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THE IRISH SEA IN PREHISTORY

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ABSTRACT

The role of the Irish Sea in the study of past contacts between Ireland and Britain is reviewed. Analysis of a selection of distribution maps relating to the period c4000 B.C. to c500 B.C. suggests the possibility of a recurring cycle of contacts over a long time span.

Now archaeologists begin to gloss the glosses.
To one school, the stone circles are pure symbol;
to another, assembly spots or hut foundations.

One school thinks a post-hole in an ancient floor
stands first of all for a pupil in an iris.
The other thinks a post-hole is a post-hole. and so on-

like the subversives and collaborators
always vying with a fierce possessiveness
for the right to set 'the island story' straight.

Seamus Heaney, 'Parable Island'.

Over sixty years ago, when that eminent archaeologist R. A. S. Macalister declared that Britain was essentially an island of the North Sea and Ireland an island of the Atlantic Ocean, he was restating with characteristic pithiness, one of the more perennial myths of the island story (1928, 52). Walter Fitzgerald, who probably deserves to be called Ireland's first historical geographer, described this island thus: 'the western "Outpost" lying on the Atlantic border of Europe was early in close contact by coast-wise routes with France, Spain and the western Mediterranean on the one hand, and with Scotland and Scandinavia on the other. On the south the sea-way to France and Spain lies open to Ireland and it carried the main racial, cultural and commercial influences which reached the western island from the parent continent throughout a vast period of time prior to the English invasion' (Fitzgerald 1925, 3).

This belief in the prime cultural importance of the Atlantic sea-ways is an ancient one, much older indeed than the study of Irish archaeology. According to early Irish history (that haunt of folk-lore and fierce philologists, as Charles Thomas once described it), the Goidelic Celts were said to have come from Scythia via Spain, being preceded by various other invasions, including the Fir Bolg from Greece. These origin legends remained part of native learning for many centuries and more than one scholar in recent times has speculated that they might contain a grain of truth at least as far as an Iberian element is concerned. In fact, it was not until the sixteenth century that the linguistic kinship of the Irish (and the Scots and Britons) with the Continental Celts was recognised.

For other reasons, however, a belief in Atlantic and Mediterranean contacts still figured prominently in antiquarian studies of the eighteenth and nineteenth centuries and, indeed, in many an archaeological study of the first half of the twentieth century as well. Egyptians, Phoenicians, tomb builders, megalithic missionaries, prospectors, early metal workers, and stone fort builders have all been credited with use of the Atlantic sea-ways at one time or another. History, of course, from time to time seemed to lend credit to some of these claims. In a 1951 discussion of the origins of some megalithic tombs, for example, a sea-borne movement of peoples from western France to the Mayo-Sligo coast on the one hand and to the Cork-Kerry region on the other was postulated with the comment 'historic landings from France and Iberia in both these areas are well known' (De Valera 1951, 180). The various expressions of this belief in the importance of the Atlantic sea-ways in Irish prehistory are worthy of a special study. Though greatly exaggerated in the past (*e.g.* Bowen 1972) there is no denying the importance of communications along stretches of the Atlantic coasts in prehistoric times. Powell (1972) saw only meagre traces of Iberian influence in the Irish Sea region in early prehistory, in contrast to the extensive relationships evident in the late Bronze Age. Savory (1978) detected Iberian elements in some early pottery types and Sheridan (1983) has carefully considered the possibility that early copper metallurgy may have been inspired by Atlantic contacts. Some aspects of the significance of later long distance exchange along the Atlantic seaboard have been reviewed by Ruiz-Gálvez (1991 and references), but to what extent Ireland and the Irish Sea participated directly in this phenomenon is difficult to assess. Certainly short coastal journeys between communities must have been common and could have formed an interconnecting chain of contacts extending considerable distances along the Atlantic coasts of Europe. It was Estyn Evans (1958) who pointed out that the length of the Atlantic fringe from the Arctic circle to the 40th parallel is about 2000 miles, the same length as the Mediterranean axis from Gibraltar to Istanbul.

I mention the question of the Atlantic seaways here, however, because I suspect that this issue has to some extent distracted archaeological attention from the Irish Sea. While this sea channel has by no means been ignored in other spheres, witness the various papers in *The Irish Sea: A Resource at Risk* edited by John C. Sweeney (1989) and the excellent series of historical studies. *The Irish Sea, Aspects of Maritime History,* edited by Michael McCaughan and John Appleby (1989), I feel the prehistoric importance of the Irish Sea has been underestimated and it certainly has yet to receive the detailed archaeological study it deserves.

Many scholars, of course, have briefly commented on the role of the Irish Sea in various studies of past contacts between the two islands (*e.g.* Bowen 1969, 1970; Buchanan 1989; De Courcy Ireland 1986; Thomas 1972a). Among the few more detailed contributions on its prehistoric role, four or five are worthy of particular note. Cyril Fox addressed the issue in his pioneering monograph *The Personality of Britain,* first published in 1932. Here distributional studies of monuments and artefacts were combined with more than a dash of geographical determinism and, as was to be expected, the interpretative framework was the traditional diffusionist one: 'There are three ways by which new ideas, new cultures or invaders can reach Ireland: either (1) by the Atlantic route from Spain and western France, or (2) by sea round the north of Britain, or (3) mainly by land across Britain'. But as far as the last point was concerned Ireland was not as susceptible to invasion from Britain in her turn as Britain had been from the Continent. 'Intrusion has occurred, but not massive invasion. The reason for her isolation is clear: it is the existence of the Highland Zone of Britain, an obstacle which hinders or prevents access to

the shores of St. George's Channel and the Irish Sea'. Nonetheless, 'there is a definite tendency for the shores of the Irish Sea to form a culture province' (Fox 1947, 42 ff).

In a remarkable paper in 1946 Margaret Davies studied the diffusion and distribution of megalithic tombs around the Irish Sea and attempted to correlate them with soils, coastal geomorphology and tidal and other factors. Her study (and her attempt to assess how early tomb builders may have availed of the tidal circulation of the Irish Sea basin) was a pioneering one in the French tradition of human geography. She, like others, saw the Irish Sea and the North Channel as a body of water which united rather than divided the landscapes of either shore: 'the borderlands of the Irish Sea and its northern gateway formed a broad cultural province knit together by the sea just as were the English and French shores of the Channel in the Middle and Late Bronze Age ...' (Davies 1946, 38). Leslie Alcock (1963) agreed with this concept of a culture province and argued that the Irish Sea zone could have been as much an area for primary settlement as southern England: 'the Irish Sea itself is a natural terminus for sea-routes bringing trade and invasion from western Europe, the Mediterranean and even at times Scandinavia'.

The concept of an Irish Sea 'Culture Province' in archaeology and history was the subject of a conference held in Abersytwyth in 1968 (Moore 1970). Two papers, one by Michael Herity, the other by Hubert Savory, dealt with the prehistoric period. In the former contribution the builders of Irish Passage Tombs came from Brittany to the Boyne Valley and thence spread elsewhere in Ireland and across the Irish Sea to Wales. The earlier Court Tomb folk also came from north-western France via those Atlantic sea-ways to north-western Ireland with an eastern variant of their tomb type 'straddling the straits between Antrim and the Arran-Bute-Kintyre province in Scotland'. These tombs and other evidence including pottery suggested 'a strong community of tradition between north-east Ireland and Scotland' (Herity and Eogan 1977, 51). Portal Tombs on either side of the Irish Sea were thought to represent parallel movements of tomb-building farmers from north to south.

In the earlier Bronze Age, Savory saw some limited folk movements in either direction reflected in pottery and metalwork. In the later Bronze Age the movement of craftsmen, again in either direction, was detected in the surviving bronze- and gold work. A limited amount of Iron Age metalwork might also represent movements of craftsmen by themselves, or in the retinues of nobles, but the scanty evidence for contacts in this period may have been due in no small measure to lack of excavation.

In 1969 the Council for British Archaeology sponsored a conference in Cardiff on the theme of 'Problems of the Iron Age in the Irish Sea Province' (Thomas 1972b). Most of the contributors more or less concentrated their attention on aspects of the period on one or other shores of the Irish Sea. But having reviewed some of the problems of the Irish Iron Age, Joseph Raftery (1972, 8) opined '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 ... 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'. Leslie Alcock, however, acknowledging the problems presented by the scanty metalwork evidence and the dearth of pottery, for instance, still preferred to see the Irish Sea zone as a geographical entity which shared broad socio-cultural traits such as small-scale enclosed settlements and a lack of interest on the part of their inhabitants to indulge in such archaeologically useful activities as pottery making on any scale.

Whatever about the difficulties of identifying contacts with Iron Age Wales, a range of material, including some decorated with La Tène art, denotes various sorts of interaction with north Britain in particular (Warner 1983, Raftery 1989), though what form these Iron Age contacts took is debated. This debate is of course just a part of a wider and much more convoluted and prolonged controversy about how and when this island became Celtic-speaking (Mallory 1984, Waddell 1991a, 1991b). Finally,

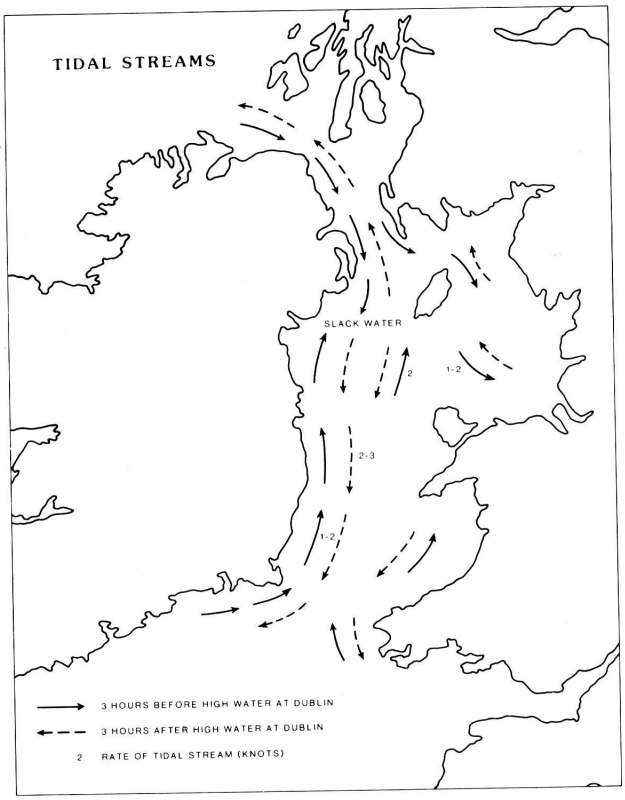

Fig. 1.
Tidal regime in the Irish Sea
(after Reed's Nautical Almanac and Tide Tables for 1977).

in a recent and thought-provoking review of prehistoric contacts between Wales and Ireland, Frances Lynch (1989) sees the early Neolithic as a period of close contact, this contact diminishing thereafter. Some shared ceramic traits in the earlier Bronze Age are judged to reflect superficial links between regions continuing to drift apart. The later gold bar torcs are thought to indicate purely commercial encounters and the decorated metalwork of the Iron Age offers only an appearance of uniformity, for such possessions of the upper levels of society need not imply any close relationship on a wider scale.

From megalithic tomb builders to Celtic craftsmen, from about 4000 BC to the early centuries AD, it is probably a fair assessment to say most archaeologists have conceded that the Irish Sea and the North Channel were bodies of water which on occasion connected, and on occasion separated, communities on either shore. More often than not, however, the Irish Sea seems to have been regarded as an obstacle, as one writer put it: 'however open the seaways as channels of prehistoric contact, conceptually water creates a barrier ...' (Murray 1991, 30). At times the idea of a cultural province has been mooted, at other times denied.

Is the fragmentary prehistoric picture then a true reflection of a pattern of contact, intense and therefore significant in certain phases, tenuous and inconsequential in others? Or behind the archaeological palimpsest that has survived this long time span, is there another picture awaiting detection?

In most discussions about contact across it, the Irish Sea itself is ignored. Its coasts and waters deserve closer examination but this is a task for those expert in these areas. If for present purposes we define the greater Irish Sea area as a region which includes the North Channel (south of a line from Fair Head near Ballycastle to the Mull of Kintyre) and, in the south, part of St. George's Channel (north of a line from Carnsore Point near Wexford to Milford Haven near Pembroke) we are talking about a body of water just over 320 km (200 miles) in length. Its width varies: the distance from Down to Galloway is about 40 km (25 miles), from Rosslare to Fishguard and from other points on the east coast to north Wales about 100 km (62 miles), and the Isle of Man is about 60 km (37 miles) from either coast. Its size is important and this

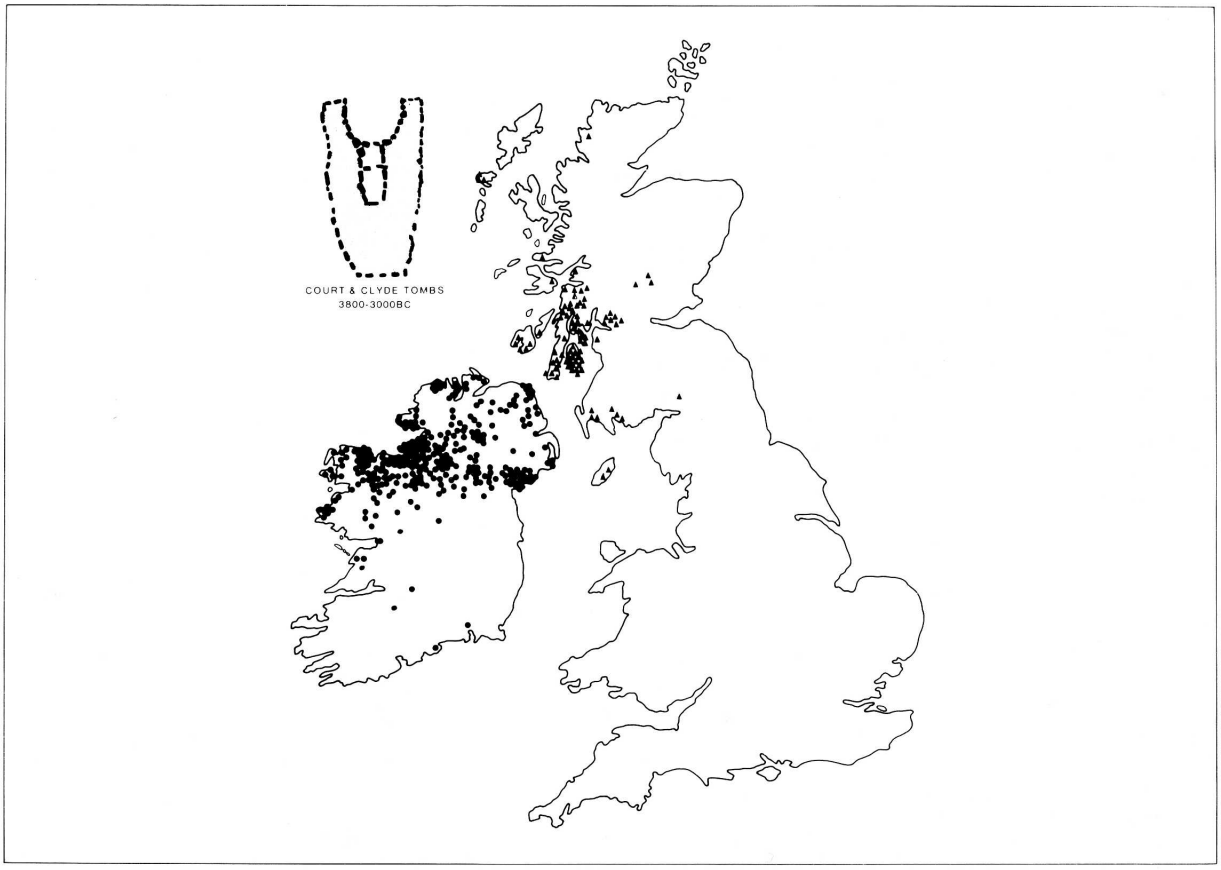

Fig. 2.
General distribution of Court Tombs in Ireland and Clyde Tombs in Scotland 3800-3000 BC (mainly after Ó Nualláin 1989 and Henshall 1972).

is not just because a primitive sailing boat averaging about 5 knots (9 km an hour) could in theory voyage from one end to the other in about 35 hours of daylight sailing. Its size means that it must have been sufficiently small to figure as a geographical entity in the minds of those who sailed it at any time in prehistory. Furthermore, its basin is ringed by major natural landmarks including the Wicklow Mountains, the Mourne Mountains, the Lake District Fells, and the mountains of Wales. These, along with the the high hills of the Isle of Man and numerous significant islands and promontories, must have been only the most prominent of numerous familiar references for early navigators. The general coastal configuration has probably changed little since 3800 BC when the sea more or less reached its present level. There have been alterations, however; minor changes in sea levels in the Neolithic would still have affected low-lying coastal areas and later local alterations occurred from time to time (Simmons and Tooley 1981).

Our early voyagers would have been greatly assisted by the regular tidal movement of the Irish Sea basin. Its tidal regime is a co-oscillating response to the tides generated in the wide expanse of the Atlantic Ocean (Huntley 1980). Atlantic tidal streams enter nearly simultaneously from north and south (Fig. 1). They average one to three knots but at Spring tides the North Channel ingoing tide runs for the most part at a rate of three to five knots, while in the broader southern or St. George's Channel it generally runs at two to three knots per hour but increasing to four or five knots in places.

Outgoing tides reverse this process, flowing respectively at much the same rates. Flood tides meet and counteract one another near latitude 54° N just south of the Isle of Man producing slack water over a large area. The tidal range (ranging to over 8m) is greatest here on the north-west English coast but on the east coast of Ireland the maximum range is about 3.6m. Like the general tidal pattern, the sequence of high and low water at suitable landing places, local difficulties like tidal races, and wind and weather are all factors which would have been learnt at an early date by those who sailed these waters (McGrail 1987, 258 ff.) To some extent, particularly since about 1000 BC when general climatic conditions deteriorated to something akin to those of today, seasonal traffic may have been common, avoiding the frequent gales between the September and March equinoxes.

As yet there is very little evidence as to what sort of craft may have sailed these waters in prehistoric times. Large hide-built boats, like currachs, may have been a common sight around the coast, for travel by water, whether river or sea, must often have been considerably easier than travel by land. Coles and Harding (1979, 210) have made this point: 'The proximity of the sea ... is likely to have led to greater territorial knowledge and to more contacts between groups living near the coasts than between land-locked groups where travel and transport would have been more difficult. The relative ease of coasting traffic along shores where landing places were abundant suggests the manner by which objects of stone, metal or clay were gradually distributed lengthy distances from their place of origin.' As far as Irish waters are concerned, a well-known late Bronze Age shale model of a possible hide boat comes from Caergwrle, Flintshire (Denford and Farrell 1980). Sewn plank- built craft were operated around the estuary of the Humber in the Bronze Age as well, as the finds from North Ferriby (dated to about 1500 BC) show. Larger sailing craft, perhaps built like Tim Severin's Brendan, were surely used too. However, the earliest evidence in Ireland is the famous small gold model of a boat found in the last century at Broighter, Co. Derry. It gives us a very general idea of what a sailing vessel of the 1st century BC may have been like. It is usually assumed to be a model of a hide-built boat but, if it is to scale, its original length may have been about 15m (50 feet) and

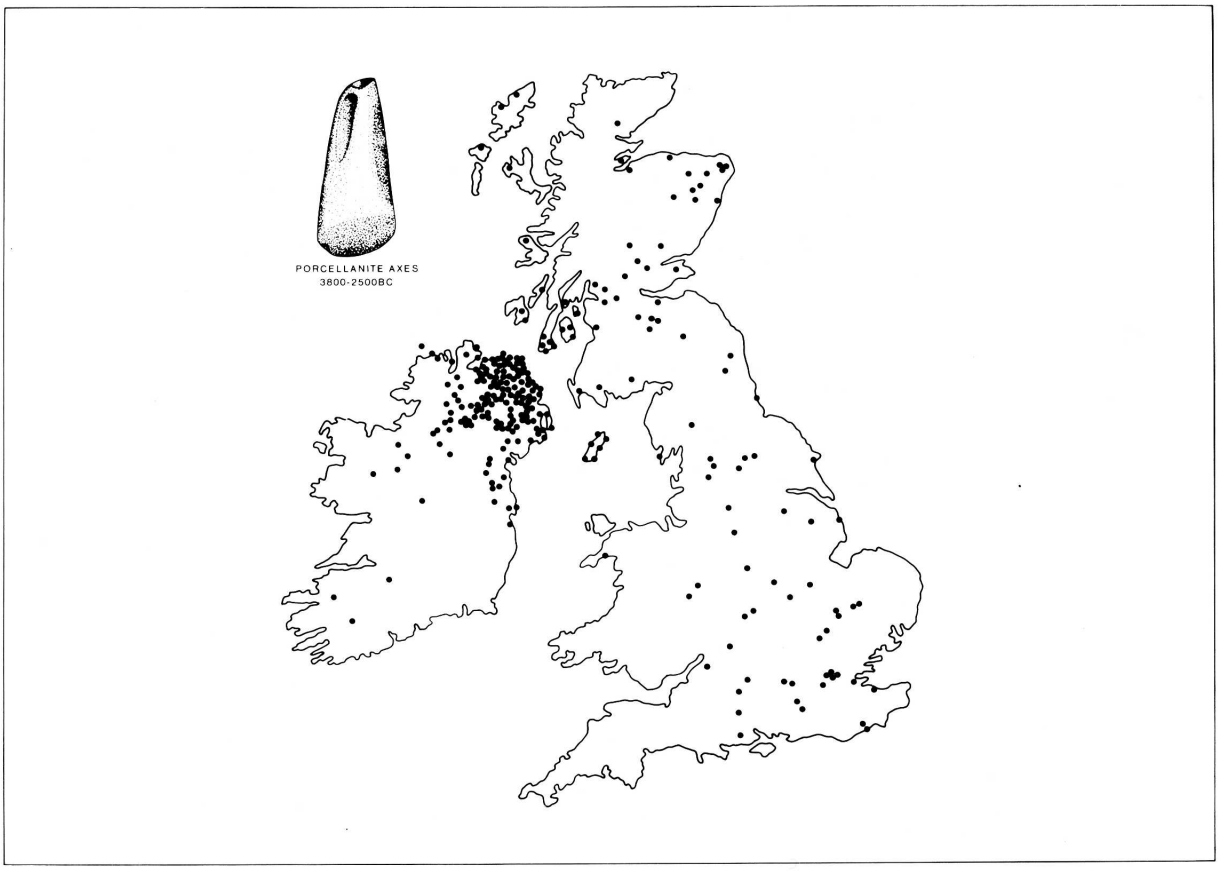

Fig. 3.
General distribution of axeheads of Antrim porcellanite in Ireland and Britain 3800-2500 BC (after Sheridan 1986).

it may therefore have possibly been plank-built (Farrell and Penny 1975). Most currachs are about 7.5m (15 feet) long and Severin's Brendan replica was 11m (36 feet) long - close to the likely size limit imposed by this form of construction (McGrail 1987, 184).

Whatever about the scanty evidence for the craft employed, there is much archaeological evidence for contacts across the Irish Sea at various times in prehistory. In considering the extent and the significance of these contacts let us take a slice of prehistory from about 4000 to 500 BC, and very briefly examine just ten distribution maps each representing some sort of contact between the two islands. Our examination is necessarily brief because small scale maps like these are obviously not amenable to detailed analysis; their purpose here is primarily to illustrate the duration and constancy of intercommunication across this body of water. These ten are a selection - many others could have been chosen, just as some distribution maps of a range of monuments and artefacts showing no Irish-British or British-Irish connections could also be produced.

The Court Tombs of the Irish Neolithic period, and their Scottish counterparts, the Clyde Tombs, are megalithic monuments which share a basic plan (Fig. 2). A forecourt gives access to a long burial gallery divided into a number of chambers and covered by a long sub-rectangular cairn. There are regional variants: elaborate versions of the basic type occur in north-western Ireland for instance, and the Scottish examples, for the most part, share minor structural details not found in Ireland. Nonetheless few would disagree with the claim for a strong community of tradition between north-east Ireland and Scotland whatever that might actually mean in human terms. There has been a prolonged and futile debate about the origin of these monuments and whether the Irish examples derived from the Scottish or *vice versa*. Of greater interest, perhaps, is the question why much of the northern half of Ireland and south-western Scotland continued to share a general tomb plan for a number of centuries. Indeed, more than an architectural plan may have been shared if it is true that complex tomb morphology (with forecourts and sub-divided chambers) denotes a complex ritual which restricted and constrained access to the contents (Thomas 1990).

If, as seems possible, these monuments were built by small scale, autonomous communities, then their spatial and chronological span refects not only a widespread and long-lasting ritual process but a complex pattern of contact between these communities. The belief that tombs like these were a social phenomenon, perhaps acting both as territorial markers and repositories for ancestral remains, has naturally focussed attention on their internal role in their respective communities. However, these monuments may have had an external role as well, acting as focal points for inter-community activities. After all, the groups who built them were not isolated, introverted entities preoccupied only with ancestral bones. They had wider contacts, and obviously trade and exchange come first to mind. But there were other significant ways of forging external relationships as Case (1976) has noted: 'viewed economically, children are important assets to primitive farmers being much to be desired additions to the labour force and apt for many tasks, besides offering chances in maturity of extending kinship links through marriage, and thus increasing not only prestige and opportunities but rights in using fixed assets such as grazing and stone quarries'.

The distribution of Court Tombs and Clyde Tombs may thus indicate a complex web of kinship and other alliances which obviously spanned the narrow waters of the North Channel and utilised the coastal seaways to a considerable extent. Some 65% of the Court Tombs in Mayo and Sligo are situated within about eight kilometres of the coast, for instance, and inshore traffic must have been a common means of communication here and

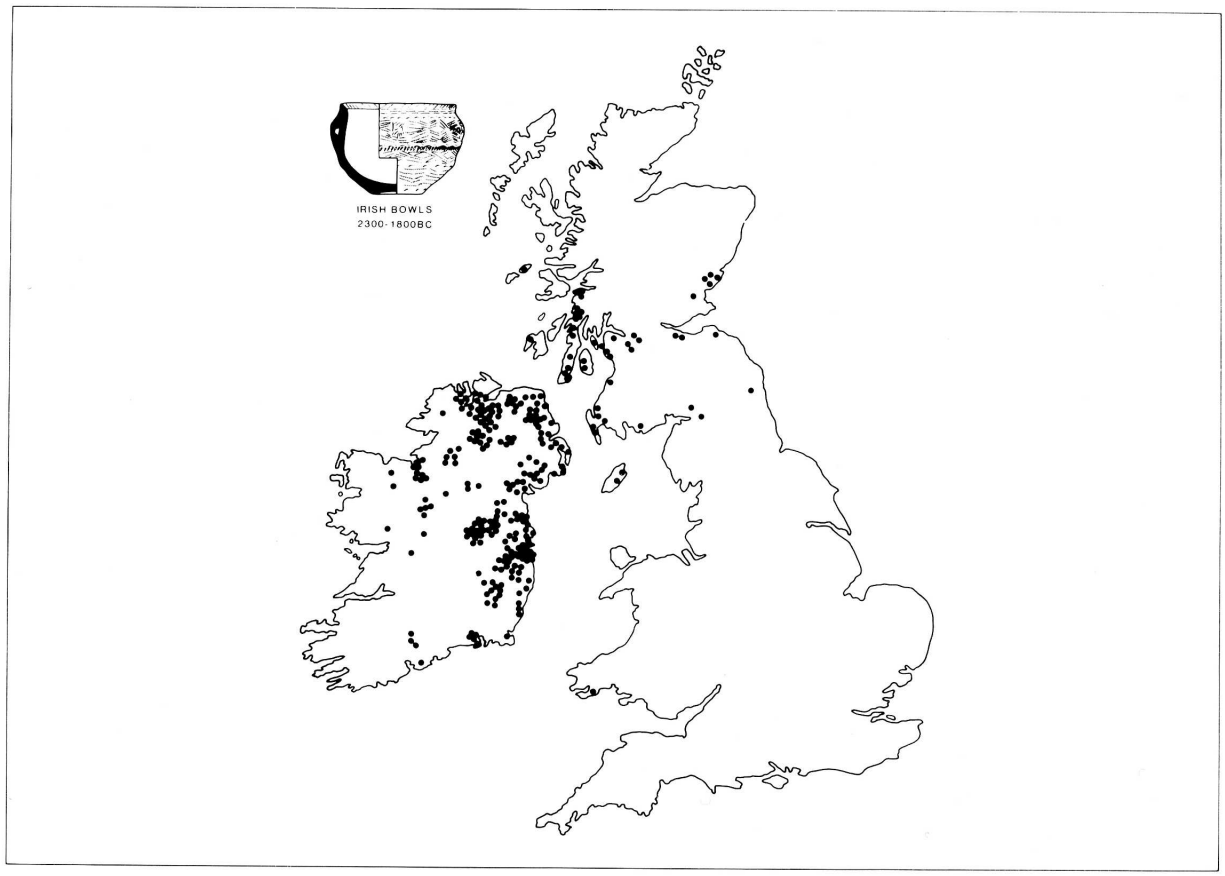

Fig. 4.
General distribution of pottery of the Irish Bowl Tradition 2300-1800 BC.

along much of the rest of the northern and north-eastern coast as well. The tombs on the islands of Arran, Bute and the Isle of Man give emphasis to this point. Such a network of alliances would facilitate the transmission of pottery fashions such as the plain carinated bowl of what has been called the Grimston-Lyles Hill ceramic tradition (Herne 1988) and some decorated styles (Herity 1982) represented in both Ireland and Scotland.

Polished stone axeheads made of hard and prized Antrim porcellanite presumably found their way to south-west Scotland by these means too (Fig. 3). Sheridan (1986) suggests that these objects were distributed not by itinerant axe vendors but by communities passing on supplies to each other around a network of contacts and clearly items could be exchanged from community to community over great distances, from as far north as Shetland to the south of England. As Sheridan points out Antrim flint was also exported to Scotland, Arran pitchstone was imported as were a number of stone axes from Great Langdale in Cumbria. The evidence suggests that the main period of production of porcellanite axes extended from about 3800 to 2500 BC and this distribution map therefore, like many others, does not depict a synchronic event but in this case a pattern of activity extending over a thousand years.

A considerably lesser time span is represented in Fig. 4 which maps the distribution of a characteristically Irish type of early Bronze Age pottery vessel. These profusely decorated Irish Bowls are normally found with unburnt or cremated burials and seemingly date from about 2300 to 1800 BC. A significant number occur in south-west Scotland, in Argyll and Galloway in particular. Well represented in the north of Ireland and common in Leinster, there are a couple of examples in the Isle of Man, and one in south-west Wales. Again, a significant pattern of cross-channel contact is indicated and some close parallels between some Scottish and Irish vessels have prompted Burgess (1980) to suggest that 'actual pots as well as ideas were carried across the Irish Sea'. Simpson (1979) considered it noteworthy that bowls 'are concentrated along important trade routes; along the western sea route up the southwest coast of Scotland, with a notable concentration in the Kilmartin valley, Argyll, where a short porterage would be necessary to avoid the dangerous currents of the Mull of Kintyre; at each end of the Great Glen and one find actually in the centre of the rift; and in eastern Scotland, one of the jumping off points for continental trade'.

A limited amount of analysis suggests that most pottery vessels of this sort were made of more or less local clays and, in all probability, were not exported any great distance. But how pottery fashions themselves were transmitted over wider areas is not at all clear. Since these bowls come mainly from burials, it is possible that we are witnessing the spread of some ritual rather than something like the exogamous movement of potters. Whatever the transmission mechanism, the distribution of a pottery fashion is very likely to be an indication of an integrated social network at some level.

Two other pottery types often found with burials of the second millennium BC confirm that far from being a barrier the Irish Sea continued to offer significant axes of communication. The Cordoned Urn is an Irish-Scottish type (Fig. 5) which possibly dates to the period 1800 to 1300 BC. Again most examples come from funerary contexts, invariably with cremated burials, but finds from coastal sandhills in northern Ireland and in Scotland are a reminder that the exploitation of coastal resources was part of the spectrum of economic activity of the makers of these vessels. Island finds include urns from Aran, in the west of Ireland, Bute in Scotland and Anglesea in north Wales. Though the North Channel was just as important a link as it had been in earlier times, examples from south-east Ireland and from south-west Wales extend the distribution significantly southwards on

Fig. 5.
General distribution of pottery of the Cordoned Urn Tradition 1800-1300 BC.

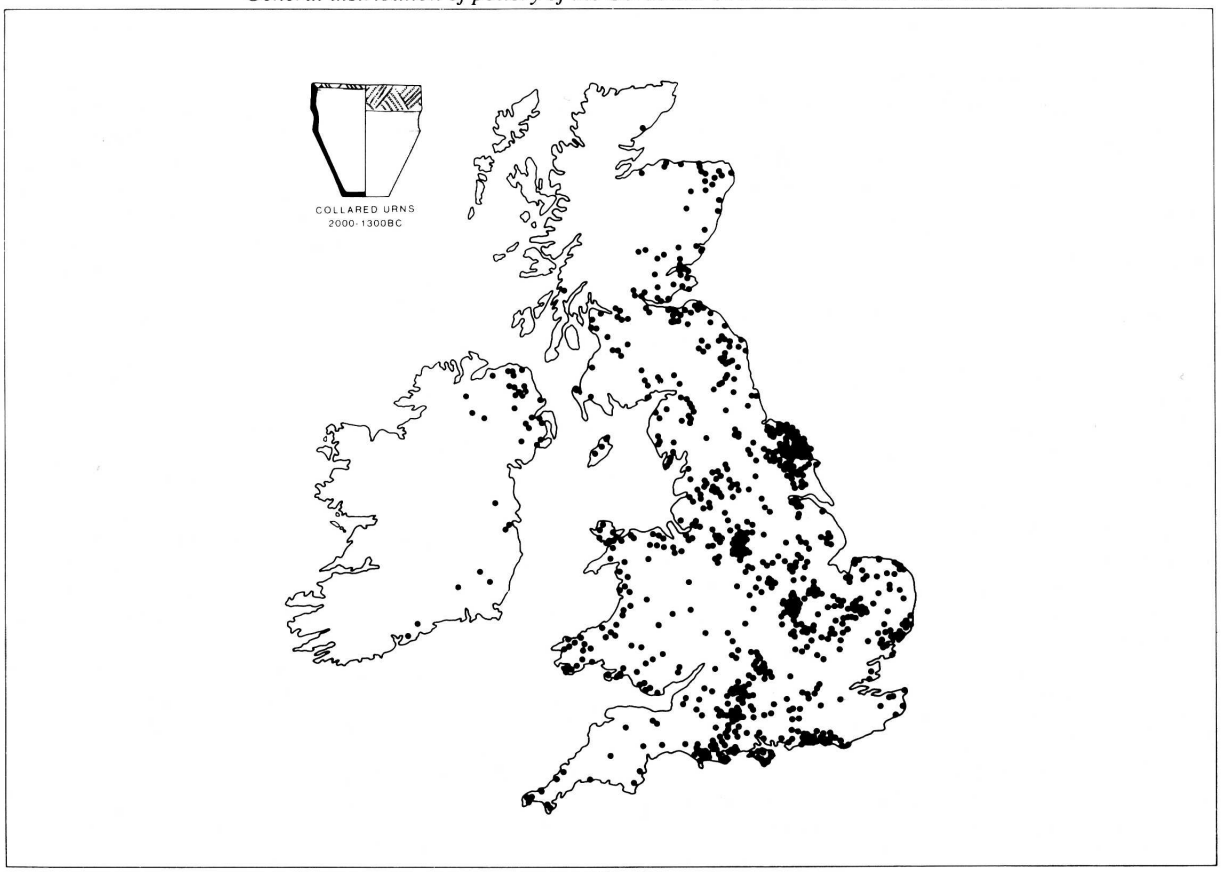

Fig. 6.
General distribution of pottery of the Collared Urn Tradition 2000-1300 BC (after Longworth 1984).
Each dot represents one or more finds.

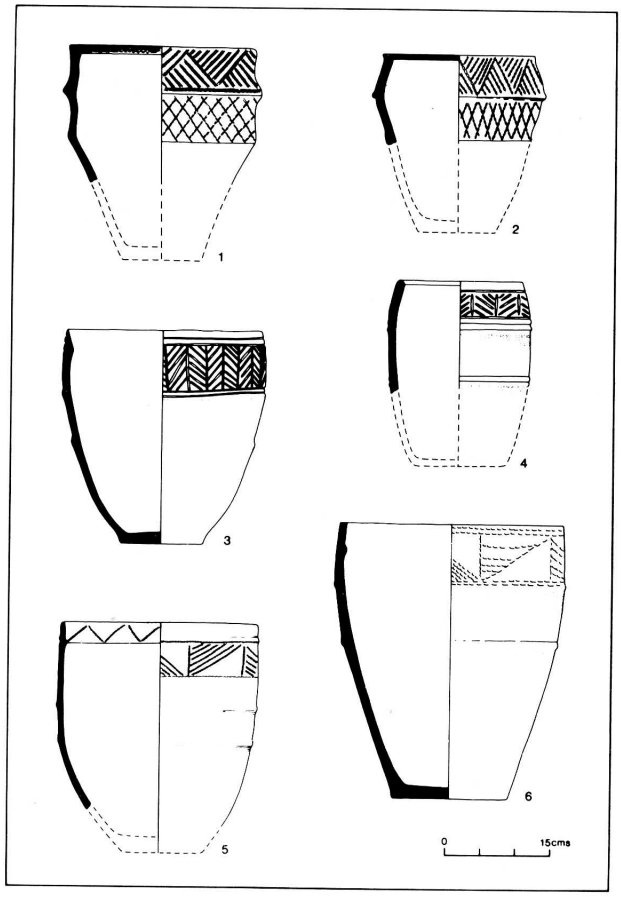

Fig. 7.
Similar Collared Urns (1-2) and Cordoned Urns (3-6) from either side of the Irish Sea:
1. Tullymurry, Co. Down, and 2. St. Cuthbert Without, Cumbria (both after Longworth 1984). 3. Altanagh, Co. Tyrone, (after Williams 1986) and 4. Mid Gleniron, Wig. (after Morrison 1968). 5. Cookstown, Co. Tyrone, and 6. Dalruan, Campbelltown, Argyll.

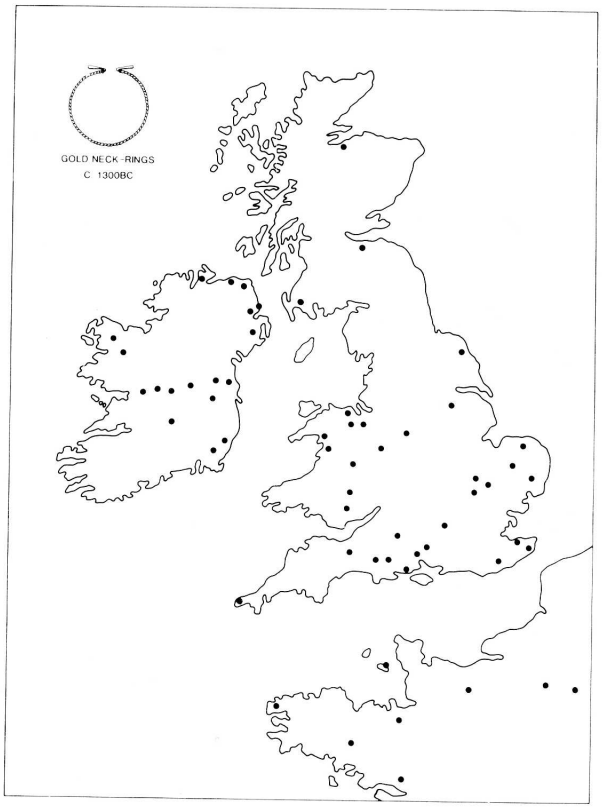

Fig. 8.
Distribution of gold bar-torcs in Ireland and Britain c. 1300 BC (after Eogan 1967).
A number of examples in France also shown.

either side of the Irish Sea. The distribution of the broadly contemporary Collared Urn Tradition (Fig. 6) may also imply a similar picture of the more extensive use of this body of water. Here, however, an essentially English phenomenon impinges mainly on the eastern half of Ireland. Longworth (1984, 81) has described this urn group as 'a tradition characterized by an underlying conservatism which ... always retained an unmistakeable identity. The tradition imposed a remarkable degree of rigidity of expression upon its potters'. While two broad regional styles emerged, the absence of more localised stylistic groups 'speaks not only for the strength of the tradition but also for a close network of communication within the main style zones'. Longworth remarks that close similarities between pots in form and decoration are extremely rare. The same may be said of the Cordoned Urn Tradition, and it is therefore all the more remarkable that a small number of broadly similar examples of both urn types can be identified on either side of the Irish Sea (Fig. 7).

Occasional parallels such as these and the widespread distribution of both Urn Traditions are particularly difficult to explain. Older notions of the migration of various 'Urn Folk' seem less than adequate today. It is worth noting that closer study of the material, both urns and associated finds (as in Longworth 1984 for instance), shows how misleading distribution maps like our Fig. 6 may be at least in so far as a pattern of identical dots suggests a degree of uniformity which is quite illusory . It is true that there is a significant degree of standardisation in burial rite and general pot shape, for example, but great diversity in many other fields. To put it another way, certain generalised features transcend regional differences, and how this was achieved over considerable parts of Britain and Ireland for a period of half a millennium or more is far from clear. Once more, a possible explanation may lie in an extensive and intricate system of interaction between communities, this complex pattern of communication serving to impose and maintain a measure of uniformity sufficient to publicly demonstrate participation in a symbolic activity which conferred some measure of social approbation. Clearly the networks of relationships and the social imperatives were both sufficiently strong and compelling to allow their material expression to cover great distances and to traverse the Irish Sea. The pottery fashions instanced here are necessarily considered in isolation but it should be remembered that the contacts they represent were only a part of a wider spectrum of activity which must have included some of the contemporary metal exchanges. Important metalliferous areas are located on both sides of the Irish Sea and this channel certainly had a significant role in, for example, the distribution or re-distribution of the ore resources of south-western Ireland in the early Bronze Age and of Welsh material in the earlier part of the middle Bronze Age (Northover 1982).

Around and about 1300 BC there is a remarkable and little understood shift in the archaeological record in Ireland and in many parts of Britain. Recognizable burial practices and the manufacture of certain types of pottery all but cease, or so it seems at present. Whatever happened, the disposal of the dead, in the later Bronze Age with or without their funerary vessels, now leaves little or no archaeological trace. Fortunately for the study of archaeology there is an increase in the practise of depositing objects of bronze and gold in the earth. This, coupled with the fact that settlement evidence is scanty, particularly in Ireland, basically means that the surviving evidence for contact between Ireland and Britain consists for the most part of metal

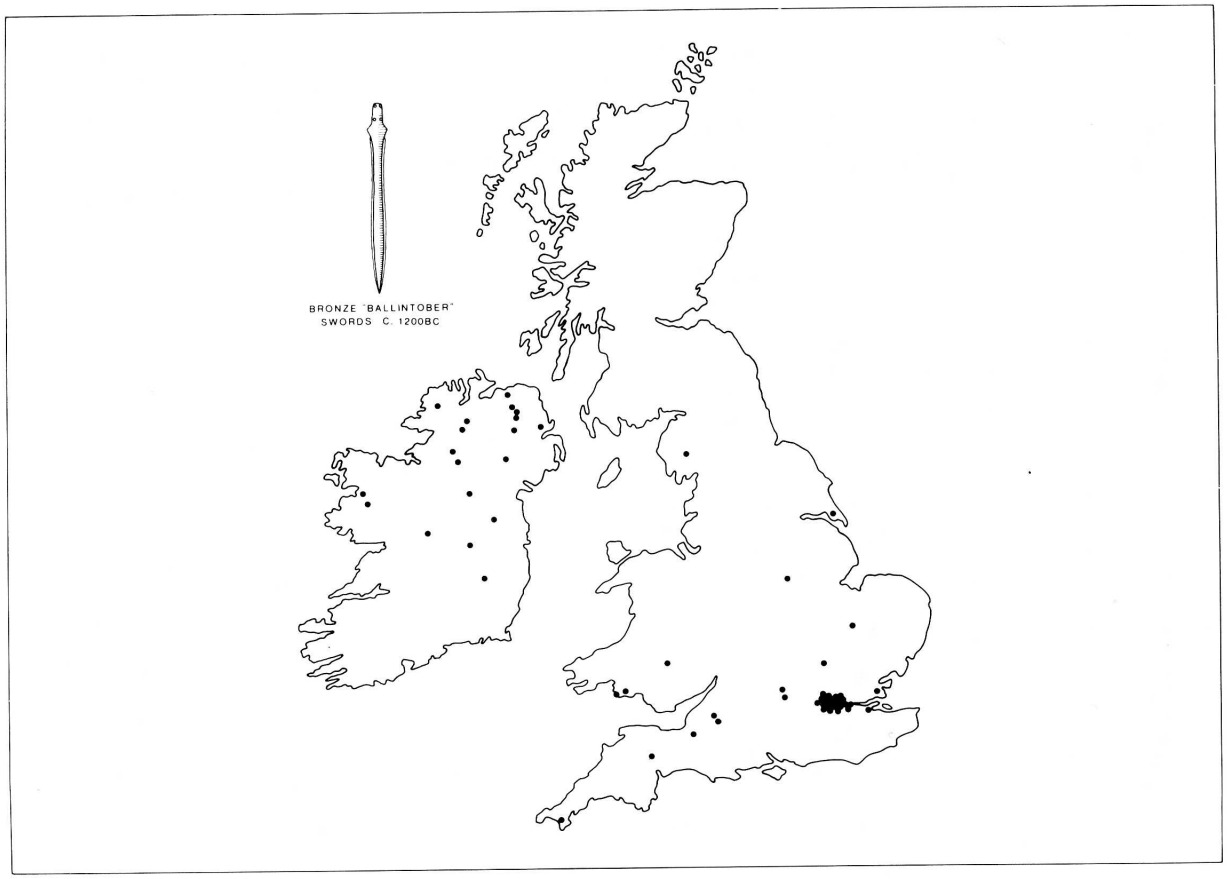

Fig. 9
General distribution of Ballintober and related bronze sword types c. 1200 BC (after Eogan 1965 and Colquhoun and Burgess 1988).

artefacts. Various explanations for these and other contemporary developments have been offered in recent years; they range from the catastrophic to the socio-economic. Certainly the disappearance of some burial traditions, whose ultimate origins lie in the Neolithic, may suggest, as Bradley (1990, 131) has put it, that 'the past lost its hold over later generations'. But how far the systems of communication they represented were modified or replaced remains uncertain. New patterns of interaction do seem to have developed, novel gold and bronze types appear and there are significant developments in weaponry. Many of these innovations indicate long distance exchange networks and it has been plausibly argued that elite elements of ranked societies were now major participants in the exchange process and that their political power and status rested to some degree on their ability to control the distribution and value of certain prestigious objects. A whole range of material indicates that Ireland shared in the social transformations taking place elsewhere, both in Britain and on the Continent. Gold objects like the ornate neck-rings called bar torcs (Fig. 8) are generally believed to have been the prestigious possessions of such a social elite. Though mainly an Irish-British fashion, a significant number of these torcs have been found in France, mostly in the north-west. Their insular distribution implies that they may have been an element in a pattern of alliances across the North Channel and across the southern half of the Irish Sea with north Wales playing a central role. Indeed new gold sources may have been developed in the Irish Sea region or in Brittany at this time (Northover 1989).

One of the earliest types of bronze sword in these islands is the Ballintober sword type (Fig. 9) and it seems to be a weapon form favoured for some unfathomable reason in the northern half of Ireland and the southern half of England. The type may have been first developed in the Thames Valley which was clearly an important area of sword manufacture as well as being a crucial link with the Continent; and perhaps through a series of political alliances the region of the Bristol Channel may have provided an important connection between south-eastern England and Ireland. Though the nature of the alliances postulated is not at all clear, it is tempting to speculate that this scatter of dots may conceivably be an echo of the competing ambitions of a network of major and minor chiefs. While integrated studies of artefact distribution and contemporary settlement have been undertaken in the south of England and have revealed a complex system of small scale interlocking exchange networks (*e.g.* Ellison 1980), the distribution of most Irish metal types has yet to be studied in detail and in relation to factors such as soils, vegetation and land usage; and there is a disconcerting dearth of settlement evidence.

A series of gold bracelets and dress fasteners (Fig. 10) displays little more than a hint of a familiar pattern of some contact between the north-east of Ireland and south-western Scotland. Many of these ornaments were probably made in Ireland but the overall distribution pattern at present indicates little more than the rather obvious fact of a fashion shared across the Irish Sea.

The identification of regional assemblages has proved difficult in Ireland but Eogan (1974) has demonstrated two significant concentrations of fine metalwork in his Dowris Phase: one in the region of the Shannon Estuary (Fig. 11), the other in the north-east of the country. The Shannon assemblage, which includes gold gorgets, so-called hair ornaments and bowls also of gold, and some bronze horns or trumpets, illustrates the real difficulty in identifying possible routes of long distance exchange. The gold hair ornaments are concentrated here, but the only other Irish finds are two examples in Leinster: Eogan (1969) has therefore suggested a trade route from north Munster to the Dublin area, thence to north Wales and onwards to northern Britain.

The Irish-British examples of the bronze Gündlingen sword

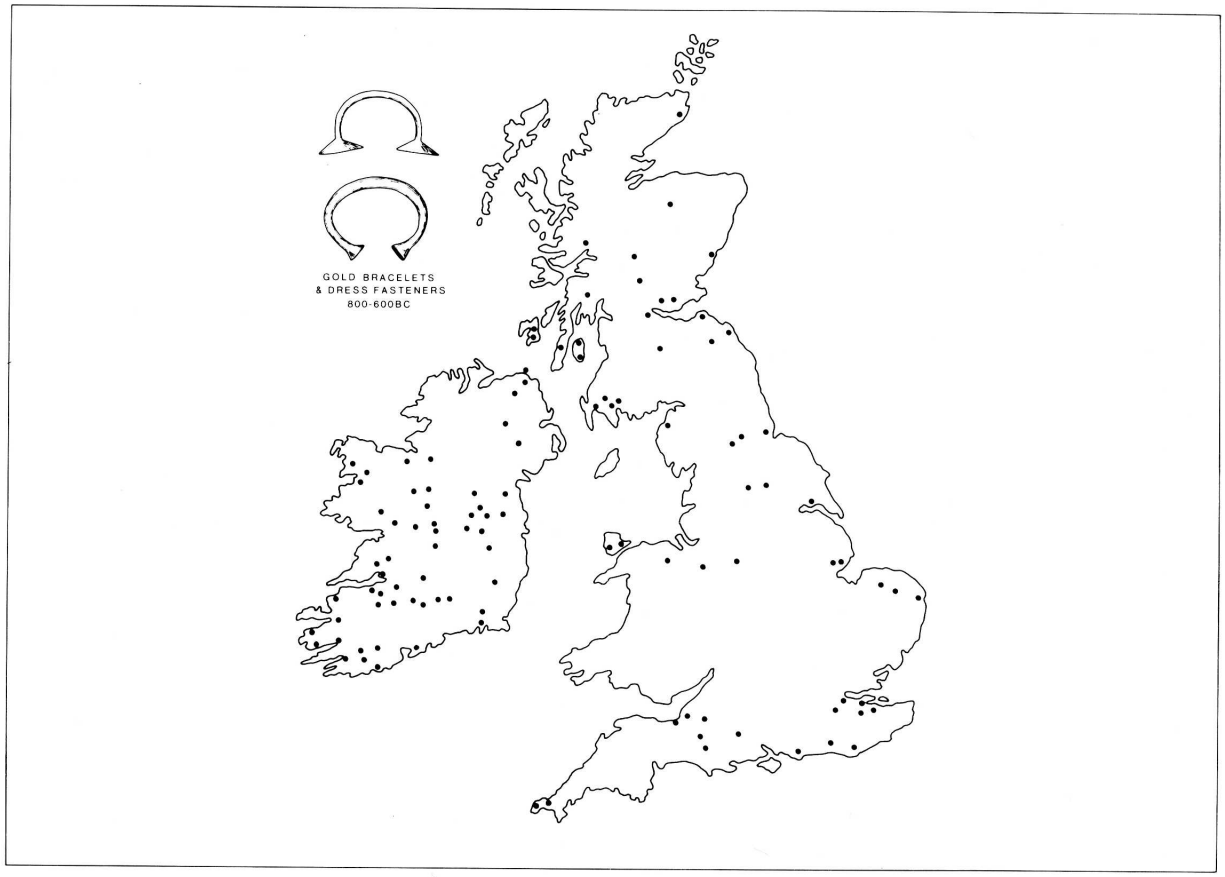

Fig. 10.
Distribution of gold bracelets and dress-fasteners c. 800-600 BC (after Taylor 1980 and Needham in Bell 1990).

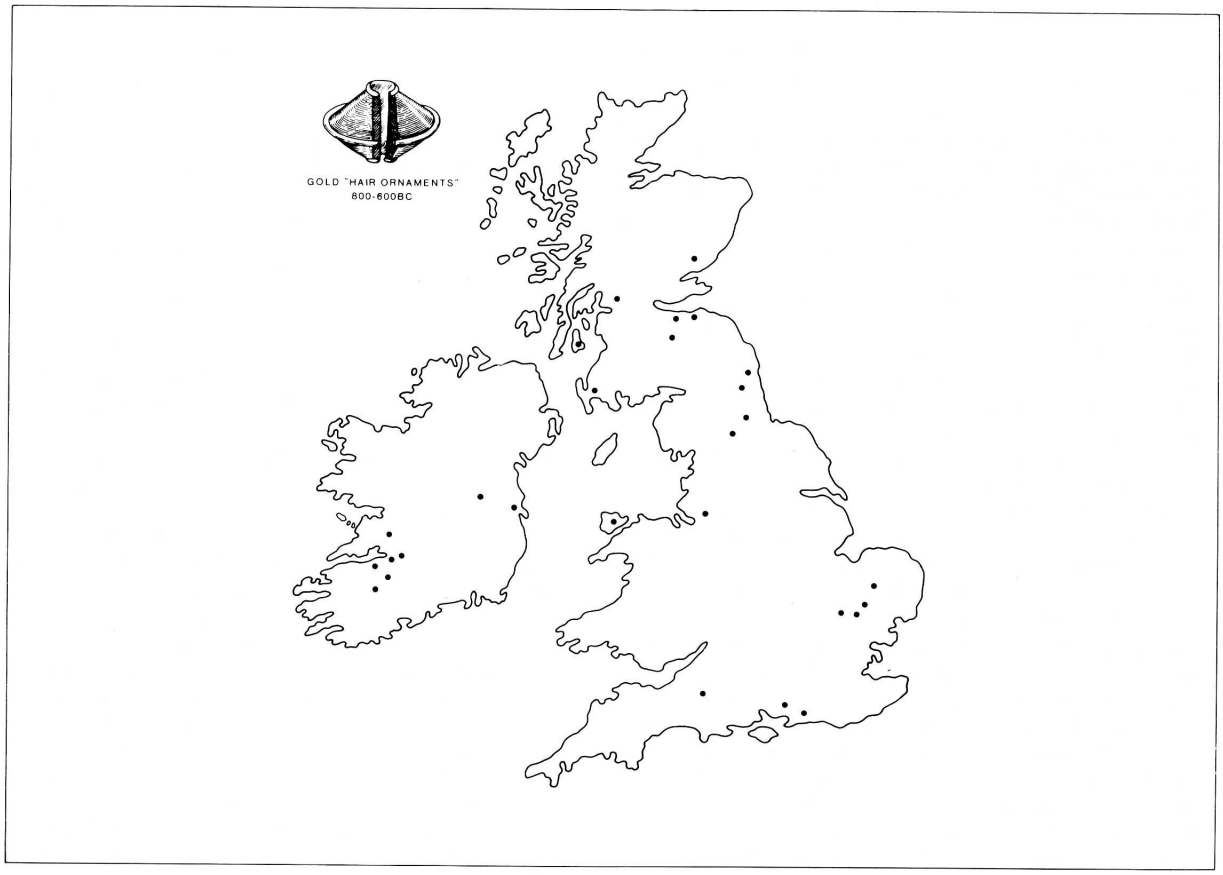

Fig. 11.
Distribution of gold hair-ornaments c. 800-600 BC (after Eogan 1969). Several examples in France not shown.

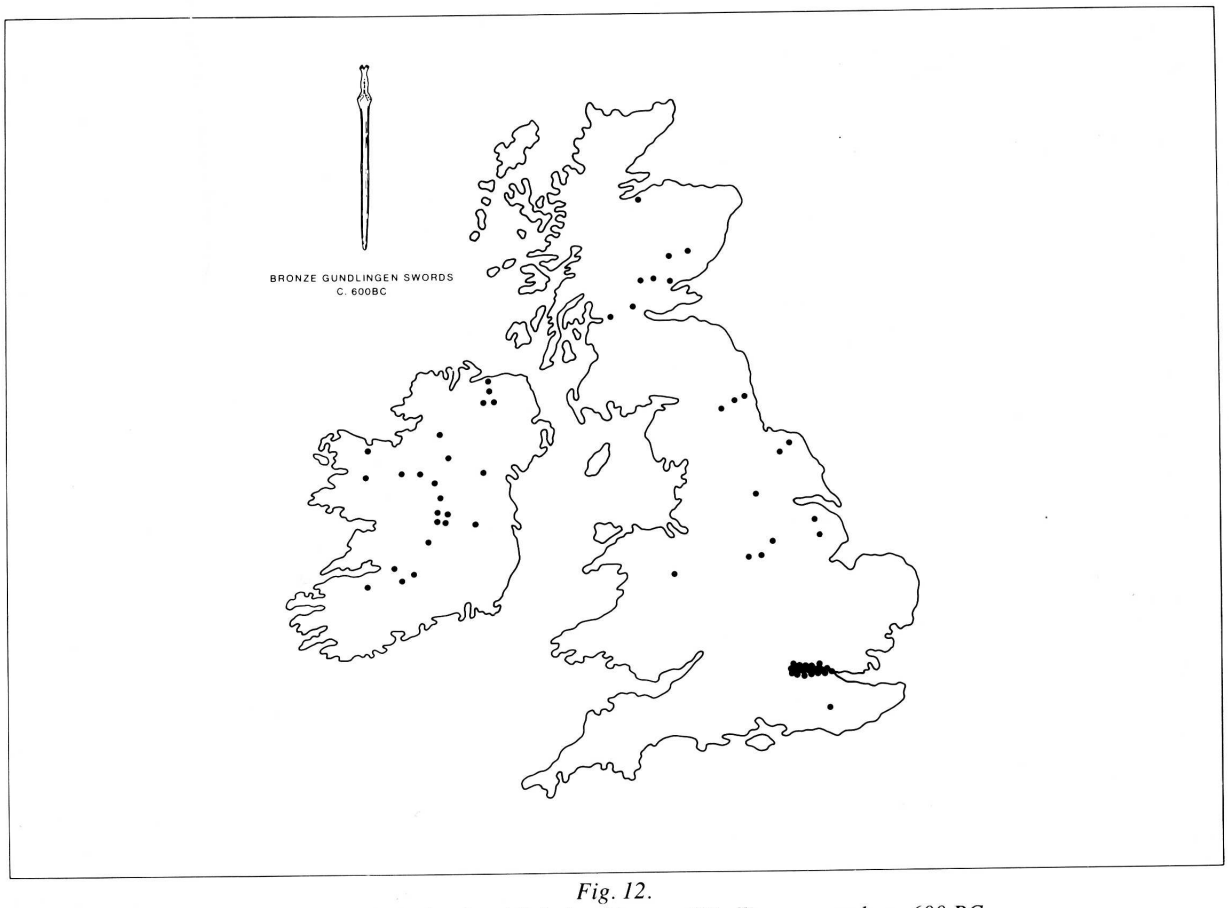

Fig. 12.
Distribution in Ireland and Britain of bronze Gündlingen swords c. 600 BC (after Eogan 1965 and Colquhoun and Burgess 1988). Continental distribution not shown.

(Fig. 12), in use at the beginning of the Iron Age, show that mutual contact continued, as indeed did Continental contacts, for the form is a variant of a wider European sword type. Apart from once again noting the importance of the Thames Valley, the scattered distribution elsewhere in these islands provides few clues as to how the fashion was actually disseminated. As with the earlier Ballintober swords it would be wrong to imagine a uniform weapon type distributed across both islands. Minor typological details occasionally permit the identification of Irish pieces in Britain and *vice versa* (Colquhoun and Burgess 1988). Again what is important, however, is not so much where the type originated, or where a particular sword was made and how far it may have been transported, but the general impression a map like this gives of a shared fashion and the communication this implies some time in the middle of the last millennium BC. Of course the sword was an offensive weapon and it must be acknowledged that some of the communication referred to here may have been more bellicose than harmonious.

In this short survey of prehistoric contacts across the Irish Sea, the supporting evidence offered by numerous other types of monument and artefact has had to be ignored: no consideration has been given to Portal Tombs, several types of Beaker pottery, some Vase Tradition pottery, Trevisker ware, gold lunulae and a whole range of other metal types. The Iron Age has not been considered either, and it is quite unlikely that the patterns of contact we have sketched ceased with the end of the Bronze Age. The demise of the bronze industry at this time is as dramatic a transformation as the disappearance of those burial practices of the earlier Bronze Age almost a thousand years before, and it too has prompted catastrophic explanations. Writing of Atlantic Europe, Rowlands (1980, 46) has said: 'the gradual adoption of iron-working should ... be viewed in a larger perspective of the general disruption of a formerly complex regional economy, the dissolution of complex networks of political alliance and exchange on which traditional forms of rank and power were based, and the transition to a more isolated and fragmented social landscape by the end of the 6th century'. If, as seems likely, bronze had an important role in the maintenance of status relationships, then iron-working may well have disrupted this structure and precipitated a decline in associated customs like hoard deposition. It does not necessarily follow that there was a wider socio-economic collapse since bronze was probably just one element, admittedly a prestigious one, in a wider spectrum of activity. Cooney and Grogan (1991) have argued convincingly that there is considerable continuity in other spheres in the period in question from about 600 to about 300 BC. If there was some disruption, then the hiatus was to prove a temporary one for a whole series of artefacts, from beehive querns to decorated bronzes, demonstrates a wide range of contacts across the Irish Sea before and after the turn of the millennium (Raftery 1984, 337 ff).

What sort of picture may we now have of prehistoric contact between the two islands? Is it in fact a picture of varying and sporadic connections as sometimes claimed, or is it possible to suggest another pattern?

It has to be admitted that the interpretation of archaeological distribution maps is fraught with difficulty. It is not easy to identify the mechanisms which produced a particular distribution and many factors may distort the issue (see Groube 1981). The nature of the society in question is likely to be a fundamental determinant: the degree of centralization and ranking, for instance, and the degree of craft specialization, will be influential. Kinship links may be no less important but hard to identify. Distorting factors are well known and they include the accidents of survival and discovery: differential survival in different areas, as well as variations in research and excavation from region to region. A variety of depositional factors may also be crucial: patterns reflecting deliberate concealment or destruction will differ from

those reflecting casual loss; and the processes affecting the distribution of weapons, for example, may differ from those dictating the distribution of ornaments, and the processes for either category may vary from place to place (Bradley 1985). Another factor which must hinder understanding is well illustrated here: the placing of large black dots on small scale maps is not the most refined method of archaeological anlaysis. What follows, therefore, is quite speculative.

Obviously the dots do reflect a measure of human activity though the nature of this activity may not be clearly discernible. Population diffusion, trade and exchange are all oft-quoted explanations which more often than not imply a more or less synchronic event or a series of discrete events over a limited period of time. Another possibility is that some of these patterns are just the visible expression at a particular time for a particular reason, of a deeper rooted and longer lasting network of relationships. This is the likely explanation, for example, for those variants of megalithic tombs found in north-eastern Ireland and south-western Scotland where a shared tomb plan was retained by communities, perhaps linked by kinship, over a period of many centuries. The distribution of pottery types too may reflect something more than the diffusion of potters or pottery traits through 'contact' or 'influence'- conveniently vague and imprecise terms often employed. These pottery vessels and the dots which represent them on our maps may just be the archaeologically visible elements of a much more intricate pattern of social interaction. This sort of interaction may also have been a perennial feature of the Irish Sea region and I suspect that its constancy has been underestimated. Archaeological evidence of its very nature is partial and fragmentary, and more often than not it provokes interpretations which emphasize discontinuity or which offer a picture of sporadic activity. Indeed, continuity is rarely discernible. However, limited excavation on Dalkey Island, Co. Dublin, has revealed a remarkable sequence of occupation (Liversage 1968): the evidence includes decorated Neolithic pottery, Beaker pottery, Irish Bowl and Vase Tradition pottery, Trevisker ware and later Bronze Age baked clay moulds. Liversage reasonably enough interpreted this as an indication of intermittent settlement but given that every phase of activity is not likely to leave its mark in the archaeological record it is also worth considering the possibility of a more constant occupancy, though not necessarily a continuous one over more than two millennia. A long episodic sequence of Bronze Age occupation has been clearly identified at Brean Down, on the southern shore of the Bristol Channel, extending from Beaker times to the earlier part of the first millennium BC (Bell 1990). The later Brean Down community indulged in salt production and was in contact with other groups particularly in the Mendip area to the east, but the discovery of two gold bracelets suggests wider contacts, with Wales or Ireland. The excavation of more coastal sites like these will undoubtedly illuminate the duration and extent of circulation around and across the Irish Sea.

The rich metalwork of later prehistory is now often seen as the material expression of interaction between elite elements of various societies. Again, however, we arguably see only the most superficial indicators of deeper layers of interaction. The discovery some years ago of the skull of a North African ape at Navan Fort, Co. Armagh (Lynn 1986) is a good reminder that important but less durable materials, like perishable apes, do not figure on our maps. I suppose our dots may be like stars, impossible to reach and fully comprehend, and - to us - miniscule reflections of protracted past events.

If our distribution maps have this deeper significance, then I tentatively suggest that this perspective and the long sequence of maps we now have allows us to view the Irish Sea in a different light. Obviously we should ignore modern political configurations, these maps reflect an older reality. This reality may have been a constant pattern of communication, the Irish Sea and its hinterlands being a focal area for interaction and exchange. The patterns of contact may have shifted from time to time, and different regional systems of interrelationships may have operated in different places, perhaps making the term 'culture province' inappropriate, but constantly recurring cycles of contact over such a long timespan must have had interminable consequences in many spheres not least in terms of kinship links, political structures and even linguistic developments.

One of the profound consequences may have been the cumulative process of the Celticization of the island of Ireland, a process fuelled by prolonged interaction across the Irish Sea in later prehistory (Waddell 1991a). The contacts which eventually produced a mutual Celticity may have been the culmination of a prehistoric pattern of persistent interaction which was at least as old as the Neolithic and one which possibly received its first significant interruption with the Roman conquest of Britain.

Much more detailed research is required to elucidate the extent and duration of the prehistoric contacts summarised in this paper. Many other distribution patterns need study too. Caution will be necessary in assessing their significance: it would be a mistake to exaggerate their importance but a greater error to minimize it.

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