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THE IRON AGE IN THE

IRISH SEA PROVINCE

Edited by Charles Thomas

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IN THE
IRISH SEA PROVINCE

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EDITOR'S FOREWORD

This volume contains certain papers given as lectures (in one or two cases, slightly enlarged or amended) at a Conference entitled 'Problems of the Iron Age in the Irish Sea Province'. The conference, which was organised by the Council for British Archaeology, was held at Coleg Addysg Dinas Caerdydd (City of Cardiff College of Education) on 3rd, 4th and 5th January, 1969, and was attended by several hundred people.

In the discussions, which were lively and informative, it became clear that many of the speakers (and not a few members of the audiences) felt that the term 'Irish Sea Province' was either inapplicable to the relevant facies of the British (and Irish) Iron Age as we now know it, or else required to be very carefully re-defined to have any geographical and cultural relevance. As editor, I am particularly grateful to Mr. Leslie Alcock, who had the difficult task of giving the customary end-of-conference summary, for here providing the last chapter, and for giving us his considered reflections on this problem.

The role of the symposium volume in clarifying, and perhaps in helping to formulate, archaeological ideas is one that has assumed much importance in recent years. The present book may be regarded as a successor to three previous reports—Problems *of the Iron Age in Southern Britain* (ed. S. S. Frere; London, Institute of Archaeology Occasional Paper No. 11, 1961), *The Iron Age in Northern Britain* (ed. A. L. F. Rivet; Edinburgh University Press, 1966), and *Rural Settlement in Roman Britain* (ed. Charles Thomas; London, C.B.A. *Research Report* No. 7, 1966). These are the outcome of conferences held in 1958, 1961, and 1965 respectively, organised (as was the Cardiff meeting) by the C.B.A.'s Iron Age and Roman Research Committee.

The editor would like to take this opportunity of thanking, on behalf of the Council for British Archaeology, all the contributors, especially those who had to travel long distances; Miss Beatrice de Cardi, F.S.A., and the staff of the C.B.A., in whose hands lay the successful organisation of the Conference; the National Museum of Wales (especially Dr. H. N. Savory, and his colleagues) who arranged for a special Conference visit; and the officials of Coleg Addysg Dinas Caerdydd, for the excellent accommodation and facilities.

Readers are asked to note that, in conformity with C.B.A. policy, all abbreviations of titles of archaeological (and other) periodicals in both text and footnotes have here been given in the approved new style. This is the American Standard (A.S.A., Z.39.5-1963), which has been chosen in preference to the British Standard equivalent (B.S.I. 4148: 1967), and which is now employed in all C.B.A. publications issued by the central office (e.g., *British Archaeological Abstracts, or Archaeological Bibliography*). It has the notable merits of consistency in the use of capital initials, and is also self-explanatory; because of this, no expanded list of periodical titles is included in the present volume. Very few of the British and Irish archaeological journals, national or local, have yet adopted the A.S.A. style of abbreviations, and it is hoped that any editors who read these words will support the C.B.A.'s lead in this direction.

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IRON AGE AND IRISH SEA: PROBLEMS FOR RESEARCH

JOSEPH RAFTERY

IN ORGANISING ITS 1969 CARDIFF CONFERENCE, the Council for British Archaeology decided to be provocative in the best sense, and the title selected for the meeting was calculated to stimulate to thought those who agreed to participate. The conference met to discuss an Irish Sea province in the Iron Age, but neither term was given definition and it became clear, during the session, that there was little support for the existence of an Irish Sea province during the Iron Age. It will, however, be of some small value, perhaps, to treat briefly of both terms in the title of the symposium.

Let us look first at the term 'Iron Age' and ask ourselves what we mean when we use it. Where, for us, does it begin, where does it end? Is it, indeed, a properly intelligible description ? In Britain the period may, in general, be deemed to have been introduced with a culture of strong Hallstatt aspect and to have ended when Roman culture became dominant in the land. In Ireland, however, the situation was at once simpler and at the same time more complicated: simpler because there is no evidence to suggest intrusive populations or cultures, more complicated because of regional differences and the overlapping of cultures.

The Iron Age of Ireland is a period of considerable interest, one which presents many problems for future research. In the main it is as yet a time which is represented by metal artefacts rather than by all the items that go to make the full material of social history. Habitations that can securely be dated to the period are almost unknown and remarkably few burials have been identified. Our major problem, therefore, is to isolate habitations and burials and, having done so by judicious excavation, to ascertain how the metalwork of the period, heretofore found mainly in isolation, is to be placed in cultural context.

But in talking in this manner we are dealing surely with the Iron Age as a unit, when it should be clear that it was not in Ireland a unit, and different influences from different

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areas were having an effect. That is the archaeological aspect of things, from which it is perhaps at this stage possible to demonstrate the broad outlines of our period. But a further problem is posed by the intrusion—if this be a proper word in this context—of philological and literary matters and above all by the general use of the emotive and evocative word 'Celtic'.

If we never had a Gaelic or a British language, if we never had a Gaelic literature, one interpretation of which suggests that it was a window on the Iron Age past, [1] we would be forced to treat of the Iron Age as being strictly of preliterate times, as being 'text-free', and in a way we might see more clearly the problems that are involved in a study of the period.

Let us then use archaeological criteria alone, and let us look in some detail at what was happening in Ireland from about the middle of the first millennium B.C. to the middle of the first millennium A.D. Why I select, somewhat arbitrarily, these two dates will appear in the sequel.

Broadly speaking, on cultural grounds the Bronze Age in Ireland can be divided, at about 1000 B.C. or so, into two main periods, an *Early,* Bronze Age, characterised by its metalwork, its burials, its pottery types, and a *Late* Bronze Age, marked by its distinctive metal types and above all by its technological advances. In the earlier period the cultural contacts were with, and the cultural influences came from, southern Europe, the Mediterranean area and to a lesser extent from what later became Gaul. There were, of course, various technical stages in both periods and, indeed, some scholars go so far as to talk of a 'Middle Bronze Age', which, as far as I am aware, has never been identified satisfactorily.

The Late Bronze Age began with a shift of emphasis from the south to the north of Europe, and throughout this period contacts of any sort with the Mediterranean world appear to have been both minimal and secondary. Again, though external contacts were clearly strong, material goods do not appear to have been imported in any great quantity. Something that was peculiarly Irish asserted itself, and this was to reappear time and again throughout the whole of the ensuing prehistoric and protohistoric periods: namely, the foreign concept, the external idea, was accepted, examined and then so adapted that the ensuing product, though bearing the stamp of a European tradition, was something that could be described as nothing other than Irish.

In the Late Bronze Age the metal objects are characteristic and it is important to note that some of the leading types occur on habitation sites. In this there is a great contrast with the later metalwork of a La Tène facies, which has in the main occurred so far as isolated discoveries.

What happened at the end of the Late Bronze Age in Ireland is still far from clear. One site, however, a crannog in the townland of Rathtinaun, on the edge of Lough Gara in County Sligo, gives us some information. Here, for the first time, was it possible to observe a proper series of habitation levels, each divided from those below it and above by thin layers of water-washed sand. The sand layers were sterile and gave clear indication of periods, presumably of shorter duration, when the site was covered by the waters of the lake and therefore not occupied. The lowermost habitation level of the crannog, resting on the mud of the lake shore, produced material that was clearly of Late Bronze Age type. Here, associated together, were artefacts of flint and other stones, typical bronzes, a small pennanular gold ring and coarse pottery of the so-called Flat-rimmed group. No houses as such could be identified but there were circular hearths, some with cobbled bases and surrounded by low wickerwork walls. Several Carbon-14 readings for this level of the site give it a date about 200 B.C. [2]

The next level of the crannog produced similar material, but with some significant additions. Again, no houses could be identified but the hearths were of exactly the same type as those in the earliest period of the settlement. The same type of coarse, bucket-shaped pottery occurred and some staves of wooden vessels were noted. The additions included a bronze bifid razor, [3] a bronze phalera, [4] an iron swan's-neck pin, an iron, three-pronged fork and an iron axehead with shaft-hole, clumsily forged out of three pieces of metal. Carbon-14 dates for this level of the site suggest that it was occupied shortly after 200 B.C. and that the space of time between the two lowermost levels of the crannog was short in the extreme.

There can be no doubt that, with the second period, a stage has been reached where influences from outside were becoming noticeable—in the razor and the swan's-neck pin—and where the use of iron was hesitantly beginning. But there can equally be no doubt that the overall culture of the second phase of the Rathtinaun crannog was of a Bronze rather than of an Iron Age kind.

The site was again deserted, the evidence suggesting strongly that this occurred because of a sudden and unexpected rise in the level of the water. When re-occupied, something like three centuries or so later, no trace of any aspect of a continuing Bronze Age culture was to be discerned.

What, then, are the conclusions which must tentatively be drawn, on the basis of the Lough Gara discoveries? First of all, though it is of no real concern for our present purposes, it seems that we must now accept, in some parts of the country at least, a Late Bronze Age culture which continued until the last centuries B.C. Then, it is also clear that at about the same general period there was, again in some areas at least, a type of culture partly of Bronze Age, partly of Iron Age aspect. The known features of this Bronze/Iron culture, limited in extent though they be, suggest what, for want of a better term at the moment, may be called quasi-Hallstatt. These two cultures would appear to have existed together at about 200 B.C.

At the same time, however, there was something else in the land. This used to be called a La Téne culture, in modern times simply Early Iron Age culture or civilisation. Based, however, almost exclusively on isolated discoveries it still remains problematical to what extent we may at all speak of an Iron Age culture: the solution of this problem should be one of the main aims of future research. Attempts have been made to treat of the period after about 200 B.C. as a cultural whole, [5] but these attempts have been far from convincing. Various dates have been suggested but those have all been based on an analysis of artistic styles and motifs and have, in consequence, limited validity. Various external sources for the new items which now appeared in Ireland have been mentioned, but these ideas again are inconclusive. [5] Only one settlement site can, with any degree of confidence, be ascribed to this period, namely the ring-fort at Turoe, Co. Galway.[6] To judge by the forged iron socketed axehead, the earliest level of the site cannot be far removed in date from that suggested for the second level at Lough Gara. Burials of the period are also few and far between. [7]

The rest of the material of the last centuries B.C. of a non-Bronze Age type includes a small number of short iron swords, bronze scabbards, a few iron spearheads and one of bronze, a larger number of bronze three-link horsebits and bronze, spurlike objects called 'pendants' or 'leading-pieces', some bronze fibulae, bracelets and finger-rings, a small body of miscellaneous decorative bronzes and an even smaller group of gold objects, all with a relatively pronounced platinum content. [8] No pottery is known from the period and no vessels of wood. Some of the wooden yokes and the well-known wooden figure from a bog at Ralaghan, Co. Cavan, [9] may belong to this period.

Practically all the objects listed above are ornamented in what may loosely be described as the La Tène style and it is on the basis of such decorative motifs that the objects have been dated. It is at once clear that there is so far nothing whatsoever in the archaeology of Iron Age Ireland which provides a fixed point of any sort for an absolute chronology. In the absence of such, dating attempts, including those by the present writer, have been subjective in the extreme, 'gefühlsmässig', as German scholars call it. This results in considerable confusion and it must be one of the major aims of future research by judicious excavation, by the application of Carbon-14 determinations where possible and applicable and by other means to attempt to establish a relative as well as an absolute chronology for the period from roughly 300 B.C. to the birth of Christ.

The existence of such details as the rocked-tracer technique *(Tremolostich)* on some of the bronzes [10] suggests the possibility that some, at least, of the La Tène-like objects may have been reaching the country as early as the 4th century B.C. At any rate—and this, of course, is again 'gefühlsmässig'—it seems not unreasonable to conclude that in the period around 200 B.C. objects of iron, bronze, gold and bone of a La Tène character were not strange in Ireland.

This leads us to the further interesting conclusion that, at about this time in Ireland, there was either one general culture over the whole of the land to which three streams contributed—the Late Bronze Age, the Bronze/Iron Age as illustrated by the second level at Rathtinaun, and the La Tène; or that there existed side by side in different areas of the country or amongst different peoples three different sorts of material culture. (We can say practically nothing about the spiritual or social culture of the time.) Either suggestion is a possibility, but it is clear that considerable research and extended field work are necessary before even a tentative solution can be put forward. It may be that cultural provinces did exist in the country as well as the dynamic regions hinted at in the heroic literature of a later date. [11] Certainly, when objects of the La Tène style are plotted on a map of Ireland the suggestion is strong that at least two areas emerge—one in which decorated bronzes occur, mainly in the midlands and reaching into the best lands west of the Shannon, and another, in the south and south-west, from which practically no objects of this type have been reported. Indeed, as already pointed out above, it would be impossible at the present stage on archaeological grounds alone to define an Iron Age culture in the period to which objects with La Tène-like ornament must belong.

What then can we say of the culture of the country as a whole from, say, 200 B.C. until the birth of Christ? In other words, to what extent did the original Late Bronze Age culture survive in the land, at what stage did it disappear entirely as a recognisable entity? To what degree, if at all, was a new culture introduced with the ornamented bronzes; and, if introduced, whence did it come? The answer to all of these questions must in honesty be that we do not know and here again we are faced with major problems of research. One can understand readily how a people with an established culture of Late Bronze Age aspect could, indeed must, gradually have absorbed the knowledge of iron-working which was all round them in the outside world with which they had strong contacts. There is no need to postulate anything more than a normal spread of ideas or occasional cultural contacts. But far otherwise is it when we come to consider the 'La Tène' aspect of the period. Here we have a body of finely decorated material of heroic proportions, but one for which as yet any cultural background in the country is missing.

When we look more closely at this body of material certain things strike us forcibly.

First of all, there can be no doubt but that the ornament falls readily into the general La Tène style which in the last four centuries B.C. was spread widely in Europe and which, with considerable probability, has been associated with the spread of Celtic-speaking peoples there. The second and very important point to be noted is that the great bulk of the Irish objects so decorated are of types which are *without parallel outside the island.* Take, for instance, the bronze fibulae. They constitute admittedly a small group, [12] but not one falls into any defined type in Britain or on the Continent; further, at least five of the fibulae (and possibly seven) possess a technical feature which, to my knowledge, is unknown outside Ireland, namely, the attachment of the pin to the bow by means of a ball-socket arrangement rather than by the normal spring principle. The horse-bits, again, while resembling superficially some in Britain and elsewhere, differ very much in detail from the known La Tène horse-bits, and bits of Irish type are otherwise generally unknown in the repertoire of La Tène. Completely unknown outside the country also are the objects, sometimes found with horse-bits, sometimes alone, which generally in the literature are referred to as 'pendants' or 'leading-pieces'. Also without parallel outside Ireland are the finely executed bronze spear-butts, especially those of the so-called 'doorknob' type, [13] and the large bronze discs with repoussé ornament of the Monasterevin type. [14] To the groups listed here many others could be added, the end result being that the conclusion cannot be avoided that the so-called 'La Tène' culture in Ireland contains basically but one La Tène element, its ornament. All else is peculiarly Irish, without parallel elsewhere; and, this being so, there can no longer be any question of an 'introduction' of a La Tène culture and by projection there can be no question of the intrusion of a new or strange people, by peaceful or by war-like means. In other words, it seems clear to the writer that, if a Celtic language were ever introduced into Ireland, [15] this is the very last period during which one would expect it to have been introduced.

External contacts, of course, there were: two certainly British La Tène objects have been found in the north-east of the country, but these are strays merely; preponderantly, the impression left by a study of the La Tène art of Ireland is of close connections with the Continent, in the *Tremolostich,* the dotted background to patterns on the flat, the raised scroll and trumpet designs on objects such as cast bronze pins, and so on. [16] Designs on some of the 'castanets' [17] are so close to patterns on such monuments as the Waldenbuch stone in Württemberg [18] that an argument in favour of some sort of a connection between Ireland and the general area of eastern Gaul and the Rhineland may be postulated. Such connection is further pointed by the recent epoch-making discoveries of our Stuttgart colleagues, Axel Hartmann and Siegfried Junghans. By a careful analysis of a large number of gold objects, without reference to their archaeo-logical contexts, they have discovered that, on the Continent and especially amongst the group of early Celtic gold coins, the so-called 'Regenbogenschüsselchen', a persistent natural impurity is a relatively high percentage of platinum. They feel furthermore able to say that the gold from which these La Tène or Celtic objects were fabricated must have been reasonably local for the only known European source of platinum-bearing gold is in the area of the upper Rhine, that region which, philologists tell us, is to be reckoned as the very heartland of the area of the Celtic-speaking peoples of La Tène times. Now, it is quite remarkable that, out of the great body of Irish prehistoric gold objects analysed in detail by Hartmann under the auspices of the Arbeitsgemeinschaft für die Metallurgie des Altertums, only those which, by their ornament or association, can be said to be of La Tène type or times were found to contain platinum. Included are objects such as those in the Broighter Hoard, [19] the Clonmacnois torc [20] and, perhaps most

interesting of all, the gold torc found with the Somerset hoard. [21] No known source of native Irish gold produces platinum-rich metal and the conclusion must, therefore, be either that the La Tène gold objects found in Ireland were imported as complete objects, or, that the raw material was imported from the Upper Rhine and manufactured here. At all events, whatever the solution to this particular problem may be, the existence of platinum as an impurity in Irish and Continental gold objects strengthens the argument in favour of connections of some sort between the two areas.

We departed from a discussion of the Rathtinaun stratigraphy in order to attempt to assess the La Tène 'culture' of Ireland and we have reached a stage where we think we can say that, at or about 200 B.C., it appears that the aboriginal Bronze Age culture was being infiltrated by external elements such as the new metal, iron, and by a new ornamental style, the La Tène. In its fullness and in all its aspects the material culture of Ireland in the last centuries B.C. cannot as yet be seen: herein lies a major field for research.

But if, for a moment, we return to Rathtinaun we begin to realise what must have happened in Ireland during the period shortly before and shortly after the birth of Christ: an iron-using culture has taken over completely from the earlier, predominantly bronze-using, one. We must, to advance the argument, have a closer look at this new element in the civilisation of Ireland.

The second Rathtinaun layer, mainly Bronze Age with a few items of iron, was sealed by a layer of water-washed sand, the site was again deserted and was not re-occupied until somewhere in the 2nd century A.D. This fairly general date is derived from a study of the archaeological remains and by Carbon-14 determinations. [22] There are several interesting things to note about this third level of the Rathtinaun crannog. First of all, it contains material which resembles closely that from sites such as Lagore, Ballinderry 1 & 2, Garranes, Ballycatteen, Carraig Aille and so on, all heretofore somewhat unthinkingly lumped together into a very vague 'Early Christian Period'. This suggests our looking much more closely than has heretofore been done at the results of the classic excavations of the 1930's and 1940's. Secondly, the third and subsequent Rathtinaun levels are completely devoid of pottery of any sort; but to what extent this is characteristic of the country as a whole at this time—early centuries A.D.—is still uncertain. A third point of interest about this level at Rathtinaun is that it contained no single object to which the term 'La Tène' in its conventional sense might be applied. The implications of this are, of course, not immediately clear. It could be that this particular site, for any one of a number of reasons, never possessed objects of a La Tène stamp, whereas other sites of the period in other areas of Ireland might well have done so; or, more far-reaching, perhaps, it might be that by this time, say A.D. 200, the La Tène style *sensu proprio* was obsolete or obsolescent in Ireland, as indeed, on analogy with the rest of Europe, it should have been.

What is to be remarked, however, about this first fully iron-using level at Rathtinaun is that much of the material recovered bore some similarity to everyday things from provincial Roman sites. This feature has been noted also at a number of the other 'Early Christian' sites excavated in the last thirty years or so in Ireland, [23] so much so, in fact, that a situation must squarely be faced in which, if no Roman ever set foot on Irish soil, Roman influence was strong in the land. This constitutes sufficient argument in favour of a thorough examination of this period of the first centuries A.D. and of the material from the period after A.D. 500, with a view to identifying clearly which items belong to which period.

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At an earlier stage in this essay, we suggested as the chronological range for our investigations the period from roughly 500 B.C. to about A.D. 500, thereby implying that this long period was that referred to in our title. We selected this period of time as it seems to us that within it is covered everything to which, in archaeological terms, the ascription 'Early Iron Age' may be given. But how sound is this? Clear it is that from 500 B.C. or earlier, material of a Hallstatt nature was reaching the country, [24] but the quantity of such material was strictly limited; and the evidence of sites such as Rathtinaun and the lowermost level of Ballinderry Crannog 2, Co. Offaly, [25] makes it abundantly clear that the country enjoyed a Late Bronze Age culture for some centuries after that date (500 B.C.). Indeed, on present evidence it is impossible to be precise as to when the Late Bronze Age style of living was, in its material aspect, finally superseded by one in which iron was the dominant metal for everyday objects. In other words, we cannot as yet say when the Late Bronze Age ended in Ireland and this constitutes a major problem for research.

This brings us, then, to what heretofore has loosely been termed in Ireland the La Tène period. Assuming it to be correct that the earliest objects of La Tène type from Ireland date to the 4th century or to about 300 B.C., can we say that with this an Iron Age culture had been introduced to or imposed on Ireland? I am afraid not. We can say that there were some areas of which this statement could hold. Turoe is an example.[26] But to what extent this is true of *all* Ireland is still a matter for investigation. There may have been, indeed there probably was, a lingering-on until about the birth of Christ of cultural details of Late Bronze Age character. After this all the evidence points to a material culture entirely iron-using and with many accretions, such as rotary querns, pointing to an appreciable change in the material content of the daily lives of the people but not necessarily to any great social or economic change.

We would, thus, seem to have in Ireland the following rough sequence: a transitional period, about 200 B.C., between Bronze and Iron Ages but which, basically, must still be reckoned rather to the former than the latter period; a phase, lasting until about the birth of Christ or a little later, the exact material cultural nature of which is not yet clear to us, but in which bronzes, of native manufacture and style but bearing La Tène ornament, were produced; and, finally, from the first century A.D. onwards to an as yet unknown date, a period which may be termed 'romanising'. Conventionally, this period is deemed to have ended about A.D. 500 but the only reason for this date, it seems to me, is that thinking amongst scholars changes from the archaeological to the historical: the conventional date for the establishment of Christianity in Ireland is said to be A.D. 432, and this momentous event in the lives of the Irish is, tacitly, deemed to have wrought a cultural change. For this, it seems to us, the evidence is exiguous in the extreme. It remains, however, a problem for future research.

So much for the situation in Ireland in which, in my submission, uncertainty reigns. Is the situation in Wales appreciably different from that which above we have indicated for Ireland? I do not think that it is. We are faced for the transition between the Bronze and Iron Ages with the imprecision that must be accepted for Ireland; we must accept that a La Tène culture for Wales exists on even flimsier grounds than for Ireland. The most characteristic material for such—the fine metalwork—seems not to be native. Indeed, A. H. A. Hogg, writing recently on such matters, felt compelled to say that 'all examples of fine metal-work of the Iron Age found in Wales can be explained as imports brought either by traders or refugees. There seems to have been no local school of craftsmen'.[27]

For the subsequent period—the 'romanising' Iron Age of Ireland—matters are appreciably better in Wales, for that country was directly involved with the Romans, Roman influence in material things is to be discerned clearly and there are many fixed points on which an objective chronology can be established. What is, however, not yet precisely clear is at what stage the Roman-influenced Welsh culture may be said to have changed to one of Early Christian aspect, if, indeed, such a change did at all occur.

The problems for research in both areas, in Ireland and in Wales, would then appear to be broadly similar; but we must ask ourselves to what extent contacts existed between the two and whether we can in any circumstances speak of an Irish Sea Province in the, very vaguely defined, Early Iron Age. As far as the evidence allows us to judge it seems not unreasonable to believe that contacts did exist between the two sides of the Irish Sea, but it remains difficult to assess either their nature or extent. The most, I think, that can be urged is that contacts between the two regions were sporadic and probably commercial, but not on a large scale. Certainly, there is no evidence to suggest the existence of a cultural province.

If one were to urge such a concept one must ask oneself several questions. One must ask to what extent was the area a province and how should one view the area in which we are immediately interested. In a political sense, a geographical way, or culturally merely? Clearly, the contact cannot have been political, save in a restricted and late sense, when we know that Irish settlers established themselves in southern Wales. Geographical ? Perhaps, but only in the loosest sense of relative propinquity. This leaves us with the third choice, the cultural, the one that is of all the most acceptable to us as archaeologists. The only way in which, in ancient times in western Europe and especially in the islands to the west, one might have talked of a province was in a cultural—or, possibly, a commercial—sense.

I think that we may agree amongst ourselves that a simple, working definition of a province, in the archaeological sense, might be that it was a distinctive geographical unit containing, at any given time, a single distinctive culture or an aspect of a more widely-spread culture. In other words, for a cultural province to exist and to be defined as existing, it must be possible to demonstrate a general cultural uniformity at a given time over the whole area of the province. Everything must contribute towards unity, nothing to separation.

Taking all these points as criteria we should at this stage, perhaps, ask ourselves whether we can in any way talk of an 'Irish Sea Province'. The dominant feature of such a province, indeed the determining factor, must be the Irish Sea itself and the question that occurs at once to the mind is whether this body of water was a unifying factor or a dividing force. In other words, have we any evidence at all that the Irish Sea was a well-travelled highway over which there were continuing and intimate contacts between communities on both sides who felt themselves to be culturally similar and emotionally and spiritually identical? I would submit that such evidence does not exist and that the Irish Sea should be looked upon as an important seaway in early times, from the Neolithic through the Bronze and Iron Ages, during the Early Christian Period and again while Viking marauders ranged the waves. An important sea route it was, but in a north-south rather than a west-east direction. Through it flowed the commerce and the cultural contacts which made the Mediterranean and the Western Continent and the North European Plain aware of each other. A route it was which served Hibernia and Britannia by providing branch routes from the main Atlantic Trade Route to east coast ports in the one and to west coast ports in the other. Movements along this route un-doubtedly took place and, indeed, the occurrence along it, in Britain and in Ireland, of

peoples with the same or similar or cognate names, such as the Dumnonii, may indicate movements of populations; but so little do we know *in fact* of these things that this, too, must be treated as a problem worthy of research.

In what has so far been written an attempt has been made to indicate how limited at the present time our knowledge of the Irish Iron Age is and how difficult—indeed, impossible—it is to define the period either culturally or chronologically. To do this must be one of the main aims for research in the future and, I would submit, this research must in the main be based upon excavation of selected sites over a wide area. To what extent regionalism played a part in the development of an iron-using economy in Ireland and in Wales must be examined, so that sites in all parts of the two countries must be investigated. On the Irish side a beginning has been made by Barry Raftery in his analysis of the hill-fort phenomenon and the excavations of hill-forts at Freestone Hill, Co. Kilkenny, [28] Dun Ailinne, Co. Kildare, Clogher, Co. Tyrone, Emain Macha, Co. Armagh, and Rathgall, Co. Wicklow, are beginning to throw much light on the problem. Reports of all these sites are not yet forthcoming but they all seem to contain material mainly of the early centuries A.D.

Clearly, the need for an intensive and concerted investigation of Ireland and Wales in Iron Age times is long overdue. How it can be organised, by whom it will be subsidised, are questions for the future to resolve.

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3   For the type see Piggott, C. M., *Proc. Prehist. Soc., 12* (1946), 126-8.
4   The type has been discussed by Gero von Merhart, 'Ueber blecherne Zierbuckel (Faleren)', in *Jahrbuch des Röm.—Germanischen Zentralmuseums Mainz, 3* (1956).
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12   There are but four or five additions to those illustrated in Raftery, Joseph, *Prehistoric Ireland,* fig. 253.
13   Raftery, Joseph, *op. cit.,* fig. 253:13.
14   Raftery, Joseph, *op. cit.,* fig. 232.
15   On this point see Raftery, Joseph, 'Some Archaeological Aspects of the Goidelic Problem', *Féilsgríbhínn Tórna* (Cork, 1947), 101-7, also Dillon, Myles and Chadwick, Nora, *The Celtic Realms* (1967), 214.
16   Raftery, Joseph, *Prehistoric Ireland, fig.* 248:3.
17   Raftery, Joseph, *op. cit.,* fig. 231:3.
18   Torbrügge, Walter, *Prehistoric European Art,* 239
19   Evans, Arthur, *Archaeologia, 55* (1897), 391-408.
20   Armstrong, E. C. R., *Catalogue of Gold Ornaments in the Collection of the Royal Irish Academy* (2nd ed., 1933), 65.
21   Raftery, Joseph, *J. Roy. Soc. Antiq. Ireland, 90* (1960), 2-5.
22   *Radiocarbon, 3* (1961), 35.
23   E.g. the crannogs at Lagore, Co. Meath, Ballinderry 2, Co. Offaly, the ring-fort at Garranes, Co. Cork, and the cashel at Carraig Aille 2, Lough Gur, Co. Limerick.
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27   'Early Iron Age Wales' in *Prehistoric and Early Wales,* (ed. Foster, I. Ll. and Daniel, G. E.) (1965), 113.
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HILL-FORTS IN THE COASTAL AREA OF WALES

A. H. A. HOGG

IN ITS LITERAL SENSE , the phrase 'Irish Sea Province' is no more than a simple geographical description; but, like all such phrases, it carries with it an implication that the area displays some degree of cultural uniformity, and there is a risk that this over-riding assumption may distort the interpretation of the actual evidence. The first requirement, then, is to investigate whether any such uniformity exists.

To anticipate; except for very broad general similarities common to most of the southern British Iron Age, the evidence indicates great diversity in character throughout the region studied. Unfortunately, this is almost the only firm conclusion which can be reached; the result of the discussion is mainly to formulate questions rather than to provide answers. As a result of this diversity, also, the sparse material from excavated sites cannot justifiably be combined to give an impression of the culture of the area. For an examination of the character of the region as a whole, therefore, the only evidence available in quantity is that given by the plans and distribution of the forts.

The area under consideration is the coastal strip extending from Glamorgan to the Lleyn peninsula. The mountains to the east are inhospitable, and thus form a natural boundary to settlement, but they are not impenetrable and need not have prevented communication. Before discussing this area in detail, though, it may be useful to look at its relation to the general distribution of forts in Britain.

The conventional view of the arrival of Iron Age influences in Britain is of steady expansion from the south and east, but if the distribution of hill-forts (fig. 1) is considered without bias it points unequivocally to arrival rather in the south-west and west. This is emphasised by the totals of all types on either side of the Dee to Dungeness line; this line itself, of course, has no special significance but forms a convenient division. That the western approach was probably the actual one is borne out by the diversity of hill-forts near the west coast; for the hypothesis of a slow movement of influences from the south-east towards Wales would imply that the culture reaching and crossing the mountain mass should be generally fairly homogeneous. This argument, of course, is
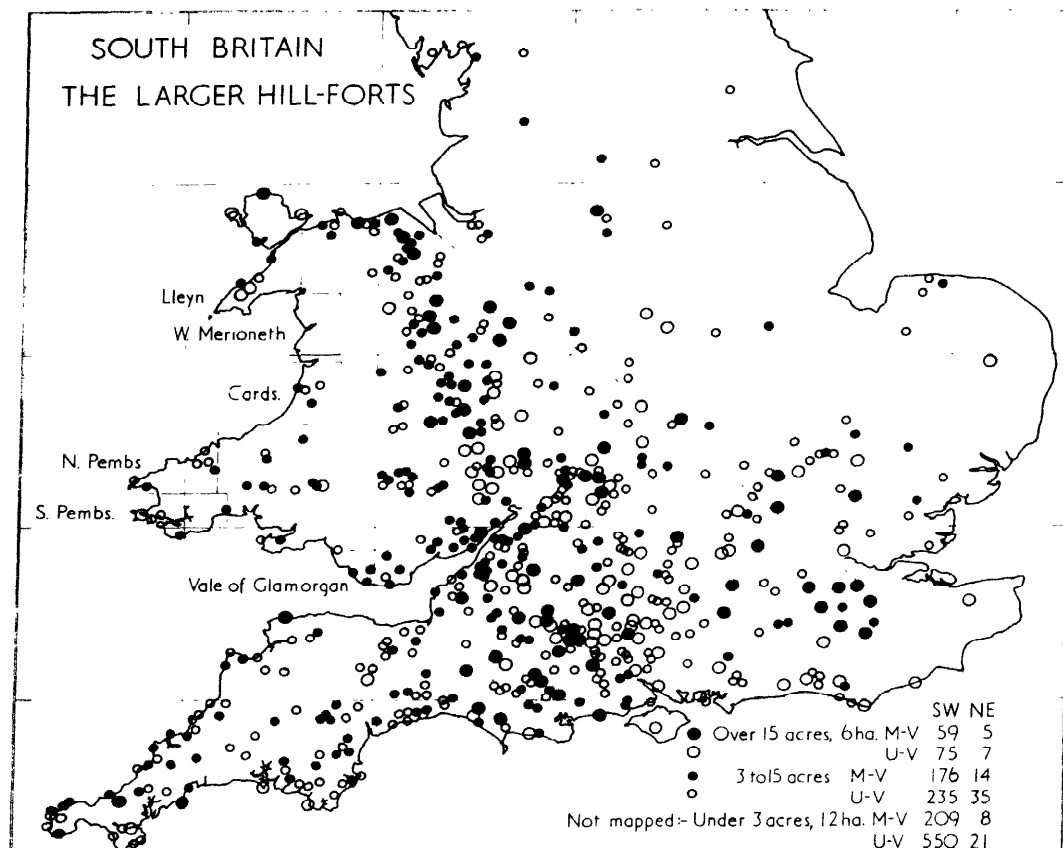
SOUTH BRITAIN
THE LARGER HILL-FORTS

Lleyn
W. Merioneth
Cards.
N. Pembs.
S. Pembs.
Vale of Glamorgan

		SW	NE
● Over 15 acres, 6 ha.	M-V	59	5
○	U-V	75	7
• 3 to 5 acres	M-V	176	14
∘	U-V	235	35
Not mapped:- Under 3 acres, 12 ha.	M-V	209	8
	U-V	550	21

Fig. 1
Distribution of hill-forts (dotted line, Dee to Dungeness)

concerned only with hill-forts; it is not suggested that all Iron Age cultural elements should be regarded as having a south-westerly origin.

Returning to the Welsh coast, the distribution of all forts, including the smallest, suggests as a possibility the spread of groups from various local points of arrival. The method of examination adopted, therefore, has been to consider half a dozen districts, all of equal area (800 sq. kms.) and generally separated far enough to reduce the effects of intrusive elements from adjacent areas. These are indicated on the map (fig. 1). It seems justifiable to argue that if there were cultural uniformity all these districts should display similarities not only in the types of fort found but in their size-distribution. The latter basis for comparison has the advantage that it can be completely objective, unlike discussions of fort design.[1] Further, the characteristics of all the districts can be compared on a single diagram, by plotting the cumulative total of enclosed area against the total number of forts, taken in order of size. If the size-distributions in two districts are similar in whole or in part, this similarity must be reflected in the resulting curves.
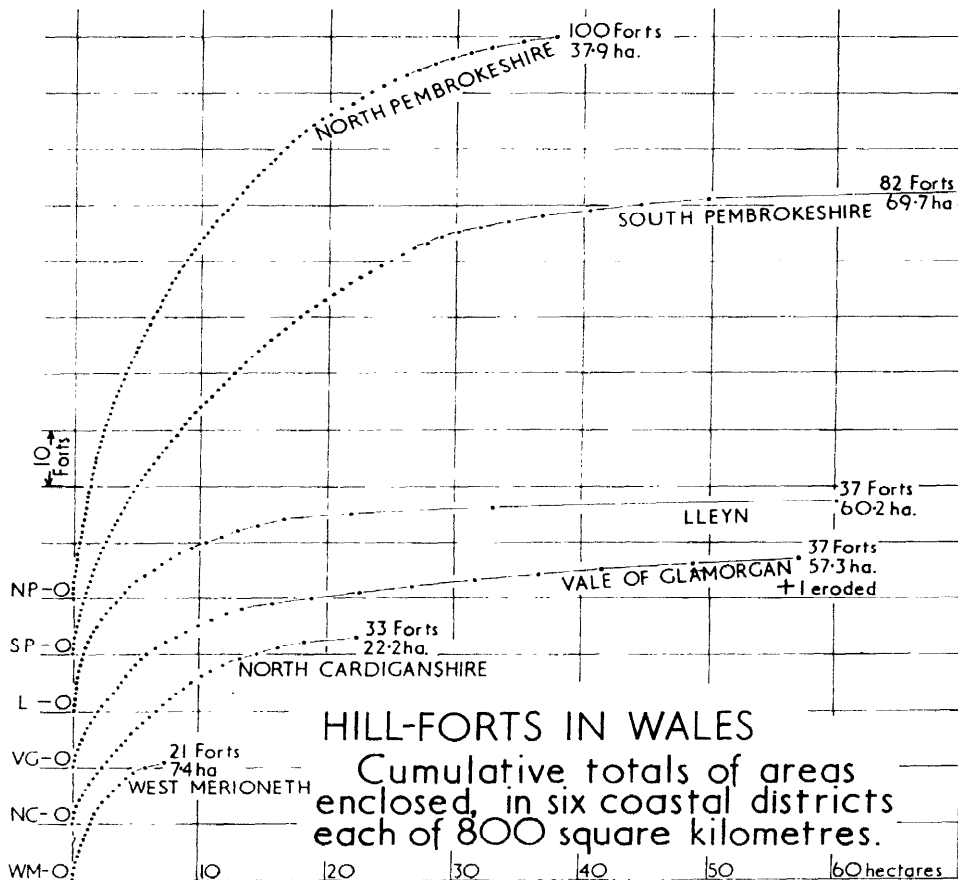
Fig. 2
*Cumulative totals of areas enclosed, all hill-forts in figs. 3 to 8,
plotted against total number of forts*

The curves for univallate and multivallate forts taken separately lead to the same conclusion as those for all forts taken together, so it is sufficient to reproduce that here (fig. 2; zeros are separated for clarity). Although this is a very crude comparison, paying no attention to details of fort design, the differences in size-distribution are so great as to out-weigh completely the possible effects of a wrong attribution or a miscalculated area for an individual fort. Save for one possible exception, it is clear that no two of the districts are alike. Detailed comparison shows also that sections of the curves do not fit, as would occur if two districts were alike save for the presence of a mass of small forts in one of them, for example. The curves for Lleyn and Glamorgan do show some resemblance, but the forts themselves are radically different.

13

From this argument alone, then, it follows that the concept of a uniform Irish Sea Province culture along the Welsh coast cannot be maintained; and this is confirmed by an examination of each district in greater detail. Since, though, there are at least three recognisably different types of fort in each district, space prohibits a type-by-type comparison, and all that will be done is to give a summary of the salient characteristics, with particular attention to the possible routes of entry of the hill-fort 'idea', and to the social organisation implied by the size-distribution. What little can be said about external origins will be discussed later.

The outline map of each district carries summary totals of the numbers of forts shown, using a size-classification which seems relevant for the whole coastal strip but making no distinction between recognisably different styles of multivallation.

Some characteristics which are common to all six districts are summarised here, and will be mentioned subsequently only where exceptions occur. The internal buildings, whether of wood or stone, seem with one possible exception to have been round, from 5 to 10 metres in diameter; their intensity, again with one exception, is about 8 to 10 huts per hectare (3 or 4 per acre). The sparse pottery found in association with the forts is almost all Iron Age B, with a little C influence, or in another notation M or UPRIA, and this and other finds suggest a range of date from about 150 B.C. to the Roman period; but there are indications on several sites of prolonged and probably earlier occupation which has left no datable relics.

In all districts, also, the smaller forts outnumber the larger, but the total area enclosed by the few large forts generally much exceeds that in all the small forts taken together, save in North and perhaps in South Pembrokeshire. By inference, therefore, the commonest settlement type was the single homestead, but the majority of the inhabitants lived in fortified villages. These villages, though, were random scatters of round houses separated by ample space where animals could graze.

At this point it is convenient to mention the south-western type of multivallate fort in which a small enclosure, usually central, is surrounded by widely-separated ramparts; the intervening spaces being probably for the protection of cattle. In South Wales most of these forts lie between the Vale of Glamorgan and the South Pembrokeshire districts, though there are some outlying examples there as also in North Pembrokeshire and North Cardiganshire. This is one of the few types of hill-fort which has received really thorough study, [2] so it seems unnecessary to discuss it in detail here.

A last characteristic common to all the districts, as will be apparent from the maps, is the marked preference for ground near or below 200 metres (650 ft.).

The six districts can now be discussed in greater detail. The main emphasis, however, will continue to be on the crude but almost completely factual statistics of distribution, number of ramparts, and enclosed area. Even with these limitations, though, some types can be isolated with fair certainty, but no attempt will be made to examine in detail the classification of all the sites or their structural history.

Vale of Glamorgan[3] (fig. 3)

Four types can be recognised in this district. In all the defences were banks, probably stone-revetted, accompanied by ditches. At Castle Ditches, Llancarfan, also, the visible univallate fort was found to have succeeded an enclosure of different but uncertain plan, defended by a stone wall with no ditch. This was invisible before excavation, so others in the district may remain undiscovered.
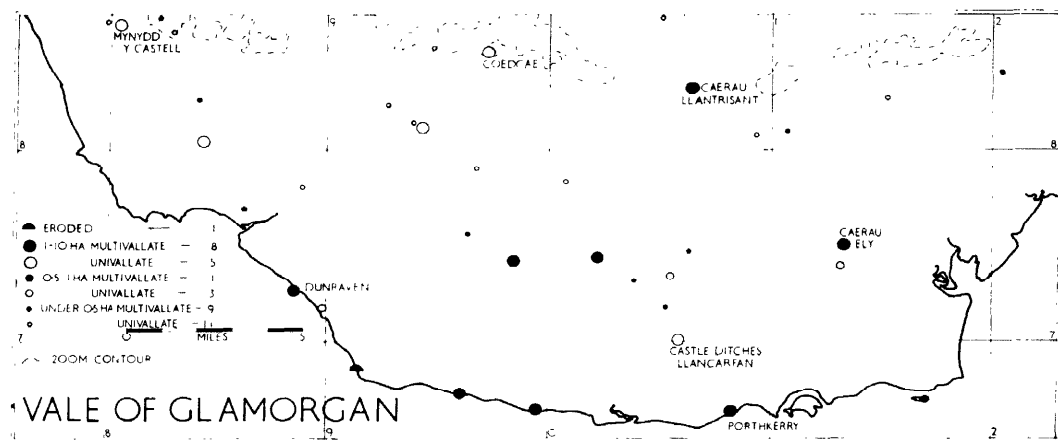
14

Fig. 3
Hill-forts, all types, in the Vale of Glamorgan

The univallate forts range with no marked break in the sequence of sizes up to 4.2 hectares in area; that is, presumably, from single fortified farms up to fairly large villages. Their distribution is generally inland, and does not suggest any particular hypothesis as to their origin. It may be relevant that the stone-walled fort at Llancarfan was derelict and ruinous when the bank-and-ditch fort was built and that the latter was founded by users of Iron Age B style pottery; but this was mostly plain, and the two scraps with 'Glastonbury'-type decoration could be the result of trade and need not imply the origins of the builders.

The multivallate forts fall into three fairly well-defined classes. Six are eastern outliers of the south-western type, three being of less than ½ hectare, one of 0.8 hectare, and one of 1 hectare. Six more, all of less than ½ hectare in area, are all bivallate, and by reasonable analogy might be called castles. They have a fairly uniform inland distribution.

The remaining eight forts form an interesting group. Nearly all are trivallate, with defences all of very similar overall width, and in comparison with the others they are large, ranging from at least 1.2 hectares up to nearly ten; owing to erosion the original size is often uncertain. They have an easterly distribution, the only example known west of the Ogmore being Ci Ifor Top in Gower. Only one, Caerau at Llantrisant, is at all far inland, and five are on the coast. These are all adjacent to cwms which, when allowance is made for the extensive erosion which has evidently occurred, seem likely to have led to good landing beaches.

The evidence here, then, suggests invasion by the builders of these large multivallate forts; but nothing was found at Llancarfan to indicate any interruption of occupation there.
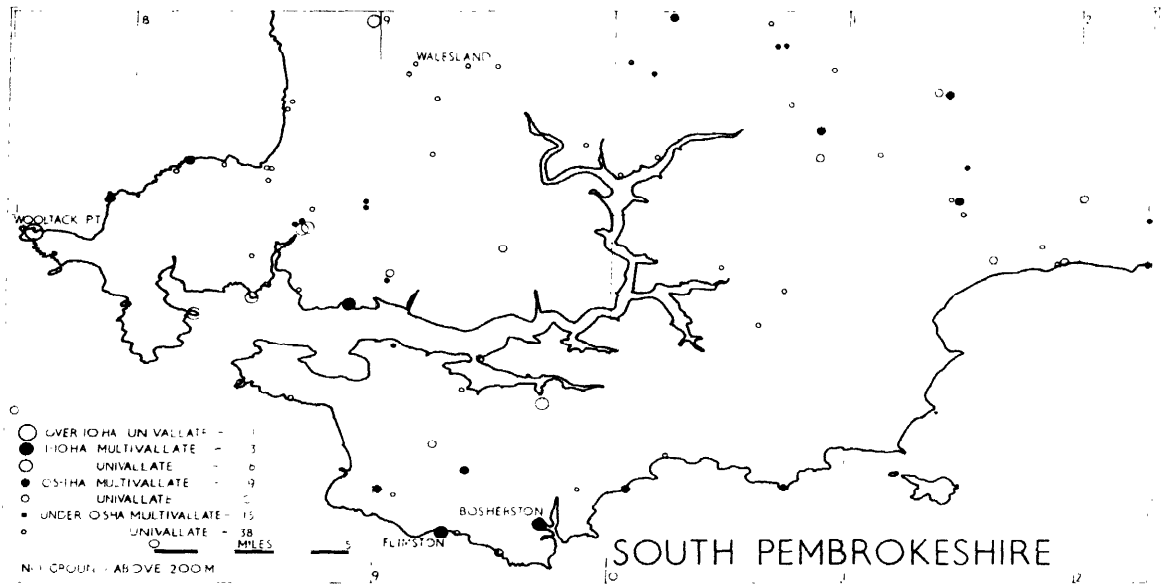
15

Fig. 4
Hill-forts all types, in South Pembrokeshire

South Pembrokeshire (fig. 4)

Much more detailed work is needed in this county, but it is obvious that the hill-fort pattern is very different from that in Glamorgan. Small forts, mostly univallate, are very numerous; but it is important to remember that there is good evidence for late Roman or post-Roman immigration from Ireland, which may account for some of these little enclosures. Dr. Wainwright's recent excavations, however, have shown that Walesland Rath was pre-Roman, and have produced very valuable evidence of its character; but it cannot safely be assumed that these discoveries are necessarily applicable to many other Pembrokeshire forts. In the absence of any detailed field-survey it is impossible to generalise about structural methods, but for most of the larger works the defences seem to be of bank-and-ditch type rather than stone-walled.

Coastal forts are fairly numerous, but most of them, like Flimston (Pl. I), are on promontories which are now, and probably always were, inaccessible from the sea; the positions were presumably chosen simply for their defensive advantages. The large univallate fort at Wooltack Point (20 hectares) could have formed an invasion-base, as it overlooks the small landing-place of Martin's Haven, but there is no scatter of forts inland to suggest a successful entry of settlers by this route. The multivallate fort at Bosherston, probably of two periods, could also have been accessible by sea, if the existing lily-ponds replace sea-inlets. Any substantial invasion of South Pembrokeshire by sea, though, would surely have used Milford Haven; but its shores are noticeably lacking in forts.
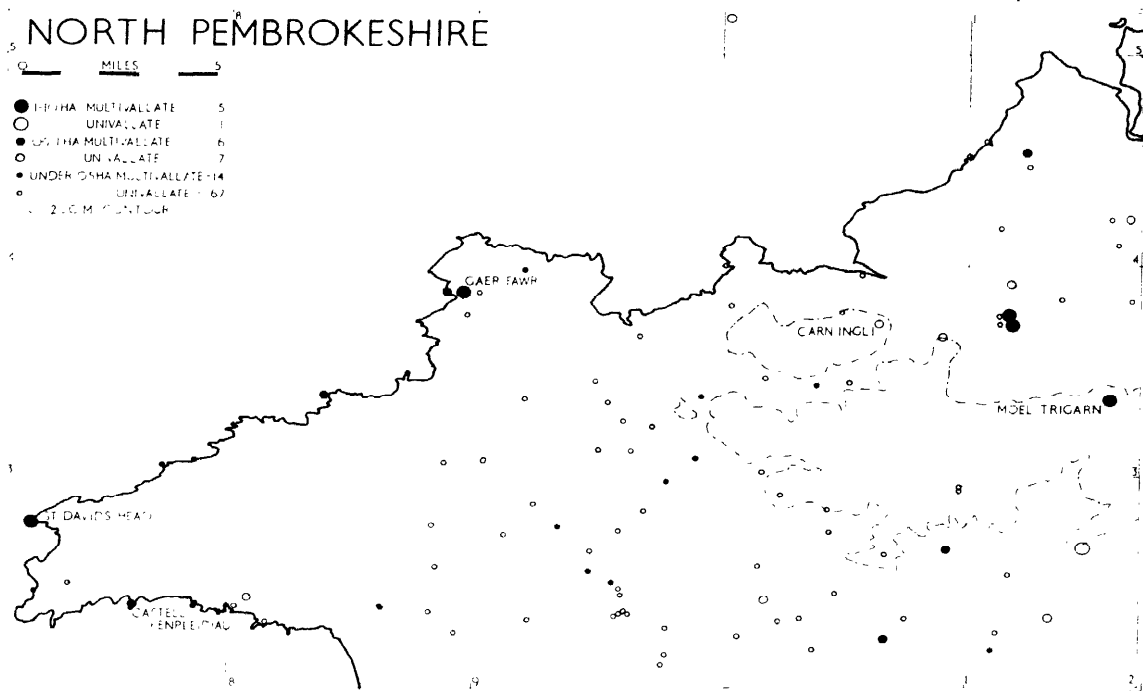
16

NORTH PEMBROKESHIRE

MILES

● I-8 HA MULTIVALLATE   5
○   UNIVALLATE   1
● UP THA MULTIVALLATE   6
○   UNIVALLATE   7
● UNDER 0·5HA MULTIVALLATE ·14
○   UNIVALLATE · 67
⌐ 2·C M CONTOUR

Fig. 5
Hill-forts, all types, in North Pembrokeshire

North Pembrokeshire (fig. 5)

Much of what has been said about South Pembrokeshire applies here also. There is an even greater numerical preponderance of the smallest univallate forts (67 out of 100), and there are again many small forts on promontories almost inaccessible from the sea, such as Castell Penpleidiau; but there are no probable invasion-bases. A note-worthy difference is the presence of a run of several stone-walled forts near the north coast, though these are not of uniform type. St. David's Head has a strong multiple rampart across the neck of a rocky promontory, protecting six round hut-foundations. Gaer Fawr occupies a very craggy hill-top, and seems originally to have comprised three fairly widely spaced ramparts connecting the crags, with a single platform for a large round wooden house near the middle of the enclosure; small oblong buildings abut on the rampart, but are probably medieval or later additions. At Carn Ingli a single wall follows the edge of a narrow rocky ridge, the interior being divided by strong cross-walls. There are irregular enclosures and a few round huts at the eastern end. Moel Trigarn is exceptional in several ways. It stands unusually high, at 360 metres (1200 ft.) above O.D., and is crowded with round hut-platforms, averaging about forty-five per hectare, in contrast to the usual eight or ten in this region.
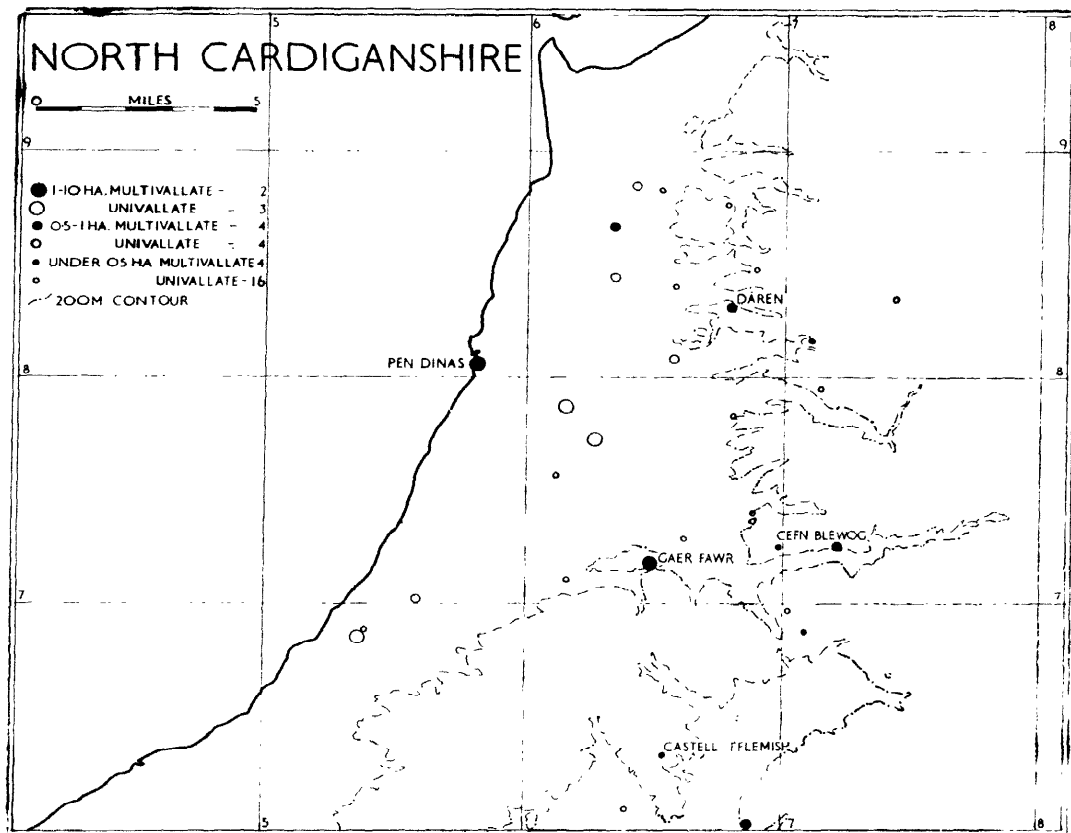
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Fig. 6
Hill-forts, all types, in North Cardiganshire

North Cardiganshire (fig. 6)

This district contains what are probably the most northerly examples of the south-western multivallate forts, at Cefn Blewog and Castell Fflemish. Leaving these out of account as also the two small forts close to the south edge of the map, the distribution pattern strongly suggests spread from Pen Dinas at Aberystwyth. That fort does in fact stand at by far the best landing-place on the coast, on a commanding hill between the Rheidol and Ystwyth, which must formerly have entered the sea here, though now diverted by a shingle bar. The earliest defence seems to have been a ditch and timber-revetted bank round the northern of the two knolls which form the summit, but the site had a complex history and finally, by about 150 B.C., both knolls were enclosed, the banks being stone-revetted. In its latest form it seems to have been at least partly bivallate. Most of the enclosed buildings were round or D-shaped, but one setting of four large posts formed a rectangle 2.1 by 1.7 metres; it belonged to a late phase.

The multivallate forts of Daren and probably of Gaer Fawr appear to comprise more than one structural period.

18

Fig. 7
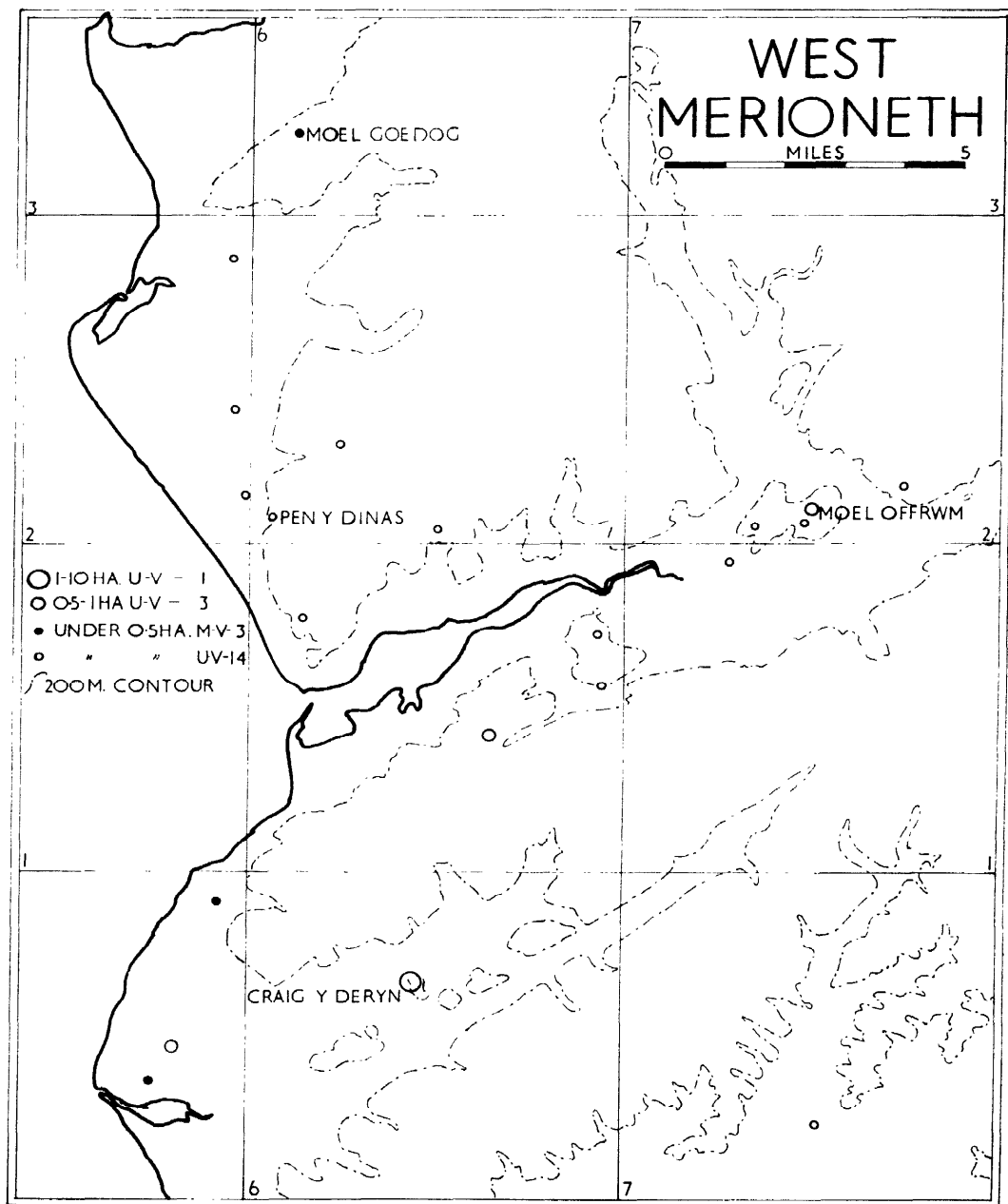*Hill-forts, all types, in West Merioneth*

The map contains the following labels:

MOEL GOEDOG

WEST MERIONETH

MILES
0   5

PEN Y DINAS

MOEL OFFRWM

○ 1-10 HA. U·V — 1
○ 0·5-1 HA U·V — 3
● UNDER 0·5 HA. M·V· 3
○   "   "   UV-14
200 M. CONTOUR

CRAIG Y DERYN

West Merioneth (fig. 7)

The rarity of forts in this district may perhaps be explained by the close approach of the 200 metre contour to the coast, but they are also very small; the largest, Craig y Deryn, only encloses about 1.4 hectares. Further, they are almost all stone walled, and give the impression of mostly belonging to a coherent group. If the interpretation suggested for the stone forts of Lleyn is valid (see below), then these small stone forts may perhaps also be regarded as the work of the undisturbed descendants of the Bronze Age inhabitants; there are no sites which suggest bases for invasion. On the other hand, the possibility that here, as in Pembrokeshire, some may be post-Roman, cannot be disregarded.

Lleyn (fig. 8)

At the western end of this peninsula there is a scatter of small bivallate forts, weakly defended and of very consistent plan; one of these, Castell Odo, was found to over-lie an unfortified Iron Age A settlement, and to have had a primary univallate phase. Further east are two very large univallate stone-walled forts, Garn Fadrun and Garn Boduan, both with numerous round stone-built hut foundations; these imply a population of at least three or four hundred at each site, possibly twice as many, depending on assumptions as to the number of huts occupied at one time. Both forts display two phases of rampart building, each being a single stone wall with no ditch; the later walls were the more massive, but otherwise showed no change in technique. There are other similar forts in the district, though none so large. Tre'r Ceiri is the most spectacular example, though in its present form it is of Roman date, and shows evidence for only one earlier phase.

Two coastal forts, Dinllaen and Dinlle, have strong bivallate defences, with ditches and stone-revetted banks; both stand at potentially good landing-places. There are similar forts inland, sometimes superimposed on a stone-walled fort, as at Dinorwig, but where the bivallate forts stand alone the huts seem to have been exclusively of timber.

The evidence in this area seems entirely consistent with the view that the bivallate forts were the work of partly-successful invaders arriving by sea. The stone-walled forts are inland, and form part of a group localised, like the stone huts, in north-west Wales; they can reasonably be attributed to 'Bronze Age survivors'.

Discussion

Each of these areas, then, has its own very individual character. The coastal strip does not appear as a single cultural province. The beginnings of hill-fort building in Britain, like all other aspects of the Bronze Age-Iron Age transition, need far more study than they have received. Considering only the Welsh coast, the evidence suggests a very sparse Bronze Age population, so that an exotic fort, such as St. David's Head or Carn Ingli, might be accounted for by the arrival of even a single boat-load of new arrivals in a region where the inhabitants were too weak to drive them out. The widespread and roughly contemporary developments of forts, though, must imply a general increase in population, perhaps owing to some natural cause such as an improvement in climate.

20

LLEYN

MILES

THIS AREA EXCLUDED

●DINORWIC

CASTELL ODO

●DINLLE

TRE'R CEIRI

DINLLAEN

GARN BODUAN

MOEL Y GEST

GARN FADRUN

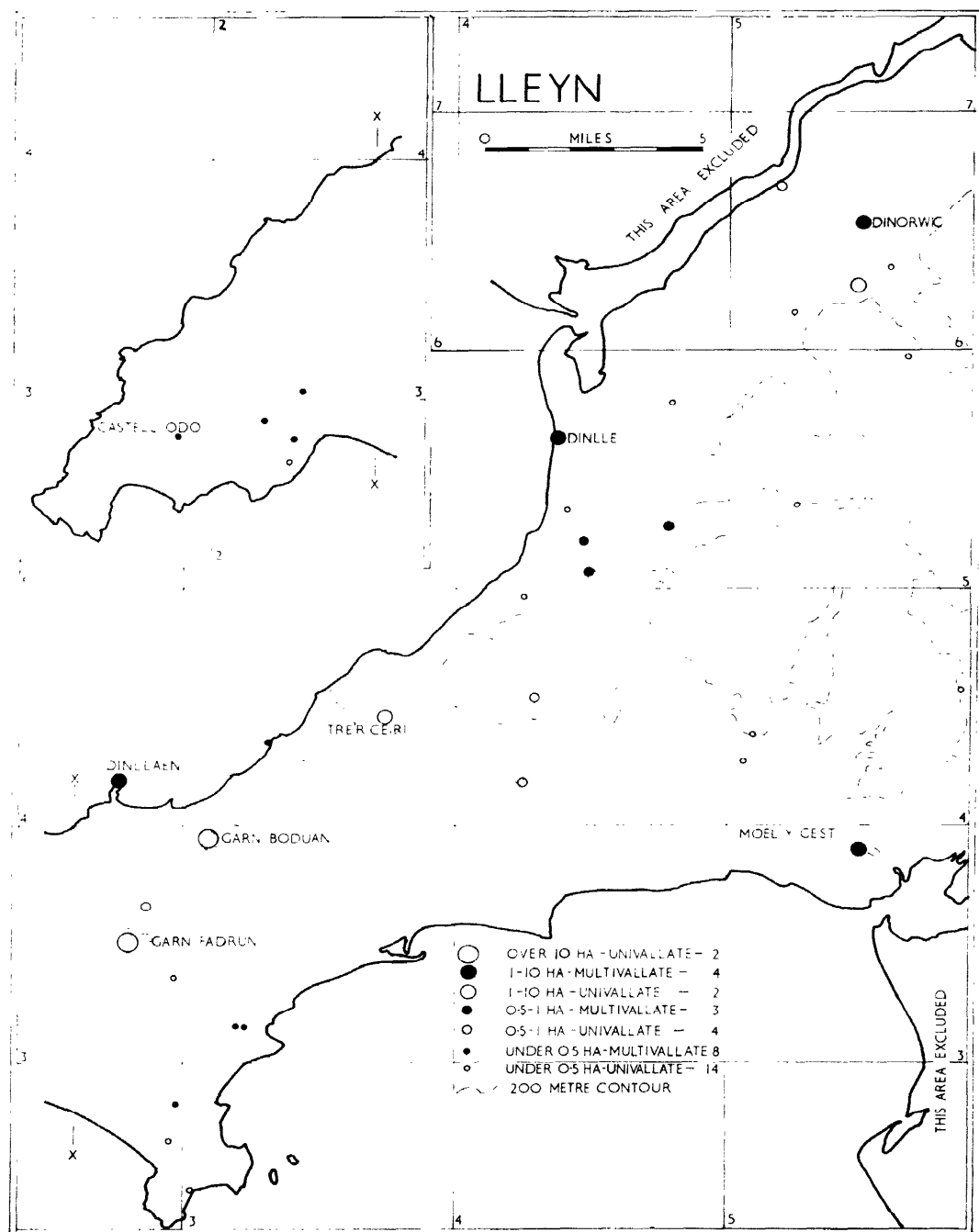|		
○	OVER 10 HA - UNIVALLATE -	2
●	1-10 HA - MULTIVALLATE -	4
○	1-10 HA - UNIVALLATE -	2
●	0·5-1 HA - MULTIVALLATE -	3
○	0·5-1 HA - UNIVALLATE -	4
•	UNDER 0·5 HA - MULTIVALLATE	8
◦	UNDER 0·5 HA - UNIVALLATE -	14
~	200 METRE CONTOUR	

THIS AREA EXCLUDED

Fig. 8
Hill-forts, all types, in the Lleyn peninsula

21

The meagre scraps of iron found in the Caernarvonshire forts, for example, can hardly correspond to a technical development which by itself would give rise to defended settlements of four or five hundred people. But whatever the cause, the adaptation of the primitive idea of a wall or bank to form a rampart for defence could result from population pressure alone. It is only necessary to postulate actual invasion of people when these are implied either by the siting of a structure, as at a landing-place, or by the appearance of some specific technical detail found elsewhere.

The siting of the multivallate forts in Lleyn and in Glamorgan justifies the assumption of invasion, but not by the same people, for the defences are bivallate in Lleyn and trivallate generally in Glamorgan. The latter are fairly distinctive, but it is not yet possible to suggest a really satisfactory origin for either group. It may perhaps be relevant that Kercaradec in Finistère has a triple rampart, [4] but the defences there measure only 28 metres overall, as against 40 to 50 metres in Glamorgan. Excavation in the Welsh sites is needed to discover whether they show other detailed structural similarities.

In North Cardiganshire, the hill-forts can all be regarded, very plausibly, as the result of one or more invasions entering at Pen Dinas, but again it is not possible to claim any really close correspondence between details exposed at that site and those found elsewhere.

There are in fact only two classes of fort in coastal Wales which can be shown to have satisfactory parallels in other regions. Lady Fox has shown convincingly that the south-western multivallate type with wide-spaced ramparts has a distribution linking South Wales with Devon and Somerset. [5] There are so many detailed resemblances that the builders must surely have been closely related, not merely following a similar way of life. There do not seem to be any Continental parallels.

The other group comprises the coastal promontory forts. These present a puzzle. They are plentiful in Gower, Pembrokeshire, and Cornwall, and in the Venetic areas of south Brittany, and even if some are to be accounted for merely by the choice of a strong position for defence the general similarities seem too close to be ignored. [6] It is tempting to accept the suggestion that these forts are evidence for direct Venetic settlement in Britain, particularly in view of the reputation of the Veneti as seafarers. It is that reputation, though, which causes the difficulty, for both in France and Britain the forts are more often than not inaccessible from the sea. This might be accepted as reasonable if any typical Venetic stronghold, as so clearly defined by Caesar, [7] could be identified near-by; but none exists. It seems unjustifiable, therefore, to link these forts with the historic Veneti, although the resemblances do strongly suggest some connections between the various areas; these contacts may well have lasted for a long time, since many of the forts show a long structural history, and the similarities persist throughout.

The conclusions reached are rather unsatisfying. It is impossible to offer a broad generalised picture applicable to the whole stretch of coastline, and this has the unfortunate consequence that research in one district will not necessarily help to solve the problems of another. On the other hand, if the hypothesis of several small independent invading groups is correct, the detailed study of the forts of the west coast should ultimately throw much light on the sources of the British Iron Age; for the association of several distinctive structural details can give a far more reliable proof of actual settlement than the appearance of portable objects which could be the result of trade.

22

REFERENCES

1   Contrast, e.g., the classifications used by D. W. Crossley and A. H. A. Hogg in listing Pembrokeshire and Cardinganshire forts   *(Bull. Board Celtic Stud., 20,* 171 ff., and 19, 354 ff.).
2   Fox, A., in *Problems of the Iron Age in Southern Britain,* ed. Frere, S. S., Univ. of London Inst. of Arch. *Occas. Paper, No. 11* (London, nd. (= 1961)), 35-60.
3   For sources, see Appendix, below.
4   Wheeler, R. E. M. and Richardson, K. M.   *Hill-forts of Northern France* (Soc. of Antiq. *Research Rep. XIX,* 1957), pl. xxvii.
5   See n.2 *supra.*
6   The resemblance between the closely-packed sunken rectangular hut-sites at Sheep Island (or Castles Bay Camp) south of Milford Haven (SM 846018) and at Castel Meur (Wheeler and Richardson, *op. cit.,* 109 (=no. 27)), is particularly remarkable.
7   As cited in Wheeler and Richardson, *supra,* 7.

Note added in press:
For Walesland Rath, Pembrokeshire (p.17   *supra),* see now Wainwright, G. J., 'The Excavation of a fortified settlement at Walesland Rath, Pembrokeshire',   *Britannia, II* (1971), 48-108. Four occupation phases run from the 3rd century B.C. to the 4th dentury A.D. Dr. Wainwright argues tentatively (p.99) that this is a small fortified farm of a generalised 'Irish Sea' type.

APPENDIX: SOURCES

Vale of Glamorgan. Use has been made of the material collected for the county Inventory of RCAM(W). Castle Ditches, Llancarfan; excavation report, forthcoming.

North and South Pembrokeshire. The main source is D. W. Crossley's list *(Bull. Board Celtic Stud., 20,* 171 ff.), supplemented by the O.S. 6-in. sheets. Bosherston; sketch-plan and brief description in Foster, I.LL., and Daniel, G. E., ed., *Prehistoric and Early Wales* (1965), 134. St. David's Head; plan and description in *Archaeol. Cambrensis* (1899), 105-131. Gaer Fawr; brief account and references in Foster and Daniel, *op. cit.,* 135. Carn Ingli; aerial photograph (by Dr. St. Joseph), *Antiquity, 35* (1961), 266, pl. xxxviii (b). Moe1 Trigarn; plan and description, *Archaeol. Cambrensis* (1900), 189-221.

North Cardiganshire. A list is given in *Bull. Board Celtic Stud., 19,* 354 ff. Pen Dinas; excavation report (C. Daryll Forde *et al.)* in *Archaeol. Cambrensis* (1963), 125-153.

West Merioneth. C. Gresham, in *Merioneth County History, I* (1967).

Lleyn. RCAM(W) Caernarvonshire *Inventory, II* (1960), *III* (1964). Garn Boduan and Tre'r Ceiri; excavation report, *Archaeol. J.,* 117 (1960), 1-39. Castell Odo; excavation report (L. Alcock), *Archaeol. Cambrensis* (1960), 78-135.

WELSH BORDER HILL-FORTS

S. C. STANFORD

(Author's note: New evidence and interpretations available since the original Conference suggest that Croft Ambrey was established *circa* 550 B.C. (p. 29 below), and enlarged to the Main Camp perimeter (p. 26) *circa* 390 B.C., when Midsummer Camp was established. The gate-posts at Croft and Midsummer are thus shown to have lasted for an average of about 32-34 years (pp. 26-7).

The earliest occurrence of Group A pottery at Croft (p. 31) is *circa* 170 B.C., and this date must now be substituted for 25 B.C. there and at Pen Dinas (p. 34) 'Ladders' are no longer to be invoked at Croft or at Midsummer (fig. 12, p. 29). A modified interpretation of the Ffridd Faldwyn sequence (p. 30) appears in *The Iron Age and its Hillforts* (Southampton, 1971), where too the other amendments above are taken into account.)

PREVIOUS SURVEYS OF WELSH BORDER HILL-FORTS have shown a notable variety of emphasis. In 1937 Miss L. F. Chitty was mainly concerned to define the route by which the builders of inturned entrances reached the Central Marches; [1] in 1948 Mr. Varley was concerned with the form of defences and origins of the presumed settlers; [2] in 1965 Mr. Alcock discussed the hill-forts of Wales and the Marches in terms of function and population,[3] and Mr. Hogg explored the possibilities of relating structural phases in the Border to developments in Wales. [4] The evidence that has accrued in recent years has something to contribute to each of these approaches. It comes from Dinorben, [5] Moel Hiraddug,[6] The Berth, [7] The Roveries, [8] Caynham Camp, [9] Croft Ambrey, [10] Credenhill Camp,[11] Midsummer Camp [12] and Twyn-Y-Gaer [13] (fig. 9).

This evidence is of two kinds: ceramic and structural. The former involves the stamped pottery of Professor Hawkes' Western Third B culture which has been shown to be early at Croft Ambrey, and in 1968 was found in an early position at Midsummer Camp. Its typical decoration, placed just below the rim, is a single line of stamps between two parallel grooves (fig. 10;l). If this decoration is to be derived from the Continent, perhaps through the medium of metal objects like the Cerrig-y-Drudion bowl [14], Professor Hawkes has pointed out to me that it should be before *circa* 250 B.C. when overall stamped decoration became the fashion in Brittany. Further support for deriving the stamped pottery from metal prototypes may be seen in the rim form of two early pieces from Croft Ambrey and Midsummer Camp (figs. 10; 3 & 2) which betray an origin in metal vessels, which could be directly copied in clay as for the cinerary urn from Lannvréon en Peumerit (Finistère). [15] The same rare form on British rims may be noted in an early context at Bredon Hill, [16] and a later one at Sutton Walls. [17]
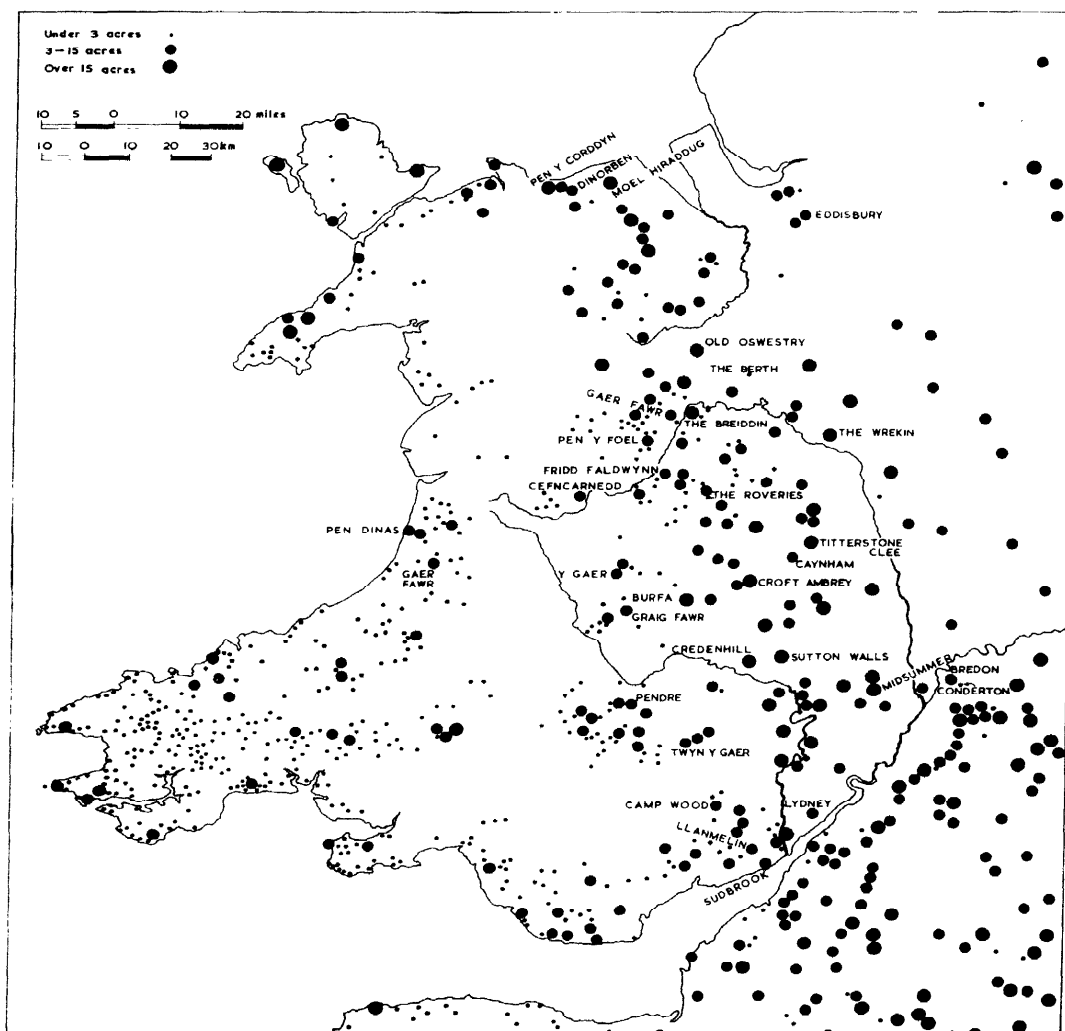
Fig. 9
Hill-forts of Wales, and the Border (based on the Ordnance Survey's
Map of Southern Britain in the Iron Age, with the addition of the Berth;
with the permission of the Director-General, Ordnance Survey)

At Croft Ambrey the introduction of stamped ware coincides with the construction of the Main Camp defences from a large quarry-ditch. The south-western entrance of this camp showed fourteen subsequent repairs, with the posts renewed and roads re-laid each time. It is arguable how long a 10 to 12-inch post might survive in working condition, but twenty-five years may be a reasonable estimate. Assuming the camp to be abandoned as a village *c.* A.D. 50 with the Roman Conquest and discounting any life for the final gate or earlier ones involved in fires, this entrance will have been built *c.* 250 B.C.

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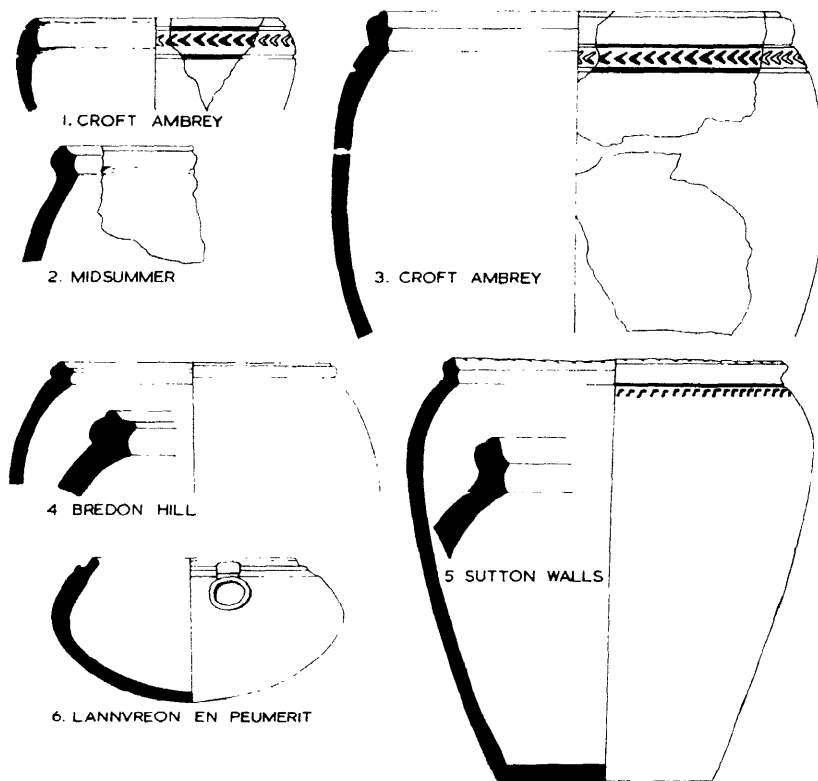
Fig. 10
Iron Age pottery; nos. 1 to 3, one-quarter scale, nos. 4 to 6, one-eigth scale (except inset rims of 4 and 5, one-quarter). No. 4 after Hencken (1939), No. 5 after Kenyon (1953). No. 6 after Giot (1962).

At Midsummer Camp the stamped wares were present following the first repair of the inturned entrance, to be succeeded by fifteen phases of repair. Employing the same rules as for Croft Ambrey the Midsummer inturn will be dated *c.* 300 B.C. The coincidences are sufficient to imply a major defence horizon at a time not incompatible with that argued from the pottery.

Does the detail of these entrances allow us to recognize a comparable horizon else-where? At Midsummer Camp the earliest inturned entrance was provided with small guardrooms defined by a shallow sub-rectangular palisade slot behind three deeply-set posts that continued the line of the entrance corridor revetment, and the gateway was double, 23 ft. wide with central post (fig. 11). We are reminded of the stone guardrooms of the northern Marches [18] and Rainsborough, [19] but Dr. Savory has already pointed to possible origins for these in southern England at St. Catharine's Hill, [20] and looking in that direction we find what must have been nearly a replica of the Midsummer arrange-ment at Maiden Castle, Dorset. [21] The north side of the original western entrance had

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been sufficiently eroded to remove most of the shallow cut of the guardroom wall trench, and on the south side the guardroom area is cut into by later pits; but the deeper post-holes of the guardroom fronts are clear. They are of a single phase although the gates show two phases of construction, even as do their equivalents at Midsummer. We are clearly involved in a widespread phase of hill-fort construction, and the Maiden Castle example has implications for earlier phases. The timber-framed rampart that was primary at the Eastern Entrance was not located in the original Western Entrance, so is
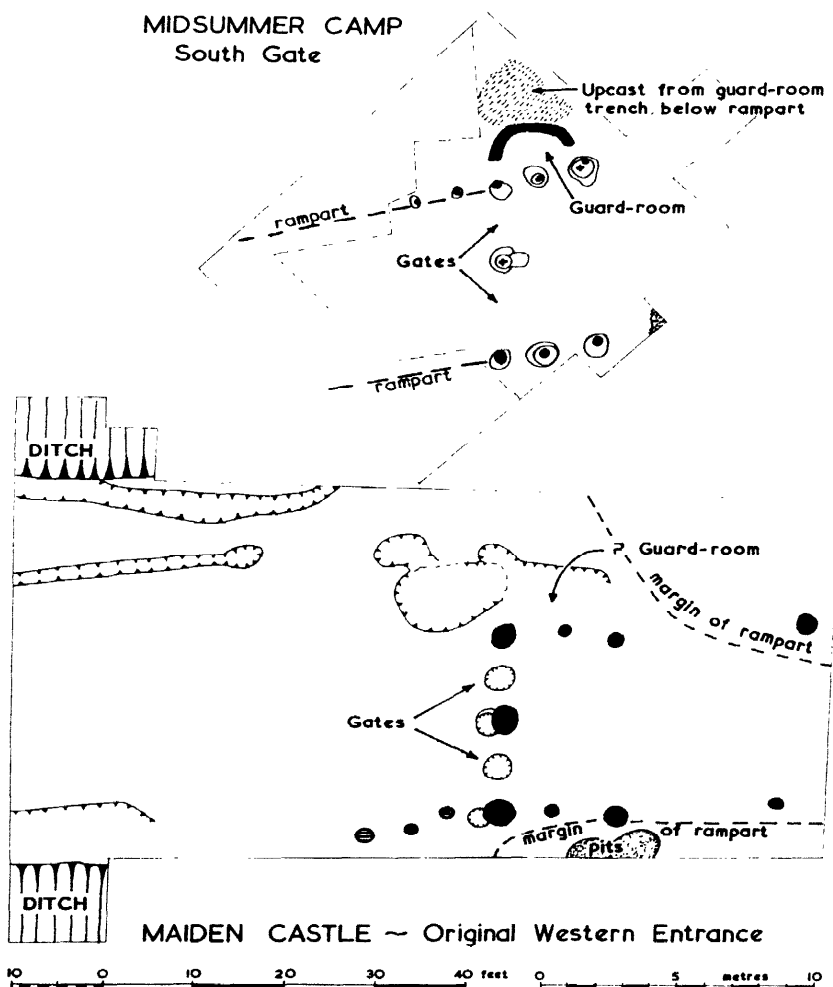
Fig. 11
Comparison of midsummer Camp's guardroom entrance with maiden Castle's original western entrance, after Wheeler (1943). Features of other phases are not shown for midsummer camp, and have been largely removed from the Maiden Castle plan. Scale—1:250.

not necessarily tied to the gateway just described. The face area of the ditch to the original rampart between the East Gate portals is approximately 230 sq. ft. (pl. XI), which agrees with the restored section of that rampart; but the final phase of the 16 acre camp was shown on site H (pl. XIX) to involve a much larger ditch 50 ft. wide and 20 ft. deep with a section of 470 sq. ft. It is this that must go with the guardroomed western entrance and the first dump rampart. The timber box rampart and its eastern gateway modifications must be earlier. We may return to the Border to see whether any pre-guardroom phases are represented there.

MIDSUMMER		DATE	CROFT AMBREY	
STRUCTURE	POTTERY		STRUCTURE	POTTERY
		425 B.C.	? DOUBLE GATE DUMP RAMPART	
		300	periods I–III, gates 1-5	
QUARRY-DITCH GUARD-ROOMS DOUBLE GATE INTURN 1-2		300 / 250	QUARRY-DITCH DOUBLE GATE IV, gates 6-7	
DOUBLE GATE gates 3-4		250 / 200	STONE G/ROOMS SINGLE GATE INTURN V, gates 8-10	
SINGLE GATE LADDER gates 5-13		200 / 25 B.C.	SINGLE GATE LADDER VI, gates 11-16	
SINGLE GATE BRIDGE gates 14-17		25 B.C. / A.D. 50	SINGLE GATE BRIDGE VII gates 17-20	

Fig. 12
Provisional correlation of phases between Midsummer Camp and Croft Ambrey

There were no timber guardrooms of Midsummer type at Croft Ambrey, but such is the synchronism of other gateway details between the two sites, I am confident in correlating the construction of the Main Camp defences at Croft with the guardroom phase at Midsummer (fig. 12). The new scale of defence, the stamped pottery and such similarities in sequence as the presence of bridges in the last four phases, the provision of conjectured 'ladder' posts at the ends of the rampart in the previous six phases, and the occurrence on both sides of the last double gateway fourteen phases from the end are the kind of evidence that encourages this assertion. Before any of this there is an earlier Plateau Camp at Croft (again without guardrooms) which stood through the life of five successive gate-posts. On the same estimate of posts lives the origins of Croft Ambrey will have been in the fifth century. Its small trench-like ditch would be appropriate to a timber box rampart, but despite close search this did not materialize. We may tentatively conjecture that where such ramparts occur in the Welsh Border they are likely to be earlier than Croft.

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At Ffridd Faldwyn (Montgomeryshire), [22] if we link on to the Herefordshire sequence at the final double gate level the inner entrance, with at least six phases of double gates, will take us back to a stage roughly equivalent to the start of Croft. Yet this series of gates can hardly belong to the double palisade which by this reasoning will not be later than the mid-fifth century. With timber revetting demonstrated at Caynham Camp [23] and Titterstone Clee [24] it is clear that the Central Marches experienced this timber phase in some form or other. In feeling our way back for the beginning of hill-fort occupation we are reminded that the earliest iron object in Western Britain is the Llynfawr sword dated *c.* 600 B.C. Somewhere between then and 450 we should place the start of hill-forts in the Welsh Border; there are perhaps five or six centuries over which to spread the total evidence.

One conclusion implicit in this discussion is that the Marches hill-forts show a long and uninterrupted concern for defence. The quest to delimit the area demonstrating this characteristic must begin with the excavated stone guardrooms which are tied into the Herefordshire sequence at Croft Ambrey where they appear in levels subsequent to those correlated with the timber guardrooms of Midsummer. If the latter, with Maiden Castle, are allowed to indicate an original inspiration from the south the northern examples will not be earlier than *c.* 225 B.C., when they were introduced at Croft. That there was no great time lag between north and south is assured by the non-repair of the Croft guardrooms after *c. 175* B.C. and confirmed by similarity of plan, especially between Croft Ambrey, The Roveries and Dinorben. Furthermore there was employed at Croft and The Roveries the most remarkable mason's trick of using boulders obtainable only at the foot of the hill as foundations for the walls of dry-stone slab masonry. [25] The technique was used only for the original Croft guardroom construction, and never subsequently. Dare we suspect the passage of a professional hill-fort architect? Such an explanation would accord well with the synchronism of gateway constructions already noted at Croft Ambrey and Midsummer Camp, some 30 miles apart.

The use of guardrooms, twice repaired at Croft, and with evidence of sentry fires in the preceding and succeeding periods indicates that hill-forts could expect to be attacked; and the evidence of destroyed gateways is not particularly rare. The second guardroom phase at Croft ended in a disastrous fire as did that at Rainsborough, and further afield the final phase at St. Catharine's Hill. There was a major fire in the entrance at Midsummer, and across the Severn at Bredon Hill I cannot subscribe to the view that the gateway slaughter was the final episode in the camp's history. For why were the pits for the slaughter level gate-posts cut through the roadway on which the skeletons lay, unless the gate had been refurbished at a later date? [26] And why were the allegedly earlier gate-post pits for the phase 2 roadway not metalled round the posts? [27] And how did their fill come to contain two skeletons and three mandibles? [28] These pits had been cut through the slaughter level. There had indeed been a massacre but perhaps not of the defenders, for the gateway was certainly repaired at least twice afterwards. There is no warrant to see the hand of the Belgic Dobunni in this massacre for such was doubtless the occasional fate of many who defended or attacked hill-forts in the hill-fort province proper.

A further characteristic of at least the southern Border hill-fort communities is the presence of professional potters who have been shown by Dr. D. P. S. Peacock to have been operating from the vicinity of the Malvern Hills. [29] The two main groups—Group A using Malvernian rock temper, and Group Bl employing crushed limestone—are between them responsible for linear-tooled pottery of Western Second B and the stamped wares of Western Third B. These two schools of potters and a minor Group

C, using sandstone, are shown by Dr. Peacock's analysis to be typologically separable, but the criteria are not those used for Hawkes' culture groupings, which need to be re-defined, or amalgamated under a Western First B which brings in guardroomed in-turned entrances and sufficient metalwork to give rise to the stamped pottery. It might also be credited with the La Tène Ic brooches needed to trigger off the development leading to the involuted brooches which were later to make such a showing at Croft Ambrey.[30] Conveniently for this hypothesis two Ic brooches were found on the back of Rampart 2 at Maiden Castle, Site G, the rampart that presumably goes with our postulated guardroomed western entrance. [31] The associated pottery is Iron Age A. but from Dr. Peacock's work in the Border, it is clear that there will be no progress if we continue to stick to pottery as the main characteristic of a culture. For do not the guardroomed forts of Dinorben, The Wrekin and Rainsborough also show associated 'Iron Age A' pottery?

In 1968 Malvernian and vesicular (so presumably limestone-tempered) wares were found together in an early context at Midsummer, but the North and West Hereford-shire market was for long the exclusive territory of the limestone temperers Group B1, and Group A pots do not appear there until a late stage, possibly not before *c.* 25 B.C. This may be seen to have dating possibilities for Group A sherds at Pen Dinas and The Berth, and other unexcavated sites to the north and west.

What I would prefer to call the Welsh Marches Hill-fort culture was far from being locally self-sufficient and isolated. It involved professional potters as well as a common architectural tradition and enjoyed the services of travelling bronze-smiths responsible for the small items of fine Celtic metalwork found at Croft Ambrey and elsewhere. Its area was for the most part beyond the normal distribution of currency bars which have yet to be found in a Marches hill-fort; equally it was beyond the main distribution of Iron Age coins. We are bound to ask what was exchanged in return for the services and luxuries brought to the hill-forts by these specialists? Their wealth lay in corn, found in quantity at Caynham Camp, Midsummer Camp and Croft Ambrey, and cattle of which the material from Croft Ambrey studied by Drs. Ruth and David Whitehouse indicates that the animals were treasured to the extent of being allowed to grow old before being slaughtered. With these natural riches and distant contacts the hill-fort dweller could live as well as his lowland counterpart.

If the best things in life were traded what should we use as criteria to denote cultural origins for different sites? There is firstly what Mr. Gelling and I have called VCP (for Very Coarse Pottery) which we believe may have been used for baking small Iron Age buns.[32] The material is so uninviting that we should perhaps view with caution its non-occurrence in the southern Border at Llanmelin, Sudbrook and Lydney. For the rest, its distribution extends from north Monmouthshire to Anglesey. Outside the hill-forts it occurred in quantity at Pant-y-Saer, Weeping Cross near Shrewsbury, and Wor-cester. I have not seen any in the collections from the Breton sites, and favour Dr. Savory's suggestion to me that it has something in common with Late Bronze Age pottery traditions. If so it could represent a native element in the hill-fort population. There is no chronological difficulty here, for it is present in the earliest hill-fort phase at Croft Ambrey.

By contrast an intrusive element is represented by the rectangular buildings that have been excavated at Croft Ambrey, Credenhill Camp and at Midsummer Camp. One building at the latter site appears to have used sleeper beams as the foundation for a rectangular structure 15 ft. by 12 ft. but otherwise these structures are four-post affairs ranging from that size down to 5 ft. square. At Croft Ambrey there seems no

alternative but to regard some of these buildings as dwellings. Despite extensive ex-cavation no round house of the Iron Age has yet been found in Herefordshire where this intrusive tradition lasts right through the Iron Age. Elsewhere the Continental-based invasions, of which we have allowed for at least two, left their mark with rectangular structures at Maiden Castle, Dorset (perhaps of simpler form than the interpretation on fig. 22), Glastonbury, [33] Rainsborough, and Ivinghoe. [34] Away from the Marches, the influence of the invaders upon house types was transient and the round-house of the Bronze Age re-asserted itself.

In the Marches these rectangular buildings characterize closely built-over sites. At Croft Ambrey, in three separate areas, they were found ranged back-to-back between narrow streets that followed the contours; at Ffridd Faldwyn similar buildings lined the main street in from the early gateway; at Credenhill Camp two rows of such buildings were excavated in the quarry ditch; and now at Midsummer comparable structures have been found set into a 1 in 3 slope. These were crowded hill-forts where it seems impossible to open a trench more than 10 ft. square without finding evidence of build-ings. Croft Ambrey, Credenhill and Midsummer show repeated renewal of posts on the same patch so that we cannot avoid concluding that these settlements were permanent and long maintained. The population density may have approached 100 per acre at Croft Ambrey, and the 5 acre unit that seems the normal minimum for Border hill-forts will represent a village of perhaps 500 souls. At the other end of the scale there would have been perhaps nearly 5,000 at Credenhill. This is all very different from Mr. Hogg's estimates of 13-21 per acre for the Caernarvonshire forts with their round huts. [35] The differences in hut form and concentration speak of basic differences in social organ-ization and settlement planning between the two societies—Welsh Marches Hill-fort on the one hand, and Welsh Secondary Iron Age on the other. Given these comparisons it is easier to appreciate the difference in earthwork between most Welsh sites and those of the Border. With Border populations of the order postulated above it is easier to see how the massive ramparts at Caynham Camp (eventually 21 ft. high) and Croft Ambrey (17 ft. high in one build) could be erected without drawing upon labour from elsewhere.

I have suggested that we have two elements in this hill-fort population: the native recognized by his field-oven and the intruder (in two consignments) marked out by his formal town planning and rectangular dwellings. If the earlier invaders had brought their pottery with them it should have been Iron A; but considering the pottery from Coygan Camp Dr. Wainwright has pointed out that much of what has been called Hallstatt pottery in Wales and the northern Border could simply represent the contin-uation of Late Bronze Age traditions. [36] In following this suggestion we do not need to tie our Border vessels with the Irish Sea Province, for at Bromfield, near Ludlow in the Central Border, a Bronze Age cemetery now has Carbon-14 dates from the Birming-ham laboratory to show that it was in use at least between *c.* 1400 and *c.* 760 B.C. [37] Among the undated vessels on fig. 13, No. 2 is a weak situlate jar, and Nos. 3 and 4 are comparable in form with Iron Age B pottery of the Marches. The form and decoration of the straight-sided vessel, No. 4, with linear-tooled oblique lines between two grooves, is reminiscent of some of the Malvernian Group A pots although it should be noted that this decoration has not so far been found stratified in the earliest hill-fort deposits in Herefordshire. No. 3 is of barrel form with internally grooved rim, not unlike Sutton Walls or Croft Ambrey Group B1 pots but not nearly as well finished. We may suspect that a local Late Bronze Age potting tradition was continued along different lines in various parts of the Border following the intrusion of new elements who, creating hill-forts, divided the old unity of pottery manufacture. For a long while the intruders used
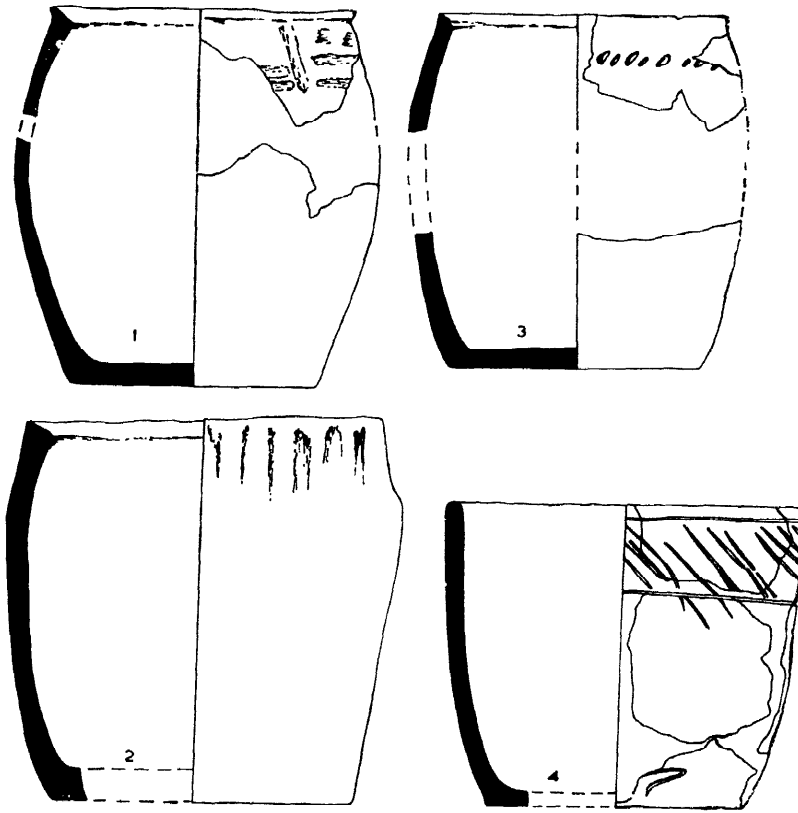
Fig. 13
Pottery from a Bronze Age cemetery at Bromfield, Shropshire (scale; one-quarter); no. 1 from a burial dated
762±75 B.C. (Birm-62), the remainder undated

little, if any, of the local products, and lacked their own pottery industry. Yet, after some time we find that pottery owing something to the native tradition, and much to new techniques, was being distributed to the hill-forts of Herefordshire and Shropshire. It seems that the native was not removed from the area, but was perhaps taken into the communities organized by the hill-fort warlords. Such an explanation would be easier to accept if late Bronze Age pottery too was the product of professionals. Dr. Peacock's preliminary inspection of pottery from the Bromfield cemetery shows consistent use of temper from Clee Hill some fives miles away and he and Mr. Gelling have compared this material with same sherds from Caynham Camp one of which Mr. Gelling sees as closely comparable in form with the Bromfield urn that is dated   *c.* 762 ± 75 B.C. (Birm-62) (fig. 13; 1). [38]

   What we are envisaging then is an incursion into the rich farmlands of Wessex and the comparably fertile areas of the Welsh Border by a group of warriors bringing the hill-fort idea and rectangular buildings some time between about 600 and 450 B.C. followed *c.* 300 B.C. by new adventurers from the Continent who introduced the guard-

roomed inturned entrance and a military organization that could maintain permanent guards. These were the 'Border Barons' of the earlier Iron Age, taking over the land of the Border even as the Normans were to do a millenium and more later. Such an invasion could bring about comparable results with no more than two or three thousand warriors capable of subduing a peaceful population that was ill-organized for its own defence. In establishing themselves in the Border they could well span the difficult and unrewarding lands of the south-west peninsula and Wales, securing the edge of the Border plains with hill-forts at Ffridd Faldwyn and Dinorben. Using the large rampart as a criterion of a Border site in at least the later phases of the Iron Age, the western frontier with Wales might be seen to run from Llanmelin to Camp Wood and Pendre; thence to Craig Fawr, Y Gaer (Llandewi), Cefncarnedd, Pen y Foel, Gaer Fawr, Old Oswestry, the forts of the Clwydds, and so to Dinorben.

There will have been adventurers too who would want to push the frontier westwards along some of the more fertile valleys of Wales and there may have been some who independently struck away from the main stream and landed on the shores of the Irish Sea to set up local hill-fort communities. Over the long period involved we should not expect the frontier between Wales proper and the Border to remain static, and there are indications that it did not. Most of the guardrooms referred to have only emerged from below later constructions. What of those hill-forts where guardrooms may be seen on the surface? Did they maintain a permanent guard through the later Iron Age? Or were they abandoned at the guardroom horizon of the second-to-third century? Do they represent the high-water mark of Border penetration into Wales? And was not Wales, in any case, split asunder by Border control of its central valleys? From Ffridd Faldwyn the Severn valley leads to Cefncarnedd, which exhibits many features of Border type; —enclosing something over 10 acres in its final form behind a rampart that is of massive proportions at the north-west corner where a long quarry-ditch provided the spoil, and with four defensive banks spaced over 100 feet.

To the south-east we can, from Burfa Camp, Radnorshire, with massive rampart and quarry-ditch holding some 30 acres, look westwards to sites exploring, or controlling, the upper reaches of the river Wye system. At Craig Fawr 6 acres are enclosed by the univallate defence that rises 10 ft. above the interior surface of a quarry-ditch; the northern entrance is further protected by two outer banks. North of Craig Fawr is Y Gaer, Llandewi (4 acres), where the rampart reaches massive proportions at the western end, and a complex history of enlargement or retraction is indicated by earthworks that break the site into three separate compartments. Hill-fort settlers had little enthusiasm for the high moors of the watershed to the west, but once over that by way of the Ystwyth we reach Gaer Fawr, a bivallate site of about 4½ acres with massive inner rampart widening at its entrance as though to include twin guardrooms. From Gaer Fawr, I move quickly north-westwards to Pen Dinas, to reach the Irish Sea. There, I note the stamped pot of Dr. Peacock's Group A that came from the Malverns not earlier than *c.* 25 B.C., and wish for the missing linear-tooled sherds from the same workshop. I notice that the period IV slab wall was founded on large boulders, and pushed to extremes can discern the traces of at least one four-post structure on the hut site there. [39] These details and a complex history of fortification show Pen Dinas to be in the same tradition as the Marches hill-forts. We cannot know whether it was founded by direct colonization from the sea or by movement westward through the central valleys of Wales, for its palisade defence will allow it to be as early as we like. The evidence of wall construction and pottery argues that it remained, intermittently at least, in touch with the Border hill-forts themselves.

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The evidence reviewed here defines the distinctiveness of Welsh Marches hill-fort settlement. The pattern of large hill-forts protected by massive ramparts and closely covered by rectangular huts contrasts markedly with the prevalent Welsh pattern of smaller earthworks and loosely spread round houses, illustrated in Mr. Hogg's paper. For a long while the increase in information had rendered the problems more complicated and obscured the simplicity of earlier explanations. As it now coagulates the evidence returns us in favour of Miss Chitty's view of a major incursion into the Border by foreign elements responsible for the construction of inturned entrances, now dated provisionally to *c.* 300 B.C. [40] This adds new force to the argument for an Iron Age B invasion in the west, while the rectangular buildings remove one of Dr. Hodson's most cogent arguments against the invasion hypothesis. [41] Such buildings have been seen to characterize also an earlier wave of hill-fort settlers. More work is required to allow their constructions and history to be related securely to the Marches' sequence that is established for the centuries after *c.* 300 B.C., but as that sequence is elaborated it offers a real prospect of fitting the structures of Welsh hill-forts into a relative chronology based on sites in better furnished territories. Mr. Hogg has already pointed to possibilities in this direction with his attempt to relate the defences of Welsh hill-forts with those of the Marches, [42] and at this conference drew attention to the different groupings of hill-forts along the Welsh coast. In his North Cardiganshire group, Pen Dinas has been picked out for its Border affinities. Sites of that kind should provide the framework for an Iron Age sequence in western Wales, which may be integrated in the course of time with Irish sites like Downpatrick that demonstrate a complex history. [43]

In conclusion I want to acknowledge my debt to the many colleagues and friends who have dug into and argued about hill-forts with me, and to thank especially Professor C. F. C. Hawkes for his patience and sympathetic criticism on numerous occasions.

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35   Hogg, A. H. A., 'Garn Boduan and Tre'r Ceiri',   *Archaeol. J., 117* (1960), 22.

36   Wainwright, G. J., *Coygan Camp* (Cardiff, 1967), 25-26.

37   Unpublished excavations (1966) by the writer. I am indebted to Professor F. W. Shotton (Dept. of Geology, Univ. of Birmingham) for arranging the radiocarbon analysis of charcoal from cremation pits,   of which the relevant samples are: Birm. 64 (1560 ± 180B.C.), Birm. 63 (850 ± 71 B.C.), and Birm. 62 (762 ± 75 B.C.).

38   Gelling, P. S. and Peacock, D. P. S., 'The pottery from Caynham Camp, near Ludlow', *Trans. Shropshire Archaeol. Soc., 58* (1966), 96-100.

39   Forde, C. D. *et al.,* 'Excavations at Pen Dinas, Aberystwyth',   *Archaeol. Cambrensis, 112* (1963), 146, fig. 10.

40   It is clear that the dating of some Continental inturned entrances to the 1st century B.C. (Dehn W., 'Zangentore an Spätkeltischen Oppida',   *Památky Archeologické, 52*, 390) is not to be extended to all British inturned entrances; Dehn himself allowed for some to be earlier.

41   Hodson, F. R., 'Cultural Grouping within the British pre-Roman Iron Age', *Proc. Prehist. Soc., 30* (1964), 103.

42   Hogg, A. H, A., *op. cit.* (1965).

43   Proudfoot, V. B., 'Excavations at the Cathedral Hill. Downpatrick'.   *Ulster J. Archaeol., 19* (1956), 57-72.

IRISH HILL-FORTS

BARRY RAFTERY

STUART PIGGOTT HAS WRITTEN '. . . the hill-fort, in one form or another, becomes the most typical field monument of the Celtic world from about the second century B.C. onwards from Iberia to Romania, from the Midi to the Baltic'. [1] The undoubted significance of the hill-fort as a means of throwing light on many of the problems of Iron Age research has been emphasised by the not inconsiderable concentration of research on these structures both in Britain and on the European mainland.

In Ireland, however, an island with a continuous tradition of Celtic occupation from the last centuries B.C. at least, the position is unfortunately otherwise. In this country the study of hill-forts has up to now been almost completely neglected. Seán P. Ó Ríordáin, writing in 1943, stated: 'These (Irish) hill-forts are presumably related to the enormous Iron Age hilltop camps of Britain, though, since none has been excavated in this country, we cannot speak with certainty of their date'. [2] Joseph Raftery, in his comprehensive work on Irish prehistory, written in 1951, considered the Irish Iron Age without once referring to the hill-forts as a type in Ireland [3]. Ralegh Radford in 1963 stated that '. . . in Ireland the hill-forts . . . are virtually lacking', [4] while two years later Françoise Henry wondered whether 'larger hilltop enclosures (in Ireland) may be the equivalents of the *oppida* of the Continental Celts'. [5] Most recently Estyn Evans had to confess to the general lack of knowledge of Irish hill-forts when he speculated: 'though some of the hill-forts should date to this time (the Early Iron Age), the archaeological evidence is meagre. The great Celtic hill-forts which in England were first constructed as univallate defences *c.* 300 B.C. have few parallels in Ireland . . .'. [6]

These few quotations illustrate how poorly have hill-forts fared in Irish archaeological studies. Not only is almost nothing known about them as a group but their very existence as a specific type is at times only grudgingly admitted. Clearly, the task of elucidating the many problems of the Irish hill-fort is an immense one, which can only proceed effectively if large-scale excavations are undertaken. Happily, this is already under way at four Irish sites.

This paper makes no claim to solve any of the outstanding problems. Rather will it pose questions without attempting solutions. It is an attempt to summarize in a brief form our present knowledge of Irish hill-fortsas based on extensive field surveys carried out by the author and on his intensive perusal of the available literature, limited though that is. [7]

The first problem which one encounters when attempting to discuss these monuments is the basic one, that of definition. It must be clear what exactly is meant when the term 'hill-fort' is used. The uncertainty of the definition is felt everywhere, but is even more pronounced in Ireland, where a multiplicity of enclosed settlement types abound in an embarrassingly rich and diverse assortment.

37

The normal type of habitation in Ireland in protohistoric times and later is the so-called ringfort, a fairly small, usually circular area enclosed by stone or earthen ramparts. These sites are normally considered to have been small, family farmsteads, the surrounding banks, though often quite imposing, being considered as protection against wild animals or thieves, or as helping to fulfil man's fundamental psychological need to secure himself and his property within some sort of wall or fence, not necessarily in terms of military or strategic significance.

Ring-forts housed families of varying degrees of wealth, so that some raths are more impressively constructed than others. Sites such as Garranes [8] and Ballycatteen [9] in Cork, Staigue [10] in Kerry or Moneygashel [11] in Cavan may thus, perhaps, be taken as belonging to the wealthier in the community. Certainly, the imported wine flagons at the two Cork sites indicate that the wealth and importance of the occupants was above average. Possessing this wealth, they had both the means and the need to construct strong defences. The latter are, however, of economic rather than martial significance. It is, in the writer's opinion, incorrect to refer to such structures as hill-forts, as has, in fact, been done on several occasions.

Ring-forts do not normally occupy dominant or commanding positions except, perhaps, in ill-drained districts where the only places suitable for habitation were the more elevated areas. In drumlin country, especially, ring-forts are often situated on the tops of these rounded, glacial hills though, as Oliver Davies has noted, raths also occur frequently in the more sheltered positions on the slopes just below the summit. [12] None the less, though often in quite dominating positions, such structures are not hill-forts, by our definition. They do not in any sense attempt to encircle the hill with their ramparts and they retain their basic circular shape and small size. This distinction was noted sixty years ago by Thomas J. Westropp when, writing of the Tulla region of Clare, he said, 'the most striking feature in this district is the number of low, rounded, green hills . . . nearly every one of which is crowned by an earthen fort. These are not in any sense contour forts, not following the natural lines of the hill but are usually oval or round . . .'. [13]

Far greater problems arise, however, from a discussion of sites in the south and west of Ireland where small *cashels* (ring-forts built of stone) are situated on the summits of steep-sided rocky outcrops. For instance at Leacanabuaile, near Cahirciveen, Co. Kerry, [14] and at Carraig Aille, Lough Gur, Co. Limerick, [15] small stone structures of the ringfort type crown the summits of steep rock outcrops, three of the sides at the Kerry site in particular being positively precipitous. Here, a considerable degree of natural defence is provided by the chosen situation. But whether this was a consideration secondary to the need for a dry site or whether such sites were chosen purely for the not inconsiderable degree of defence which they provided, is a matter for conjecture. Whatever the reason, it is clear that those who constructed the two sites mentioned were not hill-fort builders. In neither case is the full potential of the site exploited; in fact, at Leacanabuaile the wall which encloses the buildings is set some considerable distance from the edge of the precipice and the entrance faces that part of the hill-slope where it is most gradual and where ascent is easiest.

At Cashlaungar, Co. Clare, a rock bastion rises almost vertically on all sides for a height of some ten metres. [16] A small, though strong, *cashel* crowns this outcrop and its walls closely hug the edges of the rock summit and continue the cliff-face vertically upwards for another two metres.

Sites such as the three mentioned above—and the list could be extended—underline the difficulties of an unambiguous definition of what a hill-fort is. Cashlaungar, for

instance, though certainly constructed in what seems to have been a deliberately defensive position and though clearly exploiting this situation to its fullest extent, is nevertheless a family homestead; its small size (internal dimensions, 40 m. by 27 m.) and its general affinities with the more normal type of *cashel* suggest that it and other sites with similar characteristics should not properly be included in a discussion on hill-forts.

   The great cliff-top fortresses of rugged western areas are sites which, in contrast to those referred to above, clearly have a significance which can only be understood in tribal and military terms; as such they are without any doubt related to the hill-forts. Indeed, Dún Aengusa on Inishmore, Aran, Co. Galway, with its triple walls, its *chevaux de frise* and its exposed position high above the storm-prone, brooding Atlantic, demonstrates an almost obsessional desire on the part of the long-dead inhabitants for maximum security and safety. [17]

   Irish sea-girth promontory forts form a clearly definable group of defended settle-ments around our coasts. [18] Approximately two hundred examples are now known, their distribution, perhaps, being governed only by the presence or absence of suitable promontory sites. Whereas this group of sites may well be Iron Age in origin and may well be related in some way to the far less frequent hill-forts in the interior of the country, the writer does not propose to discuss them specifically here in a paper devoted primarily to the inland structures.

   From this varied and heterogeneous group of defended settlements the hill-fort stands out as a distinct and recognisable entity. In Ireland these monuments are seen to be extensive areas of land within one or more ramparts of earth or stone, defending, it must be assumed, rather than merely enclosing a hill-top or other strongly defensible natural position. The size, situation and magnitude of the defences of the hill-forts must denote centres of tribal rather than of family significance. In most cases the hill-fort may be regarded as having had, primarily, a defensive function, though in some ex-ceptional cases religious importance or significance as places of inauguration or assem-bly may have contributed paramount distinction. The exact use to which the enclosed area was put is a matter of conjecture. It seems probable that most of the hill-forts constituted settlements of quite considerable size, but there seems little, if any, evidence that they ever achieved the status of towns. In the writer's opinion they are hardly to be regarded as places of temporary refuge to be occupied only in time of danger (though the exceptional site of Caherconree, Co. Kerry, situated at a height of 2050 feet in the mist-clad Kerry mountains, could, perhaps, be so regarded). There is, it seems, no evidence in the early literature of Ireland for places of temporary refuge being con-structed and the often impressive ramparts surrounding ring-forts and the frequent presence of souterrains associated with these structures does not imply that they were to be precipitately abandoned in favour of the larger hill-forts when danger threatened.

   When compared to the many thousands of small enclosed homesteads which exist in Ireland and the considerable numbers of hill-forts which exist on the Continent and in Britain[19] the number of hill-forts in Ireland is surprisingly small, even allowing for the virtual certainty that many more examples await discovery through air photography and detailed survey. The author has now been able to identify approximately forty sites in Ireland which can be included in the hill-fort category. They may be divided into three main classes:

   Class I: Simple univallate sites of earth or stone, with or without an accompanying ditch.
   Class II: Sites with widely-spaced, multivallate defences: (a) hill-top; (b) cliff-top.
   Class III: Inland promontory forts.

There is some doubt in the author's mind as to whether a group comprising a number of small sites which apparently have indications of closely-set multivallation should be included as an additional class. These sites are at Dunbeg, Co. Down, [20] Glasbolie, Co. Donegal [21] and Clogher, Co. Tyrone. [22] However, a close examination of these three sites suggests that they may not all belong to the normal type of closely-set, multivallate hill-fort as represented by the so-called Iron Age B forts of southern Britain. They appear, in two instances at least (Dunbeg and Glasbolie) rather as elaborate examples of the more normal univallate group with the addition of a counter-scarp-type rampart: in both of these, the outer rampart is far more massive than the inner and, in these two instances at least, this may be due simply to the very steep slope of the hill. The site at Clogher is more complex and is the nearest approach in an Irish hill-fort to the classic Maiden Castle type of defence. But Clogher, with its internal ditch and its interesting internal mounds, is something quite different from the others, and is so far unique in Ireland.

At the time of writing, some twenty sites have been isolated by the writer which can be assigned to Class I, as outlined above. These vary considerably in size from as little as an acre in extent at Dunbeg, Co. Down, to almost forty times that area at Dún Ailinne, Co. Kildare (Pl. II). They also vary considerably in plan, structure and situation. Defences may consist of a simple stone rampart as at Brusselstown Ring, Co. Wicklow (Pl. III), which is a large, oval hill-fort with axes measuring about 300 m. by 190 m. On Dunmurry Hill, Co. Kildare, on the other hand, there is a pear-shaped fort, consisting of what appears to be an earthen bank with faint traces of an external ditch enclosing an area measuring some 350 m. by 220 m. Excavation at Cathedral Hill, Downpatrick, Co. Down, revealed an earthen rampart strengthened by the addition of a strong, timber framework, within the body of the bank. [23] This feature may, of course, exist elsewhere also but only excavation can reveal its presence. Rath Maeve at Tara, Co. Meath, is a circular enclosure approximately 230 m. in diameter, consisting of a massive earthen bank with a silted-up external ditch. [24] A similar structure exists in Garrangrena Lower townland, near Borrosoleigh, Co. Tipperary, where a steep-sided hill, 1050 feet high, is defended by a circular bank and external ditch enclosing an area 165 m. by 145 m. [25] Other univallate sites which may be mentioned are at Mount-fortescue, Co. Meath, [26] Magheraknock, Co. Down, [27] and Freestone Hill, Co. Kil-kenny[28].

Lyles Hill, Co. Antrim, is here being included tentatively in the list of Irish hill-forts. [29] The excavator of the site felt convinced that the enclosing rampart and the hilltop cairn were constructed at the same time, that is, in Neolithic times. This view was questioned immediately by Professor M. J. O'Kelly of University College, Cork, who felt that this must represent a two-period site, the rampart constituting the defences of an unfinished Iron Age hill-fort. [30] Professor Evans in his excavation report used as the basis for his hypothesis the great number of Neolithic potsherds which were found incorporated in the bank, the flimsy nature of the latter, the unnecessarily wide and undefended en-trance and the complete absence of any evidence of Iron Age occupation on the site. However, in view of the undoubted evidence for extensive Neolithic occupation of the hill any bank constructed after the Neolithic occupation could not have avoided in-corporating within its structure considerable quantities of Neolithic material—pot-sherds, flints and so on. The flimsy rampart and the wide entrance could be explained by Professor O'Kelly's suggestion that the site was unfinished; but it may also have been that the now apparently modest rampart could have served merely as foundation for the quite substantial timber palisade, evidence for which was found on excavation. No
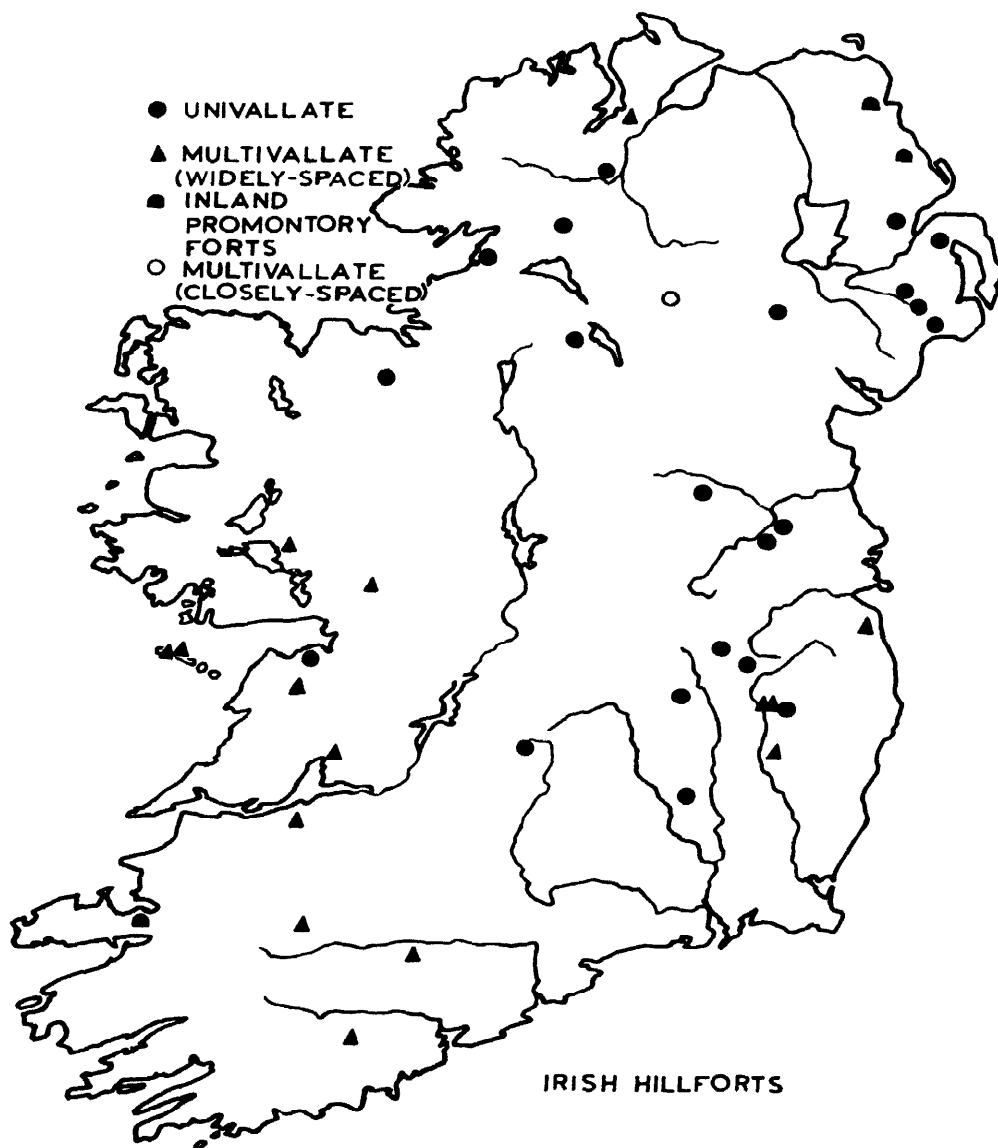
Legend:

● UNIVALLATE

▲ MULTIVALLATE (WIDELY-SPACED)

◖ INLAND PROMONTORY FORTS

○ MULTIVALLATE (CLOSELY-SPACED)

IRISH HILLFORTS

Fig. 14
Preliminary distribution map (1969) of Irish hill-forts

evidence for Iron Age occupation was found with the possible exception of the coarse ware, but it should not be overlooked that only a minute percentage of the total area was excavated. Traces of Iron Age activity could easily have escaped detection through this selective excavation. As Geoffrey Wainwright has recently warned in relation to his extensive excavation of a Durotrigan farmstead at Tollard Royal in southern England, 'we cannot generalize from a limited, selective excavation'. [31] Had he restricted the scope of his excavation instead of investigating the site completely, as he did, he would have got a totally different picture. Habitation at Tollard Royal happened to be concentrated in the western and southern sectors and a selective excavation of the site in those two areas alone would have exaggerated the intensity of occupation. Excavation in the other sectors alone would probably, in the absence of Iron Age material, have caused the earthwork to have been designated a stock enclosure. The writer feels that this is probably what happened at Lyles Hill, and is in agreement with Professor O'Kelly that the enclosure belongs to a period later than the cairn and that it should be included in a catalogue of Irish hill-forts dating several millennia later than the Lyles Hill cairn.

Another enigmatic site is a truly remarkable structure of stone on an exposed limestone ridge high up in the Burren country of Co. Clare. This is a large, roughly hexagonal enclosure measuring about 235 m. by about 200 m. in maximum length and breadth and situated at an altitude of some 800 feet, five miles east of Ballyvaughan. [32] The site is astounding not only for its unique situation on a high ridge of naked limestone, accessible only with difficulty, but also because it had at least nine and perhaps as many as fourteen entrances originally. For much of its perimeter the wall of large limestone slabs follows the edge of a steep-sided (though not very high) precipice. Only to the south and south-west, in the direction of the summit of Turlough Hill (which is crowned by a large cairn), Co. Clare, does the rampart run across flat land. Nine of the entrances are slab-lined, as at Mooghaun, Co. Clare, Rathgall, Co. Wicklow, and elsewhere, and it seems that originally both inner and outer faces of the enclosing wall were similarly defined by large limestone slabs. What was the function of this great site? What is its date? Does it belong to the univallate hill-fort group or is it perhaps linked in some way with the cairn which lies nearby? These are questions which, perhaps, can never be answered satisfactorily; there is now no soil covering left on the rock so that excavation which could have produced a solution to these questions is an apparent impossibility.

In the definition given on page 39 above it was implied that the majority of Irish hill-forts were basically defensive structures but it is conceded that the real significance of a smaller number may have been in their use for places of assembly and religious ceremonies, In this category, may, perhaps, be included the noted royal sites of Ráth na Ríogh, Tara, Co. Meath, Emain Macha (Navan Fort), Co. Armagh and Dún Aillinne (Knockaulin), Co. Kildare (Pl. II). These sites are inextricably linked with our early Celtic mythology and are referred to again and again as places of inauguration and assembly. In addition, each of the three possesses an internal ditch, a feature which seems inexplicable in military terms, but which does occur associated with the so-called henge monuments of Neolithic—Early Bronze Age date. A section cut across the bank and ditch at Ráth na Ríogh by the late Professor Seán P. Ó Ríordáin revealed, immediately inside the ditch, a substantial trench, interpreted as being for a palisade and this can only have had defensive significance. [33] A drawing of the section is preserved in the Department of Archaeology, University College, Dublin, and was examined by the writer. [34] It seems to suggest that the palisade was erected subsequent to the silting-up

of the ditch, and thus that the palisade was later than the bank and ditch. The problem is, therefore, further complicated, for Ráth na Ríogh was clearly a multi-period site. Are bank, ditch and palisade all phases belonging to the hill-fort period? Certainly that Tara was important from Neolithic times onward is shown by the presence of a Passage Grave (Mound of the Hostages) dating to about 2000 B.C. [35] The fine gold torcs—whether from the Rath of the Synods or not—indicate continued attention of some sort being paid to the hill in the Bronze Age and the Rath of the Synods, with its complex series of palisades and interments, denotes considerable activity here in the early centuries A.D.

It seems clear that at Tara, at least, the site was from earliest times one of extreme religious significance and it is probable that this veneration continued unbroken, and, indeed, probably increased, in the Iron Age. This may well be the case at Emain Macha and Dún Ailinne also. Whether these places became the sites of actual settlements on any large scale as well is a matter of conjecture. The *Dindshencas,* which devotes four lengthy poems to Tara, refers to great numbers of houses and legions of warriors existing within the ramparts. [36] This may, of course, be dismissed almost completely as poetic licence, written some considerable time after the site had fallen into disuse; there may, however, be a dim folk memory embodied in the exaggerated descriptions. recalling great numbers of people dwelling within the defences.

Apart from these three great sites, two others, Clogher, Co. Tyrone, [37] and probably Lisnaskea, Co. Fermanagh, [38] are also characterised by internal ditches. It is possible that these structures may also have had some religious importance. It is hardly likely that the internal ditch can be dismissed merely as 'the Irishman's perverseness . . . or his laziness in preferring to shovel earth downhill' [39]. This is far too facile an explanation. In the past, whenever a feature of a prehistoric site was inexplicable to nineteenth or twentieth century minds, it was interpreted as being of 'ritual significance'. Today one uses this explanation with more caution. There can be no doubt, however, that ritual practices were extremely important to prehistoric man and filled a large part of his life. For the protohistoric period there is ample literary evidence to strengthen this belief. It seems, therefore, not unreasonable to ascribe to the sites discussed above a ritual distinction which, more so than the simple properties of defence, gave these sites their especial, far-reaching significance.

The five sites with internal ditches are further linked by having in each case a burial mound of some sort within their defences. Only at Tara has the date of the mound been definitely established but there seems to be no reason not to believe that the mounds at the four sites were prehistoric also. This apparent coincidence of two different types of monument is not confined to these five sites. No less than eight other Irish hill-forts are characterised by this feature. Lyles Hill, Co. Antrim, has already been referred to. At Cam Tigherna, Co. Cork, a large cairn on the summit of the hill produced a lidded Food Vessel.[40] The rounded, granite boss of Baltinglass Hill, Co. Wicklow, encircled by the impressive hill-fort of Rathcoran, bears on its highest point the remains of a simple Passage Grave. [41] Within the hill-fort on Croaghan Hill, Co. Donegal, there is what is probably also an unopened Passage Grave. [42] At Freestone Hill, Co. Kilkenny, excavation revealed a Cemetery Cairn of the earlier Bronze Age which had been extensively disturbed by the Iron Age hill-fort-builders. [43] Dunmurry Hill, Co. Kildare, [44] Mountfortescue, Co. Meath, [45] and Glasbolie, Co. Donegal, [46] have burial mounds of unspecified type within their defences.

In view of what has been said about the obvious continuation over a wide range of time of the importance of the Hill of Tara, it seems hardly reasonable to dismiss this interesting phenomenon—which occurs in one third of the known hill-forts—as merely

a result of two groups of people seeking similar hill-top positions at differing periods of time for completely different reasons. In Celtic mythology the great Passage Graves in the Boyne Valley and at Lough Crew figure prominently. Indeed, the Iron Age occupants of Ireland regarded these impressive monuments with as much awe and wonder as is felt even in the sophisticated atmosphere of the twentieth century. The carved bone plaques which were discovered in such quantities at Cairn H, Lough Crew, further emphasize the connection between the two cultural groups.

It seems, thus, a reasonable hypothesis that the hill-fort people were drawn to particular hills because of some pre-existing sanctity emanating from them, on account of the presence on their summits of earlier sepulchral monuments. That this need not necessarily be true in *every* case, however, is demonstrated by the treatment which the cairn received at Freestone Hill.

A further interesting development from this theory of continuity extending from quite a considerable time in antiquity is the possibility of a continuity of actual population groups from megalithic to hill-fort times. This suggestion has been hinted at most recently by Professor Francis Byrne who wrote that the coincidence 'is a most impressive body of evidence which has been strangely ignored in learned discussion of the Celtic invasions'[47]. . . This will be referred to further below.

The univallate group of hill-forts has a markedly restricted distribution (fig. 14). Apart from a small example near Tobbercurry, Co. Sligo (Muckelty Hill), the enigmatic site on Turlough Hill, Co. Clare, a few sites in Donegal and Fermanagh and a single example in north Tipperary, all the rest are concentrated in the eastern half of the country in a belt stretching from Co. Antrim to Co. Kilkenny. This distribution seems more than purely fortuitous. The almost complete absence of such structures in the western and southern parts of the country is surely significant and it is submitted that future discoveries of as yet unrecorded hill-forts will not alter this pattern in any significant manner.

The distribution of univallate hill-forts tends to strengthen the idea of basic cultural unity amongst the inhabitants of the single-ramparted forts. Another interesting feature which has been adverted to above, is the presence of burial mounds in many of these structures. In fact, of the thirteen instances where such burial mounds occur only Clogher, Rathcoran and possibly Carn Tigherna are not in their present form true univallate sites. The distribution of such two-period enclosures is thus also largely an eastern one and tends to add weight to the concept of the homogeneity of the series.

Class II forts with widely-spaced, multivallate defences are somewhat less numerous than the group just discussed, but if there were any doubt as to the validity of referring to the first class as a unified group there can be little or no doubt in this respect regarding the Class II group. The idea of planning a fort with a complex system of widely-flung fortifications is completely different in terms of function and basic defensive strategy from either the univallate sites or those which are defended by closely-set multivallate earthworks. Moreover, the relatively confined distribution in the west and south of the country (with a small number of outliers in Donegal, Dublin and Wicklow), in areas almost completely devoid of univallate sites enhances the validity of considering them as a unified group.

The distribution pattern for multivallate forts (fig. 14) cannot under any circumstances be explained merely in terms of environment. It is wrong to say that western, stony areas produce widely-spaced, multivallate sites while more fertile areas produce sites defended by single ramparts. In the first place, the elaborate defensive system is a product of a carefully developed idea which envisages a particular type of attack and a

particular type of defence. Secondly, these forts are not confined to stony areas merely and are not all constructed purely of stone. At Cashel Fort in Co. Cork earth is used in the inner rampart and at Rathgall in Co. Wicklow the outer defences are partly of earth while the inner consist of a combination of earth with stone facings. Only the innermost of the four ramparts is exclusively of stone. Facile judgements in terms of now discredited environmental determinism have no validity whatever.

A more serious problem, which poses itself, however, is namely, whether these complex sites are the result of a single building phase or whether they acquired their multiple ramparts as a consequence of rebuilding and expansion. It is difficult to answer the question adequately without proper excavation, but it seems to the writer that the Class II sites may well be single-period constructions. In most cases, their ground plans —each characterised by a small central 'citadel' with a number of outer concentric enclosures—are so closely similar and their distribution so confined that it seems not unreasonable to consider these as one-period units. Grianan Aileach, Co. Donegal, is a possible exception to this generalised rule and may be a two-period fortification: however, the distinction between the very worn outer ramparts and the central *cashel* may be quite exaggerated because of the modern complete reconstruction and conse- quent imposing appearance of the latter. [48]

Fifteen examples of Class II forts are now known. These include thirteen of the more normal contour structures (which may, for convenience, be called *Class IIa)* and two cliff-top forts *(Class IIb)* which, on account of their strong, multivallate defences and impressive situations, cannot be divorced from a discussion on hill-forts. The largest and most massive hill-fort in Class IIa is the great fortress of Mooghaun, Co. Clare (fig. 15). Though only some 200 feet above sea-level this great structure has a wide view on all sides except where the dense modern vegetation cover, which mars the true magnificence of the site, obscures the view. To the south the Shannon estuary is plainly visible. This fort consists of three tumbled-down but still awe-inspiring stone ramparts, enclosing a total area of some 45 acres. The maximum overall dimensions are about 460 m. by 340 m. The two outer lines of defence surround a roughly oval area, and follow, partly at least, the outlines of the hill. The innermost enclosure is, however, almost circular, with internal axes 96 m. and 102 m. There is a considerable number of gaps in the walls but it is not clear how many of these are original, apart from the few which are lined with limestone slabs. There are two well-built stone *cashels* constructed over the ruins of the hill-fort ramparts in the western part of the fort and these are quite clearly secondary to the construction of the latter. Cashel Fort in Co. Cork is a large bivallate example of Class IIa; overall it measures about 375 m. by 300 m., [49] while Cahermore, Co. Mayo, and Cahermore, Co. Galway, [50] are similarly bivallate, circular hill-forts, each having a diameter of some 175 m. On the island of Inishmore, Aran, Co. Galway, apart from the renowned cliff-top fort of Dún Aengusa, there is a small, though very strong, fortress known as Dún Eochla, which dominates the highest point in the centre of the island. [51] An outer oval wall, about 80 m. by about 60 m. in extent, surrounds an inner, circular *cashel* measuring 28 m. by 23 m. internally. Caherdrinny, Co. Cork, seems also to have been a hill-fort of this type originally, though now, to a large extent, obliterated. [52] Grianan Aileach, Co. Donegal, with its four ramparts enclosing a roughly circular space 170 m. in diameter and covering an area of five and a half acres, has already been referred to. Lisbane Fort in Co. Limerick (Pl. IV) is so small (maximum diameter only 75 m.) that its inclusion is a subjective matter, but it is impressively situated around the contours of quite a steeply-sloping hill. [53]
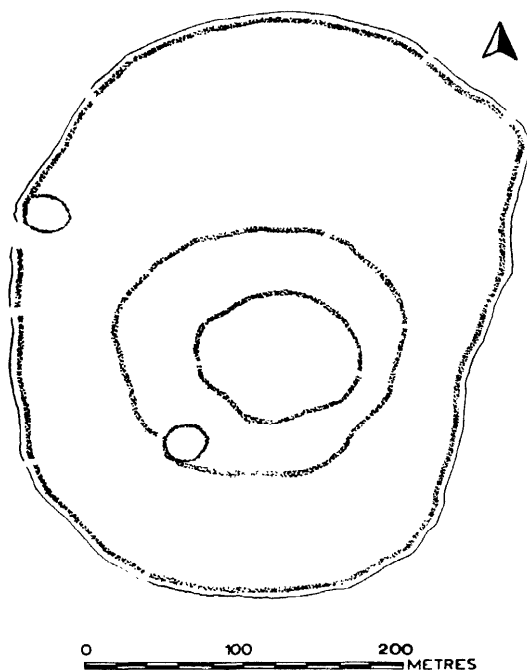
Fig. 15
Class IIa hill-fort, Mooghaun, Co. Clare

In the eastern half of the country there is a small number of multivallate hill-forts. The most notable of these is at Rathgall, Co. Wicklow. Here there are four ramparts, the maximum diameter being about 310 metres. The innermost enclosure is a small, circular *cashel* with wall of drybuilt, granite boulders; it is about 45 m. in diameter internally.[54] Rathcoran, on Baltinglass Hill, Co. Wicklow, does not have a central circular 'citadel' as do the majority of the multivallate forts, but its two massive ramparts are separated by a distance of approximately 30 m. so that the site may be included among the Class II structures.[55] The dimensions of the oval area enclosed by these ramparts are about 380 m. by 300 m. Six hundred metres from Rathcoran, on the north-west slopes of the same hill, is Rathnagree, a trivallate site approximately 270 m. in diameter with a small, central, circular enclosure (Pl. VI).[56] This site is unique in Ireland in that it is, in fact, technically a hill-slope fort, completely dominated by the main peak of Baltinglass Hill, though it does take as much advantage as possible of the quite steep slopes to the north, east and south of it. At Rathmichael in Co. Dublin there is also a bivallate fort situated at the end of a granite ridge, with a central circular area. Its maximum overall dimensions are 150 m. by 140 m.[57]

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Class III comprises inland promontory forts, i.e. sites where the natural defences are such that artificial defences are only required along one side of a steep-sided plateau. Since such sites are even more difficult to detect on the ground than are even contour hill-forts it is probable that the few examples here referred to will be considerably added to through future field-work. Oliver Davies' 'promontory raths'—since they clearly belong to the *einzelhof* class despite their situation —are not being included in this category.[58]

Lurigethan, Co. Antrim, situated 1154 feet high on a basalt plateau, is the most impressive example of this group (Pl. V). [59] The plateau is practically precipitous on three sides, so that defences are required along a single slope only. These defences consist of four, at times six, closely-spaced ramparts which follow the contours for some 400 m. along the top of the spur. The nearby site of Knockdu, Co. Antrim, is also an imposing example of this type. [60]

Caherconree, situated in the Dingle Peninsula in Co. Kerry, is a magnificent specimen of the Class III monument. [61] It is the highest hill-fort in Ireland, built at an altitude of 2050 feet above sea-level. Here there is a triangular spur, defined by almost vertical cliffs on two sides. The third side is defended by a stone wall 110 m. in length which curves outward. About ten metres outside it there is a fosse and originally it seems that there were internal chambers in the wall. The total area enclosed is scarcely two acres.

From what has been written above it has been demonstrated that, though there is considerable variety in detail, there are, nonetheless, three clearly defined groups of Irish hill-forts. Despite the often quite large size of the forts and the elaborate defences of some, especially the Class II structures, one is, however, struck by the essential simplicity in structural detail of the majority of the Irish forts when compared with their counterparts outside the country. This general scarcity of diagnostic features renders extremely difficult the task of providing convincing foreign parallels and this is especially acute when discussing the univallate sites.

The feature most strikingly absent in Irish hill-forts is any sort of an elaborate entrance. Almost without exception, entrances are simple gaps. Only at Dunbeg, Co. Down, is the entrance strengthened by an out-turning of the ramparts. [62] At Clopook, Co. Laois, the entrance proper is also a simple gap in the rampart, but in front of it there may be a protective double bank; the site is, however, now so overgrown that, without considerable clearance, it is not possible to be certain of the details. From the plan preserved by the Ordnance Survey the exact nature of the entrance features are not evident.[63]

Inturned entrances, so characteristic of late La Tène hill-forts in Britain and on the Continent, are completely absent from any Irish hill-fort. The only possible inturn in any Irish structure is in the great defensive earthwork which encloses a loop of the Shannon at Drumsna, Co. Roscommon. This impressive rampart, in places doubled and even trebled, is about 1600m. long. In places almost five metres high, it has two gaps, each almost 15 m. wide and each flanked by the inturning of the earthen bank into two parallel arms. The function and date of this monument are unknown. [64]

It has already been pointed out above that closely-set multivallation in its classic southern British form is extremely rare in the Irish hill-forts. The monument at Clogher, Co. Tyrone, seems to posses this type of defence and, of course, Lurigethan and Knock-dhu in Co. Antrim are typical examples. Otherwise, however, it is apparently absent. This is all the more surprising in that this defensive device occurs quite often not only in the Irish coastal promontory forts but also in the much smaller ring-forts of the country.

R. E. M. Wheeler looked to the Venetic defeat by Caesar in 56 B.C. for the origin of this distinctive type of defence at Maiden Castle, and he felt that it was developed as a result of the extensive use of the sling in warfare. [65] A. L. F. Rivet, however, has suggested that multivallation of this type and sling warfare need not necessarily be directly connected. He writes: 'The sophisticated engineering of Maiden Castle, which includes slingers' platforms as well as graded ramparts, . . . represents the adaptation of an already-current defensive practice to meet the growing threat of sling warfare . . .'. [66] It seems clear that multivallation came to Britain at least a century before Wheeler's postulated date for the Maiden Castle 'Southern Third B' phase, and that the latter is an insular development resulting from these early influences. The area of ultimate origin, however, may well be the Breton peninsulas with their elaborate promontory structures. [67]

Assuming, however, that closely-set multivallation *is* a defensive technique, and a very sophisticated one at that, it is legitimate to ask why it is present in some Irish structures (many of which are basically family homesteads) and, for the most part, absent in hill-forts which are, presumably, the most defensive of the Irish enclosed settlements. Does this imply some distinction between the main types of Irish structures —a distinction chronological or even cultural? Whatever other conclusions may be arrived at, it seems that, with a few possible exceptions in the north-east of the country, influences from Britain do not seem to be very noticeable. Only the eastern distribution of the univallate sites could be taken in the absence of other evidence as an indication of westward moving influences from the neighbouring island. One might even postulate tentatively the existence of an 'Irish Sea Zone' based on the hill-fort 'evidence'.

But there is as yet no real evidence which will specifically link the eastern forts as a group with Britain. Structural links are, in fact, conspicuous by their absence. Viewed chronologically or culturally, the timber lacing at Downpatrick does not seem to point in any particular direction. [68] The only fully excavated site so far, Freestone Hill, Co. Kilkenny, though producing provincial Roman bronzes, cannot be definitely ascribed to invaders from Britain.

Indeed, it is a moot point whether the hill-fort, *per se,* must reflect large-scale invasions or migrations into the country. In Britain this premise has been tacitly accepted since Hawkes' great pioneering work on the British Iron Age. [69] But recently, this hypothesis has been questioned and it seems that the importance of the indigenous population groups has been largely underestimated. [70] An insular development, possibly inspired or spurred on by the presence of small bodies of intruders, but nonetheless, basically a product of native groups, is inherently likely. The presence of megalithic burial mounds in so many hill-forts, as well as the indications of Late Bronze Age occupation at a number of the hilltop sites, also seem to point to a basic continuity.

For the Class II multivallate sites it is equally difficult to find convincing parallels. There are superficial resemblances in the so-called 'citadel forts' of Scotland, though in detail these do not seem to be altogether satisfactory, since 'it has become clear that the citadels were constructed at a later date than were the larger fortifications. Further, it appears that in most cases, if not all, the latter were not kept up after the citadels were built, so that the term citadel does not strictly apply'. [71] However, forts with widely-spaced multivallate defences do occur in Scotland. Sites such as White Caterthun in Angus,[72] Arbory Hill fort in Lanarkshire, [73] the Brown Caterthun in Angus, [74] are all reminiscent of the Irish forts under discussion. It may well be that there is a cultural link between the two groups of fortifications, though the direction in which any such influences may have travelled is as yet a matter of conjecture. It is interesting, however,

that on Island Mahee, off the Co. Down coast, there is a large stone *cashel* enclosing the (later?) monastic settlement of Nendrum. [75] This *cashel* has three widely-spaced ramparts typical of the Class II hill-forts of Ireland, and its sea-girth position between two areas where this type of structure occurs may be significant.

There is another area from which possible influences, conducive to the development of this type of defensive technique, may have emanated. The predominantly western distribution of the Class II structures (fig. 14) suggests in itself that the possibility that they are the result of movements along the western seaways must be considered,

In south-western Britain there exists a group of structures first isolated by Lady (Aileen) Fox and termed hill-slope forts by her. In plan they resemble the Irish sites; they are characterised by concentric, widely-spaced ramparts, and often have a small, roughly circular, central enclosure. They differ in many important details, however, from the Irish structures. First and foremost, their hill-slope situation contrasts sharply with the defensively-sited Irish hilltop sites. Rathnagree, Co. Wicklow (Pl. VI), though partly situated on a hill-slope and though quite clearly dominated by the adjacent high land, cannot be considered as a true hill-slope fort in Lady Fox's sense. It does, in fact, make considerable use of the contours and on three sides is flanked by steep slopes. Its lofty, exposed situation on the rugged granite hillside, moreover, does not suggest suitable terrain for extensive cattle-herding, a function ascribed to the south-west British forts by Lady Fox. Indeed, their whole *raison d'être* is explained by her in terms of a specialist pastoral economy. Such features as the successive weakening of ramparts inwards, the presence of discontinuous lengths of ramparts, of annexes, hollow ways, entrances flanked by club-ended ramparts, the deliberate incorporation of wells within the enclosed area, are all viewed by Lady Fox in this light. [76]

Though a direct relationship between the Irish and south-west British sites is unlikely, it is possible that both groups may have been inspired, in part at least, from a common source. It must be stressed at this juncture, however, that the Irish multivallate hill-forts can in no sense be interpreted primarily as cattle enclosures. Their massive ramparts and strategic situations are clearly defensive.

Lady Fox looked to Iberia as a possible source for her hill-slope forts, without, however, discounting the possibility of an exclusively insular development as a response to a specialist pastoral economy. [77] Evidence for contact between the south-western British peninsula and Iberia has of course, long been established by the evidence of duck-stamped pottery and Iberian La Tène I fibulae in Cornwall. [78] The plans of Iberian structures which Lady Fox reproduces after Dr. Ilid Antony are certainly reminiscent of some of the hill-slope forts [79] and it is also possible to compare them with Irish Class II structures. At Morgadan O Morgade-Lugo and Soltelino Orense, in north-west Spain, for instance, there is the suggestion of a small central, circular enclosure surrounded by widely-spaced outer ramparts, something which is quite at home on the Irish countryside. These forts occur in north-west Spain and were built in the sixth or fifth century B.C., though occupation continued there at least till the Roman conquest.

There is no direct evidence for contact between Ireland and Iberia in the later part of the first millennium B.C. However, the Atlantic routeways had long been important for Ireland in prehistoric times and their use is well attested in the archaeological material for several millenia before the birth of Christ. Literary evidence, such as the *Ora Maritima* [80] and the works of Tacitus, [81] Orosius, [82] Hieronymus [83] and others, all demonstrate the continued importance of these western routes and even imply direct contacts between Ireland and Iberia in the centuries around the birth of Christ.

A further feature which may hint at possible contacts between Ireland and the Iberian peninsula in Iron Age times is the presence at four western Irish sites of *chevaux de frise* defences. These are Dún Aengusa, [84] and Dún Dubhchathair [85] on Inishmore, Aran, Co. Galway; Ballykinvarga, Co. Clare, [86] and Dúnamo, Co. Mayo. [87] The first is a cliff-top fort of Class IIb type. Ballykinvarga is a strong, impressively sited circular *cashel,* while the other two are coastal promontory forts. In Britain there are at least three certain examples of this type of defensive feature. These are Pen y Gaer [88] and Craig Gwrtheyrn [89] in Wales, West Cademuir [90] in Scotland. Other possible examples occur at Dreva Craig, [91] Kaimes Hill [92] and the Fell of Barhullion [93] in Scotland. Apart from these examples, *chevaux de frise* occur only, it seems, in the Iberian peninsula. In that area, forts with this feature stretch in a belt across north central Spain into Portugal but so far none have been discovered in coastal areas. *Chevaux de frise* are, however, unknown in north-west Spain.

It is tempting to see in this feature evidence of direct links between Iberia and the western islands. Indeed, Hogg stated that 'it would seem almost certain that the British examples were directly derived from Spain'. [94] Presumably he meant to include the Irish sites in this comment as well. The basically inland distribution of the Iberian *chevaux de frise* could be taken as an objection to Hogg's view, allied to the fact that most of the British examples are also situated quite a distance inland. It has, moreover, been suggested to the writer that the stone *chevaux de frise* are merely a translation into stone of a technique widely current in wood at this period in western Europe. It must be conceded that these are possible objections. But they are hardly insurmountable, and the suggestion that the insular *chevaux de frise* are essentially skeuomorphic cannot in the present state of our knowledge be proven.

Without first-hand knowledge of the Iberian forts one cannot be in any way dogmatic as to similarities of plan and construction between them and insular examples. A number of resemblances between insular forts and north-west Iberian *castros* has been suggested above but the *chevaux de frise* is absent from the latter group.

Ballykinvarga is a site which can hardly be looked on simply as a small farmstead. It must have been the home of a band of warlike men, probably small in number, who quite clearly feared attack and who, by surrounding their *cashel* with many sharp limestone pillars, added considerably to their security. Not only are the *chevaux de frise* at this site interesting in themselves but in addition, the structure as a whole bears a remarkable resemblance to Chun Castle, Cornwall, which produced clear indications of contact with Iberia (duck-stamped ware) and was in fact considered by its excavator, E. T. Leeds, to have been built by colonists from north-west Iberia in search of tin deposits. [95] In addition to both being circular in plan the internal diameters of the inner enclosures of Chun and of the Clare site are almost identical. More interesting, however, is the arrangement of huts around the inner edge of the wall at Ballykinvarga in exactly the same manner as at Chun. Thus, structural similarities between an Irish and a Cornish site which itself has unquestionable links with Iberia, as well as the presence at Ballykinvarga of a particular type of defensive feature, which is found elsewhere almost exclusively in Iberia, must surely strengthen the case for an Iberian origin of the insular *chevaux de frise.*

In addition, one may point out that Chun has two ramparts with a space between. Thus there may again be a link between a site with Iberian connections and the Irish Class II forts, suggested already at Dún Aengusa. Unlike the British sites with *chevaux de frise,* the four Irish sites with this type of defence are decidedly coastal in distribution and, along with the Class II forts as a whole, this group has a marked western con-

centration. It seems inherently possible that they could be a product of movement along the western sea-ways from the Iberian peninsula. What particular form that movement may have taken is, of course, still a matter of conjecture. The fact that there are only four examples of *chevaux de frise* in Ireland and that influences from differing parts of the Iberian peninsula are possible in the Irish structures, might suggest small independent intrusions into western Ireland from Iberia introducing a system of defensive structure which was adopted by a native population who adapted the fort structures to their own liking and soon abandoned the *chevaux de frise,* a feature, which, perhaps, had little relevance in the context of small-scale insular warfare.

The problem of dating Irish hill-forts in general is rendered extremely difficult because of the limited amount of excavation which has up to now taken place. It is normally assumed that the hill-fort in these islands is a Celtic, Iron Age, phenomenon. The presence of the hill-fort is frequently taken as an index of Iron Age incursions into the country. This theory has been adverted to above as has the possibility that the Irish hill-forts are to a large extent a product of insular construction, though it is certain that stimuli from outside, in one form or another, were responsible for the rise and development of hill-fort building in Ireland.

But the hill-fort had a long life on the Continent, ranging in time from at least the beginning of the last millenium B.C. well into Roman times, so that the origins of the Irish hill-fort could well go back before the traditional dates for the establishment of the La Tène Iron Age in this country. If there be any truth at all in the postulated Iberian connection, any date in the last five centuries B.C. is possible for the inception of the multivallate sites. The south-western British sites date generally to the last two centuries B.C. and to the first century A.D. The only Irish multivallate site which has been excavated is the cliff-top site of Cahercommaun, Co. Clare. [96] The foundation of this site is ascribed to the ninth century, A.D., a date which, if applied to the hill-forts as a whole, would make connections with Iberia or, indeed, anywhere else, practically impossible. On the other hand, of course, the Clare fort could be considered as a late example in a long line of development stretching back a millennium or more.

One wonders, however, whether the date assigned to the foundation of Cahercommaun is altogether satisfactory. Hencken relies for this date mainly on three objects from the fort: a silver brooch, a fragment of an enamelled ring-headed pin and an incomplete penannular brooch with zoomorphic terminals. The silver brooch, however, whose date is reasonably secure, was actually found in a souterrain and, therefore, of itself can hardly date the *foundation* of the fort. It could conceivably have been deposited there at some period considerably later than the initial building of the site. Neither of the other two objects was stratified, and in any case neither can be securely dated.

Since Cahercommaun is the only Class II fort as yet excavated its date is important and thus a detailed examination of the dating evidence from that site is relevant.

Hencken begins his discussion of the finds with the silver brooch and having assigned it satisfactorily to about A.D. 800 *(op. cit.* pp. 27-30), he proceeds to the other objects, happy in the knowledge, it seems, that his site had already been securely dated and that the remainder of the discussion from the point of view of dating at least is merely a formality. The fragment of the penannular brooch with zoomorphic terminals is described as being 'a type of brooch with a long history beginning in the Roman period' and he continues that brooches of this kind 'would seem to have been disappearing by 800'. *(op. cit.* 34). He also compares it, though on rather tenuous grounds, to the Westmeath brooch now in the British Museum.

No attempt is made to date the iron pins *(op. cit.* 37) while the plain bone pins are

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'common in Ireland during the Christian period'. Dr. Hencken continues : 'their previous history in Ireland is unknown, but in Britain they appear with the beginning of the Iron Age at Scarborough . . .' (*op. cit.* 38). Of the decorated pins he states that they 'show a wide variety of shapes, many of which are familiar from other Irish sites of the Christian period, but as yet they are not dated with any precision in Ireland'. He adds that 'fig. 23, No. 231, is of Roman descent' (*op. cit.* 38).

   Hencken ascribes no dating significance to the plain blue glass beads 'such as were common in western Europe from the Iron Age onward' (*op. cit.* 40). The blue-glass bracelets, however, he feels 'can probably be dated to the latter part of VIII on the evidence of the Lagore Crannog' but he goes on to admit that 'such bracelets are des-cended from a type that occurs in Roman Britain at Verulamium, at York in the Roman Cemetery, at the fort at Newstead and elsewhere . . . *Examples dating from between the Roman period and VIII have yet to be recognised.'* (*op. cit.* 41-2: my italics).

   Hencken's only comment on the double-edged combs is that they belong to a type 'that appeared under the late Empire and were popular in the Migration and subsequent periods. All Irish sites of the Christian period yield such combs' (*op. cit.* 42). He goes on: 'There is nothing very distinctive about the cylindrical and the disc-shaped spindle whorls, but the hemispherical femur-head type occurs on Iron Age sites in Britain such as All Cannings Cross and Glastonbury. They also occur in the Bronze Age level at Ballinderry Crannog No. 2, Co. Offaly' (*op. cit.* 44).

   The iron barrel padlock 'was a Roman device. When it reached Ireland is unknown . . .' (*op. cit.* 46). The iron shears is 'another type of tool that begins in the Iron Age in western Europe. An early example, one of many in England, was found at Fyfield Bavant, Wiltshire' (*op. cit.* 48). In the same vein he describes the iron billhooks and says 'the type is an ancient one in these islands, similar ones of the Iron Age having been found at the Glastonbury and Meare lake-villages in Somerset, (*op. cit.* 51). The iron axe, too, 'resembles the common Roman axe of Britain more than Anglo-Saxon or Scandinavian examples and hence, *despite its late date is probably a type received much earlier from the Roman world'* (*op. cit.* 51: my italics). The iron tools with prongs and sockets are 'descended . . . from a more ancient type. A bronze one was found in the Roman fort of Saalburg and another from Italy, probably Roman, is in the British Museum' (*op. cit.* 53).

   The occurrence of stone axes has again many parallels on British Iron Age sites (*op. cit.* 55-56), while the 'pounding and rubbing stones of Cahercommaun type have been found on Iron Age sites in Britain such as the Glastonbury lake-village and All Cannings Cross as well as at the Bronze Age level at Ballinderry Crannog No. 2' (*op. cit.* 58).

   Rotary querns of 'late Roman or post-Roman date' were found, but also 'the archaic saddle quern of the prehistoric periods' which is dismissed cursorily as being retained for a type of milling different to that for which the rotary quern was used (*op. cit.* 60). Of the 524 whetstones recovered from the site only the rectangular, perforated ones are commented upon and since 'this type goes back to the Early Bronze Age' it is 'of no chronological significance' (*op. cit.* 60).

   The bone points, which may have been spear-heads, are briefly commented upon. Hencken says, by now predictably, that 'this type, like many others of the Christian Irish period appears in Britain during the Iron Age' (*op. cit.* 62).

   A small number of objects are treated slightly less equivocally. The iron knives, for instance, are 'generally distinguishable from Roman or Iron Age knives of the same general type' (*op. cit.* 46). The single-edged sword, too, is taken to be a late type (*op. cit.* 46).

This argument has been developed at some length but it is submitted that it is directly relevant to the problem of dating the multivallate hill-forts. Using Hencken's own discussion, it is quite evident that the basis for a ninth-century date is tenuous in the extreme. In almost every case adduced, this date is seen to be influenced entirely by the date of the silver brooch. It has already been pointed out above that, coming as it does from the souterrain, it is hardly justifiable to date the foundation of the fort by the brooch. It is small wonder that Hencken has to admit that 'despite the late date of the fort, numerous types of objects represent survivals traceable to the Roman Period, the pre-Roman Iron Age and even to earlier times' (*op. cit.* 2). There can be no doubt that the whole chronological structure of the period known loosely in Ireland as the Early Christian Period needs to be reassessed. Lagore, which is frequently adverted to by Hencken to support his late dating for Cahercommaun, must also come under scrutiny and it seems to the writer that this and a number of other Irish sites, hitherto dated to the second half of the first millenium, A.D., may well have to be back-dated by at least half a millennium.

From what has here been written it is clear that it is not possible to assign any positive dating to the multivallate sites and rather than suggest a date which would be almost entirely conjecture,   it is better to leave the matter completely open pending further definite information.

The only hill-fort in Ireland which can be dated positively is the univallate site on Freestone Hill, Co. Kilkenny.   [97] This hill-fort produced unambiguous evidence for its construction and occupation in the fourth century, A.D. The open work fibulae and the La Tène II brooch from Emain Macha, Co. Armagh, may indicate a date for that site towards the end of the last millennium, B.C. or perhaps slightly later, although of course, these are stray finds whose stratigraphical position in relation to the fort is unknown and cannot, therefore, be taken to date the foundations of the site. A number of sites have produced sherds of coarse pottery-Freestone Hill Ware-and its significance as a cultural factor uniting the hill-forts is becoming increasingly evident; its chrono-logical implications are not, as yet, fully clear.   [98] Similarly, the timber-lacing at Down-patrick is of no assistance in this respect. Using pure archaeological criteria, therefore, it is only possible to say positively that hill-forts were being constructed in the fourth century A.D., and that they probably extend backwards in time a minimum of four or five centuries before that.

Finally, brief reference must be made to the literary evidence relating to Irish hill-forts. Though there is a considerable body of written material relating either directly or indirectly to the pre-Christian Iron Age, the value of evidence contained in it with specific reference to hill-fort studies is limited. In the literature only a small number of the sites mentioned can be recognised in the field and these are sites which one has every reason to believe are exceptional ones.

The principal sites referred to in the literature are, naturally, the major royal sites at Tara, Emain Macha, Grianan Aileach and Dún Ailinne. Emain Macha was the centre of the Ulaid and figures prominently in the *Táin Bó Cúalnge,* the saga which, though not written down until the eighth century, refers clearly to a pre-Christian La Tène culture. [99] A reliable date for the foundation of the Navan fort cannot be ascertained from the annals but its abandonment around the middle of the fifth century A.D. seems to be reasonably well established. [100]

The growth of the Connacht dynasties and their expansion north and east in the fifth century A.D., led to the fall of the Ulaid kingdom and to the establishment of new kingdoms among which were the kingdom of Ailech with its centre at Grianan Aileach

in Donegal and, of course, the kingdom of Midhe with its centre at Tara. [101] Thus it may be argued that the hill-forts of Tara and the Grianan Aileach date no earlier than the fifth century; this is, however, extremely unlikely. They probably attained their maximum importance at this time, but were almost certainly in existence some considerable period before it. That the Hill of Tara was already an important Iron Age site in the second or third century A.D. is well attested by the evidence from the Rath of the Synods. Indeed, the latter site by its situation gives the impression that it was built when the Rath of the Kings (Ráth na Ríogh) was already in existence. Dún Ailinne is also a royal site referred to in the literature, but again there is no reliable indication as to the time of its foundation. The Martyrology of Oengus the Culdee, written in about 800, gives a *terminus ante quern* of a sort for this site (and incidentally also for Emain Macha and the Connacht centre of Crúachu—Rathcroghan, Co. Roscommon). In this lengthy poem the poet exults over the triumph of Christianity over paganism and compares the thriving monasteries of his day with the tumbled ruins of once-great pagan centres:

'Rathcroghan, it has vanished with Ailill, offspring of victory : fair the sovranty over princes that there is in the monastery of Clonmacnois'.
'Aillenn's proud burgh has perished with its warlike host: great is victorious Brigit : fair is her multitudinous cemetery'.
'Emain's burgh it hath vanished, save that the stones remain: the cemetery of the west of the world is the multitudinous Glendalough'. [102]

Finally, if Downpatrick is in fact the Rath Celtchair of the literature, its supposed pre-Christian date is confirmed, but little else positive as regards its dating can be said. [103]

The existence of hill-forts in the Iron Age period in Ireland is thus confirmed from the literary evidence and in a number of cases it is possible to state roughly when the hill-fort had become disused. In one case, at least, the remarkable longevity of the hill-fort in this country is demonstrated. The final destruction of Grianan Aileach is recorded in the *Annals of the Four Masters s.a.* 1101.

Thus it can be seen that three types of hill-forts exist in Ireland, and that of these, the two most numerous types—Class I and Class II—are almost mutually exclusive in distribution. Excavation has been so limited that firm conclusions as to origin and dating are extremely conjectural. Possible connections with Scotland have been suggested, while Iberian influences may perhaps be detected in the west. Their initial date may be anywhere within the last five centuries B.C. or perhaps even earlier, though, as yet, the only fixed chronological point is the mid-fourth century A.D. date from Freestone Hill. The early twelfth century destruction of Grianan Aileach, Co. Donegal, demonstrates that in some cases at least the hill-fort continued well into fully historic times.

This brief summary has, therefore, shown how limited is our knowledge of the hill-forts in Ireland and how limited is the amount of information upon which we can base any conclusions. Indeed, since the hill-fort must occupy a central point in the elucidation of many of the more pressing problems of Iron Age research, the excavation of these monuments is a matter of pressing urgency.

Note added in press:

Since this paper was written the number of hill-forts recognised in Ireland has increased to almost fifty. Also, additional important information has come to light through excavations at Emain Macha, Co. Armagh, Clogher, Co. Tyrone, Dun Ailinne, Co. Kildare and Rathgall, Co. Wicklow. A summary of the first season's excavation by the present writer at the latter site has appeared in *Antiquity, 44* (1970), 51-55. A note on the second (1970) season may be found in *Antiquity, 45* (1971), 296-8. Preliminary reports by Wailes, B., on the Dun Ailinne excavations are given in *J. Kildare Archaeol. Soc., 14* (1970), 507-517, and in *J. Roy. Soc. Antiq. Ireland, 100* (1970), 79-90.

At the Rathgall hill-fort the excavations have so far revealed that occupation within the present area of the central, stone enclosure occurred during the Late Bronze Age, during the Iron Age (early centuries A.D.) and during the thirteenth and fourteenth centuries.

It cannot, as yet, be stated which of these three periods of settlement is related to the substantial outer defences but it is now clear that the innermost enclosure is a late feature on the site, certainly no earlier than Mediaeval in date.

The best represented phase of occupation so far discovered is the earliest and it is now evident that Rathgall was a site of above average importance during the Late Bronze Age. An actual workshop structure has been uncovered dating to this period and the many hundreds of clay mould fragments denote that bronze working was carried on here with industrial intensity. A small, penannular gold ring emphasizes the not inconsiderable wealth of the bronze working community.

In view of the increasing body of evidence from Britain for the early dating of hill-forts the task of dating the great defensive ramparts at the Irish site is now one of extreme urgency and the possibility that they might, in fact, belong to the early phase is indeed an interesting one.

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Flimston Promontory Fort, Castlemartin, Pembrokeshire
(*Photo:* J. K. St Joseph, Cambridge University Collection: copyright reserved)
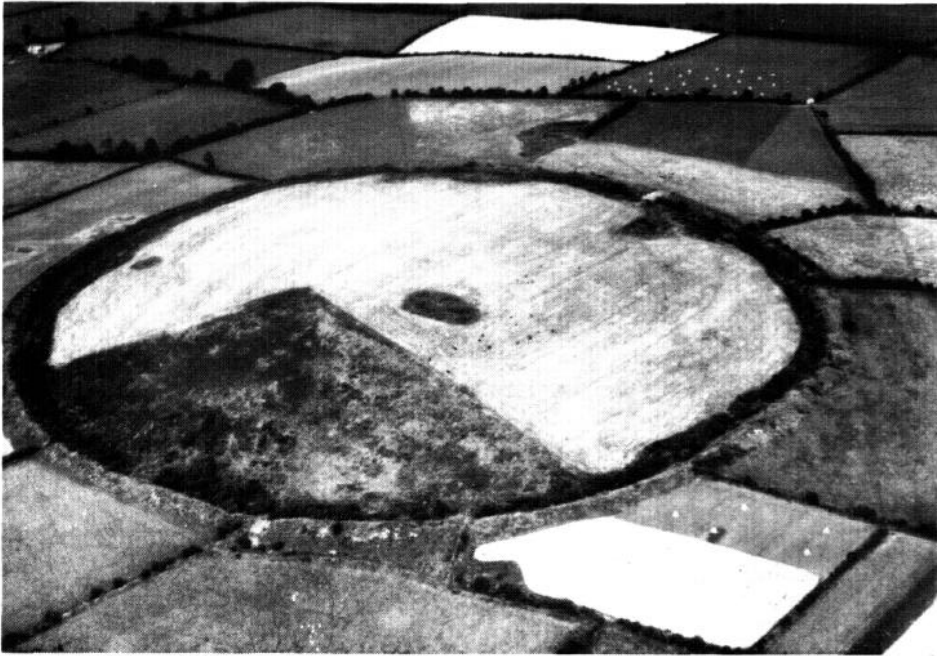
PLATE I

Dun Ailinne. Co. Kildare   (*Photo:* J. K. St. Joseph, Cambridge University Collection:

PLATE III

Brusselstown Ring, Co. Kildare   (*Photo:* J. K. St. Joseph, Cambridge University Collection:

Lisbane Fort, Co. Limerick

PLATE V

Lurigethan, Co. Antrim
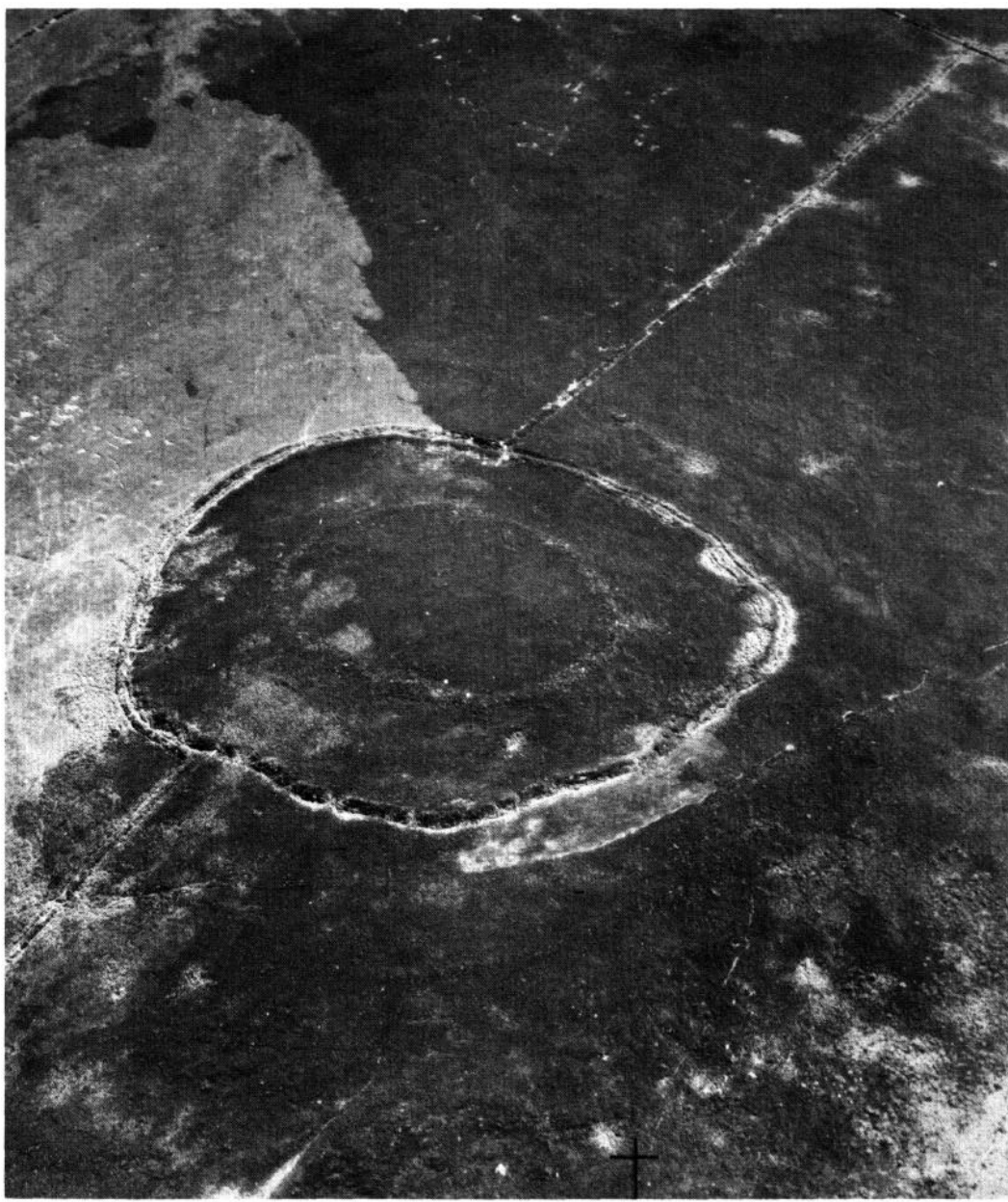
Rathnagree, Co. Wicklow

(Photo: J. K. St. Joseph, Cambridge University Collection:
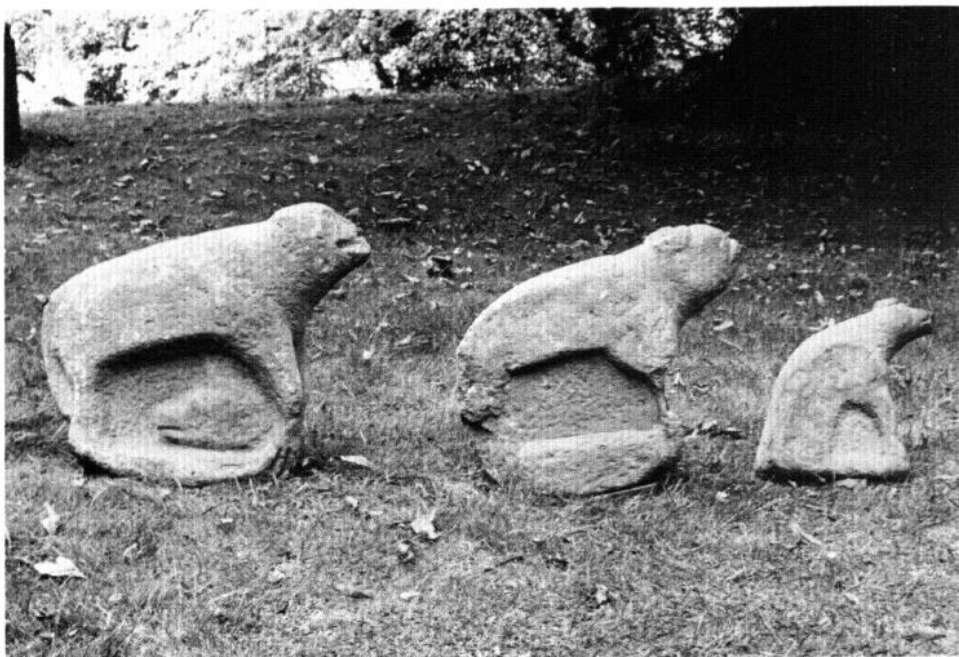
1. Stone bears, Cathedral Hill, Armagh

(*Photo:* County Museum, Armagh)
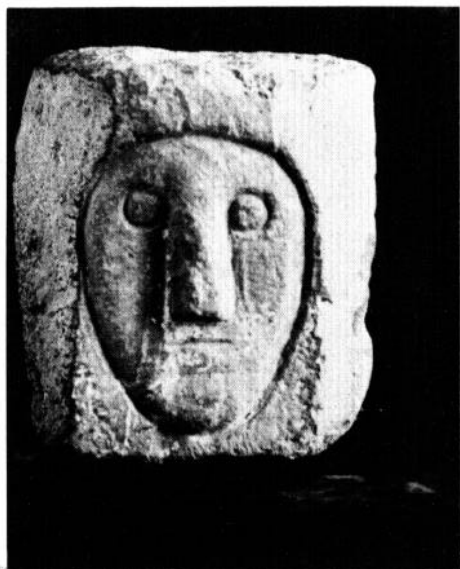
2. Stone head, Camlyball, Co. Armagh
(*Photo:* County Museum, Armagh)
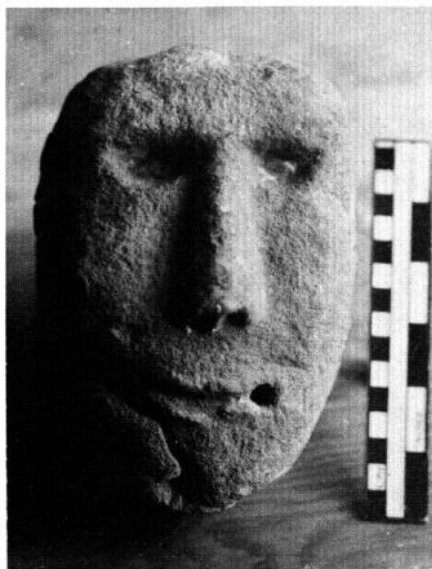
3. Stone head, Armaghbrague, Co. Armagh
(*Photo:* County Museum, Armagh)

1. Stone head, Cortynan, Co. Armagh
(*Photo:* County Museum, Armagh)

2. Stone head, near Tynan, Co. Armagh
(*Photo:* M. Batley)

3. Three-faced stone head (front face), Corleck,
Co. Cavan (*Photo:* National Museum of Ireland)

4. Stone head, Corravilla, Co. Cavan
(*Photo:* National Museum of Ireland)

1. Stone head, Corraghy, Co. Cavan
    (*Photo:* National Museum of Ireland)

2. Stone head, Kilmanahin, Co. Kilkenny
    (*Photo:* E. M. Prendergast)

3. Lustymore idol *(left)* and Boa Island Janus *(right),* Caldragh, Co. Fermanagh
    (Photo: The Green Studio Ltd., Dublin)

1. and 2.   Three-faced stone bust, Woodlands, Co. Donegal

(*Photos:* National Museum of Ireland)

3. Stone bust, Woodlands, Co. Donegal
(Photo: National Museum of Ireland)

4. 'The Sailor', Woodlands, Co. Donegal
(Photo: National Museum of Ireland)

PLATE XI

1. Stone head, Piltown, Co. Kilkenny
(*Photo:* National Museum of Ireland)

2. Stone bust, Piltown, Co. Kilkenny
(*Photo:* National Museum of Ireland)
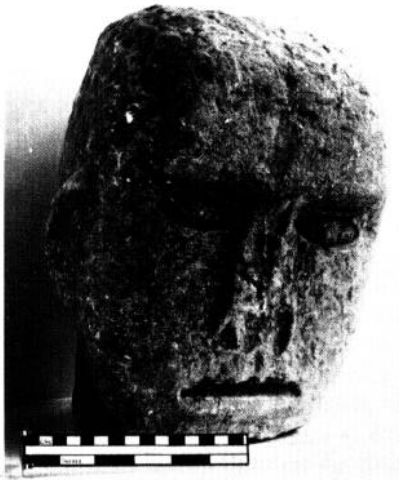
3. Stone head, near Armagh City
(*Photo:* County Museum, Armagh)

4. Stone head, Cavan town
(*Photo:* National Museum of Ireland)

THE CHARIOT
AS DESCRIBED IN IRISH LITERATURE

DAVID GREENE

THE ONLY JUSTIFICATION for offering a paper with this title to a conference concerned with the Iron Age is that there is reason to believe that the oldest Irish tradition opens a window on that period, as Kenneth Jackson has argued so cogently. [1] That tradition is not easy to use, for, while it is certain that it was written down in the seventh and eighth centuries, no manuscripts of that period survive, and the recensions of the twelfth century often have remoulded and interpolated the older versions. A good deal of textual criticism is necessary before we can have reasonable certainty that we have before us the seventh- or eighth-century text which we propose to use as evidence; it is only then that we can attempt to build up a picture of, say, the third or fourth century A.D., which was probably still in the Iron Age as far as Ireland is concerned.

Our first concern, then, is to use only the oldest available material, and Jackson was right to point out that the description of Cú Chulainn's wonderful scythed chariot is part of a late interpolated passage in *Táin Bó Cúalnge*. Windisch, the first editor of this saga, was not so careful, for he thought that, while this passage might contain fanciful exaggerations, it derived from old Celtic tradition and represented a memory of the *covinnus* described by Pomponius Mela and other ancient writers. [2] The matter can be decided by an examination of the episode, for, unlike the older tradition, it contains a number of exotic references. Cú Chulainn is described as wearing a helmet (in itself a late feature) *do chumtuch ingantach tíri Arabiae .i. críchi na Sorcha* 'of the wonderful workmanship of Arabia, i.e. the land of Syria', *LL* 24890, while his charioteer wears a cloak which Simon Magus had made for Darius the king of the Romans, who had given it to Conchobar, king of Ulster, who had given it to Cú Chulainn, who had finally passed it on to his charioteer *(TBC*[2] *1873-5)*! In a version of *Tochmarc Emíre* which also contains interpolations we find a reference to a scythed chariot with a very signi-cant explanation: 'The reason it was called *serda* was from the iron scythes *(serra)* which were fixed to project from it, or, alternatively, it was from the Syrians *(Serrdai)* it was first derived' *(TE,* edited Van Hamel, §85). All this suggests echoes from the

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medieval literature of Europe, which was well known in Ireland by the eleventh century, the period to which this episode might be assigned on linguistic grounds; sure enough, in the Irish *Alexander Saga* we find Porus's army described as having a great number of *cethirriad . . . co serraib iarnaidib estib,* which is a translation of the *quadrigae, omnes falcatae* of the *Epistola ad Aristotelem,* long recognised as one of the sources of this saga. All the evidence points in one direction: the scythed chariot is a late literary motif and no part of the old tradition.

It is also necessary to guard against making the evidence carry more than it will bear. The Irish sagas are penetrated not only with fantasy but with mythology; while it is possible to sympathise with Jackson in rejecting O'Rahilly's interpretation of the *gae bulga* as a lightning flash, it must be admitted that rationalist explanations such as that of Pokorny[3] are hardly convincing. Not much is to be gained by a study of the *clessa* or 'feats' often mentioned in connection with the chariot if our main interest is in the structure of the chariot itself and I think that Terence Powell misjudged the nature of his evidence when he used the undoubtedly archaic story of the inauguration of Conaire Mór for this purpose. He argued:

'The chariot was ready yoked, and the kingly aspirant had first to enter it in such a way that it did not tilt against him. This can only mean that he had to jump into it so as to land above or forward of the axle. If he jumped short, the horses would rear up as the straps tugged their necks'. [4]

This sounds convincing; obviously, if you jump on the back of a two-wheeled vehicle, you may incommode the horses. But the text does not mention jumping at all; it says that the chariot tilted up before any man who was not destined to receive the kingship of Tara 'so that he did not enter it, and the horses reared up before him'; when Conaire passes the test, the words are *téit isin carpat* 'he enters the chariot', and there is nothing about jumping. What is more important, however, is that this is part of a description of a long series of tests: the mantle which fitted only the rightful king, the two closely-set stones which opened only for him, the pillar-stone which shrieked for him. I do not think we are entitled to draw conclusions as to the structure of the chariot from an account in which the supernatural plays so large a part.

And, finally, reasonable certainty must exist as to the meanings of words which we take to be technical terms. It will be recalled that Sir Cyril Fox filled in part of the frame of his reconstruction of the Llyn Cerrig Bach chariot with wickerwork, on the basis of a translation of an Irish poem made many years ago by Eleanor Hull[5]. That poem is, in my opinion, one of our best sources for the Irish chariot and it will be fully discussed in this paper; it is, however, most unlikely that the word in question should be translated 'wickerwork'. We must stick to words which are well attested, and I begin with an examination of some of these.

The first is, naturally, *carpat,* which is the word translated 'chariot' in all the examples above. It is not the only word for a vehicle in Old Irish; we also find *á, carr, cul, fén.* The first of these (see RIA *Contribb.* s.v.) is attested only by two examples, one of which translates Lat. *axis* in the meaning 'axle-tree', while the other appears to mean 'cart'. The words *carr* and *fén* (see *Contribb.* s.vv.) are of Indo-European origin, being cognate with Lat. *currus* and Eng. *wain* respectively; in the older language they always denote vehicles used for carrying loads, never those in which people ride. The fourth word, *cul,* with its derivatives *culgaire* 'noise of a chariot' and *culmaire* 'chariot-builder', occurs only in a few obscure examples; if Vendryes is right in his speculation[6] that it is an old dual of the IE word meaning 'wheel' it is a very archaic word indeed but, since it does not occur in any context which is capable of interpretation, it will not be discussed here.

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Of the four words mentioned here, two can be identified with words in Continental Celtic: *carpat* and *carr* correspond exactly with the first elements in the compounds *Karbantorigon* and *Karrodounon* respectively, and it will be remembered that the Celtic words were borrowed into Latin, together with several other words for vehicles, as *carpentum* and *carrus,* which survive in English as *carpent(er)* and *car.* There is no difficulty about the etymology of *carr;* as we have seen, it is cognate with Lat. *currus,* the relation of which to the verb *curro* is similar to that between OIr. *reithid* 'runs' and *roth* 'wheel'. The Common Celtic **karbanto-* is not quite so transparent. The only surviving meanings of the Welsh cognate *carfan* are 'frame', 'gum (of the jaw)', and the latter is also the meaning of *carbad* in modern spoken Irish; we are justified in assuming that the original meaning of **karbanto-* was 'framework', which then came to be used to denote the framework of a chariot and finally, by synecdoche, the chariot itself.

Old Irish, then, preserves in *carpat* a word for a vehicle also attested in Continental Celtic and borrowed into Latin as *carpentum.* The latter word is normally applied to a car used for peaceful purposes and, it must be noted, so often is the Irish *carpat;* we may translate it as 'chariot' if we wish, but to translate it as 'war chariot' is to impose a restriction not justified by the evidence. In the early Christian literature kings, saints and other notabilities are described as travelling by *carpat* (which is invariably rendered in Latin as *currus)* and this is entirely consistent with the saga evidence; thus Deichtine acts as charioteer for her father Conchobar on a hunting expedition and Deirdriu throws herself out of Éogan mac Durthacht's chariot when being taken home by him. This implies the existence of roads, and the Irish laws lay down very precise regulations as to the responsibility of maintaining these; [7] roads are mentioned in the sagas too—the young Cú Chulainn tells his charioteer to drive *céin ad-nindain int slige* 'as far as the road will take us'. All this reminds us that riding on horseback is completely unknown to early Irish civilisation, which is indicated in another way by the fact that there is no native word for 'trousers', the most appropriate garb for a horseman; in this respect the Irish are in remarkable contrast to the Celts of *Gallia bracata.* I suspect that *marcach* 'horse-man', which occurs in Old Irish translating Lat. *eques,* is nothing more than a calque on Welsh *marchawg,* and *marc* 'a riding horse' may well be borrowed from Welsh *march.* The Welsh had, of course, learned riding from the Romans and the British warband described in *Canu Aneirin* ride on horseback, not in chariots. Indeed, so completely was the memory of the chariot lost in Wales that the Irish word was borrowed in the form *cerpit* in order to provide a rendering of Lat. *currus.* No more striking testimony to the archaism of the Irish tradition can be found than the silence of the sagas on the subject of horse-riding, which had certainly been introduced at the time they were being written down, for the legal text *Crith Gablach,* composed at the beginning of the eighth century, mentions an *ech imrimme* 'horse for riding' as appropriate to those of certain status.

Jackson has made the observation that 'the Irish heroes are called by the term *eirr* which means 'chariot man', as if the possession of a chariot was their main character-istic, very much as the medieval term *eques,* 'knight' is strictly speaking 'horseman, a soldier who fights on horseback''. [8] He is right in thinking that *eirr* is a very archaic word, but it should be noted that it exists side by side with another term, *cairptech,*[9] which, as a derivative of *carpat,* offers a better parallel with *equus:eques;* thus we find *cairptech dorét far ndochum, LU* 5191. This may have been originally the word for the chariot-owner in his civil function; in the legal tract *Bretha Crólige,* which deals with the very old institution of 'sick-maintenance', we read about the invalid: *for feraib fedair febe iar n-arilliud; mad caem cairptech, con-fedar fris, fír as caindell incoisc hi suithcherna sét* 'he is carried on the shoulders of men according to the merit of his status; if he is a

noble *cairptech,* it [the chariot] is brought with him, a proof which is a candle of demonstration on the path of good lordship' .[10] The possession of a chariot was important in the legal system, for a recognised way of laying claim to land was for the claimant to drive on to the land in dispute and unyoke his horses there. This custom is so firmly embedded in Irish thought and tradition that in the *Calendar of Oengus,* written about 800 A.D., we find the saints commemorated on May 17 described as having unyoked their horses on the stronghold of the Kingdom of Heaven. And it is, I think, the origin of the legal term *carpat for immrimm,* literally 'a chariot driving around', which is used to describe a man who has cattle but no land to put them on.[11]

The combination of the early Christian evidence with that of the laws makes it clear that there was a tradition of the chariot as a vehicle used in times of peace, and that the vehicle itself may have existed right up to the time at which written literature began. Exactly the same word, *carpat,* is used in the sagas to denote the war chariot, though the contradiction is more apparent than real. I cannot find any evidence to support Jackson's view that 'the tactic seems to have been that [the charioteer] drove the chariot at the enemy and the warrior himself hurled his spears at them'; [12] Powell's phrase that the driving around and performing of feats was 'the phase for display and intimidation'[13] seems much nearer to the facts. The final stage was a descent from the chariot for hand-to-hand battle; this formalized encounter was the central point of the heroic tradition, and the chariot played an essential role both in the preliminaries and in the aftermath, for the winner drove away with the head of his victim displayed prominently on his chariot. This is when he is described as *eirr* which, felicitously enough, glosses *curruum princeps* in the Leyden Priscian *(Thes.* ii 231.6). But the word originally meant no more than 'he who sits behind' *(*er-seds),* just as the term for the charioteer, *arae,* meant 'he who sits in front' *(*are-seds);* it is hard to believe that Irish did not at one time have a word for the chariot corresponding to the Gaulish **ensedon* (preserved in the Latin form *essedum)* meaning simply 'what is sat in'. This etymology is confirmed by consistent saga references to the hero with *arue ar a bélaib isin charput* 'a charioteer in front of him in the chariot'. With one apparent exception, all the Irish evidence points to a vehicle in which two persons sat in tandem.

This exception is of some importance, however, for it suggests the warrior and charioteer sitting side by side, with the warrior on the left and, in spite of the other evidence, it was presumably what decided Thurneysen to say unequivocally: 'Rechts sitzt der Wagenlenker . . . links der Krieger', *Heldensuge* 84; this sounds like an echo of Zimmer's description of the arrangement of the ancient Indian war chariot: 'Links steht der Wagenkämpfer . . . neben ihm der Lenker der Rosse', *Altindisches Leben* 296, and, when discussing the word *arae* 'charioteer' in his *Lexique étymologique de l'ir-landais ancien,* Vendryes concluded that this arrangement 'remonte á l'époque indo-européenne', which, of course, implies that the war chariot is to be included among common Indo-European institutions. Elsewhere in the *Lexique,* when discussing the word *á* 'cart' (see above), which is of doubtful etymology, he had suggested a connection with Sanskrit *āsa-* on the grounds that 'certains mots se rapportant à la pratique des chars de guerre sont communs au celtique et à l'indo-iranien', citing as examples *arae, faitse, fochla* and *fonnad.* Of these it may be said at once that the only two etymologies of *arae* which have been offered both assume that it contains as first element **are-* 'in front of' and that there is no Sanskrit chariot term which resembles it; *fonnad* was compared by Windisch with Sanskrit *vandhura* but, as will be seen below, is probably of quite distinct origin. The argument rests on *fochlae* and *faitse,* and, as I have argued elsewhere (see *Ériu,* 21 (1969), 94-8), the interpretation of these two words as names of the

seats in the chariot rests on no firmer foundation than the speculations of an early glossator on a very obscure passage of Old Irish; weighed against the unanimous evidence of the saga tradition, it must be decisively rejected. As we will see, the linguistic evidence points to the gradual evolution of a vocabulary of chariotry, rather than to a common stock of primitive terms; there is no basis for assuming a common Indo-European inheritance. [14]

I now propose to set up a list of words relating to the chariot, fourteen in all. The first nine are derived from the formulaic description which has already been mentioned; it is well-known, having been utilised in recent years not only by Fox (see n. 5), but by Stuart Piggott [15] and Calvert Watkins, [16] the latter treating it as an example of archaic metrics. It occurs five times in our earliest saga manuscript, *LU,* and once in *YBL;* I give it with all its variants as Appendix A. The other five words are found either in early saga material or in the two verses from the genealogies which I give as Appendix B.

1 *dá ech* 'two horses'
                        This is invariable; there are no references to any other number. In all six versions the description of the horses, which we would expect to follow the normal pattern of *dá ech* followed by two alliterating adjectives, has been inflated enormously, sometimes so as to give a separate description of each horse. This is the work of later redactors and is of no interest to us here.

2 *carpat* 'a chariot'
                        The word itself has already been discussed. The first adjective is *fidgrind,* of which the first element is *fid* 'wood', while *grind* is of vague meaning, perhaps 'fine' or 'strong'. The second epithet is *féthaine* or *féthaide;* the former could be the gen. sg. *of fethan* '? circular band', see 5 *sithbe,* while the latter is probably a derivative of *féth* 'smooth', but there is no justification for Hull's 'wickerwork'. All we can say is that the chariot was made of wood, probably not too solidly, for its creaking is often mentioned: . . . *co cualatar ani na ndochum: boscairi na n-ech, culgaire in charpait, siangal inna tét, drésacht inna roth, imorráin ind láith gaile, scretgaire na n-arm* 'they heard something coming towards them: the trampling of the horses, the clatter of the chariot, the whistling of the cords, the creaking of the wheels, the violence of the warrior, the screaming of the weapons', *LU* 10193-7. There are some saga indications that the chariot could be easily dismantled, and this is confirmed by the passing reference in a law text,[17] which is concerned with the difficult concept of *nemed* 'a privileged place or person': . . . *in-samlaither nemed fri bésu carpait; nach tuidme do-n-uidmenar is túaslucud do-úaslaicther úad,* literally, 'a *nemed* is [to be] compared to the state of a chariot; for every binding that is bound, there is an unbinding that is unbound'; I take this to mean that a *nemed* could no more be firmly and finally bound by obligations than a chariot could be regarded as a solid whole.

3 *dá ndroch* 'two wheels'
                        This word is almost confined to descriptions of chariots; in later texts we find the generic *roth* 'wheel' substituted, as it is in Version F, while D has both *dá ndroch* and *dá roth* by conflation of two sources. Following the principle of preferring alliterating epithets, we get *finna* 'bright' and either *umaidi* 'copper' or *iarnaidi* 'iron'. Piggott[18] reminds us that there is nothing inherently improbable about this, quoting the case of Bituitus. However, we may take it that the wheels were originally of wood; indeed, if we accept Pedersen's etymology, *droch* is simply a derivative of the

word meaning 'tree, wood' from which Eng. *tree* and *trough* derive, though it is more likely that we should compare Gk. *trokhos*. They had spokes, though no word for these is attested, because it was possible to see through them *(BDD²* 590, 644). A rough idea of their size may be got from the account of a snowfall that reached co *fernu fer ocus co drochu carpad* 'up to the belts of men and the wheels of chariots'; this if, taken literally, would suggest wheels larger than the three foot diameter given by the Llyn Cerrig Bach tyre, but the measurements would certainly be of that order—and, after all, we do not know what height the men were.

    No texts in Irish offer us any clue as to how the wheels were fixed to the chariot. When this paper was read at the Cardiff conference, it was pointed out to me that Adamnán's *Life of Columba* gives a detailed account of a miracle whereby a chariot went safely on its way although the charioteer had forgotten to insert the linchpins—a miracle which turns up in several places in Irish hagiography (see the editions by Reeves, W. (Dublin, 1857), 172, 174, and by Anderson, A.O. and M.O. (1961), 448) but, unfortunately, always in Latin texts. If it is assumed, as seems reasonably likely, that there was a continuity between the saga tradition and that of early Christian Ireland, this seventh-century evidence is of considerable importance. Firstly, the act of yoking *(jungere)* the chariot included at least the insertion of the linchpins and probably the placing of the wheels on a fixed axle; this is consistent with the references to dismantling which have already been noted under *2 carpat.* The word *axis* 'axle' appears in the plural, which I take as indicating that each fixed projection was regarded as a separate entity. Each of these projections had on the inside a shoulder *(humerulus),* against which the wheel was placed, and the wheel was held against this shoulder by putting a pin *(obex)* through a hole *(foramen)* at the end of the axle. All these are common Latin words and are no doubt translations of Irish terms, which, however, are not attested. In some of the later versions of the miracle the hapax *roseta* occurs instead of *obex;* this may well be a Latinization of a native word but, again, no explanation presents itself.

4 *fonnaid* 'wheelrims', 'tyres'

          It should be said immediately that it is by no means certain that this item belongs to the formulaic description we are discussing; it occurs only in F, which is considerably abridged and, like *6 feirtsi,* it is in the plural rather than the expected dual. However, as it constitutes one of the knottiest problems, I have taken it here; the epithets are *réidi* 'smooth' and *ruirthecha* 'fast-running', which are in keeping with the meaning I have given to it.

    The word was thoroughly studied by Eleanor Knott in her article on it in the RIA *Dictionary* and I cannot do better than quote her analysis. The *fonnad* is not the *7 crett;* it is not a wheel, but is closely connected with it; there is more than one in a chariot, apparently two, one on each side; a *fonnad* of one chariot might be juxtaposed to a *fonnad* of another chariot; it can touch the ground and leave a trace on it; it makes a noise; it is sometimes washed; it is sometimes used by synecdoche for *roth* 'wheel' (and, we may add, for *carpat* 'chariot', too). All these considerations confirm Strachan's opinion of seventy years ago that 'the primary meaning is probably some part or parts of the wheel'; [19] unfortunately he did not live to publish the fuller investigation he promised, but it is unlikely that he would have had more to offer than Knott, who her-self offers the meaning 'wheelrim', 'tyre', with a prudent question-mark attached. I think it is safe to accept it; there is a striking passage in the *Táin* which makes it clear that the *fonnad* was made of metal, and, since it will be referred to again, I give it here.

    The young Cú Chulainn has tamed a stag with his bare hands and tied it *eter da fert*
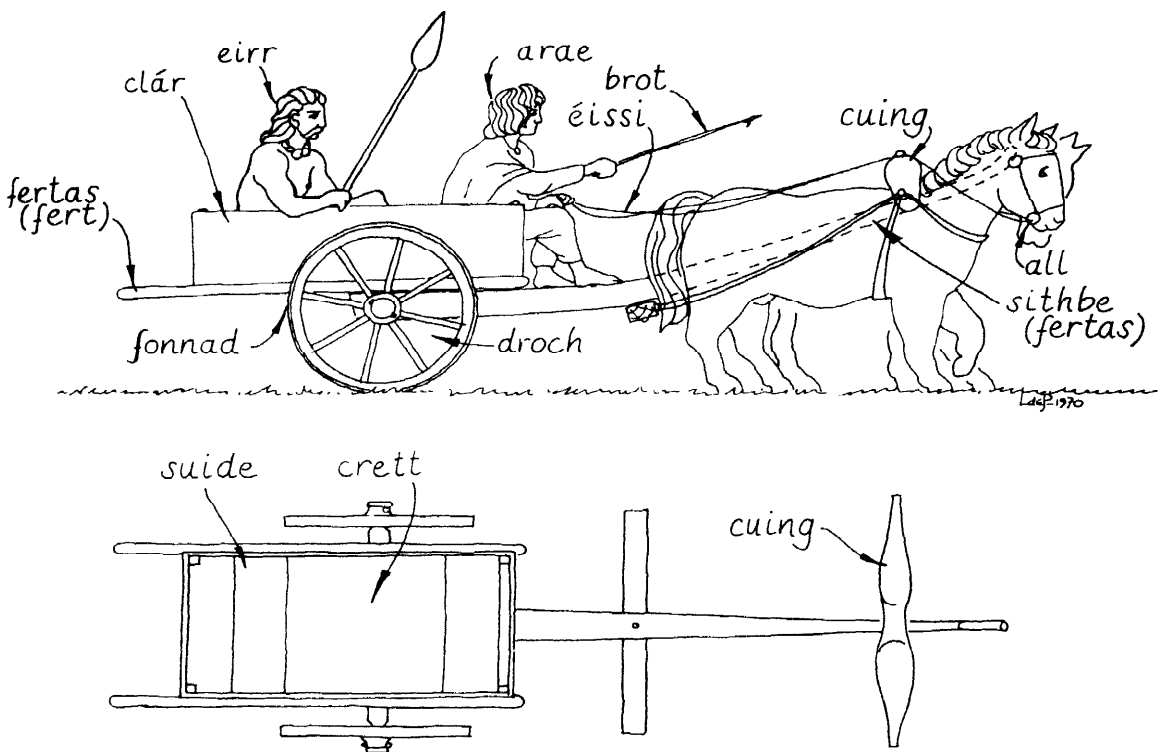
Fig. 16
Reconstruction of the 'carpat' on the lines suggested
in this paper (drawing by Liam de Paor, M.R.I.A.)

in charpait 'between the two shafts of the chariot' (see 6   *feirtsi* below). He and his charioteer proceed on their way and Cú Chulainn brings down twelve birds with his sling and tells the charioteer to get down and collect them, because the stag will attack the charioteer if Cú Chulainn goes himself. The charioteer replies: 'It is not easy for me to go; the horses have been driven wild so that I cannot go past them. I cannot go past either of the two iron wheels *(in dá roth .i. fonno iarnae)* of the chariot because they are so sharp and I cannot go past the stag because his horns have filled the space between the two shafts *(eter di fert in carpait)', TBC²* 699-704. The editors say in a footnote that

fonno is a gloss which has crept into the *YBL* text; in the *LU* text it does in fact appear as a gloss. But *roth iarnae* would not require glossing even in modern Irish; the insertion of *fonno, fonnod* is plainly the restoration of a reading found in another, and older, source. What the original form of the word was is not easy to say, but it is hard to separate it from the word *fonn,* which means, firstly 'sole of the foot' and then 'base, foundation, bottom'; for the semantic development it would be tempting to cite modern Irish *bonn* 'sole of the foot' and 'tyre', but it is not certain that the two words are originally the same.

Windisch [20] rejected Strachan's view, on the grounds that *roth* and *fonnad* were distinguished from one another; his examples, however, are taken from the later recension. He went on to say:

'Bemerkenswerth ist, dass das lautliche vergleichbare vedische *vandhura* gleichfalls einen Theil des Wagens ("Sitz des Wagenlenkers") bezeichnet. Wahrscheinlich ist *fonnad* der untere Theil des Wagens zwischen den Rädern, der den Boden des Capsus *(cret),* die Plätze des Kämpfers und seines Wagenlenkers bildete oder trug'.

As we have seen, Vendryes accepted the equation of *fonnad* and *vandhura,* but, apart from the fact that the evidence collected by Strachan and Knott is against Windisch's explanation, there are linguistic difficulties. In Old Irish we would expect the cognate of Sanskrit *vandh-* to show the consonant group *-nd-;* while it is true that *-nd-* falls together with *-nn-* in the later language, the fact that all our examples have *fonnad* rather than *fondad* can hardly be accidental. Indeed the spelling gen. sg. *fonnith* is found in the undoubtedly archaic *Audacht Morainn,* [21] which, incidentally, shows how the use of *fonnad* in the meaning 'chariot' could come about. This text is concerned with advice to a ruler, who is told to take example from the driver of an old chariot *(are sencharpait):*

Ar nicon chotli are senfhonnith: remi-déci, iarmo-déci . . . desiul scéo túaithbiul, im-dich, im-díthnatar, arna bó co foill ná co forán fonna fod-rethat 'For the driver of an old *fonnad* does not sleep; he looks ahead and behind, right and left ; he protects, he engages himself, so that that he may not break, either by negligence or over-driving, the *fonna* which run under him'.

If the reading *fonna* is right here, we can translate it as something like 'bases', with a play on the words between *fonn* 'base' and its derivative *fonnad* 'tyre'; the latter, of course, would be the part of the chariot most exposed to strain and therefore most likely to break. There is another play of words involved, for *fo-reith,* which is formally identical with Latin *succurro* can, like it, mean 'runs under' or 'supports, helps'. In spite of some obscurities, the passage is entirely consonant with the interpretation of *fonnad* as "tyre", and the use of the verb *fo-reith* tells decisively against any connection with *vandhura,* thus disposing of the last piece of evidence adduced in favour of a common chariot terminology in Sanskrit and Irish.

5 *sithbe* 'a pole',

described as *co féthain findruine* 'with a band of white metal', which is to be preferred to the alternative *find forargit* 'white and silvered', since a wooden pole would presumably require a metal band at the point where the yoke was attached.

There are again several difficulties. The distribution of this word in the literature is almost the opposite to that of 4 *fonnad* for, while it occurs in four of the six versions of our formulaic description, it is very rare in the sagas; it does not occur at all, for example, in the oldest version of the *Táin.* It is significant, however, that in *Togail Bruidne Da Derga* we find *Cul, Frecul* and *Forcul* as names of charioteers who are the sons

of *Sithbe* and *Cuing;* these fanciful names names often preserve archaic words, and the first three are *cul* 'chariot' and two compounds of it, while the other two mean 'pole' and 'yoke' respectively, and embody two items of our description.

I have spelt this word as though it were a compound of *sith-* 'long' and *-be* 'cutting'.[22] The RIA *Contribb,* give the headword as *síthbe,* presumably on the basis of the example rhyming with *gníthi,* SR 4284, which is also the only occurrence of the word in the meaning 'pole' after the OIr. period, though it has nothing to do with chariots, cf. the variant *. . . na suainemain no bítis asna sithbib anart n-illdathach* 'the cords which were attached to poles carrying many-coloured cloths', *Celtica,* 4 (1958), 30.428. The long vowel is supported by other examples; perhaps there was interference from the prefix *sith-* which becomes increasingly common in Middle Irish.

6 *feirtsi* 'shafts'

This item, like 4 *fonnaid,* occurs in the plural, not the dual; it is better attested, being found in three versions. In all three it has the same epithets: *crúaidi colgdírgi* 'hard, as straight as a sword'.

The translation 'shafts' given above immediately raises the question of what their function could be in a vehicle already provided with a chariot pole. When we turn to the sagas, we find a large body of evidence which shows clearly that *fertas* is used to describe a part of the chariot which is not a chariot pole at all, but one of two projections at the rear; in this meaning it alternates with another word *fert.* Thus, in the display of strength which preceded his first foray, the young Cú Chulainn broke a chariot apart by putting his hands between the two shafts *(eter di fertais)* of the chariot, and pushing; since all early references to chariots indicate two horses, these cannot be shafts used for harnessing. Other examples make it clear that they projected behind the chariot; the most striking is that already quoted under 4 *fonnaid,* where a stag was tied between them, but there are several other clear references, such as the apparition in *Táin Bó Regamna* with her cloak floating back between the two shafts of her chariot *(a brat itir di .fert in charpaid siar, IT* ii² 242). This is of some interest because it is the only saga reference known to me where *sithbe* and *fert* are combined in the description; we find them also in the poem printed as Appendix B.

There are, however, other cases where there seems to have been only one *fertas,* which was in front and can therefore be identified with the chariot pole. Thus, admittedly in the later recension of the *Táin,* and in another description of an apparition, Medb sees the prophetess Fedelm coming towards her in a chariot and standing *for fertais in charpait* 'on the shaft of the chariot', which surely must mean the pole. Again, we read how Mac Dathó's dog seized the *fertas* of the chariot in which Ailill and Medb were escaping; their charioteer cut him in two and his head remained gripping the shaft of the chariot *(fertais in charpait, SMMD* 18 §19) which implies that the *fertas* must have been in the front of the chariot, within the reach of the charioteer. There are no examples of *fert* in such contexts.

Other examples of *fertas* are uncertain; I think, for example, that the account of Cú Chulainn breaking the *fertas* of his chariot and going to cut another one almost certainly refers to the chariot pole rather than to the rear projections, but the readings vary too much for certainty.[23] In the same episode he meets a Connacht charioteer cutting wood (specifically, holly) for *feirtsi* and complaining that the chariots had been broken pursuing Cú Chulainn; the poles are a likely part to break when the chariot is driven over rough ground.

When we consider the etymology of the words we find that *fertas,* at least, must

represent a transferred meaning, for it is a derivative of the same root as that of Lat. *verto* and means specifically 'spindle'. A spindle is long and narrow, and the word describing it can be transferred to objects of similar structure; *fertas,* like the related Welsh word for 'spindle', *gwerthyd,* can also mean the rung of a ladder, and a similar semantic development has taken place in English, where a 'spindle-shank' is a long thin leg. The meaning of *fertas,* therefore, is simply a long and slender piece of wood—'hard, and as straight as a sword', to quote the epithets—which tells us nothing about its original function, but would be an appropriate term for a chariot pole. The other word, *fert,* is much more difficult, for it occurs only in the meaning 'rear-shaft'; if it comes from the same root as *fertas,* the semantic development is obscure. [24]

   The evidence for two projecting shafts from the back of the chariot is too firmly embedded in the saga tradition to be ignored, and those who have seen Fox's reconstruction will ask whether they could be identified with the chariot-horns placed so that they could be used as hand-grips for mounting. [25] It must be admitted that *fert* could be explained on this basis, as meaning primarily 'a curved object', but the horns would have had to project much further back than they do in Fox's reconstruction to make it possible to tether a stag between them and it does not seem possible that *fertas,* which occurs just as often in this context as *fert,* could ever have been used to describe a curved object. There is, of course, the possibility of a contamination of the tradition by features derived from vehicles familiar to the compilers of the sagas. No Irishman has to look far for rear shafts, for they are a regular feature of such farmcarts as still survive and Estyn Evans quotes a description of one-horse carts used in the early nineteenth century[26] with rear shafts four feet long, which is more than enough to tether a stag in. He goes on to suggest that these projections are 'surely a reminiscence of the long slide-car runners' and tells us that some slide-car runners he himself had examined were made of holly, thus reminding us of the *Táin* incident quoted above, where the charioteer was cutting holly for *feirtsi,* though, as I have suggested, these were probably chariot poles.

   In the Irish farmcart the rear shafts are all of a piece with the front shafts, between which the single horse is harnessed; this will not do for the *carpat,* where there are always two horses, but that is not a reason for eliminating the back shafts, which are in fact functional, for the two-wheeled cart is tilted back on them when not in use, thus facilitating harnessing. The saga evidence is consistent with a structure where two poles which formed the base of the 7 *crett* 'body' projected behind, but not in front, the rear projections being called *ferta,* while the chariot also had a *sithbe* 'pole'. At a later stage in the tradition *fert* was largely replaced by *fertas* 'spindle', which also superseded *sithbe;* there were therefore three *feirtsi* in the make-up of the chariot, which accounts for the use of the plural rather than the dual. This is admittedly speculative; it would also be possible to argue that the *ferta* were chariot horns of the type described by Fox, and that the saga tradition of rear shafts is imported from more vulgar vehicles than the *carpat.*

   7 *crett* 'frame, body'
                                    The epithets vary considerably and offer no real information. The word has survived into modern Irish in the derivative *creatlach* 'frame, skeleton'; in Welsh, on the other hand, the cognate *creth* is abstract in meaning: 'appearance, form, nature'. Pedersen plausibly compares the Celtic words with Lat. *cratis* 'frame made of hurdles', so that linguistic history repeats itself, for we have seen that *carpat* itself originally meant 'frame' and may have displaced the archaic *cul* as the name of the vehicle. It was probably of light construction and easily dismantled; in one saga

episode the ribs of the frame of the chariot *(asnai creiti in charpait, TBC²2872)* are used as splints, and from another *(TBC²2938)* it appears that objects could fall through the floor.

8 *cuing* 'a yoke'
All versions have the epithet *druimnech* 'ridged' and alliteration suggests that the first element of the second epithet was *dron* 'firm', linked with either *órdae* 'gilded' or *dúalach* 'curly'. This is not a specifically chariot term, but the ordinary word for 'yoke', etymologically connected with the English word and with Latin *jugum.* We are indebted to Sir Cyril Fox for a very perceptive remark as to its exact shape; quoting the kenning found in *Tochmarc Emere* for a woman's breasts seen above the edge of her dress *Cain in magsa mag al chuing* 'this is a lovely plain, the plain beyond the yoke', he says that a Gallo-Roman yoke, rounded and peaked to a single terret on each side of the bar, will best fit this description. [27] I confess that I thought this somewhat imaginative until my friend Liam de Paor called my attention to the Iron Age yoke from northern Ireland published by Stuart Piggott, [28] the contours of which fit the description exactly.

9 *dá n-all* 'two bridles'
Four of the versions give the same epithets *dúalucha dron-buidi 'curly,* firm and yellow'; a fifth has *aphthi,* which is unexplained, and *intlaissi* 'inlaid'. The meaning is well established by two old 'etymological' glosses: *alla .i. ab alligatione equorum, O'Mulc.* 39, and *indel .i. all n-ind, ut est in capite equorum,* 741, which explains the word for 'harnessing' as 'putting an *all* into it, that is, into the heads of the horses'. Needless to say, it is not derived from Lat. *alligatio;* it remains, however, the only word to be discussed here for which no etymology can be offered. It is found only in descriptions of chariots and is replaced early in the Old Irish period by *srían,* a loanword from Lat. *frenum;* it is least possible that the shift in terminology is to be linked with the introduction of horse-riding, no doubt from Britain. It is often described as being of metal, e.g. *all cruain* 'an enamelled bridle', *O'Dav.* 555 and *co n-allaib óir* 'with golden bridles', *SMMD* §20.
This exhausts the evidence of the formulaic description, but a number of other terms can be collected from the sagas.

10 *clár* 'side-piece'
This means, at all periods of the Irish language, simply 'board'; again, it is tempting to invoke the parallel of the Irish farmcart with its detachable side-pieces. The turning of *clár clé* 'the left hand side' of a chariot to those approaching was a challenge to battle *(LU* 5194, 5668); this was in accordance with the usage whereby a movement *tuaithbiul* 'widdershins' was unlucky or insulting.

11 *suide* 'seat'
Like *clár,* this is a generic word, not restricted to chariotry. We have already seen that there are two seats, with that of the charioteer in front; in one highly-coloured description of Cú Chulainn, he is sitting in his chariot, with his charioteer in front of him; the charioteer has turned round so that his back is to the horses and he and Cú Chulainn have a gaming board arranged between them *(TBC²3398-3401).* Presumably their knees were touching, and the board rested on them, which gives us a rough guide to the dimensions of the chariot.

12 *etruide*

'space between the seats' is etymologically transparent. It does not occur in the sagas, and the only example of it is in the poem printed in Appendix B, where the triumphal return from battle is described: 'our whole chariot was red, the space between the seats was full of heads'.

13 *essi* 'reins'

This, like *all,* is a specifically chariot word which disappears in the later language. Its etymology[29] is of some interest, for it is cognate with Gk. *hēnia* 'reins', and with Sanskrit *nasyā* which originally must have meant a cord passed through the nose of oxen. This is not to suggest that any such meaning was felt to exist in either the Old Irish or Greek words; what it does indicate is that the vocabulary of chariotry is not of Indo-European origin, while that of driving oxen probably is.

The charioteer held the reins in his left hand, and in his right the—

14 *brot* 'goad'

This is the generic word. It should be noted that O'Rahilly's attempt to explain it as a Middle Irish borrowing from Old Norse *broddr (Ériu,* 13 (1942), 169) is completely unjustified; apart from many examples from pre-Norse saga material, it is attested in the Glosses by *inna brotu,* glossing *tela, Sg* 94ª2, as well as in the eighth-century *Crith Gablach.* Like 8 *cuing, brot* is used for both oxen and horses.

These represent all the technical terms which can be assigned with reasonable certainty to the oldest period of Irish literature—the seventh and eighth centuries A.D.—and to which a specific meaning can be given. I have excluded terms of doubtful meaning; thus I have not listed *tét* 'rope' or *refed* 'cord', which occur in the description of Cú Chulainn attaching birds which he had caught to his chariot, because there is nothing to show what part, if any, these objects played in the structure of the chariot-one might think of traces, which could have been used to supplement the pole and yoke harnessing, but that is just a guess. Similar considerations lead to the exclusion of such items as *pupall corcorda, fortche uanaide* 'a purple awning, a green covering', *LU* 9263, which are added to one version of our formulaic description; they have no parallels in the old saga material and *pupall* is a loan from Latin *papilio.* Of the fourteen words selected for discussion, only two—4 *fonnaid* and 9 *dá n-all*—cannot be accounted for as inherited from the Celtic branch of Indo-European; there is no evidence that they are borrowed from any other language, and the presumption is that they are just as Celtic as the other twelve, even though no etymology can at present be offered. Four of the items, meaning 'horses', 'yoke', 'seat' and 'goad', have similar forms and meanings in other Celtic languages; these are all generic words not restricted to chariotry. Only one specific term, that of the chariot *(carpat)* itself, is found in another Celtic language, in the Gaulish *carpentum;* while it is dangerous to rely too much on deductions from linguistic origins, all this seems to point to the Irish chariot as a largely indigenous development.

This may help to make more acceptable the picture that has emerged from this study of a simple two-wheeled cart, containing two single seats in tandem in a light wooden frame and drawn by two horses harnessed by bridles to a yoke attached to the chariot pole; the wheels were shod with iron tyres. That is all that can be said with reasonable certainty; I have chosen to accept the evidence for two rear shafts projecting from the framework, but the confliction of terminology here would also make it possible to dismiss these as a later accretion. Information as to how the pole was attached to the chariot is wholly lacking, and the evidence for traces as an auxiliary part of the harness is too

scanty for any positive conclusion. This is not by itself a war chariot, but the vehicle used by the privileged in a civilisation where equitation was unknown. It is, however, intimately connected with battle, because it was in the *carpat* that the warrior drove to his formalised combats, and in it that he performed the ceremonies of insult and display that preceded those combats; it was in the *carpat,* too, decorated with the heads of his victims, that the victorious warrior drove home.

ABBREVIATIONS

BDD²	*Togail Bruidne Da Derga,* ed. Knott, E., Dublin (1936).
IT ii²	*Irische Texte,* ed. Stokes, W., and Windisch, E., zweite Serie, 2 Heft; Leipzig (1887).
LL	*The Book of Leinster,* ed. Best, R. I., Bergin, O. and O'Brien, M. A., I [-V, in progress], Dublin (1954).
LU	Lebor na hUidre.
O'Mulc.	'O'Mulconry's Glossary'. in: *Archiv für Celtische Lexikographie,* Halle (1900), i, 232 ff.
O'Dav.	'O'Davoren's Glossary', in vol. ii of the same work (Halle, 1904).
RIA Contribb. & Dictionary	These are really the same piece of lexicography, but some of the fasciculi are called *Contributions to a Dictionary of the Irish Language,* and others *A Dictionary* . . . (etc.); Royal Irish Academy, Dublin (1913- [in progress]).
Sg	St. Gall Glosses on Priscian, in: *Thes. (vide infra),* ii.
SMMD	*Scéla Mucce Meic Dathó.* ed. Thurneysen, R., Dublin (1935. repr. 1951).
SR	*Sultair na Rann,* ed Stokes, W., Oxford (1883).
TBC²	*Táin Bó Cúalnge,* ed. Strachan, J. and O'Keeffe, J. G., Dublin (1912, repr. 1967).
TE	*Tochmarc Emire,* in: *Compert Con Culainn and other Stories,* Dublin (1933, repr. 1956).
Thes.	*Thesaurus Palaeohibernicus,* ed. Stokes. W. and Strachan, J., Cambridge (190l-03).

1 In *The Oldest Irish Tradition: a Window on The Iron Age,* Cambridge (1964).
2 See *Táin Bó Cúalnge;* Leipzig (1905), 352, n.1.
3 Jackson, *op. cit.* p.16 n.1; Pokorny, J., *Zeifschrift für Celtische Philologie, 12* (1918) 195 ff.
4 See Foster, 1. Ll. and Alcock, L. (ed.), *Culture and Environment; Essays in Honour of Sir Cyril Fox* (1963), 169.
5 Fox, C., *A Find of the Early Iron Age from Llyn Cerrig Bach, Anglesey,* Cardiff (1946), 27.
6 *Revue Celtique,* 42 (1925), 399-400.

7   See Binchy, D. A., 'Aimser Chue', *Féil-Sgríbhinn Eóin Mhic Néill,* ed. Ryan, J., Dublin (1940), 18-22.

8   *Op. cit.,* p. 18.

9   Often *cairpthech,* presumably because the cluster [-bd-] is unusual in Irish.

10 'Bretha Crólige', ed. Binchy, D. A., *Ériu, 12* (1938) 46, §58. The translation of the passage is my own, but Dr. Binchy regards it as at least as probable as that given by him.

11 So read *carpat ar imram, Contribb.* C 77. 15-22.

12 *Op. cit.,* p. 17.

13 *Op. cit.,* p. 167.

14 Since this paper went to press, Benveniste has argued that chariotry was an Indo-European institution, see *Le vocabulaire des institutions indo-européennes* (1966), i.286. The word on which his argument is based is the Avestic $r \Theta a \bar{e} š t \bar{a}$ 'member of the warrior class', which he analyses as meaning originally 'celui qui se tient debout sur le char', and which, while it is a formation parallel with Irish *eirr,* derives from the technique of fighting from chariots, well attested from the Indo-Iranian area but unknown to the Irish tradition.

15 'The chariot with its driver and warrior was the object of a recurrent formulaic description in the hero-tales, in which the gorgeousness of the vehicle, the clothing and the equipment, can be exaggerated to legendary improbability, yet with a strain of underlying truth', *Ancient Europe,* Edinburgh (1965) 240.

16 *Celtica, 6* (1963), 231-2.

17 See Laws *iv 374;* Thurneysen, *ZCP, 13* (1921), 300; *16* (1927) 273-4.

18 *Loc. cit.*

19 *Archiv für Celtische Lexikographie* I, 23.

20 *Op. cit.,* p. 878 n.4.

21 See *ZCP,* 11 (1966), 93. My text and translation are based on a suggestion by D. A. Binchy (cf. *Ériu,* 20 (1966), 220-1)).

22 In compounds *-be* has usually abstract meaning, cf. *díbe, fubae, tóbae,* etc. In *fidbae* 'bill-hook' it is concrete but active, and there is no certain example of it in the meaning 'that which is cut' required here. It is possible, however, that the word *airbe* 'fence' (which cannot come from *ar-fen,* as stated in *Contribb.* s.v.) contains *-be* in the meaning of 'pole', or the like.

23 *Isihi fertais charpait C.C. ro maid 7 is do béim fertais dochoid, TBC* 773; *is fertas C.C. ro maid 7 is do béim fertas dochoid, LU* 5250; *is fertius carpoit C.C. do muidh 7 is do béim fertusa docóidh, TBC (C)* 67.

24 We can distinguish at least two other words *fert* in Old Irish. The first is a neuter o-stem with the meaning 'tumulus, grave-mound', see D. A. Binchy, *Ériu,* 17 (1952), 83, §11. There is also the word which is the second element of **adbart (see Contribb.* s.v. *adbairt, adbartaigidir,* etc.; regularly used to translate the derivatives of Lat. *adversor)* and *cúart* 'circuit, loop' (from earlier **coärt);* this was originally an $\bar{a}$-stem. Both of these can reasonably be referred to the root meaning 'turn'; for the semantics of *fert* 'tumulus', cf. *túaimm,* discussed in *Celtica, 4* (1958), 44.

25 *Loc. cit.*

26 *Irish Folk Ways* (1957), 176, 171.

27 *Op. cit.,* p. 25.

28 *Proc. Prehist. Soc., 15* (1949), 192-3.

29 *See* Stokes, W., *Indogermanische Forschungen,* 12, 189: Saussure, *Mémoires de la Société Linguistique de Paris, 7,* 88.

APPENDIX A

Sources: LU   8590-8597   (A)

        8625-8635   (B) See edition by
                        Watkins,
              Celtica, 6 (1963), 231

        8657-8672   (C)
        9251-9263   (D)
      10198-10218 (E)

TBC²(YBL)

        3389-3394   (F)

1. dá ech
2. carpat fidgrind (ABE)   féthaidi (ABE)
        fethgrind (C)   fethaine (C)
3. dá ndroch duba (AD)   tairchisi (AD)
            finna (BE)   umaidi (BE)
           ernbudi (C)   iarnda (C)
 dá roth   chóiri (D)   cóicrisi (D)
           nduba (F)   tairchisi (F)

4. fonnaid   réidi (F)   ruirthecha (F)
5. síthfe (B) find (B)   forargit (B)
    sithfe (C) co féthain   findruine (CDE)
             (CDE)
    síthbe (DE)
6. feirtsi crúaidi (ADE)   colgdirgi (ADE)
7. cret aurard (BDF)   drésachtach
                         (BDF)
        noíthech (A)   noiglinne (A)
         chréda (C)   chomglinne (C)
8. cuing druimnech   dronargda (A)
      (ABCDE)   dronuallach (B)
                      dronordae (CE)
                      fororda (D)
9. dá n-all n-aebda (A)   imnaissi (A)
        dúalcha (ABCE) dronbudi (ABCE)
         aphthi (D)   intlasse (D)

APPENDIX B

Text based on the readings given in *Corpus Genealogiarum Hibernicarum,* p. 281.

    1.   Ron boí laithe rortho rind
         i n-íath Cairbri des Boïnd;
          boí cenn airech for ar feirt.
          for ar sithbiu boí écairc.

    2.   Bátir cadain for clár chliu,
         clár ndess, géissi for suidiu;
          ba derg ar carpat uile
          ba lán cenn ar n-etruide.

(Translation)

    1. We had a day of great plying of spear-points in the land of Cairbre south of the Boyne; there was a nobleman's head on our shaft *(fert),* an *écairc* on our chariot-pole.

    2. There were wild geese on the left side (of the chariot), swans on the right side; our chariot was all red, the space between the seats was full of heads.

    The Academy *Dictionary,* s.v. ʔecairc, suggests that it may be a compound of *éc* and *airc.* meaning 'death-strait'. This implies that *sithbe* here means 'chieftain', which is followed by *Contribb.* s.v. *síthbe,* so that it would mean 'our chieftain was in a deadly strait'. But the whole passage obviously refers to a triumphant return from battle, decked with trophies, and *écairc* must be one of these, while *sithbe* refers to the chariot-pole.

    The birds mentioned in v. 2 are perhaps to be compared with those described as accompanying the chariot in some extensions of the formulaic description: *anbluth n-én n-etegnaith/úasa creit chróncharpait,* translated by Watkins as 'a charging along (??) of wild birds from the copper-red frame of the chariot', *Celtica, 6* (1963), 232.

SOUTERRAINS IN THE SEA PROVINCE: A NOTE

CHARLES THOMAS

THE PROBLEMS SURROUNDING the existence of souterrains in Britain and Ireland—problems of their origin, functions, and chronology—have perplexed archaeologists for the last two centuries. At the end of this short note, they will remain unsolved, and the most that one may hope to do is to clarify certain headings as a basis for discussion; not least, whether souterrains are involved in any way with any 'Irish Sea Province' in pre- or protohistory.

As field monuments, souterrains have various regional labels. In Cornwall, they are the well-known 'fogous', *fogou* being a late and slightly corrupt form of *fogo,* or *ogo,* a Cornish word meaning 'cave'. Two dialect variations, *vow* and *vug,* are applied to natural sea-caves as well as to souterrains. Over most of Ireland, the word 'souterrain', mainly (I suspect) because of the plethora of instances, has been confirmed in the archaeological vocabulary alongside cist, cromlech, dolmen, menhir, henge, cursus, and all the other borrowings and neologisms. In Scotland, one can find a wide selection of terms; notably 'earth-house' and 'Pict's House' and (from Gaelic) *weem* and *wag*.

Seen against the setting of the Irish Sea, souterrains can be found in the western half of Cornwall (where there may have been up to fifty or so); in Ireland, with particular reference to the west and the north-east, and with a total running into four, if not indeed five, figures; but, as far as I can discover, none at all is known from any part of Wales. Though that country lies beyond our province, we can hardly omit mention of Scotland. Here, the general distribution of souterrains stretches far and wide, from a scatter in the Northern Isles and the north-east tip of the mainland, down to a much larger concentration along the eastern coastal belt. Scottish souterrains are notably present in those modern counties, north of the Firth of Forth, which formed in historic times the southern moiety of the Pictish kingdom.

This overall Irish-British distribution is a curious one, but, as we now have it, must be regarded as largely real. There are scarcely any traces of souterrains in east Cornwall and none in Devon; there is the absence from Wales; and the Scottish map, prepared in recent years in connection with another and earlier C.B.A. conference, rests on some years of authoritative fieldwork. The only parallel, and it may be irrelevant, is the pattern of a much earlier spread, that of megalithic tombs; and the similarity is emphasised by the occurrence of what appear to be the end-products of the souterrain tradition in Jutland, like the tail-end of the megalithic diffusion in Scandinavia.

The chronology is far from settled. Without prejudice to absolute dates, the vast majority of the Irish examples have some association (when they have any at all) with the native Iron Age and the Early Christian era. The later phase is important. It is commonplace in Irish archaeological literature to read accounts of Ogham-inscribed stones having been used to roof, or to re-roof, souterrain passages, and the hand-made native pottery of north-east Ireland from roughly the 5th to 11th centuries A.D., 'souterrain ware', was first given this now-misleading title because it was so frequently found in this class of structure. In Scotland, not very many souterrains have been investigated, but in the far north the usual context seems to be (allied with various forms of circular stone-built dwellings) on the whole secondary to brochs and to allied Iron Age constructions. Those souterrains investigated by the late Frederick Wainwright in southern Pictland certainly fall within the Roman period, and one of them yielded finds which I would prefer to regard as distinctly late Roman and conceivably later.

Certain aspects of the souterrain puzzle, if hardly amounting to common ground for all students, do strike the casual enquirer. Firstly, whatever specialised or arcane functions individual souterrains may be argued to have possessed, they are basically *cellars,* and are so predominantly associated with homesteads (or with small fortifications enclosing homesteads) that one is now inclined to suspect any claims for 'isolated' souterrains. Secondly, however late in time souterrains may have been in use in the various regions where they occur, it is difficult in any case to show that they were in use before the late Pre-Roman Iron Age. Thirdly, though souterrains do not occur universally, they occur in fairly intense localised concentrations; what we see on the maps might be the end-product of a locally-adopted taste in souterrains, a secondary pattern, and not a simple, primary, pattern immediately betraying sea-borne diffusion. Fourthly, while it could be argued—and I think, on balance, it may have to be argued— that the souterrain idea came from Armorica to Cornwall, and thence (or independently) to Ireland, followed by a further spread to Scotland, the absence of Welsh souterrains not only remains a most awkward enigma; it weakens any idea that we are viewing any form of characteristic 'Irish Sea' distribution, and a rapid and only partially-explicable diffusion from south to north seems at the moment all that we could suppose. Fifthly and lastly, there is a glaring lack of any *cultural* homogeneity. Phenomena which can be classed as 'Iron Age' are not *ipso facto* culturally related, and one would like to know why (at random) there are no souterrains reported from the Lake District, from the Pennines, or from those great tracts of Scotland which are distributionally unaffected. Even within distinct souterrain provinces like Scotland, there are clear divergences in type between (say) the souterrains of Sutherland and those of southern Pictland.

If we return to the Cornish fogous, of which there has been much sporadic excavation in the last decade, we do at least have some evidence for a starting-date; and no fogou has yet yielded any acceptable evidence of post-Roman occupation. The Cornish souterrains are either fully or partially subterranean, sited in previously-dug gullies or cuttings of substantial proportions, and built up with dry-stone walling and slab roofs. The majority (possibly all, though one cannot demonstrate this) were directly associated with some standard form of normal above-ground homestead-single hut, conjoined huts, or courtyard house—or else with one of the numerous small univallate earthworks known as 'rounds'. These, the counterpart of the Irish raths, are enclosed homesteads (house(s) and yard) characterising settlement-pattern over most of Cornwall from roughly the 1st century B.C. to the late Roman era.

In plan, the Cornish souterrains tend to possess more than one entrance, the main

gallery being a through passage. Side-passages or chambers, which may or may not have subsidiary terminal entrances, can be finger-shaped or (as the Carn Euny) end in a large circular corbelled chamber. In two surviving examples (Pendeen and Treveneague) there are short side-passages tunnelled into the 'rab' or 'growan', the compact gravel-like decomposed granite which occurs widely in granite uplands. This is a feature of some interest, because the Breton and Gaulish souterrains, apart from being rather smaller and slighter than the Cornish ones, differ radically in constructional techniques; the Breton souterrain is almost always a tunnel, not a great trench lined and roofed with stone.

Finds from Cornish souterrains, whether made by chance or recovered in the course of proper excavations, are open to a measure of suspicion; all the known sites are today, and I think have been since the iron Age, open to all comers. Blue-and-white china and medieval pottery need occasion little comment, but when sherds of far older date are found compacted within the subterranean floors, it could be supposed that they were derived from the debris of some associated, possibly earlier, surface site. None the less at Treveneague, at Boscaswell, and at Carn Euny, the oldest pottery found is consistently of Pre-Roman Iron Age type (i.e., local versions of 'South-western B'). In the case of Carn Euny, this particular context is derived from current excavations, where such pottery is not only primary but related directly to the phase of souterrain construction.

The function, or functions, of souterrains is open to some discussion. Very few anywhere could safely be described as sally-ports for forts or cliff-castles; very few seem to be either suitable or likely places of refuge. While noting the increasing viewpoint that souterrains have, in general, mundane functions associated with homesteads (cellars, byres, store-places), it must be stressed that the class 'souterrain' is almost as diverse in content as the class 'hillfort'. Diversity in detailed plan and in the mode of association with any surface structure argues corresponding diversity—within the broad domestic relevance—of specific function. Wainwright considered that the Ardestie and Carlungie souterrains were semi-subterranean byres for cattle of small size. At least one Cornish fogou—Porthmeor—is really an extension of a complex thick-walled hut and would serve very well as some kind of larder. Though one cannot press the parallelism too far, it should be noted that in granite areas of west Cornwall there are souterrain-like structures—passages up to fifty feet long, side-chamber, even circular chambers, all hollowed out in hillsides from farmyards and gardens—which were in use and in some cases are still in use during this century. Some of these latter-day fogous are demonstrably 19th century; some may be earlier. Locally, they are called 'tatie hulls' or 'hullies' (potato holes), and were used to store potatoes over the winter, and to house butter and milk during the summer. Some have been turned into garden stores and general glory-holes; some have been fitted with door-frames and wooden doors, or wire netting, and used to accommodate pigs or chickens. Without suggesting that they represent a continuous tradition from the era of the fogous, one can argue that similarly varied uses are on the whole probable for the prehistoric counterparts,

It would of course be rash to dismiss out of hand the possibility of some magical or religious aspect of souterrains. Students of early Celtic religion have shown us that we cannot blind ourselves to the potentially sacral character of any pit, shaft, hollow, or cave in the insular Iron Age. Mrs. Clarke and Dr. Ford have argued that a relief figure (a man holding a spear and perhaps a serpent) appears on an entrance jamb at the Boleigh fogou in the Land's End peninsula. At Cam Euny, the great circular chamber, less obviously utilitarian than most subsidiary chambers, may have formed some curious

'basement' to a hut above it. But the difficulties in providing immediate, domestic, explanations for the functions of individual souterrains surely arise in most cases from our ignorance of the surrounding economy.

How did souterrains begin, and have they anything to do with any concept of an Irish Sea Province? I have elsewhere suggested that the souterrain fashion reached our shores from France, specifically from Iron Age Armorica, and that the transmission to south-west Britain formed part of a whole culture-complex; this involved cliff-castles (which also occur, in bewildering numbers. in Ireland), cordoned ware, and possibly enclosed homesteads leading to the Cornish courtyard houses. If so, this was in the 2nd century B.C., the incoming settlers (Veneti) being subsequently marked off from the Dumnoni by the specific label of *Cornovii,* 'dwellers in promontory forts' (whence, later, the area-name **Cornouia* and ultimately the word 'Cornwall'). In the case of souterrains, the outline plans of Cornish and Armorican souterrains are (given a change in scale) fairly similar. Despite the different techniques of construction, there are certain Breton souterrains—those at La Trinité sur Mer, Morbihan—which are not only integrated with hut complexes, as in Cornwall, but appear to be stone-walled; and there are occasional chambers in Cornwall which, like those in Armorica, are rock-cut, not built.

Can one press this cross-Channel diffusion further? I think not. It seems highly probable that Irish souterrains spring from some independent introduction, perhaps a little after that into Cornwall, and this view gains some support from views about early Irish metalwork and its affinities. But this does not in any way constitute an 'Irish Sea Province' facet of archaeology. Wales does not come into it at all; nor do the shores of Severn. The Scottish souterrains, which I do not attempt to explain, do seem to be in general a little later than those in Ireland or the south-west (or, except perhaps for Jarlshof, can nowhere be shown certainly to be *earlier).*

As to the origins of souterrains, I use the word 'origins' (plural) because of a belief that the germ of the idea could be contained in more than one source. I do not know, and have not found any recent discussion of, the European distribution of such monuments. In northern and north-west Gaul, the idea has been expressed that souterrains are late, domestic, copies of aspects of megalithic tombs—one thinks of *allées couvertes,* for instance. In Scotland, might some such idea conceivably explain the otherwise anomalous Scottish distribution, the lack of any direct connection between the other souterrain regions at the appropriate time? Again, are the galleries of galleried duns related to souterrains? Does the massive walling of Cornish courtyard houses, double-faced and rubble-cored to a thickness of many feet, in any way reflect (as at Porthmeor) the sort of semi-souterrain than can be built by leaving such a wall with a hollow centre? What precisely were the underground structures used by the Germani, mentioned with tantalising brevity by Tacitus ? Is there indeed some other part of Atlantic Europe—Spain or Portugal, perhaps—to which we should look? The problems of the souterrains remain, as I warned at the outset, still unsolved; but I think we can be clear that they offer no evidence for an Irish Sea Province.

CELTIC STONE IDOLS IN IRELAND

ETIENNE RYNNE

STONE SCULPTURE from pagan Celtic Ireland is found in two forms: aniconic and iconic, There are but four examples of the former type, all pillar-stones [1], namely the Turoe Stone, Co. Galway, the Castlestrange Stone, Co. Roscommon, the Killycluggin Stone, Co. Cavan, and the Mullaghmast Stone, Co. Kildare. It is not, however, the intention in this paper to discuss those stones[2], except to restate the writer's belief that they most probably reflect a La Tène infiltration into the western part of Ireland from Brittany[3], and, in consequence, are not justifiably to be linked with an 'Irish Sea Province'. The iconic sculptures, on the other hand, are mostly found in the northern part of the island and many of them seem to show links with Britain and, via Britain, with the Rhineland and areas east [4], fitting, thus, into the somewhat unrealistic concept of an 'Irish Sea Province'.

Several stone heads, a few busts, one complete figure in low relief and three stone animals are known from Ireland and are suspected of belonging to the pagan Celtic period. The period of these idols is a long one, extending over a span of about five hundred years, it being unlikely that any of the Irish carvings antedate Romano-British influence and equally unlikely that the arrival of Christianity in the mid-fifth century succeeded in abruptly terminating the practice of carving them.

Unfortunately, it is extremely difficult to be definite about which carvings to assign to the pagan period, most of them being found in ancient church-sites and not in identifiable pagan sanctuaries: it seems probable, in Ireland, that the pagan ritual sites were not always destroyed by the early Christian monks but were more often taken over by them, the Christian church being triumphantly erected on the site of the pagan temple. In consequence, it is not yet possible to claim a definite pagan origin for any stone idol from Ireland on the basis of its associations or provenence. Furthermore, only one Irish stone head seems to have a recognisably Celtic attribute, namely the head from Beltany, Co. Donegal,[5] around the neck of which very faint traces of a collar have been noted, though even this does not seem to be of standard Celtic type [6] (Fig. 18).

The identification of Irish stone heads and other such iconic sculpture as belonging to the pagan Celtic period has, therefore, largely to be based on art-historical criteria. Nonetheless, it is believed that such identification is possible, even if it be generally of a tentative nature. From a careful study of these apparently pagan Celtic carvings, however, it is possible to isolate certain features which seem to be virtually exclusive to them and, furthermore, which are not generally found associated with later sculpture. It is also possible, in some cases, to recognise certain schools of sculpture. Finally, it seems possible to link many of these sculptured idols with Celtic sculpture in Britain and points eastwards. [7]

There are six major areas of concentration of stone idols in Ulster, three of which are in Co. Armagh (one from Cathedral Hill, Armagh City, the second from the Newtownhamilton area some twelve miles to the South, and the third from the Tynan area some eight miles west of the city). The three other Ulster concentrations are in the Corleck area, Co. Cavan, the Lower Lough Erne area, Co. Fermanagh, and the Raphoe area, Co. Donegal. Outside of Ulster, there appears to be but one minor concentration of stone idols, in the Piltown area, Co. Kilkenny. There are also a few isolated stone heads of apparently pagan Celtic type scattered widely in Ulster, Leinster and Munster, but none from Connacht, or otherwise west of the River Shannon (Fig. 17).

1. Cathedral Hill, Armagh

The concentration of stone idols from Cathedral Hill, Armagh, is the only really closely-knit group in Ireland, some six sculptures from the site being clearly carved in the one school, perhaps even by the one hand. Cathedral Hill, the site chosen in the fifth century by the national saint of Ireland, St. Patrick, upon which to build his principal church, was apparently an important pagan Celtic cult-centre during the early centuries A.D., probably that of the Ulaid who had their royal residence on another hill, Emain Macha (now generally known as Navan Rath or Navan Fort), about two miles to the West. Cathedral Hill, the ancient Ard Macha, is the only Irish pagan Celtic sanctuary-site which we can identify with any degree of certainty. There is an enclosure around the top of the hill, an enclosure which can be traced on the ground but which is more clearly discernible from the air, [8] and for which a radiocarbon date of *c.* 290 A.D. was recently obtained. [9]

The six sculptures of probable pre-Christian date from Cathedral Hill comprise the so-called 'Tanderagee Idol' (a bust, magnificent in its crude barbarism), [10] the so-called 'Sun-God' (a complete high relief figure of Sol *Invicta* type)[11], an apparently bearded head,[12] and three bears. [13] There is also one badly defaced head [14] which may possibly belong to this group, while yet other stone carvings preserved in the Cathedral or neighbourhood have sometimes been claimed as belonging to the pre-Christian period also, but, in the opinion of the present writer, more probably date from several centuries later. [15]

The above six sculptures are all linked together by certain features, including the fingers/claws of the 'Tanderagee Idol', 'Sun God', and two larger beasts; the mouths, nose and eyes of the 'Sun God', bearded head and, to a lesser extent, of the 'Tanderagee Idol'; the eyes and snouts of all three bears; and the stance of the two larger bears and, to a lesser extent, of the smallest bear. Furthermore, there is a similarity of stone and carving which supports the other links in justifying a belief that they all belong to the same school of sculpture, even that they may be the work of one master-sculptor.

Links with other possibly pagan Celtic sculptures in Ireland are less easy to find, though the wide, flattish wedge-shaped nose with closely-set rounded eyes, of the bust, figure and head, can be reasonably well compared with those of the heads from Camly-ball, Co. Armagh, Corleck, Co. Cavan, the 'back' face of the three-faced head from Woodlands, Co. Donegal, and, to a lesser extent, the head from Killavilla, Co. Tipper-ary—and, possibly negating the value of such parallels, on the heads on the 9th century high cross at Moone, Co. Kildare! [16] The hair, side-whiskers, and beard of the stone head from Cathedral Hill can, to some extent, be paralleled with those of a head from Corraghy, Co. Cavan—a comparison of the general style of the features with those of
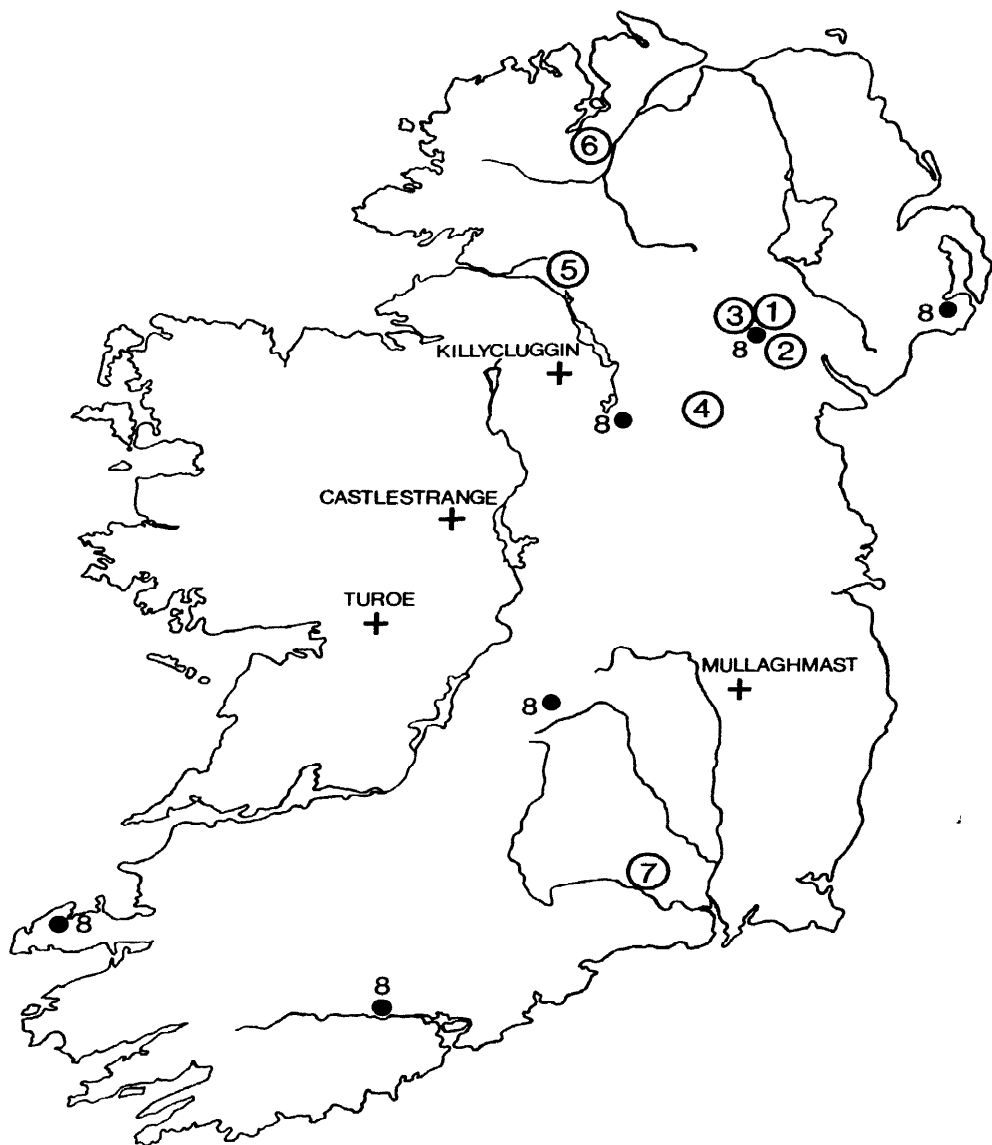
Fig. 17

PAGAN CELTIC STONE SCULPTURE IN IRELAND

Idols: *(1) Cathedral Hill, Armagh; (2) Newtownhamilton area, Co. Armagh; (3) Tyrtan area, Co. Armagh; (4) Corleck area, Co. Cavan; (5) Lower Lough Erne area, Co. Fermanagh; (6) Raphoe area, Co. Donegal; (7) Piltown area, Co. Kilkenny; (8) Isolated heads.*

'Stoney Brennan' in Loughrea, Co. Galway, [17] is not valid, the latter being clearly a 17th/18th century carving with wavy hair, ears and twisted mouth. The rectangular mouth with ridged lips of the 'Tanderagee Idol' can be paralleled on the head at Killadeas, Co. Fermanagh, and possibly also on that at Saul, Co. Down, while the extension of its eyebrows back around the sides of the head can be paralleled on 'The Sailor', from Woodlands, Co. Donegal.

Parallels on the other side of the Irish Sea and farther afield can also be found for the Cathedral Hill carvings. The emphasis on the head and arms as on the 'Tanderagee Idol' is well attested on several Celtic sculptures in western Germany, one of the best known being the Holzgerlingen Janus. [18] Busts of this general type are not generally known from Britain, but it would seem unwise to propose that the type may have reached north-east Ireland directly from the Rhineland—too many other features on the 'Tanderagee Idol' can be more closely paralleled in Britain than on the Continent. The fingers of the 'Tanderagee Idol' and 'Sun God' are crudely carved and seem to flow directly from the forearms and not from hands, a feature which can be very closely paralleled on the Holzgerlingen Janus, though not easily elsewhere (unless on the Neolithic statue-menhirs in southern France!). [19] The vestigial (or incipient?) horns of the 'Tanderagee Idol' can be more closely paralleled in Britain than elsewhere, among several good examples being the stone heads from Carvoran, [20] *Corstopitum* (Corbridge), [21] and Chesters, [22] all in Northumberland. The rectangular mouth bordered by ridged lips can likewise be found on British heads, two good examples being on the ram's-horned head and the head with flowing hair from Netherby, Cumberland, [23] and on one of the stone heads from Le Temple de la Forêt d'Halette, in north-eastern France. [24] The wide flattish nose and closely-set rounded eyes of the Cathedral Hill heads can be paralleled in Britain, for example on the stone head and on the seated goddess from Caerwent, Wales. [25] Parallels can also be found on the Continent, for example on some of the stone heads from Le Temple de la Forêt d'Halette, and also on the heads of the well-known Early La Tène pillar from Pfalzfeld, on the Rhineland. [26] The eyebrows of the 'Tanderagee Idol', stretching in a straight and prominent ridge above the nose and extending back around the sides of the head, cannot be easily paralleled. The eyebrows of the Holzerlingen Janus stretch in a straight ridge above the nose, while several heads in Britain and on the Continent have eyebrows which extend around the sides of the head, *e.g.,* the horned Netherby head, on many of the heads on the Gundestrup Cauldron, [27] the heads held in the claws of the Noves monster, [28] and the *orans* busts on the bronze plaques from Waldalgesheim. [29]

The bears from Cathedral Hill (pl.VII.1) cannot be well paralleled in Britain, but a reasonable comparison for the smallest bear can be made with one from Limoges, in west-central France. [30] The largest bear, however, has an added feature not found on either of the others. The space between the legs of all three bears is left uncut, though recessed, and on either side of the largest bear, carved in relief between the legs and facing towards the rear, is the head of a large dog or wolf. The dog and wolf, like the bear, played a small rôle in Celtic mythology, [31] but the presence of heads on a larger idol, as in this instance, recalls immediately the boar and eye carved on the torso of the well-known figure from Euffigneix, in north-east France. [32]

2. Newtownhamilton area, Co. Armagh

There are three heads from the Newtownhamilton area which are probably of pagan origin.[33] All of them are apparently associated with buildings which may have been built by Jonathan Kernaghan, a local builder of the last century who, according to local tradition, had a supply of these heads and built one into every house he erected, as a sort of trade-mark. As Kernaghan may have been employed on the renovations carried out at Armagh Cathedral in 1834-40 or, at least, have been in close contact with his fellow-builders working there, it is possible that he obtained the heads from there. In view of the marked difference between the Newtownhamilton heads and the Cathedral Hill carvings, however, it is more likely that he acquired them from somewhere in the Newtownhamilton district itself.

From the old barracks in Johnston's Fews, Camlyball, near Newtownhamilton, comes a block of sandstone(?) with a deeply incised ovoid face which has a slit mouth, wide flattish nose, and browless eyes, each of which has a small central depression[34] (P1. VII.2). Although carved in a very different style, the flattish face and features recall that of the Cathedral Hill 'Sun God', but apart from this it has no congeners in Ireland. It can, however, be compared with several heads on the other side of the Irish Sea, especially with the cult-head from Port Talbot, Glamorganshire in south Wales,[35] although the narrow lentoid eyes of the latter are very different. A date in the early centuries A.D. has been suggested for the Port Talbot head, and a similar date would appear acceptable for that from Camlyball. Eyes with central depressions representing the pupils are not uncommon in Celtic sculptures from Britain[36] and Continental Europe,[37] but are rare in Ireland, occurring only on the heads from Saul, Co. Down, from Killavilla, Co. Offaly, and on the faces of the Boa Island Janus.

The two other heads are from Armaghbrague, just north-west of Newtownhamilton. One is still in the gable-end of an outhouse[38] while the other (Pl. VII.3) is in private hands in Newtownhamilton.[39] They have several features in common, which suggests that they may have been carved by the same hand. They resemble each other in the oval shape of the face, the slightly rounded contours of the features, the broad noses with nostrils (rather doubtful in one case but very evident in the other), the browless, D-shaped eyes, the wide space between nose and mouth, and in the fact that each has a small circular hole to one side of the mouth. As has been noted by the present writer on a previous occasion,[40] the hole-in-mouth feature seems to be a characteristic one of some Celtic heads. The only other examples known from Ireland are the small hole in the front face of the three-faced head from Corleck, Co. Cavan, and the 'whistling' mouth of 'The Sailor' head from Woodlands, Co. Donegal. There are several examples from Yorkshire, the best known being those in all six faces of the two three-faced heads from Greetland, near Halifax,[41] while the feature is also known from a stone head from Anglesey, in north-west Wales.[42] The best Continental parallel is undoubtedly the small hole in the centre of the mouth of the well-known Celtic head from Msecké Zehrovice, Czechoslovakia.[43]

3. Tynan area, Co. Armagh

The third group of Armagh idols, that from the Tynan area, consists of only two heads. Both were found in the area and may be from Cortynan, where there is abundant evidence of an early church-site. They are of similar stone, style and workmanship,

and, although not by any means identical, may have been sculpted by the same hand. One is a spherical head with short tenon-like neck [44] (Pl. VIII.1) while the other head is almost equally spherical but has a long, thick, columnar neck [45] (Pl. VIII.2). Apart from the neck, the main difference between the two heads are the eyes and ears, the first head, that with tenon-like neck, having narrow lentoid eyes with brows, and horn-like crescentic swellings for the ears, while the second head, that with columnar neck, has browless round eyes and C-shaped swellings for ears. The only other good Irish example of a spherically shaped head with horn-like/C-shaped swellings for ears is that from Corravilla, Co. Cavan. There are several spherical heads from the other side of the Irish Sea, notably two from Bron-y-Garth, Shropshire, [46] a three-faced head from Bradenstoke, Wiltshire, [47] and a three-faced head from Sutherland, Scotland. [48] The horn-like swellings for ears likewise find good parallels in Britain, close comparisons being possible with those of the Netherby head [49] and, perhaps best, with those of the *Corstopitum* 'Maponus' head. Spherical stone heads are not frequent in Continental Europe, but a good comparison can be found on the three-faced head from Glejbjerg, in Jutland, Denmark. [50] This head has a tenon-like neck and one face which definitely recalls that of the tenoned Cortynan head, in shape and general style. [51] The rounded head of the janiform idol from Leichlingen, [52] in north-west Germany, also provides a good comparison, especially the horn-like/C-shaped swellings which both faces have for ears. [53] Lastly, the narrow lentoid eyes of one of the Cortynan heads deserve mention. Such eyes are relatively rare in Ireland, the only examples being those of the unprovenanced head from the Armagh neighbourhood, of the Corraghy head, Co. Cavan, and of the Kilmanahin head, Co. Kilkenny. The type is more frequently encountered in Britain, where the closest parallels are the narrow lentoid eyes of the Port Talbot head.

4.   *Corleck area, Co. Cavan*

All the stone heads in the Corleck area, near Bailieborough, Co. Cavan, have already been mentioned in relation to the various Armagh idols. These Cavan heads include the well-known three-faced example from Corleck itself, [54] the head from nearby Corravilla, [55] which somewhat resembles the Cortynan ones, and the long-necked, bearded head from Corraghy, [56] just north of Corleck. Local tradition, furthermore, records that two janiform stone heads were dug up many years ago in Drumeague, the townland in which is Corleck Hill, [57] while the wooden figure from Ralaghan, near Shercock, Co. Cavan, [58] was found less than five miles to the East.

Three-faced idols have often been discussed, [59] and it is clear that this form of stone head is common to Ireland, Britain, Continental Europe and to places much farther afield. The Corleck specimen (Pl. VIII.3) is unlike all others in its elegance and economy of line. The three faces carved on the boulder are all very similar, but are not identical. The hole-in-mouth feature of the front face and the general appearance of the rounded eyes and broad flattish noses have already been commented on. There is a small hole in the bottom of this head, obviously intended as a mortice to help retain the head on a stand or pedestal which would have had a small tenon. A similar feature is to be found on the unprovenanced Armagh head, and on the bottom of a Janus head from Lower Pennington Farm, Hampshire, England. [60] All in all, therefore, it seems clear that the Corleck head is related in various ways to several Irish heads, and to three-faced and other heads in Britain; relationships with heads in Continental Europe are less apparent, apart from its three-faced form. [61]

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The Corravilla head (Pl. VIII.4), being small, spherical and having horn-like swellings for ears, shows obvious relationships with the Cortynan heads. The eyes are lentoid, but they differ from the Cortynan examples in having large lentoid depressions in their centres. Such depressions are not known from other Irish idols, but can perhaps be compared with those on a stone head from near Appleby, in Cumberland, [62] and, to a lesser extent on another stone head from *Corstopitum* (Corbridge), in Northumberland.[63] Parallels can also be found in some English Celtic metalwork, for example on the bronze mask of a horse from Stanwick, Yorks. [64]

The head from Corraghy differs from all other Cavan heads in its massive, pedestal-like neck (Pl. IX.1). Its beard and side-whiskers have already been noted, as have its narrow lentoid eyes. These have a scored line above them, under the very slight brows, as if to depict eyelids. This feature is certainly unique in Ireland, but possible British examples can be found on the horned head from Muirton, near Perth, Scotland, [65] and, in a somewhat different way, on several Roman and Romano-British heads. [66] The ears, indicated as small holes surrounded by penannular ridges, are paralleled on the two-piece head from near Piltown, Co. Kilkenny, but not on any other Irish head. The smiling mouth of the Corraghy head can be paralled on only one Irish head, that from Kilmanahin, Co. Kilkenny, and though such mouths are also known elsewhere, they are rare. Good British examples are to be found on both faces of the Janus head from Lower Pennington Farm, Hampshire, while good Continental examples can be seen on both faces of the Leichlingen Janus. The pedestal-like neck can, perhaps, be compared with that of one of the Cortynan heads and also with that of the Kilmanahin head.

5. *Lower Lough Erne area, Co. Fermanagh*

The stone idols from the Lower Lough Erne area, Co. Fermanagh, comprise a markedly different sort of group than do the others, the 'decapitated head' being absent. There are three sculptures in this group, the best known being the janiform idol in the ancient churchyard at Caldragh, Boa Island [67] (Pl. IX.3). Janus idols have, like the three-faced type, been frequently discussed, and likewise are found in Ireland, Britain and on the Continent. [68] The Caldragh idol is more correctly two busts back-to-back, much as is the Holzgerlingen Janus, rather than a two-faced head. The emphasis is all on the large heads and crossed arms, [69] an emphasis which links it with the 'Tanderagee Idol' from Cathedral Hill and with sculptures in western Germany—the presence of a belt around the Boa Island idol further supporting the connection with those from Germany. The Boa Island Janus may well have moustaches and pointed beards which are such that the faces appear sub-triangular, and in some ways somewhat similar to that of the 'Maponus' head from *Corstopitum*.[70] The large eyes are outlined by a ridge which springs from the top of the nose. Although the eyes of Celtic heads are frequently outlined by ridges, parallels for the ridges springing from the bridge of the nose before encircling the eyes are not easy to find. The eyes of the stone heads from Beltany, Co. Donegal, and from Cloghane, Co. Kerry, are so bordered, while the eyes of the small head from Cavan town seem also to be similarly outlined. The shape of the Janus' eyes can, however, be paralleled on some British heads, notably with those of a small Romano-British statuette from Carlisle, Cumberland, [71] and those of both faces of the Janus from *Corstopitum* (Corbridge), in Northumberland. [72] The mouths are pointed oval in shape and the tongues appear to be protruding slightly, features which link the Janus

with the nearby Lustymore idol and, to a lesser extent, with the Beltany head. Between the two heads is a socket-like hollow which appears to have been intended for the retention of something—possibly for a separately made 'comma-leaf crown' to serve for both heads? In the top of one of the heads is a fairly large but shallow depression which could be interpreted as a hollow for libations. Libation hollows in stone heads are not common in Ireland, the only other example being in the top of the unprovenanced head from near Armagh. In Britain, however, there are several recorded examples, including the *Corstopitum* 'Maponus' head and the three-faced head from Sutherland. The feature is also well-known in Continental Europe, particularly in Gaul, one of the better examples being in the head from Montceau-les-Mines, near Chalons-sur-Saône. [73]

The second idol in the Lower Lough Erne area is that from an ancient graveyard on Lustymore Island, but is now re-erected in Caldragh churchyard, alongside the Janus [74] (Pl. IX.3). In many ways this idol resembles the Boa Island Janus, and if the points of resemblance are perhaps not sufficient to indicate that they are the work of the same sculptor, they do at least suggest that they may be products of the same school. It has been suggested that the Lustymore figure is sitting in a squatting, Buddha-like position, [75] which, if true, would immediately recall the well-known Roquepertuse and Bouray figures. [76] This is very doubtful, however, several careful examinations of the stone by the present writer failing to reveal any certain evidence for legs or hips. It has further been suggested that the idol was perhaps originally janiform like the Boa Island one, [77] but, again, careful examination of the flat back of the stone failed to reveal any indication of either carving or defacement.

The third head in the Lower Lough Erne group is in some ways the least convincing of the Lower Lough Erne group of idols. It is carved in high relief on the edge of a large thick slab in the old churchyard at Killadeas, Co. Fermanagh. [79] There are other carvings also on this slab, *viz.,* a panel of wide-ribbon interlacing down the same side as the head, running from below the chin to near the bottom of the slab, and, on one of the broad faces of the slab, the hunched figure of an ecclesiastic with a bell and crozier. These latter carvings are probably 9th or 10th century in date [79] and both appear to be secondary—the dressing of the broad face to take the carving of the ecclesiastic has clearly reduced the left cheek of the high relief head on the edge, thus making the face asymmetrical; the panel of interlace is less obviously secondary, but is most probably so. Although almost as closely similar to the 9th/10th century Christian sculptures on nearby White Islands [80] as to pagan sculptures, there seems to be at least one good reason, other than the fact that it antedates a carving of an ecclesiastic, to suspect that "It is probably a pagan statue adapted to a Christian monument": [81] the mouth, a rectangular opening bordered by a ridge, is similar to that of the 'Tanderagee Idol', rather than to the pouting rectangular mouths of the White Island sculptures. Despite this, however, one ought to keep an open mind concerning its date and nature— as one must, indeed, for almost all the Irish carvings discussed in this paper.

6. Raphoe area, Co. Donegal

The last concentration of stone idols in Ulster to be discussed, that found in the Raphoe area, Co. Donegal, comprises seven sculptures. They include three from Woodlands [82] (Pl. X), two from Drumleene (one of which is now lost), [83] one from Creaghadoos, [84] and one from Beltany Stone Circle or its immediate vicinity. [85]
All three of the Woodlands carvings are busts, two (one three-faced and the other of
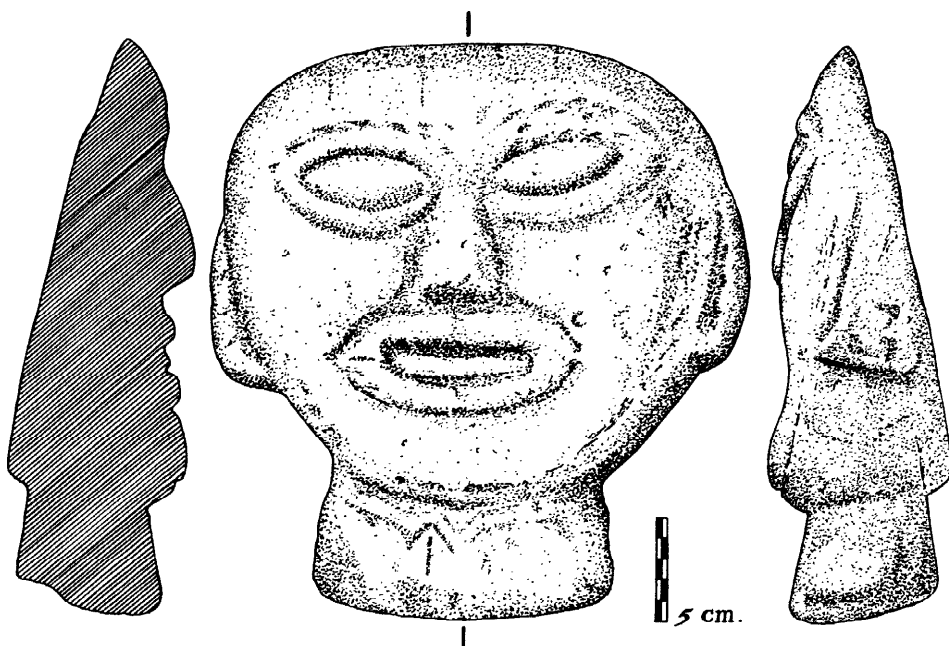
Fig. 18
Stone head from Beltany Stone Circle, Co. Donegal

rather simian appearance) seemingly carved by the same sculptor, and the third, known traditionally as 'The Sailor', being of a different type of stone and carved in a different style by a different hand. The three-faced bust and the rather simian bust are both massive pieces of sculpture. The back face of the three-faced bust, with its round flat face, wide flat nose, round eyes, and slit mouth, is clearly in the same tradition as many of the heads and busts discussed already, while the presence of but a single ear has been paralleled across the Irish Sea, on the three-faced head from Bradenstoke, Wilts.[86] Although it is difficult to parallel the small side face or the front face with its bulbous and heavy brows, [87] and although both these faces differ from one another and are quite different from the flat back face, it is clear that they were all carved at the one time; there is, therefore, no good reason to exclude them from a probably pagan tradition. The other large bust, being arguably by the same sculptor, should likewise be considered probably of pagan Celtic origin, although it also is difficult to parallel. The third bust, 'The Sailor', resembles the latter sculpture, and to a lesser extent the back face of the three-faced bust, in the manner in which the head is set slightly forward so that it presents a hunchbacked profile. The clearly-cut lentoid eyes recall somewhat those on the unprovenanced Armagh head in execution but are much wider, while the eyebrows recall those of the 'Tanderagee Idol' in their backwards extension, but they spring from the nose rather than pass straight above it. The 'whistling' mouth of 'The Sailor' has already been mentioned, and its connections with the hole-in-mouth feature

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have been fully argued elsewhere, [88] a feature which links this head with the Corleck and Armaghbrague heads, with the Anglesey and Yorkshire heads, and with the Msecké Zehrovice head in Czechoslovakia.

Little can be said about the two Drumleene heads—one is now lost and the other [89] is so covered with whitewash and paint that its features are virtually indiscernible. It is carved from a rounded boulder which would suggest a link with the spherical heads from Britain (mentioned above in relation to the Cortynan heads) and which would, furthermore, almost certainly exclude a Romanesque origin for it. [90]

The Creaghadoos head is also carved from a boulder, ovoid in shape and is unique in that its nose, eyes, eyebrows and mouth, are cut into the stone, not raised in relief. [91] Although a 6th century B.C. archaic Punic origin has been suggested for this head, [92] it would seem wiser in the present stage of our knowledge to regard it as something of a freak but, because of its shape and location, to include it with the other probably pagan Celtic idols found in the same general area.

The head which came from Beltany Stone Circle, or its vicinity, differs from the other stone heads in being carved from a rather thin slab rather than from a thick stone or rounded boulder. The face is flattish and round, with a lug-like projection at either side apparently to represent ears (when viewed from the front). The neck is almost tenon-like and appears to be 'encircled' by some sort of collar, indicated by very shallow, pocked-out grooves. The sub-rectangular mouth is bordered by a ridge and the tongue protrudes slightly, much as do those of the Boa Island Janus. As already mentioned, good parallels for the manner in which the eyes are bordered by ridges springing from the bridge of the nose are to be seen on the Boa Island Janus and Cloghane head. Quite apart from its wild and barbaric appearance, and apart from the close resemblances between it and the Boa Island Janus, the collar-like neck-ornament must surely provide a very strong argument in favour of a pagan Celtic origin for this head (Fig. 18).

7. Piltown area, Co. Kilkenny

The last concentration of stone idols to be discussed is that centred in the area around Piltown, in south-west Co. Kilkenny. The group comprises three stone heads, one from Kilmanahin, near Glenbower, [93] and the other two presumably from the neighbourhood of Piltown. [94]

The head from Kilmanahin (Pl. IX.2) is, like many of the heads discussed above, from an old church and, as has been pointed out, 'although this is not conclusive evidence for any Christian significance, it [the head] may well be accepted in good faith as having religious associations.' [95] Its several similarities with the Cortynan heads have already been referred to, while its smiling mouth, giving it the general impression of 'a benign and benevolent patriarch', [96] has already been mentioned in connection with the head from Corraghy, Co. Cavan. Like the Corraghy head and one of the Cortynan heads, this head has a disproportionately long, pedestal-like neck. Long columnar necks are known on Celtic carvings, a good British example being the stone head of a goddess from Winterslow, Wilts., [97] while in a Continental context this feature appears on some of the wooden heads from the Celtic sanctuary at the source of the Seine, near Dijon. [98] The manner in which the Janus from Leichlingen is carved as if on a cylindrical column might perhaps have inspired such pedestal-like necks. Despite its distance from them, therefore, the Kilmanahin head can in many ways be compared with some of the southern Ulster heads and, like them, with other Celtic heads farther afield.

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The two heads now preserved at Piltown are very different from each other and from all other Irish stone heads. One is a two-piece sculpture, consisting of a rounded head resting on a truncated conoidal stone [99] (Pl. XI.2). This lower stone forms a sort of bust and, with the head in position, recalls somewhat the two single-headed busts from Woodlands. The round, flat face, with its slit mouth and wedge-shaped nose, recalls many other Celtic idols, as do the pointed oval eyes bordered by a low ridge and with minimal brows. The ears, however, each consisting of a hole surrounded by a penannular ridge, are unusual—the closest parallels being those of the head from Corraghy, Co. Cavan, and perhaps also those of the head from Caerwent, Wales. [100] The most unusual feature of the Piltown two-piece head is, however, its unusual head-dress or hair-style. This looks like a round skull-cap worn on the top of a completely shaven or bald head, but it could be equally validly interpreted as a peculiar hair-style. It is like a rosette of fourteen marigold petals radiating from a central circle, the whole encircled by a low ridge. The result is rather similar to the rendering of the hair which is found on some late Romanesque and Early Gothic carvings [101]—but since this type of hairstyling is known on statuary from Roman times, [102] it is not a reliable indication of date. Although it is difficult to find a close parallel for the formalized petal-like arrangement on the top of the Piltown head, the stylized hair of a cloaked pilgrim holding a ball/apple, carved in stone and found at the Celtic sanctuary at the source of the Seine, is very reminiscent of it. [103]

The second carving is a long, slender head sporting a head-dress which could be related to the Phrygian cap [104] characteristic of Mithras, [105] the bull-slaying Roman god, but could also be interpreted as a helmet of some sort. Apart altogether from the head-dress, little about this head (Pl. XI.1) can be paralleled in Ireland or, indeed, elsewhere. Its elegantly flowing moustache and beard are of the type one tends to think of as typically Celtic, and they can perhaps be best paralleled on Gallo-Roman sculptures. There is something about the longish face, deep rectangular mouth, [106] moustache and beard, and the slope of the base, which has a dowel-hole or mortice in it, which suggests that this head may possibly have formed part of the statuary of the 'Horseman-kneeling Giant' type generally found on Jupiter Columns. [107] Such Romano-Celtic monuments are chiefly concentrated in the Middle Rhenish zone, with a wide dispersal into northern and central Gaul [108]—there is some evidence, also, of two such monuments in Britain, at *Corinium* (Cirencester, Gloucs.) and Chichester. [109] One might even, for good measure, compare the gaping mouth with that of an imported ivory mask topped by a somewhat similar head-dress found at the Roman site of Caerleon, [110] again finding a possible link across the Irish Sea to south Wales, and from there through England to the Rhineland.

8. Isolated Heads

Outside of the seven concentrations discussed above, there are at least six isolated stone heads scattered around the country which appear to belong to the pagan Celtic period. They are an unprovenanced head from near Armagh City, a head from Saul, Co. Down, a small one from Cavan town, the fairly well-known one from Killavilla, Co. Offaly, a head from Cloghane, Co. Kerry, and one from Ballykerwick, Co. Cork.

The unprovenanced head (Pl. Xl.3) from the neighbourhood of Armagh is a singularly ugly specimen, [111] but has some interesting features. Its narrow lentoid eyes have already been compared with those of other Irish heads, as have its large C-shaped swellings

representing ears. Although superficially unlike the *Corstopitum* 'Maponus' head, this Armagh head can be compared with it in many ways. Both have lentoid eyes, both have somewhat similar ears, both have a neck but present a somewhat neckless appearance when viewed from the front, both, like many other stone heads, were obviously intended to be placed on a pedestal or pillar, and both have a depression (probably for libations) in the top of the head; there is some doubt, however, as to whether the depression in the Armagh head is original or not—it certainly was deepened and squared off at the bottom within recent times. [112]

The stone head from Saul, Co. Down, [113] is, like the Cathedral Hill idols, from an ancient church-site closely associated with St. Patrick. The ridged rectangular mouth has already been compared with those of the 'Tanderagee Idol' and the Killadeas head, while the small depressions in the outlined eyes have also been mentioned. It is these features, taken in conjunction with the antiquity of the site where it was found, which most strongly suggest a pagan Celtic origin for this head.

The head from Cavan town [114] consists of an earless, browless, hairless face carved at one of the narrow ends of a small sub-rectangular boulder with flat base (Pl. XI.4). The almost round, slightly bulbous eyes are outlined by a shallow groove springing from the bridge of the nose, much in the same way as the eyes of the Boa Island Janus and of the Beltany and Cloghane heads are outlined by a ridge. This link with two almost certainly pagan Celtic idols suggests that it can with reasonable confidence be similarly dated.

The head from Killavilla, near Roscrea, [115] is unusual in that it is carved in almost full relief from an irregular block of limestone, the unworked part forming 'a sort of background and base to the carved part'. [116] The elongated top of the head may possibly indicate a relationship with the *genii cucullati,* hooded deities which are most frequently met with in Britain. [117] The round eyes with slight central depressions, and the wide flattish nose have already been mentioned in comparison with other Irish stone heads, while the slit mouth and lack of brows, ears and neck could likewise be paralleled on many Irish and other stone heads. It was found in the earth at the base of a large glacial erratic which had apparently fallen or been overthrown but which, when upright, might have served as a sort of rough pedestal for the head, an interesting possibility which would strengthen the likelihood of the head being a pagan Celtic idol.

The stone head built into the wall of the old church at Cloghane, on the northern shore of the Dingle Peninsula and at the foot of Mount Brandon, Co. Kerry, is known locally as the head of Crom Dubh. [118] Traditionally, Crom Dubh is believed to have been a pagan chieftain who lived at nearby Ballyduff and who was converted to Christianity by the sixth century Saint Brendan, although according to another version of the tradition recorded in 1841, Croum Dhu was the god of the harvest whom the pagans had worshipped until they were converted by the saint. [119] The head was formerly kissed as a cure for toothache and was associated with a *turas* (pilgrimage) to the top of Mount Brandon (3,127 feet high) on which there is a pillar-stone, legendarily associated with Fionn Mac Cumhaill, which cured backaches if the sufferer stood with his back against it. The *turas* took place annually on Domnach Chrom Dubh, the last Sunday of July, and, though Christianized, is clearly to be regarded as a survival connected with the pagan festival of Lughnasa. The head, which is apparently carved from an oval boulder, is earless, has a small mouth, and rounded eyes which are bordered by a slight ridge springing from the bridge of the nose, [120] all features linking it stylistically with other Irish stone heads of probable pagan Celtic date. On stylistic as well as on traditional grounds, therefore, this head can confidently be regarded as of pagan and Celtic origin.

The stone head from Ballykerwick, near Donaghmore, just west of Cork City, was found buried about six or eight feet deep in sticky clay, near an old rath. [121] The face is unusually well carved, the eyes, nose, mouth and chin all being much more realistically represented than is usual. The large ears, however, suggest that the head may be of pagan Celtic type. In shape and design they seem to bear some resemblance to the very unusual, highly stylized ears of the Celtic head from Msecké Zehrovice, in Bohemia, Czechoslovakia, the main difference being that instead of a small pear-shaped boss flanked by two peculiar lobes, there is a small circular hole similarly flanked [122] — these ear-holes might, perhaps, provide a link with the heads from Corraghy, Piltown and Caerwent.

*   *   *   *

All the stone carvings in Ireland which the present writer knows of and believes to be most probably identifiable as pagan Celtic idols have been briefly discussed above. There are doubtless several other heads, busts and figures which further examination and re-examination might suggest are also of pagan Celtic origin, but, in the present state of our knowledge of the characteristic stylistic features to be associated with such idols, it would be very unwise unduly to lengthen the list. Indeed, such is the weakness of all dating based almost entirely on purely stylistic grounds, further study, in the light of more advanced knowledge, might well reduce the number drastically. Many carvings formerly accepted as being pagan and Celtic have been omitted from the above list, on the basis that they appear to the present writer to be arguably of a later date and often Christian in origin. Such carvings include the well-known tau-cross from Killinaboy, Co. Clare, which the writer has elsewhere demonstrated as being of Romanesque date, [123] and also some of the carvings from Cathedral Hill, Armagh, [124] and that from Tomregan, Co. Cavan. [125] There are also some other carvings which appear from a cursory inspection or from published photographs to possibly belong to the pagan Celtic period, [126] but without a detailed examination of each individual specimen it would be unwise to pass judgment on any of them. It would seem safe, however, to declare one's disbelief in the alleged 'stone figurine' which 'bears a certain resemblance to a hooded figure' and which was discovered during the excavation of Portbraddan Cave, Co. Antrim, [127] and likewise to express one's serious doubts regarding the alleged idol of Crom Cruaich, with its 'two footless legs and apparently the tassel of a girdle or kilt between them', in Drumcoo, near Belcoo, Co. Cavan. [128]

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[1] The carvings on the Rathkenny Dolmen, Co. Meath, are more Neolithic than Celtic in type, although an Early Iron Age date has been claimed for two of them (Raftery (1937-40), 258-261, plate facing p. 260)—the so-called 'mirror case' design can probably be safely included with the other pocked circles on the stone, though the triskele, while very doubtful, can be less easily dismissed.

[2] These stone pillars have been frequently published, perhaps the best and most easily accessible publications being, to date, the following:—
    Turoe Stone: Raftery (1944), 42-46.
    Cast/estrange Stone: Coffey (1902-4), 262-3, Pl. XXI.
    Killycluggin Stone: Macalister (1922), 113-6, and Ó Ríordáin (1952), 68.
    Mullaghmast Stone: Coffey (1902-4), 263-6, Pl. XXII.

[3] Rynne (1961), 706.

[4] Rynne (1961), 706-7.

[5] Rynne (1964), 108-9, Pl. 5, *bottom.* In general, references to Irish stone idols will not be given, except where they are dealt with explicitly.

[6] Noticed in 1968 when this head, in private possession, was lent to the National Museum of Ireland for recording. I am grateful to Dr. Joseph Raftery, M.R.I.A., Keeper of Irish Antiquities, National Museum of Ireland, for bringing this feature to my notice, and to the National Museum for providing the drawing used for Fig. 18.

[7] A detailed discussion of all the presently known Irish stone sculpture of this sort is in course of preparation by the writer, and will, it is hoped, be published shortly.

[8] Norman/St. Joseph (1969), 118, Fig. 69.

[9] *Radiocarbon, 13* (1971), 103, no. UB-283; more scientifically put, the date is 1660 ± 80 B.P.

[10] Frequently illustrated, perhaps one of the best illustrations being Plate 3 in Henry (1965). This bust has been generally published as from 'a bog near Newry', but it can not only be provenanced to Cathedral Hill on stylistic grounds, but also from its known history—see also Paterson/Davies (1940) 90-1.

[11] Ross (1967, A), 380, Pl. 9l *b, c.*

[12] Ross (1967, A), 115, Pl. 39 *a, b;* this head is complete in itself, the apparent neck-fragment visible in the illustrations being a piece of modern cement.

[13] Only the two smaller examples of these have been published—Ross (1967, A), 349, Pls. 84*a, b* and 85 *a.*

[14] Unpublished; the face has been completely and deliberately smashed, but the straight-grooved hair remains untouched.

[15] Including the bust very similar to the 'Tanderagee Idol' (*cf* Davies / Paterson (1940), 91, Pl. X, a2) and the so-called 'St. Patrick' (*cf.* Davies/Paterson (1940), 68, Pl. V, b and Ross (1967, A), 116, Pl. 40   *a*). The former appears to be a ninth century imitation of the 'Tanderagee Idol', while the latter seems to be more probably Romanesque, or somewhat later, than Celtic—the arguments for these datings will be given in the fuller, more detailed, discussion to be published shortly (see n.7).

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[16] *Cf.* Henry (1965), Pls. 68, 71 and 72.

[17] Ross (1967, A), 115, n. 3, PI. 40*b;* in the footnote the head is erroneously identified as "the 'portrait' of Saint Brennan".

[18] Frequently illustrated, good illustrations being Jacobsthal (1944), no. 13, Pl. 13; Sandars (1968), Pl. 269, and Powell (1966), Fig. 202.

[19] Varagnac (1956), Pls. 14-17 ('Protromes du Celtisme').

[20] Ross (1967, A), 82, Pl. 2l *b.*

[21] Ross (1967, A), 82, Pl. 21 *c.*

[22] Ross (1967, A), 82, Pl. 21 *d.*

[23] Ross (1967, A), 81, Pl. 21 *a* and p. 386 *(not* xxviii, as listed), Pl. 26*b,* respectively.

[24] Ross (1967, A), 63, Pl. 14 *b.*

[25] Ross (1967, A), 88, Pl. 31 *a* and p. 192, Pl. 69, respectively.

[26] Jacobsthal (1944), no. 11, Pls. 9-11; Sandars (1968), Pl. 267; Moreau (1958) Pl. 43.

[27] Moreau (1958), Pls. 95-97.

[28] Moreau (1958), Pls. 52 and 53; Varagnac (1956), Pls. 25 and 27 ('La Sculpture').

[29] Jacobsthal (1944), no. 156(d), Pl. 98; Sandars (1968), Pl. 253.

[30] Ross (1967, A), 349, Pl. 85 *b.*

[31] *Cf.* Ross (1967, A), 339-341 and 349.

[32] Sandars (1968), Pl. 272; Powell (1958), Pl. 67; Ross (1967, A), Pl. 79*a.*

[33] I am grateful to Mr. Alexander Patterson, Newtownhamilton, Co. Armagh, for bringing these three heads to my notice and for supplying me with information about them. Mr. Patterson also showed me a fourth head, built into the front of a house at Lisnadill, halfway between Armagh and Newtownhamilton. Although thickly covered with whitewash, the features can be made out, and they do not appear to be closely related to those on possibly pre-Christian heads. This head may, in fact, be of late 19th century date [a date on the house, not easily decipherable, reads 188(5?)], perhaps carved by Kernaghan who might, by then, have run out of ready-made heads!

[34] This head is now in the possession of Mr. Patterson.

[35] Megaw (1966), 94-97, Pl. V; Ross (1967, A), 93, Pl. 26 *c.*

[36] *E.g.,* the well-known 'Maponus' head from *Corstopitum,* Northumberland (*cf.* Ross (1967, A), Pl. 24 *a),* the mask-like head from Charterhouse, Somerset (Ross 1967, A), Pl. 33 *c;* Megaw (1966), Pl. VI, a), or the three-faced head from Bradenstoke, Wiltshire (Ross (1967, B), 53-6, Pl. IV).

[37] *E.g.,* the head from Hohensalzburg, Salzburg, Austria (Willvonseder (1965), 129-134, Pls. 15 and 16; Powell (1966), Pl. 233).

[38] I am grateful to the owner, Mrs. Warnock, for kindly allowing me to examine this head.

[39] Now in the possession of Mr. Patterson.

[40] Rynne (1966), 152-3.

[41] Jackson (1968), 314, *backpiece.*

[42] Lynch (1970), 280-1, Fig. 92 and Frontispiece—the head is preserved at Hendy, Llanfair Pwllgwyngyll.

[43] Frequently illustrated, good illustrations showing this feature being Sandars (1968), Pl. 274; Powell (1958), Pl. 2.

[44] Paterson (1962), 8l-83, Pl. XIII; Ross (1967, A), 114 and 147, Fig. 83.

45 Unpublished; in private possession in Tynan district. I am grateful to Mr. Roger Weatherup, F.M.A., Curator, The County Museum, Armagh, for bringing this head to my notice.

46 Ross (1970).

47 Ross (1967, B), 53-6; Pl. IV.

48 Ross (1957-8), 10-11, Pl. III; Ross (1967, A), 74, Pl. 17.

49 As pointed out by Dr. Ross (Ross (1967, A), 114—one of the best illustrations showing these horns is Plate 44 in Toynbee (1963).

50 Ostergaard (1954), 55-77.

51 Ostergaard (1954), Fig. 3 (this is the third face, *i.e.,* not either of the faces shown in Ross (1967, A), Pl. 41 *a*).

52 Frequently illustrated, good illustrations being Powell (1958), Pls. 64-66 and Jacobsthal (1944), no. 10, Pl. 8.

53 As pointed out by Paterson (1962), 83—he follows Jacobsthal in miscalling the provenance 'Solingen'.

54 Undoubtedly the most frequently illustrated Irish stone head, though never adequately published in full; the earliest published reference is still one of the best: Mahr (1937), 414-6, Pl. XXVI, *lower.* See also Rynne (1966), 152, Fig. 14; Ross (1957-8), 13-14, Pl. IV; Ross (1967, A), 75, Fig. 42; Raftery (1951) Fig. 263; Powell (1958), Fig. 20; Ostergaard (1954), Figs. 15 and 16.

55 *J. Roy. Soc. Antiq. Ireland, 99* (1969), 104.

56 Unpublished; in private possession in Bailieborough.

57 Ross (1967, B), 54, n.; MacNeill (1962), 172.

58 Mahr (1930), 487, Pl. IV; Ross (1967, A), 35, Fig. 5; Piggott/Daniel (1951), 17, Pl. 31. Although there seems to be a general tendency to date this sculpture to Late Bronze Age/Hallstatt times, there would appear to be no strong reason why a later, La Tène date should not be at least equally probable.

59 *E.g.,* Kirfel (l948); Lambrechts (1954), 83-90; Ross (1957-8), 13-16; Ross (1967, A), 73-8 ; Ross (1967, B), 53-6; Rynne (1964), 106-7.

60 Unpublished; now in Devizes Museum, Wiltshire—the present writer is preparing publication of this and another stone head from the same place.

61 None of its faces bear the slightest resemblance to either of those of the Roquepertuse Janus, *pace* Ross (1957-8), 13 and (1967, A), 114.

62 Ross (1967, A), 85, Pl. 27 *b.*

63 Ross (1967, A), Pl. 28 *c.*

64 Ross (1967, A), Pl. 81 *a.*

65 Ross (1967, A), 81, n., Pl. 22 *a.*

66 *E.g.,* Ross (1967, A), Pls. 30 *d* and 32*a;* Toynbee (1963), Pls. 1, 8, 28, 29, 42, 43, 52 *inter alia.*

67 Lowry-Carry (1933), 200-3, Pls. VII and VIII, 1; Ross (1957-8), 16, Pl. IV; Ross (1967, A), 80 and 146—where it is erroneously described as possessing 'vestigial horns' on both heads; Henry (1965), Pl. 2.

68 *E.g.,* Lambrechts (1954), 81-3; Ross (1957-8), 16-17; Ross (1967, A), 78-81.

69 The arms of this idol have sometimes been interpreted as legs, apparently because one of them has a foot-like termination-in the case of Ross (1967, A), 146, there seems possibly to be some confusion with the Lustymore idol, as on page 80 the description is of 'small strap-like arms'.

70 Ross (1967, A), 80.

71 Toynbee (1963), 140, no. 33, Pl. 30.

[72] Ross (1967, A), 79, Pl. 20 *c, d;* Richmond (1956), 11-12, Pl. III, *B* and *C.*

[73] Lambrechts (1954), 75-6, Pl. VI, figs. 23 and 24.

[74] Lowry-Carry (1933), 203-4, Pl. VIII, 2 and 3; Ross (1957-8), 26; Ross (1967, A), 80 and 146-7 (where the idol is throughout referred to as being from Boa Island).

[75] Henry (1940), 7; Ross (1957-8), 26.

[76] Both frequently illustrated, *e.g.* Powell (1958), Fig 22 and Pl. 68 respectively.

[77] Ross (1967, A), 80 and 146-7.

[78] Lowry-Corry (1935), 26-7, Pl. VI; *Ulster J. Archaeol., 3rd ser., 12* (1949), Pl. V, 2.

[79] Henry (1967), 114 and 193.

[80] Lowry-Corry (1959), 59-64, Pls. VI and VII.

[81] Henry (1940), 59

[82] Rynne (1964), 105-9, Pls. 4 and 5; Rynne (1966), 152-3, Fig. 15; Ross (1967, A), 75 and 114-5, Pl. 18 *a, b.*

[83] Davies (1947), 157-8, Pl. XLII, 1.

[84] Davies (1947), 157, Pl. XLI; Davies (1953), 198-9; Ross (1967, A), 72, Fig. 42. This head is generally referred to as the Saint Johnstown head, but is from Creaga-doos, about midway between Saint Johnstown and Raphoe.

[85] Rynne (1964), 108-9, Pl. 5, *bottom;* Ross (1967, A), 115, Fig. 84 *a, b.*

[86] Ross (1967, B), 54.

[87] This is the face described in Ross (1967, A), 114-5, where it is regarded, in error, as being a single head independent of the three-faced one.

[88] Rynne (1966) 152-3.

[89] In private possession, Co. Donegal.

[90] As suggested in Davies (1947), 158.

[91] In private possession, Co. Donegal.

[92] Davies (1953), 198.

[93] Prendergast (1965), 49-52, illustrated on pp. 50 and 51; now preserved in Rothe House Museum, Kilkenny.

[94] Both in private possession,   Piltown, Co. Kilkenny. I am grateful to Mr. P. O hEailidhe, Dublin, for bringing these heads to my attention.

[95] Prendergast (1965) 52.

[96] Prendergast (1965), 50.

[97] Toynbee (1964), 105, Pl. XXVII—'The head is set on a long, columnar neck that can hardly have ever topped a body'.

[98] Martin (1965), 249, Pl. XLVIII.

[99] The fit is, at present, aided by a cement 'collar'.

[100] It has been suggested that the slot-like, ridged ears of the Caerwent head might possibly have been 'originally intended for the insertion of cervine or equine ears' (Ross (1967, A), 88). Such a possibility would appear neither realistic nor feasible in the case of the Piltown head, and perhaps even less so, in the opinion of the present writer, in the case of the Caerwent head.

[101] Good Irish examples of this are to be seen on the heads of the 13th/l4th century wooden statues from Innismurray, Co. Sligo (St. Molaise: MacLeod (1946), 159, Pl. XIII), Kilcorben, Co. Galway (Madonna and Child: MacLeod (1945), 172, Fig. 1), and Athlone, Co. Westmeath (Madonna and Child: MacLeod (1945), 178, Figs. 3 and 4, Pl. XXV, 2).

[102] *E.g.,* the stone female head from York (Toynbee (1964), 63, Pl. XII) or the Roman silver dish-fragment from Balline, Co. Limerick (Toynbee (1964), 315, Pl. LXXIII,

a); there are several examples from Continental Europe (*e.g.,* Eydoux (1962) Figs. 304, 352, 353 *inter alia*).

[103] Eydoux (1962), Fig. 219.

[104] The Phrygian cap is similar to the *bonnet rouge* of the French Revolution, now usually identified with the cap of liberty.

[105] See, for example, on the marble head of Mithras found in the Wallbrook Mithraeum, London (Toynbee (1963), 141-2, Pl. 42 or Toynbee (1964), 97-8, Pl. XXIV).

[106] The damaged nose and mouth of this head have been restored with cement, apparently with approximate correctness.

[107] *E.g.,* Lambrechts (1954), 91-2, Pl. XI, figs. 38-40; Hatt (1966), 81-2, Pl. V11, *g.*

[108] Powell (1958) 136, Figs. 21 (distribution map) and 25 (Jupiter Column from Cannstatt, Stuttgart).

[109] Ross (1957, A), 196; Toynbee (1963), 165.

[110] Toynbee (1964), 359, Pl. LXXXII, *a.*

[111] Now housed in The County Museum, Armagh.

[112] Possibly for use as a gas-lamp standard—the bottom of the hole is filled with lead in which are the stumps of two iron rods,

[113] Co. Down Survey (1966), 289, Pl. 106, no. 903(*g*); now built into an outbuilding in nearby Millvale Cottage—I have not seen this head myself, the description given here being based on the published photograph.

[114] *J. Roy. Soc. Antiq. Ireland, 100* (1970), 154-5.

[115] Roe (1945), 263-6; Ross (1957-8), 23-4, Pl. V; Ross (1967, A), 88-9, Pl. 32 *b* .

[116] Roe (1945), 264.

[117] Ross (1967, A), 187-8 and 380; Heichelheim (1935).

[118] J MacNeill (1962), 104 and 460-470, Pl. 12; Leslie (1940), 78-9—I am grateful to Revd. Christopher Warren, Kilcolman Rectory, Miltown, Co. Kerry, for this reference.

[119] MacNeill (1962), 104.

[120] I have not seen this head myself, and the description given here is based on the illustration in MacNeill (1962) and on colour transparencies kindly sent me by Revd. Mr. Warren.

[121] Cremin (1909), 58-9, Pl. facing p. 53 (a poor illustration, showing only a profile view of the face).

[122] I have not seen this head myself, and the comparison made here is based on an excellent photograph of the head kindly sent me by Miss Kathleen M. Dickie, J.P., Edinburgh, Scotland.

[123] Rynne (1967).

[124] See n. 15.

[125] Davies (1948), 117, Pl. XXI, 2; Dickie (1963), 198-9; Powell (1966), 210.

[126] Particularly, perhaps, the stone head from Saggart, Co. Dublin (O Ríordáin (1947), 85-6, Pl. XIX, 5), which was apparently mislaid in 1965 when the present writer visited Saggart graveyard to inspect it.

[127] May (1943), 50, Fig. 7.

[128] Davies (1939), 101-2, Fig. 3.

THE IRISH SEA ZONE IN THE PRE-ROMAN IRON AGE

LESLIE ALCOCK

At the Easter 1968 meeting of the Cambrian Archaeological Association I surveyed the evidence for an Irish Sea culture-province in the 1st millennium A.D. [1] For the present conference, my terms of reference were to extend this survey back through the Pre-Roman Iron Age; and to do this, partly in the form of a prepared paper which examined the state of knowledge and opinion as it appeared on the eve of the conference, and partly as a report on the ways in which the conference itself had added to knowledge or had modified hypotheses.

This essay falls therefore into two parts. Section A is the prepared paper, modified in minor ways, for the sake of clarity, from the text that was actually delivered. Section B was originally, of necessity, delivered *ex tempore.* The text given here follows the notes that were used at the time, but benefits from the fact that I have been able to read the final versions of my colleagues' papers in galley-proof.

Section A: the Irish Sea culture-province as it appeared in 1968

The intention of the original promoters of the Cardiff conference [2] was that it should complete the Celtic triad, of which the first two elements had been the conference on the Iron Age in Southern Britain held in London in 1958, and that on Northern Britain held in Edinburgh in 1961. In his opening paper at the London conference [3], Professor Hawkes initiated a scheme of *Provinces* determined on the basis of physical features, which should provide a geographical framework for the Iron Age of Southern Britain. The scheme was subsequently extended to Northern Britain by Professor Piggott [4]. With these precedents, it seemed incumbent on me to extend the system of provinces to Ireland. In fact, that island has been described simply as a central lowland surrounded by a rim of mountains, which is not a very promising basis for sub-division. None the less, I think we can reasonably see a *Central Province* and a *Southern Mountain Province.* Perhaps the whole of the north should be classed merely as a *Northern Mountain Province,* but it seems to me that the area around Lough Neagh is sufficiently distinct geographically to count as a separate *North Channel Province.*

When we consider the various Provinces of these islands, it seems that in terms of its geographical position the South-Western Province stands apart not only from the Irish Provinces, but also from those British Provinces which border the Irish Sea—the Atlantic, the Solway-Clyde, the Pennine and the Western Provinces. In brief, the South-Western Province appears to have no geographical relationship to the lands around the Irish Sea. Archaeologically-speaking, too, the south-west is distinguished from those other Provinces. In a previous C.B.A. conference, Professor Charles Thomas exposed at length the isolation and poverty of the territory of the Dumnonii, the people of the South-Western Province[5]. Despite this, when we compare Dumnonia with the Provinces bordering on the Irish Sea we must conclude that it has a long and rich sequence in the Iron Age [6]. On its eastern borders at South Cadbury that sequence appears to begin
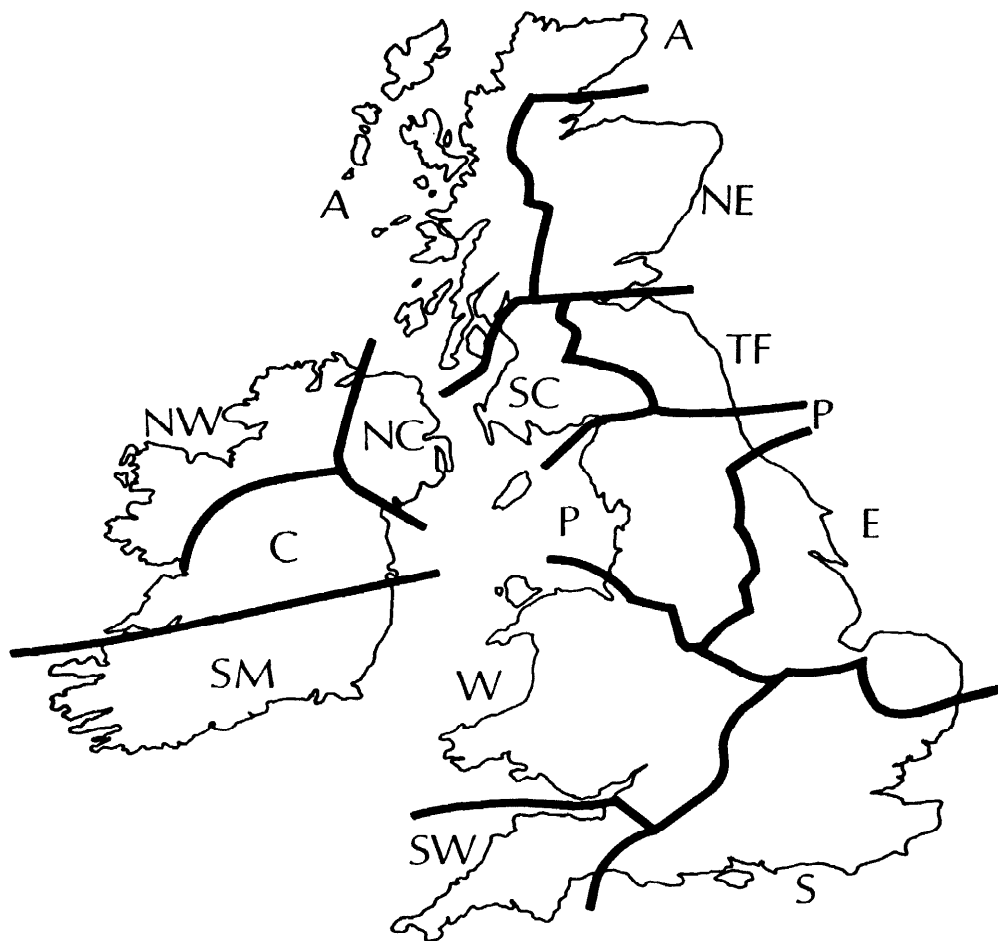
Fig. 19
Provinces of the British and Irish Pre-Roman Iron Age. A—Atlantic, C—Central, E—Eastern, NC—North Channel, NE—North-Eastern, NW—North-Western, P—Pennine, S—Southern, SC—Solway-Clyde, SM—Southern Mountain, SW—South-Western, TF—Tyne-Forth, W—Western

before 700 B.C. in an Ultimate Bronze phase, which then passes into an Initial Pre-Roman Iron Age contemporary with continental Hallstatt C [7]. In the west of the province, the relics from Mountbatten, both the well-known bronzes and the unpublished pottery, demonstrate a sequence starting in the 6th century [8]. From about 300 B.C., intensive occupation and activity is shown by both pottery and fortifications. In all this, the South-Western Province is in stark contrast with the lands around the Irish Sea. So too, it should be added, are the Marches of Wales, especially in their southern half [9].

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Fig. 20
Generalized distribution of Ogham inscriptions and of Tintagel-type
imported pottery, 5th to 7th centuries A.D.

Another map, however, suggests a more intimate connexion between some of these Provinces. In the 5th and 6th centuries A.D., we may take the main incidence of Ogham-inscribed stones to express internal connexions around the Irish Sea [10]. Similarly, the distribution of East Mediterranean pottery of Tintagel type may reveal external re-lations[11]. On this basis we may draw a line which demarcates an Irish Sea Province— a cultural province, it should be noticed, not a physiographical one. It is more difficult, however, to define the archaeological criteria for a similar map in the Pre-Roman Iron Age (PRIA).

None the less, location of tribes of the same name either side of the Irish Sea may be significant here. Particularly interesting are the Gangani of Galway and Caernarvon-shire, and the Lagin—probably 'The Spearmen' —who gave their name to Leinster and Lleyn. Except for the Lagin, these names are taken of course from Ptolemy in the 2nd century A.D., using 1st century A.D. material, so we may be doubtful how far back these names apply. We should certainly note Professor Greene's forthright rejection of O'Rahilly's attempt to push Ptolemy's source back to the 4th century B.C. [12]

Whatever their date, these apparent tribal connexions across the Irish Sea may not mean as much, in cultural terms, as those attested by similar evidence across the English Channel, particularly those among the Belgae. If we contemplate the historical movements which brought the Déisi to Dyfed and the 'Scoti' to Scotland, we find them scarcely reflected in the archaeological record. The Déisi brought the Ogham script to south-west Wales, but had little subsequent effect on the language of the area; the Scoti introduced a major linguistic change, but not the appropriate script to express it. The actual settlements explored archaeologically show little sign of the transplantation of material culture either to Dalriadic Scotland or to Dyfed.

Turning now to the archaeological sequence around the Irish Sea, we find that the background to the Iron Age is a healthy bronze industry, with strongly marked regional schools[13]; and in particular, in Ireland, a vigorous manufacture and export of gold ornaments[14]. The skill and ingenuity of native craftsmen enabled them, in the late 8th and 7th centuries, to adapt Mediterranean and Continental models to produce insular buckets and cauldrons [15]. At this time, too, pottery like that from Knocknalappa[16] and Ballinderry 2 [17], associated at the latter site with a remarkable rectangular building, hints at folk movement into the Central and North Channel Provinces. The Hallstatt B contacts demonstrated by the buckets are followed in the 7th century by the appearance of Hallstatt C swords—bronze in Ireland [18], iron at Llyn Fawr [19], where the sword was associated with appropriate horse-gear [20].

Swords and horse- and cart-gear are widely considered to mark invasion and conquest by Hallstatt chieftains and their war-bands [21]. Accepting that the continental homeland of these chieftains was Celtic, or at least proto-Celtic, in speech, we may think that by 600 B.C., a common Celtic culture had spread, albeit thinly, around the shores of the Irish Sea. Professor Greene, writing of the Celtic languages, thought of 'a date *circa* 700 B.C. for the period where the ancestors of Irish and Welsh began to diverge' [22], and this seems to fit the archaeological evidence very well.

These early insular Celts were both iron-using and iron-manufacturing, as the socketed iron sickle from Llyn Fawr demonstrates [23]. The Llyn Fawr technological stage, in which wrought iron is used inappropriately for implements patterned on cast bronze models, may be represented in Ireland by several socketed iron axes, including that from Feerwore, despite its much later associations [24]. In other words, an iron technology was established around the Irish Sea in the 7th century, or at least the 6th century, B.C. Admittedly after this initial stage it is impossible to see any further products for several centuries; but the wholesale collapse of the Irish gold and bronze industry, which Professor Hawkes has described so poetically [25], would seem to imply some major shift in technology, unless we are to attribute it wholly to the sub-Atlantic climatic deterioration which would have been especially severe in Ireland [26].

After the Initial PRIA phase, a darkness lit only by occasional flashes descends. In Ireland, Downpatrick alone demonstrates a complex, and presumably lengthy, sequence of fortification, but even there the only cultural content is a scatter of Ballinderry pottery[27]. The slightly greater riches of Wales serve only to tantalize. At Castell Odo,

Fig. 21
Some apparent tribal connections around the Irish Sea

an invasive group with Early PRIA pottery was quickly suppressed; the long sequence of defence- and house-building which followed was not only aceramic, but virtually findless in every sense [28]. A cave on Caldey Island produced a little pottery which may all be Early, though a sharp-shouldered jar or bowl could conceivably be later [29]. There are sporadic finds of La Tène I brooches [30], notably from Moel Hiraddug, where an exciting collection of metalwork and some terribly crude pottery awaits publication [31]. At Llandegai, the large circular houses presumably belong to a late stage of the PRIA [32]. But all this name-listing does not amount to much; and even relatively rich, complex and intensively excavated sites like Dinorben [33], or Coygan [34], are pathetically impoverished by the standards of southern England.

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It is above all the lack of pottery which is so frustrating. This distinguishes those parts of Wales which border the Irish Sea from the rest of the Western Province, and from the South-Western Province as well. In default of it, Mr. Hogg has made an ingenious attempt to use the very abundant evidence of field monuments to construct a history of Iron Age Wales [35]. Observing the five structural periods at Ffridd Faldwyn, he postulated at least five and more probably seven 'times of disturbance' which led to the building or renovation of hill-forts throughout Wales. He was unable to assign every structural period in every fort to one of these 'times of disturbance'; but he did believe it possible to establish three phases. To his Early Phases he assigned univallate forts, except those which on the evidence of pottery and other relics were manifestly later. Among the early forts, he separated those with a bank and ditch, the work of invaders, from those with stone walls and no ditch, which he saw as a native reaction—his Secondary Iron Age, in fact. To his Middle Phases he assigned bivallate or multivallate defences, and a group with a distinctive form of sharply inturned entrance, characteristic of the territory of the Deceangli and the Cornovii. Finally, his Later Phases represented reaction to the Romans or the effects of Roman Conquest. Mr. Hogg himself was at such pains to emphasize the shaky basis of assumption on which his model rests that it is scarcely necessary to remind ourselves that unexcavated hillforts are phenomorphs, not genomorphs. And even if we accept Mr. Hogg's scheme as internally self-consistent, the attempt to link it to Professor Hawkes's ABC scheme, and to provide a chronology for it, fails simply for lack of datable relics to provide the links.

We cannot at present write a history of hillfort building around the Irish Sea; but other aspects of the forts deserve further mention. There are, for instance, hints, at once exciting and tantalizing, of wider connexions; *chevaux de frise* in Western Ireland, Caernarvonshire and Spain [36]; stepped ramparts in Cork, Cornwall and Brittany [37]. Parenthetically we should notice that stepped ramparts are significantly different from *murus duplex*[38], which has, however, been recorded on the fringe of the area at Worlebury[39].

One particular class of fortified—or at least enclosed—site is so widespread around the Irish Sea as to demand further consideration: the simple circular enclosures of earth or stone, the raths and cashels of Ireland [40], one sub-class of the rounds of Cornwall [41], one element in the loosely named raths of Demetia [42]. In surface appearance these merge into the ringworks or *petites enceintes circulaires* of the medievalist [43], and some in Ireland were built as late as the 11th, if not the 16th century A.D. [44] Indeed, the overwhelming majority of excavated examples were occupied in the 1st and early 2nd millennia A.D. How far back in time do they go? In Cornwall, elaborated expressions of the basic idea, like Chûn or Castle Dore [45], go back into the 2nd century B.C., but simple, single banked rounds are apparently not earlier than the 1st century. In Ireland, the earliest known example, Feerwore, is not earlier than a bronze spiral finger-ring, presumably of the 2nd or 1st century B.C.

Until recently, the earliest of such sites known in Wales had been Roman [46], and the general period of their occupation appeared to be Roman and later. But now Dr. Wainwright's excavations at Walesland [47] have produced two periods of rampart which are pre-Roman, the second apparently associated with a continuous range of timber buildings[48].

Similar ranges of dwellings set against the back of the rampart are, of course, well known from the Northern Isles [49]; but at present they are unknown among excavated Irish raths and Cornish rounds. This is a warning, therefore, that the apparent resemblances between these earthworks and those of Demetia may be purely superficial.

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Indeed, the ringworks with the annular range of dwellings may even house a different social unit from those which enclose one or more free-standing houses. All this does little to increase our confidence in the value of comparing earthwork phenomorphs around the Irish Sea [50].

Section B: the implications of the conference for Irish Sea Studies

The underlying assumptions of the prepared section of my paper, and even the chronology expounded in it, were not in complete accord with the views expressed by the other speakers. In the *ex tempore* section, therefore, I had first to draw attention to these conflicts of interpretation, and then to outline the modifications to my own picture which ensued from them. The same procedure is followed here, with further modifications as a result of more mature reflection.

Undoubtedly the most serious conflict was that over Irish chronology. It was clear both from the papers delivered and from informal discussions that Irish scholars were prepared to maintain the traditional doctrine, ably set out for instance in Mr. Rynne's 1958 paper [51], that the Iron Age in Ireland begins with a La Tène II/III horizon, and this means not before the second century B.C. Powerful support for the doctrine that the inception of the Irish Iron Age was so long delayed appears to be given by Dr. Raftery's radio-carbon dates for the relevant phases at Lough Gara (above, pp. 2, 6). But these dates in themselves are so difficult to reconcile with the chronology of comparable culture-phases elsewhere in these islands that I was moved to declare them 'archaeologically inacceptable' [52].

It is admittedly difficult to put any material into the gap between the Dowris B phase with its Hallstatt C bronzes (and also a Hallstatt iron spearhead from Limerick) [53] on the one hand and the La Tène III brooches, sword-scabbards and comparable aristocratic metalwork on the other. It is also equally difficult to believe that the manufacture of bronzes of the Dowris B phase continued for about five centuries with no discernible typological development: the vigour and inventiveness of Irish bronze-smiths in the preceding centuries seems to rule out such a hypothesis. We must face two facts: first, that even after the received doctrine has allowed the Iron Age to begin, recognizable finds remain few and far between. The scarcity of La Tène III brooches, even when we include the Navan type among the class, is a case in point, especially by comparison with England. Does this reflect massive depopulation, cultural impoverishment, or simply the hazards of discovery? And this brings us to the second fact: that revolutionary discoveries are likely to be made, especially as research and excavation on hill-forts and cliff-castles quickens its pace. It is, after all, only since 1948 that Roman material has been recognized in Ireland at the Rath of the Synods [54] and, possibly, Freestone Hill [55].

Here it may be recalled that it is only over the last score of years that Iron A culture has been widely recognized in Wales. The discovery of potentially early pottery, especially at Castell Odo in 1958-59, helped to bridge the gap which until then had existed in the Welsh sequence between the Hallstatt C event of Llyn Fawr and the appearance of La Tène III pottery in the hillforts of south Wales. Similar discoveries must be expected in Ireland. None the less, in both Wales and Ireland we must often be forced to calibrate the Iron Age sequence with the aid of structural developments at sites which, like Downpatrick, Odo and Fridd Faldwyn, are findless for much of their history. In other words, much of Wales and most of Ireland share a common cultural impoverishment in this period. It is interesting to reflect further on this in the light of Rowlett's

comments on the culture history of the north European lowland in the same broad period[56]. He suggests that the general adoption of iron for weapons and edge tools in central Europe put an end to the demand for bronze tools and weapons from Scandinavia, and thereby killed off a flourishing industry and export trade. The wholesale cultural impoverishment which followed is reflected in 'a cutback in the wealth interred with burials, religious offerings, and in mercantile hoards'. This pattern cannot of course be fitted at all points to Irish developments, because the export of finished bronzes can scarcely have been a mainstay of the Irish industry. It is none the less possible that the actual reduction in demand for copper and lead—since trinkets obviously require far less than swords and axes—had a seriously depressing effect on the economy of the metalliferous areas of Wales and Ireland.

The actual effects of the largely-contemporary climatic deterioration also deserve further consideration. One result may have been a rise in water level in lakes and swamps, and this in turn may have meant the difference between security and flooding on crannog-settlements. The Dowris phase at Ballinderry No. 2 is overlaid by a flood silt[57], and the occupation of the Lough Gara Crannog may have been similarly interrupted. Did the climatic deterioration bring disaster to a whole class of flourishing settlements? And if so, where did the descendants of the Late Bronze Age crannog-dwellers live? Not, presumably, in raths, if these do not begin until the second or first century B.C.; and only occasionally (if at all) in hill-forts, since these are so very rare. It seems at least possible that we lack finds for the five 'missing' centuries simply because the relevant sites have not yet been located or excavated.

I have described this conflict over chronology as the most serious of those revealed at the conference because correct dating is so obviously essential to any understanding of the historical processes of the Iron Age in our area. But more fundamental was the divergence of views over the whole concept of a distinct culture province around the Irish Sea. The conservative line relied on the simple division of these islands into a Lowland Zone and a Highland Zone, with Ireland very firmly in the Highland Zone, and then re-affirmed Fox's 'laws' in an unamended version [58]. To me, this seems to ignore completely the very real physiographic differences between the coast and riverine lowlands of western Britain and their hinterland of mountain and moorland. In terms of basic farming potential for a start, these lowland strips have more in common with lowland England and most of Ireland than they have with the true Highland Zone of Britain. And archaeologically it is demonstrable, from the distribution for instance of chambered tombs or Early Christian monuments, that communication across the Irish Sea is not too difficult. At any period of our history, the Irish Sea may be a lake whose shores exhibit common features. So if we are to think in very broad geographical terms, we really need not Fox's bipartite division, but a three-fold one: Lowland, Highland and Irish Sea Zones.

So much for the geographical background. But when we turn to the archaeology of any period, but especially of the Iron Age, it is easy to point in detail to cultural divergences between Ireland and western Britain, as well as between the different Provinces of both Britain and Ireland. Mr. Hogg carried this analysis of minutiae about as far as it can be taken, and demonstrated how even the coastal strip of Wales can be subdivided on the basis of sub-types of hillfort (above, pp. 11-14). Within its own terms of reference his demonstration is irrefutable, but it provokes the immediate reaction that its general validity is weakened by its introspectiveness. Putting this reaction into concrete terms, we can ask what the results would be if similar graphs were prepared for other regions of these islands. I would guess that, taken as a whole, the graphs of the Welsh

coastlands would prove more comparable with graphs for Ireland than with those for Wessex, or the Welsh Marches. In other words, however much the image of an Irish Sea culture province may splinter when we look at it introspectively, it may prove solid enough when we look at it against the backcloth of surrounding areas.

In anthropological terms this is, of course, a wholly legitimate way to regard it. It seems relevant here to quote the definitions of an anthropologist working on the Indians of North America:

> "A culture area is a geographical area occupied by a number of peoples whose cultures show a significant degree of similarity with each other and at the same time a significant degree of dissimilarity with the cultures of the peoples of other such areas. The determination of significant degrees of similarity and dissimilarity is ultimately a statistical problem, but working approximations may be arrived at by other means, partly intuitive, by scholars familiar with a region". [59]

Among the features in which the Irish Sea Zone exhibits internal similarity and external dissimilarity three may be mentioned briefly here, with the thought that they merit further examination. First is the proliferation of small and even very small defended sites, and the corresponding scarcity of even medium-sized hillforts. This is immediately verifiable by archaeological means, and presumably it has implications for social structure which deserve investigation by students of Celtic institutions. Secondly there is a certain emphasis on wide-spaced ramparts, well known in south-west England and Wales, and now revealed by Barry Raftery's field work in Ireland. The archaeological facts have implications for the economy of the forts, if we believe that they reflect an emphasis on stock-raising. And this in turn has implications for social structure, not merely in the Marxist sense, but because of the correlation between cattle-raising, cattle-raiding and heroic society. Thirdly, much of the Irish Sea Zone shares the common trait of not using pottery. Such a negative trait may seem meaningless, until it is remembered that what the archaeologist sees here is only the reverse of a coin of which the obverse is the use of a range of organic materials—wood, leather, horn—which have perished.

I still think, therefore, that as a culture area the Irish Sea Zone has more reality in the Iron Age than other speakers, each very properly engaged in his own small corner, would allow. And granted this, the conference allowed us some fascinating glimpses of the external relations of the Zone. Dr. Raftery set the tone here with a most remarkable map in which the line of Longitude 5° west, instead of curving off to the right as it does on most projections, ran vertically up the middle. The visual effect was that the Irish Sea was a marine basin on a northward projection of the Atlantic coastline, and that our area was an integral part of western Europe, not a remote archipelago about to slip off the curving top of the globe. With the positional geography of the Irish Sea displayed in this way, it was easy to credit Professor Jope's affirmation that the fine metalwork of Ireland was inspired directly from continental sources, not by way of England. Direct continental inspiration could also be argued for other groups of metalwork from the coastal strip of western Britain, notably those from Tal-y-llyn in Merionethshire and Torrs in Kirkcudbrightshire.

Relevant here too is Mr. Hogg's classification of some of his coastal earthworks as 'invasion forts', for this necessarily implies folk movement coming by sea, either from other parts of Britain or direct from the Continent, rather than as an overland infiltration from southern England. For many years the received doctrine on the Iron Age cultures of both Wales and Ireland was that they were derived immediately from England: from Yorkshire in the case of the aristocratic metalwork of Ulster, from south-western

England in the case of the Iron B pottery of south Wales, from Wessex in the case of the multivallate forts of the Marches. Undoubtedly the model here was based on the historically documented invasions of the Romans, the Anglo-Saxons, and above all the Normans. But the equally well-attested Viking movements and settlements provide a very different model, in which sea routes in general and the Irish Sea in particular play a large part. The main direction of movement was then from north to south whereas in the Iron Age the movement was in the opposite direction. But at least the Viking activity serves to remind us that the coasts of Sussex, Kent and the Thames Estuary are not the only parts of these islands which lie open to trade and invasion from Europe.

In the discussion which followed this paper, the whole concept of invasions, from whatever quarter, was vigorously attacked. Since this concept is fundamental to current models of the Iron Age, it seems appropriate to incorporate this part of the discussion into the paper, however briefly. The two bases from which the attack was launched were: the work of modem geographers demonstrating that culture traits may be spread by trade, imitation, and so on, without any need to invoke invasions; and Professor J. G. D. Clark's well-known discussion of the invasion hypothesis in British archaeo-ology[60]. So far as the latter is concerned, it can scarcely be claimed that its analysis of the Iron Age is one of its strongest elements. It is dubious archaeology, to say the least. to claim that 'the ring-headed pin (has) an indigenous background', when that back-ground consists of the Hallstatt swan's neck pin. Again, the much-rehearsed argument which contrasts continental rectangular houses with indigenous circular ones overlooks both the round houses of the Continent and the rectangular ones in Late Bronze and Iron Age contexts in these islands [61]. Faulty archaeology apart, the attack on the in-vasion hypothesis is, so far as the Iron Age is concerned, a flight from history, both from the detailed history of the 1st century B.C. and early 1st century A.D., and from historical parallels in general. One example must suffice here. The idea of Hallstatt adventurers carving out petty kingdoms and founding dynasties in the coastlands of Britain and Ireland is one which tends to engender scepticism. But this is exactly the process which we can see around the coast of Greece in the aftermath of the Fourth Crusade[62]. All that is claimed here is that historical parallels, like anthropological parallels, should open our minds to the range of possibilities. Among those possibilities are invasions of varied strength and at various levels of society. And in the Iron Age, the Irish Sea Zone stood open to receive these and other forms of contact direct from the Continent.

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22 Greene, D., *op. cit.* in n. 12 above, 12. It is only fair to Prof. Greene to quote this statement in context: 'I have carried out, in a very amateurish way, a comparison of the vocabulary of Irish and Welsh, on the lines laid down by Swadesh, who believes that vocabulary has a constant rate of change and I arrived at a date of *circa* 700 B.C. for the period where the ancestors of Irish and Welsh began to diverge. I must emphasise that I have strong doubts about the validity of Swadesh's methods and that it is quite possible that I have not applied them correctly so that I do not offer this date as any more than a guess, but it at least lies in the area of probability'.

23 Fox, *op. cit.* in n. 19. The hypothesis that the iron used for the Llyn Fawr sickle (and perhaps for the spearhead) came from the Forest of Dean is unnecessary because iron ore was available in Glamorgan.

24 Feerwore axe: Raftery, J., 'The Turoe stone and the rath of Feerwore', *J. Roy. Soc. Antiq. Ireland, 74* (1944), 23-52. I am grateful to my colleague, Dr. W. H. Manning, for drawing my attention to unpublished axes of this type from Lough Mourne and Toome Bay, Co. Antrim. The argument that such axes must belong to a transitional technological stage, and therefore to an initial phase of the Iron Age, may be weakened by the discovery of a socketed iron axe, apparently of the 13th century A.D., at Castell Degannwy, Caerns. I am grateful to Mr. R. G. Livens for bringing this to my notice.

25 *op. cit.* in n. 14, 240.

26 For a recent survey of the climatic history, Lamb, H. H., *The changing climate* (1968). I am indebted to Prof. Homer L. Thomas for bringing this to my attention. For the cultural effects of the climatic deterioration, Rowlett, R. M., 'The Iron Age north of the Alps', *Science, 161* (1968), 123-34.

27 Preliminary reports by Proudfoot, B., in *Ulster J. Archaeol., 17* (1954), 97-102; *19* (1956), 57-72. Summary in *Archaeological Survey of Northern Ireland: County Down* (Belfast 1966), 98-9.

28 Alcock, L., 'Castell Odo . . .', *Archaeol. Cambrensis, 109* (1960), 78-135.

29 Lacaille, A. D., and Grimes, W. F., 'The prehistory of Caldey, part 2', *Archaeol. Cambrensis, 110* (1961), 30-70, espec. 40-4.

30 Grimes, W. F., *The Prehistory of Wales* (Cardiff, 1938; 2nd edn. revised by Savory, H. N., 1951), fig. 41. For a very Breton-looking stamped sherd from Merthyr Mawr, Savory, H. N., *Early Iron Age art in Wales* (Cardiff 1968), fig. 12, 5.

31 I am grateful to Mr. M. Bevan Evans for showing me this material in advance of publication.

32 Houlder, C. H., 'The henge monuments at Llandegai', *Antiquity, 42* (1968), 216-21.

33 Gardner, W. and Savory, H. N., *Dinorben, a hill-fort occupied in Early Iron Age and Roman times* (Cardiff 1964).

34 Wainwright, G. J., *Coygan Camp, a prehistoric, Romano-British and dark-age settlement in Carmarthenshire* (Cardiff 1967).

35 Hogg, A. H. A., 'Early Iron Age Wales', in Daniel, G. E. and Foster, I. Ll., *Prehistoric and Early Wales* (1965), 109-50.

36   Western Ireland: e.g. Ballykinvarga, Co. Clare, and Dún Aengusa, Aran; Norman, E. R. and St. Joseph, J. K. S., *The early development of Irish society* (Cambridge, 1969), 78-81.
     Caernarvonshire: Pen-y-gaer, Llanbedr-y-cennin; *RCAM Caerns. Inventory, I* (1965), 100-1.
     Spain: Hogg, A. H. A., 'Four Spanish hill-forts', *Antiquity, 31* (1957), 25-32.

37   Cork: O'Kelly, M. J., 'Three promontory forts in Co. Cork', *Proc. Roy. Irish Acad,, 55 C* (1952), 25-59.
     Cornwall: Gordon, A. S. R., 'The excavation of Gurnard's Head, an Iron Age cliff castle in Western Cornwall', *Archaeol. J., 97* (1940), 96-111.
     Brittany: Threipland, L. M., 'Excavations in Brittany, spring 1939', *Archaeol. J., 100* (1943), 128-49.

38   *Pace* Hamilton, J. R. C., *Excavations at Clickhimin, Shetland* (Edinburgh 1968), 50-l.

39   Dymond, C. W., *Worlebury, an ancient stronghold in the county of Somerset* (2nd. edn., Bristol, 1902).

40   Ó Ríordáin, S. P., *Antiquities of the Irish countryside* (3rd edn., 1953), 1-11. O'Kelly, M. J., 'Problems of Irish ring-forts', in Moore, *Irish Sea Province,* cited in n. 1.

41   Thomas, *op. cit.,* in n. 5.

42   Grimes, W. F., 'The problems of the raths of Pembrokeshire' in Moore, D., (ed.), *The land of Dyfed in early times* (Cardiff 1964), 17-8; Crossley, D. W., 'List of hill-forts and other earthworks in Pembrokeshire', *Bull. Board Celtic Stud., 20* (1962-4), 171-205.

43   King, D. J. C. and Alcock. L., 'Ringworks of England and Wales', in Taylor, A. J. (ed.), *Chateau Gaillard III, conference at Battle,* Sussex, *1966,* (Chichester 1969), 90-127.

44   Eleventh century: O'Kelly, M. J., 'Beal Boru, Co. Clare', *J. Cork Hist. Archaeol. Soc., 67* (1962), l-27. Sixteen century: Rynne, E., 'Some destroyed sites at Shannon airport, Co. Clare', *Proc. Roy. Irish Acad., 63, C* (1964) 245-77.

45   Chûn: Leeds, E. T., 'Excavations at Chûn Castle, in Penwith, Cornwall', *Archaeologia, 76* (1926-7), 205-40. Castle Dore: Radford, C. A. R., 'Report on the excavations at Castle Dore', *J. Roy. Inst. Cornwall, (NS) I, Appendix* (1951).

46   Cwmbrwyn: Ward, J., 'Roman remains at Cwmbrwyn, Carmarthenshire', *Archaeol. Cambrensis, 1907,* 175-212. Trelissey: Thomas, W. G. and Walker, R. F., 'Excavations at Trelissey, Pembrokeshire, 1950-51', *Bull. Board Celtic Stud., 18* (1958-60), 295-303. Note also the campaign of excavations on Pembrokehire 'raths' carried out by D. W. Crossley: Merryborough, *Bull. Board Celtic Stud., 21* (1964-6), 105-17; Knock, *ibid,* 264-75.

47   Wainwright, G., 'Walesland Rath', *Current Archaeol., 2.1 (no. 12) (Jan. 1969),* 4-7. At the conference, Dr. Wainwright most generously allowed me to show a version of his site plan prior to publication. (See also note, p.23 *supra.*)

48   The discovery at Walesland of a definitely pre-Roman 'rath' has repercussions for the Iron Age map of Demetia. In preparing a map of Iron Age Wales in 1963 (n. 21, fig. 1) I was so impressed by the kind of dating evidence cited in n. 46 that I deliberately excluded all rath-like structures. It is now evident that an unknown proportion of them—perhaps 20%—should be restored. Obviously without excavation it is impossible to say which particular examples are pre-Roman; and it is quite certain that the Ordnance Survey *Map of Southern Britain in the Iron Age* (1962) gives too dense a distribution.

49   Hamilton in n. 38.
50   This survey deliberately excluded any consideration of fine metalwork. For a
      recent review of the Welsh material, with summary references, Savory, H. N.,
      Early Iron Age art in Wales (Cardiff 1968).
51   Rynne, E., 'The introduction of La Tène into Ireland',   *Bericht über den V inter-
      nationalen Kongress für Vor-und Frühgeschichte, Hamburg* (1961), 705-9.
52   The precedents for the use of this expression are unhappy, but I remain unrepentant.
53   I owe this reference to Mr. Rynne.
54   Ó Ríordáin, S. P., *Tara, the monuments on the hill* (1953, 2nd edn. 1957), 22.
55   Raftery, B.,   'Freestone Hill, Co. Kilkenny: an iron age hillfort and bronze age
      cairn', *Proc. Roy. Irish Acad., 68, C* (1969) l-l08, espec. 96.
56   Rowlett, *op. cit.,* in n. 26, 130.
57   Hencken, *op. cit.,* in n. 17.
58   Fox, C., *The Personality of Britain,* (1932, 4th edn. 1943).
59   Driver, H. E., *Indians of North America,* (1961; 2nd edn., 1969), 17.
60   Clark, G., 'The invasion hypothesis in British archaeology',   *Antiquity, 40* (1966),
      172-89.
61   Hawkes, C. F. C., 'British prehistory: the invasion hypothesis',   *Antiquity, 40*
      (1966), 297-9.
62   Villehardouin's account of these events is readily accessible in Shaw, M. R. B.,
      Chronicles of the Crusades (Penguin, 1963), espec. p. 112 ff.