornwall on the one hand and up the Marches into North Wales on the other.

These socketed axes have, therefore, a dual significance. They illustrate the regionalism which is a feature of Late Bronze industry in Britain, enabling certain types to be recognised as characteristic of certain areas. And they

also demonstrate the greater vigour of south-eastern Wales as compared with the rest of the country. For even the prosperous north-eastern corner (which for one reason or another attracted a much greater share of the Irish gold trade) seems to have relied entirely either upon the undifferentiated products of the travelling smiths or upon imports from other areas like Ireland and Yorkshire: it did not develop its own industry with recognisable local forms.

On the other hand, once again the pottery types demonstrate the essential unity pervading the native culture which received and modified the new forms described above. In North, in Central and in South Wales, and from east to west the prevailing forms are those of the cordoned urn and the bipartite or bucket-shaped urn, both of which were developed from the overhanging-rim urn of the preceding phase. No recent discoveries have been added, but the Anglesey series has been republished and Sir Cyril and Lady Fox have reconstructed the Golden Mile barrow at Colwinston in Glamorgan, which produced the urns now in the British Museum.

The Encrusted Urn Movement and Irish Influence

The Anglesey material published by the Royal Commission also included an 'encrusted' urn from Llangeinwen to add to the five already known from Wales. The encrusted urn lies outside the main Bronze Age urn sequence: its distribution and development are evidence of a population movement within the Highland Zone, from the north through Ireland into Wales; and most of the Welsh examples belong typologically to the end of the series. The Llangeinwen urn has the advanced ornament which relates it to the Irish development; but the other recent discovery, from Brynford, Flintshire, is much simpler and is in all probability due to a direct link with the Yorkshire home of the type. This is one of a number of indications that the contact of north Wales with the north and east of England was maintained throughout the whole Bronze Age. And in addition the presence of segmented faience beads of Egyptian origin with the pot enables the date of this early movement to be fixed at about half-way through the Middle Bronze Age.

And finally, also throughout the Bronze Age, the Irish gold trade continued and left some of its products mainly in the north coastal areas and in Denbighshire–Flintshire. There have been no recent developments bearing on this subject and it still remains most likely that the presence of finds of Irish gold in this area is merely incidental to the movements of the trade across Britain to the Continent.

In sum, therefore, the work of recent years has served to underline the conclusions which have been drawn by several writers since the ecological and geographical approach to the problems of early human history became the rule. The distinctness of north and south, the strong tendency to survival, the interaction of east and west, of Highland and Lowland, the variations of

trade and settlement—these are now the commonplaces of Welsh prehistory, and much recent work has served to confirm and enrich them. The main contributions outlined above have led to the clarification in regard to Wales of the Middle Bronze Age cultural movements whose isolation in Britain as a whole is a recent development. The south coastal plain emerges as an extension of the 'Wessex' culture, thus fulfilling its perennial function. Above all, the superior vitality and quality of the Middle-Late Bronze Age culture centred on south-eastern Wales is now apparent as never before. superiority is not due simply to the pressure of modern events which has compelled a disproportionate activity in the south of the country: for (as we have seen) its reality is confirmed by the existence and distribution of the south-western Welsh bronze axe. Its economic background appears rather to have been the prosperous agriculture of the area, while its technical and material equipment developed under the stimuli of the mixed movements of trade and settlement which geography and prosperity alike promoted. By the end of the Bronze Age, therefore, the process was completed by which the south Wales coastal plain became—and was destined to remain (in a material sense)—the most progressive part of the country.

THE EARLY IRON AGE

The somewhat illogical inclusion of a discussion of the Hallstatt sword and other Iron Age products of Llynfawr and Cardiff under the Late Bronze Age is to be justified purely as a matter of convenience. In so far as it has archaeological warrant that warrant is to be found in the fact that these finds occur in what is essentially a Bronze Age context, while there is as yet no sign that they are part of an Iron Age culture and industry based upon Wales. Nonetheless, if a firm stand be taken on the position that a hoard is dated by the latest object in it, I can only agree that much of what has been written above on intrusive influence ought to appear here.

The cultural classification of the Iron Age into groups labelled A, B and C, first devised by Hawkes is now generally accepted for Britain in place of the Continental scheme, and calls for no further comment.

Iron Age A

Of the first of these groups, corresponding with the Hallstatt-La Tène I phases, a series of scattered finds suggests that as with the 'Wessex' culture there was now a certain amount of sea-borne traffic which deposited settlers, or at least their chattels, at scattered points along the coast. A chance find of a ring-pin at Din Silwy, Anglesey, may be a sign of such early activity, though the type is not now taken to be as exclusively early as once it was; while if Mr Hemp is right in suggesting that the Clynnog barrow had Hallstatt features, the Clynnog collar (pl. III, B) must indicate settlement. The landing of wandering groups of Iron Age A folk along the north coast of Wales must

therefore be accepted as a possibility on which further light will be shed in due course.

The evidence in the south is rather more definite, as we should expect. In Pembrokeshire the Stackpole ring-headed pin came from a promontory fort which seems to betray early features and suggests an outpost of this phase. Further east again, in Gower, Mrs Williams has published a carinated pot from the Bacon Hole cave which shows 'A' characteristics. And finally, the well-known site at Merthyr-mawr now has two La Tène I brooches to its credit and

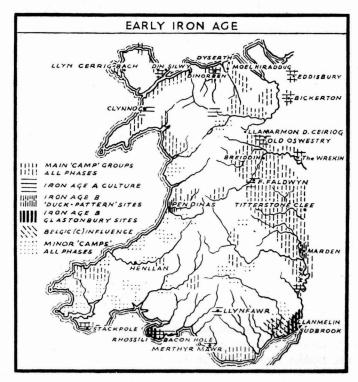


Fig. 8. The distribution of Early Iron Age culture-groups.

is indeed the only one of which at the present time much is known. Here there are no defences, but seasonal occupation in a changing sand-dune area is indicated. The people pursued a wide range of activities, which included metal-working, stock-breeding and food-gathering.

Merthyr-mawr implies settled conditions, in contradiction to the uncertainty suggested by the Stackpole earthwork. A later date and the peaceful acceptance of new settlers may account for the difference; but at the same time the possibility that other earthworks may be equally early deserves consideration.

Work in England has established a sequence of earthwork-types in which simply-defended 'camps' of the A phase (themselves often the successors of 'open' villages) were succeeded by multiple-ramparted sites, often with elaborate entrances, of phase B. Since some of our simple 'cliff-castles' in the west have produced Romano-British pottery this classification cannot be applied blindly to Wales, where in any case we should anticipate different conditions. But the fact remains that a somewhat similar process seems to have taken place in some parts of the country. In Pembrokeshire there are several instances of a simple earthwork having been replaced by a more complex set of defences of 'B' character; and there is growing evidence for the same sequence in the Marches. But single-ramparted 'camps' are common in many parts of Wales and their dates and cultural affiliations are still unknown.

The problems of the Iron Age in eastern Wales cannot be adequately surveyed without crossing the border into England, for the Iron Age colonisations of the Marches took no note of modern boundaries. Though all the sites so far excavated have been large hill-forts with multiple defences which place them in the 'B' group, several have produced signs of occupation in an earlier phase or of influence from another culture. As Mr Radford has pointed out, the native pottery of the first century A.D. from Poston Camp, Herefordshire shows that here as in Wales, the smaller simple type of defences is not necessarily early, but evidently continued in use, at any rate throughout south Wales, into the Christian era.

On the other hand, at Ffridd-faldwyn Mr O'Neil noted two periods of occupation which preceded the multi-vallate defences of the larger hill-fort. Absence of finds prevents close dating, but the structural analogies are all with camps of the 'A' type (Fig. 9). The first phase had palisade defences; in the second an elaborate construction of earth and stone laced with timber was used for the rampart of the small inner camp and there were signs that these defences had been vitrified by burning in several places.

Across the border once again at the Wrekin, Miss Kenyon has found an occupation preceding the defences of the great hill-fort in which there were traces of two 'periods.' The second had a deeply-inturned entrance with the flanking guard-rooms which are characteristic of the Iron Age A phase elsewhere. Associated with this period was pottery which is readily recognisable as belonging to an undifferentiated and very persistent 'A' group, which, as Miss Kenyon rightly remarks, is not of south-western origin.

Mr Varley's work at Old Oswestry is as yet unpublished in detail, but here too was an early phase with late 'A' pottery, this time apparently of southern (Wessex) origin. Further north again, at Eddisbury in Cheshire, Mr Varley found that the second period of the camp (which also had a deeply-inturned entrance with flanking guard-rooms) was associated with finger-nail ornamented coarse-gritted pottery of Iron Age A character. Maiden Castle,

Bickerton, however, had an inturned entrance in its first period: and here the rampart was of composite timber-and-soil construction. It was dated by late A pottery. Finally, another site, Almondbury, near Huddersfield, takes this late A culture even further to the north-east.¹

The growing evidence therefore demonstrates a strong influx of people into the border districts of Wales in the early part of the prehistoric Iron Age. But the source or sources of this movement still remain undefined. Here one

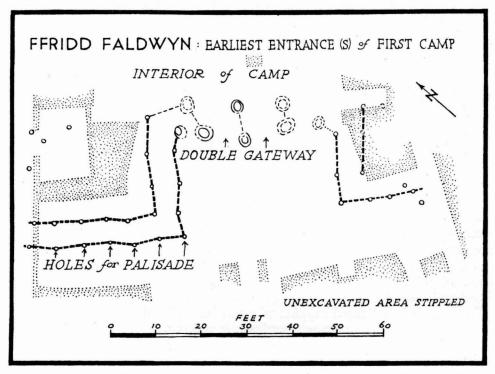


Fig. 9. Fridd Faldwyn (Mont.): plan of earliest entrance and defences (Iron Age A) of inner camp, as excavated, showing double inturned palisade. (p. 72)

(Based on Arch. Camb., 1942, pp. 1-57 (O'Neil)).

of the chief difficulties is the outstanding gap in our knowledge of the northern English cultures of the period, apart from one or two sites: we are thus compelled to view the Welsh development almost exclusively in the light of the better-known southern cultures.

In the north-east, however, experience with earlier tendencies should induce a certain caution: for we may well expect to find that here the Iron

¹ It is to be noted too that the Iron Age A culture of the Midlands and the north is extending its boundaries, while the persistence of its coarser ceramic products (the high-shouldered 'situla' pots with or without finger-nail ornament especially) is also noteworthy. Influence on Wales from this area is not impossible.

Age of the north has played a greater part than we can as yet recognise, though the possibility can at present be stated only in the most general terms. It has been suggested tentatively that some of the features of the north border 'camps' may be derived from Scotland, the vitrification and the timber-laced ramparts in particular. The resemblances are not decisively close; but they may perhaps be a straw to show which way the wind of Iron Age colonisation was blowing, for the Scottish 'forts' are a local expression of a much larger Iron Age province and certain of their features may have a wider distribution than the form of the 'forts' themselves.

But the movement, whatever its source, penetrated some way into north Wales. Mr Glenn's 'upper prehistoric floor' at Diserth, Flintshire, appears to have been part of an open site of this or the following period: it is dated by the untwisted spiral finger-rings of bronze (thought by the excavator to be ear-rings). 'Vitrified' forts have been observed at Llanarmon-dyffrynceiriog Caer Euni by Professor Estyn Evans: they are not yet dated. The same applies to some of the Denbighshire sites, as, for instance, Dinorben, where Dr Willoughby Gardner found in all four periods, only the last of them dated to the third-fourth century A.D., with at least one interval of neglect and ruin between.

The Iron Age A movement therefore affected scattered areas along the coast of Wales and occupied some part of the border and the north-eastern coastal plain and its hilly fringe in Denbighshire and Flintshire. Its remains are normally slight, though the entrance arrangements of the 'camps' show a developed military architecture. We know little as yet of their domestic and economic life: the Welsh sites at least are depressingly poor in pottery, so that wood and leather must have been the normal materials for containers. They seem to have had limited supplies of metal, and though the sites themselves must be regarded as permanent settlements rather than refuges, they do not appear at this early period to have cultivation-plots associated with them.

Iron Age B

More is known about Iron Age B, covering the later phases of La Tène before the Belgic invasions.

Here in south-western Britain two aspects of this second main division of the Iron Age are recognisable. The earlier, for which a date at about the middle of the second century B.C. is suggested, has its first home in Cornwall. It is distinguished ceramically by the use of a stamped pattern of repeated duck-motifs on its pottery; its immediate source is Brittany and it seems to be due to the close contacts maintained between Cornwall and the Veneti through the tin-trade until in 56 B.C. Caesar destroyed the power of the Breton tribe. The second group is that centred (in probably distinct colonies) in Wessex and Somerset, with Maiden Castle and Glastonbury as its respective type-sites. They are thought to be immigrations related also to Caesar's Gallic campaigns.

The behaviour of the first movement once again shows prehistory repeating itself. As earlier, members of it moved northwards along the west coast of Wales and one colony established itself at Pen-dinas, Aberystwyth. Here Professor Daryll Forde's excavations, as yet unpublished in detail, have revealed a three-period structure in which two distinct forts were finally linked to form one. 'Duck pattern' pottery of late type establishes the cultural affinities of the site.

Similarly, some groups sailed up the Bristol Channel. Here they have been recognised so far only on the English side, in the lower Severn valley and on the west flank of the Cotswolds: Mrs Hencken has recorded them at Bredon, where the duck-pattern pottery occurs with Glastonbury wares, thus indicating a comparatively late date, she thinks, in the first half of the first century B.C. Whether this culture spread up the Marches and if so how far remains to be seen: it occurs abundantly (at present unpublished) at one Herefordshire site, Marden, in the Wye Valley, and Mr O'Neill has commented on the technical resemblance of his scanty pottery at the Breiddin to that at Pen-dinas. From her distributional study of the camps with inturned entrances Miss Chitty has shown that the Wye and its tributaries provided the main line of approach for the builders of the more elaborate hill-forts of the B complex; and the 'duck-pattern' group must have played some part in this.

In the end, however, the cultural grouping of the hill-forts must depend less on their structural characters than on the equipment of their builders—Mr Varley has shown, for instance, that the inturned entrance which is one of the most distinctive features of the period is not confined to any one group or phase—and it is therefore unfortunate that the great hill-forts of the Marches have yielded little material to much patient and otherwise productive work. Apart from all else, the problem of dating is thus complicated and can be seen only in the light of known historical developments.

Of the sites so far explored, Ffridd Faldwyn is an instance of the re-fortification of a deserted 'A' site by later people and Titterstone Clee, in Shropshire, was similarly developed; but the Breiddin seems to have been newly occupied now. These later camps are all distinguished by multiple ramparts with elaborate entrances. At the earliest they might be of midfirst century B.C. date, when they would be the product of the disturbed conditions to which their own builders would have contributed; but the inroads of the Belgae in the early first century A.D. might equally well have inspired them—Bredon appears to have been sacked by Belgic invaders—and re-building then and later against the Roman advance also seems to have occurred frequently (see below).

The part played by the two main groups in the establishment of these border camps remains uncertain, and equally the cultural relationships of the camps which extend westwards into Wales along the river valleys have yet to be determined. In the south-east coastal area on the other hand, the Glastonbury culture, without duck-pattern elements, has been recorded by Dr Nash-Williams at Llanmelin and Sudbrook, and by Dr Wheeler at Lydney. This colonisation may well have originated from the Somerset side of the Bristol Channel and it, rather than the duck-pattern group, can lay claim at present to the first development of the iron industry of the Forest of Dean. This industry Fox has shown to have been responsible for the iron currency-bars and he has suggested that the control was exercised by the Dobuni, the Celtic tribe which was located in the lower Severn area. This conclusion is supported by the absence of currency-bars to the west, where the Silures held sway; but it is not yet possible to recognise any differences in the material culture of the two.

The Glastonbury culture has been found further north in Herefordshire, but it also occurs very much further west. Throughout the Vale of Glamorgan there are hill- and promontory-camps with elaborate defences which, while they may not compare in size or number with those of the border, are nevertheless indistinguishable from them in their external structural characters. Of their culture nothing is at present known. But in Gower Mrs Williams's excavation of the multiple-defended cliff camp as Rhossili produced characteristic Glastonbury pottery; and she has also published pottery of B type from a Gower cave. The colonisation of the south coast of Wales was not therefore restricted to the iron-producing area; and it may well be that cliff-camps and hill-top camps further west will take their place in the same movement. Many show Iron Age B defensive arrangements, though the work already done suggests that here as in the east the difficulty may be absence of pre-Roman pottery. Mrs Williams's work on the Gower cliffcamps and at Henllan in Cardiganshire has given us our first picture of the internal lay-out and hut-plans of these sites—or for that matter of any other site in south Wales. Their structures continue to conform to Iron Age B type, even when the evidence suggests a Romano-British date (Fig. 10).

The same scarcity of material handicaps us in the north, where at Dinorben the early phases revealed by Dr Willoughby Gardner's excavations are undated. The famous Moel-Hiraddug shield-plates hint at violent happenings in which warriors with La Tène equipment were involved; but it is no more than a hint.

It is, however, clear, for all the gaps in the evidence, that by early in the Christian era the Celtic tribes who were later to give such trouble to the Romans were securely established throughout Wales, their settlements crowning the naturally strong points which break the flanks of the country's many rivervalleys. The main masses of the upland, away from coastal plains, valleys and foothills, they left untouched. We have at present no certain evidence of prehistoric fields associated with their settlements, perhaps because they have been destroyed by later intensive cultivation; but in some areas there are extensive remains of ancient field systems which are still largely uncharted.

They are often associated with hut-groups, some of which may be of prehistoric origin. Those in north-west Wales have been discussed by Messrs Hemp and Gresham: they occur less abundantly in the south-west also.

Iron Age C

This Iron Age culture, compounded of A and B elements as it must have been, was only lightly touched by the third wave of invasion, that of the Belgae (Iron Age C). Peaceful penetration as well as actual warfare seems to have helped to establish them in the south-east. At both Sudbrook and Llanmelin, Belgic pottery types like the bead-rim bowl begin to appear with

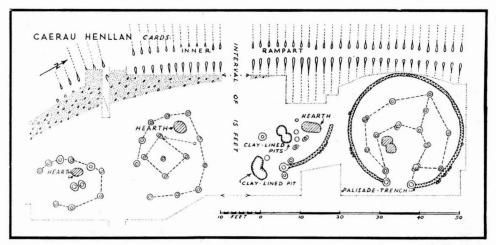


Fig. 10. Caerau, Henllan (Cards.): plan of huts behind inner rampart of camp, as excavated (p. 76)

(Based on Arch. Camb., 1945, pp. 226-40 (A. Williams)).

the Glastonbury forms. On the other hand, at Bredon, Mrs Hencken has suggested that the occupants were massacred by Belgic invaders, after which the settlement was deserted; and elsewhere in the Marches the appearance of the newcomers is accepted as one of the alternative reasons for the re-fortification of some of these sites (like the Breiddin) in the early first century A.D. But the Belgae seem to have arrived only just ahead of the Romans, if their quickened movement westwards was not indeed actuated by the Roman advance; and they had little opportunity of leaving any mark on the prehistoric Iron Age culture of Wales.

Native Settlements and the Roman Conquest

With the Roman conquest it seems probable that most of the hill-top camps were given up never to be re-occupied on any scale in the future. Some were re-fortified against the Romans in the period A.D. 50-75 Fridd Faldwyn,

the Breiddin and Bickerton were all re-used now, to be dismantled in due course by the conquerors. The subsequent history of these sites varied from more or less complete desertion through occupation of the undefended area to the replacement by a small and weakly defended village-settlement like that at the Breiddin (New Pieces), which resembles the villages of Caernarvonshire and Anglesey and remained in occupation until the fourth century A.D. Llanmelin and perhaps Sudbrook, on the other hand, became the subject of a more direct expression of a Roman policy which was followed elsewhere: they were replaced by the new town of Caerwent as the tribal centre of the Silures. This development belongs properly to subsequent sections of this survey, as also does the continued occupation of the smaller cliff-castles of the west (where several sites along the coast of Carmarthenshire and Pembrokeshire have yielded Romano–British pottery) and the new (or renewed) occupation of the great hill-forts of North Wales which has been discussed by Dr Wheeler.

The Llyn Cerrig Bach Finds (pl. III, C, D)

It remains to say something of the outstanding find of the period, one of the finest that has ever been made in Britain: the great cache of objects from Llyn Cerrig Bach, Anglesey, which has recently been published by Sir Cyril Fox.

Only the briefest summary of this material can be attempted here. finds came from the peaty margin of the small lake in conditions which made any kind of exact observation impossible. They extend in date from the second century B.C. to about the middle of the first century A.D., and include weapons, harness and chariot fittings, gang-chains and currency bars, a fragmentary trumpet and other ceremonial objects, plaques of bronze with embossed ornament and a shield boss of the Moel-Hiraddug type with engraved patterns in the 'mirror style.' Fox's account of the collection demonstrates that it is not the product of a single school of craftsmen working in Anglesey but must have been amassed by trade and other movements from various centres: his analysis of the sources from which the different elements were derived shows that the chief of these was the south-western cultural area centred upon Glastonbury, but that the north-eastern culture and that of northern Ireland, as well as even the Belgic area of eastern England, also made their contributions. In a collection in which everything has its interest it is difficult to be adequately selective; but the outstanding objects may be said to be the horse-bits and chariot fittings and above all the crescentic plaque and the shield-boss, which have a quite crucial importance for the study of Late Celtic art forms in this country.

These matters are all discussed with insight and erudition in the detailed publication of the discovery. It is the meaning of the collection which remains its outstanding question—a question which cannot be satisfactorily answered because of the conditions of finding. The only other observed finds were

quantities of bones, mainly those of food-animals, whose significance is equally uncertain: Fox discusses the alternative explanations of a settlement destroyed when the Romans in A.D. 61 overcame Mona, and of a sacred deposit of votive offerings to 'the indwelling spirit of the pool,' and finds himself obliged to associate this wealth of material in such a remote centre with the cult of the Druids.

In conclusion, then, the work of recent years has begun to give the Iron Age in Wales more definite shape and to model the background against which the arrival of the Roman conqueror and the dawn of the historic period will be the more clearly seen. This development is largely due to the application to the subject of modern methods of excavation undertaken in a scientific spirit which accepts stoically scanty finds and is ever-ready to amplify them by means of painstaking and patient study of structural evidences. The hill-top 'camps,' 'cliff-castles' and hut-villages of Wales are still a largely untapped reservoir of information: in due time they will tell us, we may expect, of tribal and cultural divisions, of the succession of historical phases and events. Their very number is testimony to the strength of the native power which combined with the natural obstinacy of the land itself to delay for so long the advance of Rome.

W. F. GRIMES.