#### D. L. CLARKE

# A TENTATIVE RECLASSIFICATION OF BRITISH BEAKER POTTERY IN THE LIGHT OF RECENT RESEARCH

(Fig. 1)

The history of the analysis and classification of British Beakers between 1870–1960 is too well known to need any lengthy restatement here. This complex 'tradition' has been summarised and restated in a more modern guise by Professor Piggott in his recent paper (1963). All that I wish to do at this stage is to emphasise four salient features underlying the current classification of British Beaker material:

i. Abercromby's scheme of 'A, B, C,' beaker groups (Abercromby, 1912, p. 18) was based on the "excellent" system of division by shape variation devised by Thurnam (1871). The British Beakers were basically separated into three groups according to their shape alone – "ovoid cups with recurved rims", "low brimmed cups" and "high brimmed cups". Thurnam's ' $\alpha$ ,  $\beta$ ,  $\gamma$ ,' groups became Abercromby's 'A, B, C,' and eventually Piggott's 'Long neck, Bell and Short neck' Beaker groups. In these schemes the decoration, motifs and zonal styles of the Beakers are not integrated into the process of classification, merely being described for the classes already defined by shape alone. This fact makes these schemes, or rather scheme, completely at variance with modern ethnological/archaeological thought.

Beakers and pottery in general display variation usefully noted under the headings – decorative motifs, arrangement of the decoration (zonal styles), shape, paste and firing. Any one of these facets can, and has been, used to classify and define groupings in prehistoric pottery. However, each classification based on but a single aspect, such as shape alone, can only have partial and rather muddled validity. Indeed, if one was forced to choose a single aspect by which to analyse a prehistoric pottery group then decoration would probably be the most valid basis. Since, the shape of pottery vessels is at least in part limited by functional considerations and the paste and firing of the vessels can be only partially controlled by the potter's will. The decorative motifs and their arrangement on the pot are, in contrast, a deliberate aesthetic and non-random selection of elements from an inherited corpus of social

tradition. The number of motifs and arrangements possible are infinite, the number used in practice is relatively small and limited in range. It would seem that if forced to choose a single aspect, then decoration would have been the most compatible with the attempt to define ancient social traditions.

Clearly then, the current classification of British Beaker material is ill-based although partially valid. On the arguments advanced above, the decoration and zonal styles of the beakers would be a better alternative and form the backbone of most advanced studies of beaker classification today (Van der Waals & Glasbergen, 1955). The best alternative of all, however, would surely be an analysis integrating shape, motif, style, paste, firing, associations, distribution etc., etc. This is the alternative course that I have followed in my attempt to detect pottery traditions and groups within British Beaker material. Groups can be defined by a limited range of vessel shapes, motifs, styles etc., although the space available prevents the full definition of the group characteristics here. The practical difficulties of applying the Thurnam/Abercromby/Piggott scheme have long puzzled the curator and the student when in practice classifying beakers by the presence of large areas of floating lozenges or hexagons, or by the multiple groups of narrow zones with simple motifs, rather than by physically measuring the neck length. There are, unfortunately, 'long neck' beakers with 'short neck' beaker decoration and vice versa; many 'long neck' beakers even have necks of the same proportions as those on 'short neck' vessels. The uncomfortable but demonstrable fact remains that the current British Beaker classification is a classification by shape alone, inherited from the nineteenth century.

ii. Abercromby was the first and last scholar to make a reasonably full, illustrated corpus of the beaker material available (then c. 300 vessels); upon this basis he divided the vessels into groups.

iii. Most of the schemes devised since 1912 have been based largely upon Abercromby and have mainly been minor modifications of that scheme. A recent trend has been to steadily simplify Abercromby's initially complex analysis. In this way we seem to have lost all trace of Abercromby's A/B, A/C, B/C; Fox's Bl(a), and Crichton Mitchell's C(A), C(B), beaker groups. Were these beaker groups completely unreal, if not how are we to label them under the simplified classification at present in vogue? Could it be that the further we get away in time from the original piece of detailed research the more easily we can ignore the complexity of the real beaker situation?

iv. No illustrated corpus of British Beaker material has been made since 1912, although it was known even then that Abercromby's corpus was incomplete. Probably

in this one fact the germ of the confusion lies, that the material has never been properly gathered together and examined objectively.

The four points listed above have led me to attempt an entirely new classification of British Beakers starting from first principles and based on a new corpus. This fresh corpus now includes more than 1,944 beaker finds from England, Scotland, Wales and Ireland; 800 beakers are complete or completely restorable and nearly 100 beaker domestic sites are now known, each yielding many hundreds of sherds. This corpus of drawings and details reveals that the Abercromby classification was based on less than 16% of the material now available for study. This fresh corpus itself can hardly represent all the material in existence but in attempting a 100% cover I hope effectually to have embraced around 90–95%, a more than sufficient sample for a fresh classification and study. The analysis and interpretation of this new body of data has formed the basis of the classification that I shall outline in the latter half of this paper. The analysis itself has been designed to try and avoid the rather narrow approach this sort of problem has received in the past.

Most of the intact beaker material in Britain comes from burials but the proper environment of these specially selected vessels was in the domestic assemblages, now surviving only in thousands of sherds. In these domestic assemblages the beaker form was the common general purpose food and drink container but other forms were also in use, including the giant storage vessels upto 60 cms high, various hemispherical and conical bowls and many rusticated vessels. Comparative study of the sherds from domestic sites of various beaker groups demonstrate a roughly common breakdown into three varieties of vessels. The most common variety, perhaps accounting for half the number of vessels present on each site is always the normal beaker form with decoration impressed by comb or cord. These vessels have given their name to the cultural assemblage as a whole and seem to have been the multi-purpose container, selected examples being buried in the graves. However, roughly a quarter of the domestic beaker assemblage appears to have consisted of similarly shaped small beakers but with rusticated designs in finger-nailing, finger-pinching or stick impressions, or sometimes entirely undecorated; in fact a kind of second-best ware. The remaining quarter of the vessels used were also rusticated but this time comprise thick sherds upto 2 cms across and coming from giant storage beakers often with cordoned or collared rims; these represent the heavy-duty containers. In essence then, the beakers from the graves reflect only the fashions of the 'fine-ware' aspect of the assemblage, only partially matched by the fashions of the 'second-best' and 'heavy duty' domestic wares.

Any scheme of beaker classification must be based principally on the fashion fluctuations of beaker fine ware but should nevertheless aim at tying these fashions in with the contemporary assemblages of domestic vessels. Indeed in some cases it

is possible to demonstrate that the domestic assemblages provided a pool of minor innovations and inventions, some of which were only later integrated into the finer and more conservative wares.

In the previous approaches to beaker classification, and indeed in many related problems, it seems that the direction of approach of the particular prehistorian more or less predetermined the solution eventually arrived at. The problem is rather similar to a man walking the plank, having once decided the direction of the goal, walking the plank brings one to an inevitable end. In practice it seems much more likely that an observer can arrive at equally valid but different aspects of his objective from any one of many angles. In this way the Abercromby beaker shape classification certainly has partial validity. Surely, the best method of ascertaining the nucleus of a problem is not by using a single approach or even the intersection of two approaches but rather by defining a limited area of 'truth' by as many differing aspects of approach as is feasible. It is therefore necessary to approach the problem of British Beakers from as many different bases as possible and then resolve their conclusions into a coherent whole.

I have attempted to integrate separate and partially independant conclusions based upon stratigraphy, typology, material and ritual associations, statistical tests, distribution and absolute chronology. There are from Great Britain at least 124 sites in which beakers have been recorded in stratigraphical relationship to other beakers, providing invaluable evidence of sequence in particular areas. In addition to these there are more than 88 cases of direct or probably direct association of groups of two or three beakers in individual graves. Other material associations have been found with another 230 beakers, including metal daggers, bracers, buttons, awls and flint arrowheads, themselves susceptible to an independant typology. These latter finds have provided an independant ordering of the beakers associated with them. Statistical tests have been used to supplement typology as far as is possible and sensible in terms of the material. Distribution maps have played a crucial part in suggesting the complementary or successive nature of the groups already defined, as well as inferring whether groups are sensible in terms of human cultural activity. In the case of absolute chronology we have a small but precious group of carbon dated beaker finds from Britain and Western Europe which also throw light on the successive development and sequence of the beaker groups. It is then on the basis of the detailed integration of all these aspects of British Beakers that the tentative re-classification has been attempted.

Before I proceed to outline the proposed scheme for British Beakers I must emphasise one or two points. The first and most important point is that this article is a tentative preliminary sketch not a definitive work. Pressure of work on the main thesis, the length of this article and the problem of illustrations combine to prevent any other solution in the time available. That this sketch has been produced at all

can solely be attributed to the debt that I owe my Dutch colleagues for material help and stimulus. My second point is the nature of the beaker 'groups' that I am about to discuss. In an attempt to devise a classification close to human cultural reality I have used the term 'group' to define a group or assemblage of beaker pottery and artefacts believed to reflect a social tradition or group of people over several generations. The type fossil of eachgroup is the typical fine ware beaker which usually makes up half the domestic assemblage. Nevertheless an attempt has been made and must in future be developed, to define the other vessels in each beaker group as well as the distinctive burial rites and associations.

Detailed analysis of the beaker domestic sites has revealed interesting information on the 'mechanics' of innovation and change in pottery styles. This can only approximately be expressed in words but might be roughly paraphrased as follows: apparently, contemporary assemblages of beakers from individual domestic sites can be separated into three categories. Perhaps about 80% of each assemblage of fine beakers reflect the same general shape, motif assemblage and zonation, thus enabling typology and zone contraction ideas to have some reality. However, about 10% or so of the beakers still carry 'archaic' motifs, shapes or zonation, inherited from preceding phases, whilst yet another 10% exhibit 'prototypical' variations some of which will become 'typical' of the ensuing generations of pottery in that group. In the process of change within the beaker group the sequence can be crudely said to follow a progressive cycle, in which the 'typical' beaker type of a given phase becomes the 'archaic' variant of the succeeding assemblage, which is then typified by the dominance of a formerly 'prototypical' element accompanied by yet another set of new experimental innovations. If we extend this picture to each vessel form of the beaker assemblage and admit from the outset that even the 'type' in vogue has a considerable range of variation, then we begin to approximate to the many dimensions of change present in evolving pottery assemblages. Against this background the value of the typology of individual pots is strictly limited and of doubtful significance. Comparative safety only lies in treating real assemblages or in their absence by treating large numbers of similar, individual vessels. Each of my beaker 'groups' must then be understood as parts of a dynamic assemblage frozen at convenient points and defined by a limited assemblage of vessel types, with particular emphasis on the narrow range of shape, motif and zonal decoration in vogue on the principal beaker form.

#### BRITISH BEAKERS RE-CLASSIFIED

After some consideration, it seemed that algebraic and alphabetical labels for beaker groups were undesirable since they would undoubtedly be confused with previous classification systems and in any case they produce a misleadingly mechanical sense of succession. Similarly, a nomenclature based on type sites is not yet feasible, if only because of the absence of properly excavated beaker domestic sites. Therefore, wherever a beaker group has an internationally agreed name such as 'All-Over-Cord' and 'Barbed-Wire' beakers, I have thought it sensible to extend it to the British material. Apart from these examples, I have adopted regional names based on the name of the area in which the beaker group is centred, in the manner of the 'Severn-Cotswold', 'Clyde-Carlingford' nomenclature. When the beaker group being dis-

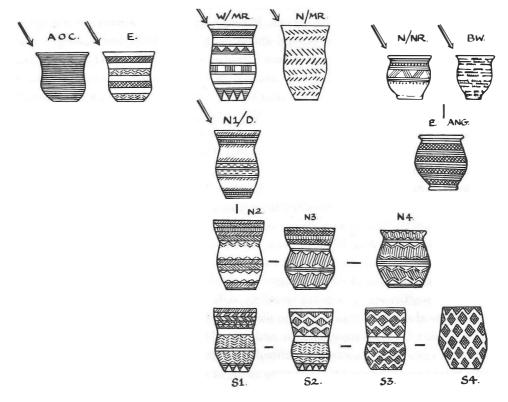


Fig. 1. A diagrammatic sketch of the evolving beaker traditions of Great Britain, using the new group classification. The intrusive groups from the Continent are indicated by the oblique arrows and the three main indigenous traditions are linked by lines. The diagonal from top left to bottom right represents passing time from c. 2000–1450 B.C. The diagram underlines the pattern independently established by the Matrix analysis of British Beaker data (*Proc. Prehist. Soc.* 28, 1962

prises W/MR, N/MR; Group 1/3 comprises N/NR, BW, E. Ang; Group 2 comprises N1/D, N2; Group 2/3 comprises N3, S1, S2; Group 3 comprises N4, S3, S4).

cussed is intrusive in Britain, I have used compound labels broadly indicating the area of origin in Europe and the area of settlement in Britain, thus: – the Wessex/Middle Rhine beaker group. Exceptions to this rule are the labels already noted as internationally accepted.

In Great Britain, I propose to distinguish a minimum of seven beaker groups or assemblages intruding into Britain from various parts of Western Europe at various times. These include the All-Over-Cord, the European Bell Beaker, the Wessex/ Middle Rhine, the Northern British/ Middle Rhine, the Northern British/North Rhine, the Barbed-Wire, and the Primary Northern British/Dutch, beaker groups. From these main waves of beaker settlers there evolved in Britain three long lived and competing regional beaker traditions of a purely insular character. These three 'native' beaker traditions comprise the Northern British tradition centred north of the Wash, the Southern British tradition centered south of the Wash and finally the East Anglian tradition centered on the littoral strip of East Anglia and the Thames Estuary. The picture is one of complex and notably regional development contrasting strongly with the ever more simplified pattern extrapolated from Abercromby's admirable early work. In the sections that follow, I will briefly discuss each beaker group in approximately chronological succession. Unfortunately, space and time prevent my putting the evidence in detail in this interim report which must take the form of a summary.

#### The All-Over-Cord Beaker Group (AOC)

Probably in the century around the year 2000 B.C. groups of All-Over-Cord beaker settlers began infiltrating the east coast of Britain from the Rhine Delta and the areas immediately to the north. These peasant farmers and fishermen settled principally in centres around the Upper Thames, the Wash, the Humber and the Eastern Coast of Scotland. Subsequent expansion took them to the Bristol Channel in the south and the West Coast of England and Scotland in the north. From these points, All-Over-Cord beakers ultimately reached Northern and Southern Ireland respectively but in very small numbers restricted to coastal sites. The pottery assemblage consisted of mainly low, broad, bell-shaped beakers, including some with narrow mouths and cordoned or collared rims. The distinctive feature is the normally total decoration with fine two strand twisted cord applied in short but overlapping spiral lengths sometimes extending inside the rim. The domestic assemblage included quantities of undecorated beakers and small bowls, possibly used as lamps. Rusticated ware was already present but at this stage is normally decorated with non-plastic single and paired fingernailing, supplemented by bone impressions. The

group seems to have been formally neolithic although having some knowledge of, and probably importing, a few copper and gold trinkets. The normal burial rite was crouched inhumation, often under barrows. The detailed study of the pottery and burial idiosyncrasies strongly support the Rhenish/North German connections of the British group and show no positive evidence of Breton connections.

# The European Bell Beaker Group (E)

The chronological evidence is uncertain but at least one stratigraphy and several carbon dates suggest that the 'true' comb impressed beaker assemblage reached Britain contemporarily with, or even later than, the main All-Over-Cord beaker settlement. This beaker group is usually associated with the initial explosive expansion of beaker assemblages to Western, Central and Eastern Europe. The so-called Pan-European or Maritime beaker appears to have been only a single decorative variant in a much wider assemblage. Hence, I have chosen the name 'European' Bell beaker to embrace the early beakers of Britain that share the same basic shape and motif assemblage as their cousins from most of Europe. In Britain the distribution of the European Bell beaker group partially overlaps, but is mainly complementary to, that of the All-Over-Cord beaker folk; the centre of gravity being in southern England as opposed to the All-Over-Cord preponderance, or survival, in the North.

The early European Bell beakers preserve the low, broad bell-shaped silhouette and display a range of cordoned and collared forms. The domestic assemblage follows the established pattern of undecorated beakers, small bowls and larger vessels in non-plastic rusticated techniques. Once again the only metalwork certainly associated with the group are gold trinkets and copper awls. It is particularly significant and striking that the early Bell beaker groups of Britain and possibly of much of Western Europe, were apparently formally neolithic and unacquainted with either tanged copper daggers, bracers or 'V' perforated buttons, the so-called beaker type objects.

The main centres of European Bell beaker settlement in Britain were Wessex, the East Anglian Coast, the Yorkshire Wolds and the Scottish Eastern Coast; subsequent expansion reaching the Bristol Channel and Southern Ireland, as well as to Western Scotland and Northern Ireland. The pottery and burial rite idiosyncrasies once again point mainly to the Rhine Delta and even Lower Saxony rather than to any significant Breton influx. This holds true for the Irish material which can best be paralleled in Britain and the Rhineland.

The decoration on the European Bell beakers normally consists of multiple narrow zones of decoration, although quite often the zones are joined in pairs, or are

of double breadth. The repertoire of motifs is comparatively small but already included variations on the filled triangle and lozenge. Comb impressed decoration is normal but occasional cord defined zones and internal rim cording betray the strong connections with the All-Over-Cord beaker group. The tendency for increasingly tall and slender vessel shapes begins to appear in both of the earliest beaker groups, presumably reflecting the influence of the Protruding-Foot beakers of the Rhineland. This feature is particularly noticeable amongst some of the Maritime beakers and becomes a constant feature in some of the following beaker groups from the Rhineland.

#### The Wessex/Middle Rhine Beaker Group (W/MR)

This intrusive beaker group is one of the most important and clearly defined waves of beaker settlers to reach Britain; an important forerunner of events later to shape the full Bronze Age of Wessex and Brittany. The assemblage defining this group centres around tall slender, or biconical, beaker forms. The absolute range in size is much greater than amongst the preceding groups and is accompanied by a new range of motifs and motif preference. Principal amongst these distinctive motifs is the extreme emphasis on narrow lattice, ladder, chequer and ermine zones, frequently accompanied by filled triangles. Especially distinctive is the introduction of the arrangement of filled triangles around the beaker base giving the impression of a flower's calyx or a band of 'flames'. Equally distinctive and surprisingly consistent is the bright burnished 'sealing-wax' red fabric, strongly recalling burnished copper. Cord decoration and internal rim decoration have both entirely disappeared from the assemblage. The domestic assemblage remains generally the same, including as before plain beakers and bowls and nonplastic rustication. The zonal arrangement is now predominately in broad or paired decorative zones with the occasional vessel anticipating full zone contraction. Similarly, some beakers already display the sharpened neck profile typical of the later Dutch beakers.

The available dating evidence points to the arrival of this group in Britain around 1800–1750 B.C. The group as an assemblage has no close parallel in the Netherlands, with the important exception of one or two vessels of which the Odoorn beaker may be an atypical example. The only area in which the British vessels are paralleled, and indeed can be shown to have evolved, is in the Middle Rhineland, particularly in the beaker foci around Koblenz and Mainz, at either end of the Rhine Gorge. The early beaker groups of this area appear to have developed a particularly rich and flourishing economy, based in part on the strategic trading position of their territory. The area dominates the confluence of the rivers Rhine, Neckar, Main,

Lahn and Moselle, bringing direct contact with the metope beakers of Saxo-Thuringia to the northeast and the Straubing/Singen groups to the south. These various areas contributed many of the features transported by the Wessex/Middle Rhine group to England, notably polypod bowls, metope patterns, bone belt rings, bracers and a flourishing copper and copper alloy metallurgy. The metalwork includes raquet head pins, tanged and simple riveted daggers, tubular beads, large awls, gold capped 'V' perforated buttons and probably thick butted axes made from sulphide ores. The earliest and rare examples of tin bronze occur in both the German and British aspects of this beaker assemblage.

The Wessex/Middle Rhine beaker group appears to have emigrated almost directly from the Middle Rhine to Southern England. At first sight a long leap, but one should remember that they were following in the immediate footsteps of their own ancestors, the European Bell beaker folk, and that the Rhine will carry an unpowered boat from Mainz to the Channel in one or two days. Scattered outliers of the group reached the Wash, the Thames Valley and the Sussex coast but over 80% of the total group are clustered within sixty miles radius of Stonehenge, hence the choice of the Wessex/Middle Rhine label. Some of the sherds and the metope decorated bowl from Lough Gur, Co. Limerick in Southern Ireland, belong to this beaker group, making it very probable that the Wessex/Middle Rhine beaker group was responsible for the early bronze and copper sulphide ore metallurgy of Ireland. This early Irish metalwork was apparently traded back to Wessex where graves of this group contain daggers of Irish copper and trinkets of gold (Coghlan& Case, 1957). Thick butt copper axes may also have been introduced by this group.

For the first time, tanged copper daggers, flint daggers, bracers and probably 'V' perforated buttons appear as part of the British beaker assemblage. Five or possibly six rich burials, with tanged copper daggers and other equipment of Straubing/Adlerberg and Irish origin, have been found with Wessex/Middle Rhine beakers¹ in the Wessex area (Coghlan, 1957). Almost all of these early 'dagger' burials occur in the triangle between the Upper Thames, the Bristol Channel and North Wessex. Clearly the importance of the Wessex area as an economic centre linking Irish, Rhenish and Breton trade had already been anticipated; controlling the Thames headwaters to the east, the Bristol Avon to the west and the Wiltshire Avon to the south. In Brittany too there appears to have been a less numerous intrusion of the same Middle Rhenish beaker group accompanied by similar equipment and a similar boom in copper and early bronze metallurgy. In this way the links between Ireland, Wessex, Brittany and the Middle Rhineland, which become so apparent in the full Bronze Age, had already been anticipated by the Wessex/ Middle Rhine beaker group and its wealthy aristocracy.

#### The Northern British/Middle Rhine Beaker Group (N/MR)

This beaker group was closely allied to the Wessex/Middle Rhine group, being roughly contemporary and coming from the same general region with similar material equipment. The difference lies mainly in their different origins and pottery and different distribution in Britain. Whereas the Wessex/Middle Rhine group was a fairly pure development from the early European Bell beaker settlement along the Rhine, the Northern (British)/Middle Rhine group reflects the integration of contemporary Bell beaker folk with Sangmeister's Westdeutsche Becher groups on the surrounding hills. These Westdeutsche Becher were a late Single Grave group whose slender beaker forms were decorated with horizontal herringbone impressions made with a stick or spatula, burying their dead under barrows with central timber structures and palisade ring (Sangmeister, 1951, p.64, Taf. X-XI, XVIII-XIX, Karte 18). The amalgamation of the two populations, in the area immediately adjacent to the Wessex/Middle Rhine area of origin, led to a series of beakers of mixed traditions and similarly mixed material and ritual associations. Typical features of the pottery are once again a tall slender curvilinear or biconical profile decorated with zones of horizontal herringbone either impressed by a spatula or a dentated comb. Some of the vessels preserve the Single Grave feature of leaving the lower half of the vessel undecorated and this can be seen on some typical English specimens, e.g. at Linch Hill, Oxon (Grimes, 1943/44, pp. 34-35).

The distribution of this beaker group in Britain is roughly complementary to the contemporary Wessex/Middle Rhine group but overlapping in the Thames Valley, the probable common access route. The Northern British/North Rhine group clusters in small foci along the East Coast of Britain north of the Thames Valley and stretches into Lowland Scotland. The tanged copper daggers from these regions were perhaps introduced by this group but are unfortunately without pottery associations. Nevertheless, a distinctive association with this beaker group are the various forms of bone belt rings or buckles derived ultimately from the Single Grave background of the Westdeutsche Becher. At Sittingbourne, Kent (Jessup, 1930, p.96, 115), such a bone belt ring was associated with a single rivet dagger of the early tanged variety and a two-hole bracer<sup>2</sup>; at Melton Quarry, Yorkshire<sup>3</sup>, with another two-hole bracer and an undecorated beaker (bowl?) rim sherd. Such a belt ring was found in situ in the well known archer's grave at Linch Hill, Stanton Harcourt, Oxford, with a t

The related Northern/Middle Rhine beaker from Talbenny, South Hill Pembrokeshire Wales, came from under a barrow with a timber post circle in typical Westdeutsche Becher tradition (Fox, 1943).

## The Northern British/North Rhine Beaker Group (N/NR)

The particular interest of the Northern/North Rhine group and its close cousin the Barbed Wire beaker group, is that both groups only just scrape within the definition of beakers of the Bell beaker tradition. Both the Northern/North Rhine and the Barbed-Wire beaker groups comprise traditions of mixed Late Corded Ware and peripheral Bell beaker origin. This mixture of traditions can be recognised in the squat, protruding foot, ovoid body beakers with recurved rims, incised or grooved decoration with a poor repertoire of basic beaker motifs and a neolithic poverty of grave associations. To these factors can be added the occasional use of cremation burial rite in a small grave with the beaker beside the cremation heap, and a number of vessels without decoration below the belly.

The Northern/North Rhine beaker group then is represented by the small squat or globular vessels with protruding feet. The decoration frequently consists of heavy grooving below the rim with crude or carelessly incised zones on the body, including metopic motifs. The typical motif is the multiple outlined triangle of the diagnostic form common throughout the Corded Ware tradition and entirely alien in the Bell beaker motif assemblage (Struve, 1955, p. 136). The origin of the group seems to lie in the similar assemblages found immediately North of the old Rhine Delta and along the hinterland of the Frisian coasts. The Dutch examples of this group have been partially defined by Modderman (1955) but the type is centered across the border in coastal Germany 4. In this area it would appear that late and devolved Corded Ware groups integrated small bands of beaker settlers producing a pottery assemblage of hybrid character.

These folk, with their strong non-beaker background, apparently crossed the North Sea in a series of small bands somewhere around 1700 B.C. or slightly later. The settlers clustered in three foci based on the North Sea Coast: – around the Moray Firth, in the Border Counties and on the Yorkshire Wolds. The domestic assemblage included both undecorated and non-plastic rusticated ware. The main importance of these settlers from across the North Sea lies in the subsequent integration of certain of their pottery features with the later Dutch beakers of the Veluwe type, giving rise to regional insular variations such as the beakers with short, angular, all-over-grooved necks.

#### The Barbed-Wire Beaker Group (BW)

The Barbed-Wire beaker group represents another wave of settlers of mingled Late Corded Ware and Bell beaker ancestry. The group that settled in Britain came from the area immediately south of the Northern British/North Rhine group with whom

they share many minor characteristics, based on their common background. The immediate and closest parallels of the British vessels are with the Barbed-Wire vessels of the Lower Rhineland. From this area the Barbed-Wire beaker settlers seem to have moved into the East Anglian littoral and penetrated along the Thames Valley as far as the Bristol Channel and even into North Devon and South Wales. In this way they occupied the interface of the territories of the Northern British-/Middle Rhine and Wessex/Middle Rhine beakers, whilst simultaneously holding the North Sea coast in the area immediately south of their North Rhine cousins (N/NR).

The Barbed-Wire beaker pottery varies over a considerable range of shapes including archaic bell forms, prototypical short neck forms and various hybrids with Wessex/Middle Rhine beakers. However, the typical form appears to have been a small, curvilinear profile, ovoid bodied beaker with protruding foot and recurved rim. The decoration is stereotyped and with a minimal repertoire of Bell beaker motifs, mainly simple hatched or lattice-filled zones. The outlined triangle and grooved neck features of the Northern/North Rhine beakers are also occasionally found. The decorative zones are usually broad and sometimes contracted to the salient points of the vessel profile, archaic all-over motifs and decoration within the rim is preserved on a few vessels. The decoration is typically applied by a thread-wound stamp with supplementary decoration added by jabbing, incision and grooving. The normal beaker comb was occasionally used and some vessels entirely decorated with comb impressions certainly belong to this group, others used both techniques together.

The domestic material of these beaker settlers has been admirably illustrated by Dr. Isobel Smith in her initial publication of this pottery assemblage (1955). The assemblage includes large and small Barbed-Wire beakers and bowls, large and small rusticated beakers and some comb impressed or incised vessels. The larger rusticated vessels attain sizes of upto 60 cms high with small peg-like bases of the Fengate type. Some of these larger vessels have been found inverted over cremation burials in Britain and on the Continent.

The Barbed-Wire beaker group appears to have been numerically small and rapidly became assimilated with beaker traditions already settled in Britain. The corrected radio-carbon dates and stratigraphy suggest that the Barbed-Wire beaker infiltration started around 1700–1650 B.C. The area of settlement is roughly complementary to the territory of the preceding Middle and North Rhenish beaker groups (W/MR, N/MR, N/NR). Nevertheless, the area infiltrated still contained a residual European Bell beaker population and the integration of the two traditions partly led to the rise of the distinctive East Anglian beaker group.

## The East Anglian Beaker Group (E. Ang.)

The origins of the East Anglian beaker tradition are typical of the processes of regional integration leading to the three main insular beaker traditions. The East Anglian littoral was a centre of European Bell beaker settlement second only to Wessex itself. The predominant regional decoration of this European Bell beaker focus was the All-Over-Comb impressed variant. Exactly as in the domestic assemblages of all the European Bell beakers, the range included a variety of narrow-mouthed vessel forms. The integration of elements from the Mildenhall Ware Neolithic population of the area, especially the rolled-over rim, led to the evolution of a new beaker tradition. The vessels are small, with biconical or globular profiles symmetrical about a prominent belly axis. The base and rim diameter are roughly equal and the rims are characteristically rolled over and rounded (roughly Abercromby's B2 beakers). The decoration is often simply All-Over horizontal comb or incision but finer examples have broad or paired zones with lattice or some other simple filling. Certain aspects of the decoration point to the absorbtion of some of the small outlying pockets of Wessex/Middle Rhine settlement around the Wash.

The slow evolution of the East Anglian tradition outlined above occupied the period between c.1900–1700 B.C. In the half century following this phase, the Barbed-Wire beaker group began landing up and down the East Anglian littoral strip and the two traditions confronted one another. The result appears to have been the steady integration of the Barbed-Wire tradition into the larger, locally evolved group with a resultant loss of identity. However, the East Anglian beaker group itself became changed by the intrusion, adopting many of the Barbed-Wire beaker characteristics. The revitalised East Anglian tradition now commenced to consolidate its control of the Fen Basin and the East Anglian coast, whilst simultaneously expanding into the Thames estuary and along the Kent and Sussex coast. This coastal territory, linked by the sea, remained complementary to the established and flourishing Wessex/Middle Rhine group to the west.

East Anglian beaker domestic sites repeat the same characteristics as those of the Barbed-Wire beaker group. Large and small rusticated vessels are common and for the first time begin to develop a ribbed or plastic finger-pinched surface. This feature is still rare and may be tentatively be equated with the arrival of the first Primary Northern/Dutch beaker settlers. Undecorated vessels are now uncommon in this and the contemporary beaker domestic assemblages, consequently rusticated decoration becomes more common.

## Primary Northern British/Dutch Beakers (N1/D)

The evolution in the Netherlands, particularly in the Veluwe, of a specifically Dutch beaker type with a specific motif assemblage, zonal range and short necked profile, has been demonstrated by van der Waals in the classic paper with Professor Glasbergen (1955). In the century between 1700–1600 B.C. it would seem that the Dutch beaker folk of the Veluwe began to settle the opposing coast of Great Britain. These beakers, corresponding exactly to Van der Waals' 2<sup>Ic</sup> group, make up my Primary Northern/Dutch beaker group (N1/D).

These new arrivals found Southern Britain already in the hands of at least two or three alien and flourishing traditions (W/MR; BW; E. Ang;). The North of Britain was far more sparsely held by beaker groups of small size (N/MR, N/NR, and AOC surviving in Scotland). Nevertheless, the new wave of Dutch settlers consolidated small bridgeheads in the south, securing the shortest crossing from the Veluwe to Norfolk. Other small foci appear on the Fen Margins, the Lincolnshire and Yorkshire Wolds, in the Border Counties, and along the enticing, thinly populated East Coast of Lowland Scotland. The distribution noticeably clusters around the large estuaries and inlets with all the find spots within twenty-five miles of North Sea tidal waters.

The domestic assemblage of this and the succeeding Northern British beaker groups is very poorly represented. However, there appear to have been large and small rusticated short neck vessels ('pot-beakers') with the new development of plastic finger-pinching in alternate horizontal and vertical bands imitating the contemporary zonal styles in use on the fine ware. Undecorated beakers are absent; collared or cordoned rims are rare being entirely restricted to the rusticated pottery. The fine beakers are identical with the Dutch beakers described by van der Waals (1955) under his 2<sup>Ic-d</sup> phases. The vessels are typically small but slender with a straight or concave neck profile above a sharply defined waist. The decoration is especially distinctive and introduces a new array of motifs which form the basis of the Northern British tradition lasting for many centuries. The distinctive feature of this new motif tradition is the assemblage of 'fringe' decorations that can be attached to zone borders; not all the vessels, however, have fringe motifs. The typical zone arrangements tend towards groups of three or more narrow zones separated by undecorated areas. A system of three groups of three zones was much favoured, emphasising the main shape elements, some of these vessels show full zone contraction as in the Veluwe beakers.

## The Northern British Beaker Tradition (N1, N2, N3, N4)

The intrusive beaker group, represented by the Primary Northern/Dutch folk, rapidly settled, consolidated and expanded their territory in Britain. This Primary group established a beaker tradition that was to continue to evolve in Northern Britain for at least another two centuries. I propose to divide the beakers of the subsequent Northern British tradition into a series of four consecutive assemblages or groups, each of which represents a successively later phase in the tradition. Needless to say these assemblages or groups are only phases in the coherent development of a single social tradition and must be assumed to overlap considerably. In addition to the Primary Northern group (NI/D), just discussed, I propose to distinguish a Developed Northern group (N2), a Late Northern Group (N3) and a Final Northern Group (N4), each defined on the basis of the evolving motif assemblage and shape variation that separate the increasingly insular Northern British tradition from its divergently evolving Veluwe ancestor. There is however, some evidence of continued contact with the Netherlands upto, and including, a few beakers and associations of van der Waals' 2<sup>Id</sup> group. The available evidence points to the continued links with the Veluwe as the source of the single-rivet and notched rhomboidal knives and also as the stimulus for more extensive metallurgy in Northern Britain.

The confines of this paper are too small to allow the detailed description of the successive phases of the Northern British beaker tradition. However, I wish to underline one or two aspects. By the Developed Northern beaker phase c. 1600 B.C. this tradition was the dominant beaker tradition in Britain. Regional centres of the tradition evolved regional shape and motif preferences within the body of the main tradition. These areas included extensive settlements around the Fen Margin, in North Wessex, on the Yorkshire Wolds, in the Border Counties and along the Scottish East Coast. This chain of settlement areas along the North Sea coast clearly maintained its commonly evolving tradition by sea traffic. Consequently the central area of Yorkshire originally played a crucial axial role in linking the other groups one to another. With the subsequent expansion of the Southern beaker tradition, the centre of distribution within the Northern tradition retreated into the Scottish counties with consequent expansion of related groups to the West Scottish Coast and ultimately to Northern Ireland. One crucial feature needing special emphasis was the relatively heavy settlement of Northern British beakers (N2, N3) around the Fen Margin of East Anglia and more sparsely, in North Wessex.

The situation in Britain c. 1600 B.C. sees the Developed Northern Beaker tradition (N2) occupying most of Britain north of the Wash. The remnants of the earlier beaker settlers were integrated into the new tradition but gave rise to regional styles within the tradition (groups absorbed include N/MR, N/NR and some AOC, W/MR;). Meanwhile, in Southern Britain the Wessex/Middle Rhine group itself

absorbed the earlier European Bell beaker population and consolidated its territory in Central and South Wessex. The Upper Thames had by then been partially infiltrated by Developed Northern beaker folk from Yorkshire and the Fen Margins. To the East, the East Anglian beaker group retreated from the Fenlands in the face of Developed Northern beaker expansion. Sheltered by the forested East Anglian clay belt, the local beaker group still held the littoral strip, the Thames estuary and the coast of Kent and Sussex. It is about this stage that new developments slowly begin to emerge amongst the Developed Northern beaker groups of the Fen Margin, foreshadowing the evolution of the third major beaker tradition native to Great Britain, the Southern British beaker tradition.

#### The Southern British Beaker Tradition (S1, S2, S3, S4)

The fully evolved beakers of this tradition display a preference for longer necked profile and a new motif assemblage based partly on reserved motifs, ultimately stemming from filled lozenges and triangles (E & W/MR), and partly on motifs common on Developed Northern beakers (N2). In addition to these features, two new zonal arrangements were developed that were unknown amongst the repertoire of the Dutch beakers, although based indirectly upon them. These include the filled neck/zoned belly style and a little later, the filled neck/fillled belly style. These two styles allow extra broad areas of decoration and thus stimulated the evolution of new motifs including floating patterns of various kinds.

In the Primary Southern beaker assemblage (S1) the neck length is often the same or slightly longer than of normal Developed Northern beakers. The motifs used clearly show the fusion of the simple reserved triangle and lozenge motifs of local Wessex/Middle Rhine and European Bell beaker origin, intermingled with Developed Northern British (N2) motifs. This mixed motif assemblage now appears on beakers with the medium/short neck length and sharp neck profile of the Developed Northern beaker group. It would seem that locally strong elements of Wessex/ Middle Rhine and perhaps late European Bell beaker groups had become integrated with the Developed Northern beaker settlers of the Fen Margin, and to a less extent, of the Yorkshire Wolds and the Derbyshire Peaks. In short, the Fen Margin regional form of the Developed Northern beaker assemblage represents the beginnings of the first phase of the Primary Southern British beaker tradition. In a sense, the reason why long neck beakers and their motifs evolved in the south and not the north of Britain is because in the north the Northern British/Dutch beaker settlers were imposed on a feeble scatter of earlier beaker groups. Whereas, the Northern British/ Dutch settlers of Southern Britain had to integrate large populations of earlier beaker

settlers, principally the Wessex/Middle Rhine and late European Bell beaker groups.

The association evidence of the Primary Southern beaker group completely confirms the dual cultural background of the group. From the Wessex and Northern/Middle Rhine groups the Primary Southern tradition inherits an array of equipment including 'V' perforated buttons, flint daggers, polished bone spatulae and jet belt rings (in the so-called 'pulley' form). Associations derived from the Developed Northern beaker group include the knowledge of latest bronze metallurgy, 'V' perforated buttons of Whitby jet and Northern amber, flint strike-a-lights with pyrites nodules as a standardised male kit, and bone awls.

The Southern British beaker tradition is as long lived as the parallel Northern British beaker groups. Once again successive phases of the Southern Beaker tradition can be isolated in terms of the evolving motif assemblage, zonal styles and shape variations. These phases I have labelled in a similar fashion to the Northern pattern, defining a Developed Southern (S2), Late Southern (S3) and a Final Southern (S4), series of assemblages. The Developed Southern Beaker assemblage expanded to the south and west, engulfing the late Wessex/Middle Rhine centre around Stone-henge, ultimately reaching Southern Wales and Ireland. A parallel expansion from the Fen Margin and the borders of the Wolds and Peaks pushed northward into former Northern beaker territories. Yorkshire and the Peaks were overrun; with western expansion into North Wales and Northern Ireland balanced by northern settlement as far as the Scottish Lowlands. The territory of the Northern British beaker tradition was steadily usurped and the Northern beaker groups confined to Scotland and Northern Ireland.

Apparently at the height of Developed/Late Southern beaker expansion c. 1550 B.C. the first elements of a new and alien warrior aristocracy entered Wessex with their dependant bronze and gold artificers. The intrusive Wessex I aristocracy with its new range of prestige weapons and accoutrements gradually aligned itself with the non-beaker population of indigenous Late Neolithic origin, perhaps as a genuine political move against the economic and social status of the beaker groups. Whatever the cause, the Late Southern beaker group abandoned the crucial Wessex area to the powerful intruders. Consequently the Late and Final Southern beaker distribution is markedly complementary to the centres of Wessex I affiliation, with a compensating expansion or retreat northwards. In the Final phase, the slack biconical Final Southern beakers are carelessly decorated with blade incised lines and comb impression is abandoned. The beaker features of the pottery become increasingly less evident, especially when compared with convergent development of adjacent Collared and Biconical Urn groups. The new bronze weapons and Wessex personal trappings scarcely reach a single beaker grave whilst the indigenous Collared and Biconical Urn traditions become expensively re-equipped and expand their terrtories into former beaker areas. The British Beaker tradition gradually becomes a scatter of devolved and engulfed groups slowly losing coherence, ultimately to be re-integrated into the birth of new traditions.

The domestic pottery of the Southern British beaker tradition continued and developed the plastic finger-pinch rusticated ware developed by the Northern British/Dutch tradition. The domestic assemblages include large and small rusticated beakers, some of colossal biconical proportions, also apparently large rusticated and comb impressed conical bowls. Heavy plastic ribbing strengthened the larger beaker domestic vessels but at the same time continued to follow the zone styles in vogue on the finer ware. The overall trend follows the fine beaker tendency to simple biconical profiles.

In conclusion, I must once again stress that this paper is a preliminary sketch prepared with serious limitations of space, time and illustration. I have deliberately avoided specific reference to the Middle and Late Neolithic Cultures of Britain, many of which must be drastically reinterpreted in the light of the beaker evidence. To include this topic and related facets such as food-vessel origins and handled beaker development would take many chapters of detailed argument. Nevertheless, I hope in the not too distant future to more fully publish these aspects of the beaker problem. In the meantime I would like to tender this paper as a small token of the great debt that I owe my Dutch colleagues for stimulus, advice and material help.

[As presented in January, 1964. The full corpus of British Beakers together with detailed discussion and distribution maps is to be published by Cambridge University Press in 1968.]

#### NOTES

<sup>&</sup>lt;sup>1</sup> For W/MR beakers see Coghlan (1957), Fig. 3, top.

<sup>&</sup>lt;sup>2</sup> Sittingbourne, Kent, – Inhumation in flat grave with a two-hole bracer, bone belt ring and single-rivet tanged dagger, *Proceedings of the Society of Antiquaries of London* 10, 1884, p. 29.

<sup>&</sup>lt;sup>3</sup> Melton Quarry, Yorkshire – Beaker rim sherd, bone belt ring, two-hole bracer with four imperforate pits, human bones – probably a disturbed grave. *Unpublished*, by courtesy of Hull Museum.

<sup>&</sup>lt;sup>4</sup> For the beakers related to the British N/NR group see Modderman (1955), Fig.4, Nos. 9, 10; Fig.5; Fig.7.

#### LITERATURE

- Abercromby, J., 1912. A study of the Bronze Age pottery of Great Britain and Ireland and its associated grave goods I. Oxford.
- Coghlan, H. H. & H. Case, 1957. Early metallurgy of copper in Ireland and Britain. *Proceedings* of the Prehistoric Society 23, p.91-123.
- Fox, C., 1943. A Beaker Barrow, enlarged in the Middle Bronze Age, at South Hill, Talbenny, Pembrokeshire. *Archaeological Journal* 99, p. 1–32.
- Grimes, W. F., 1943/44. Excavations at Stanton Harcourt, Oxon., 1940. Oxoniensia 8/9, p. 19-62.
- Jessup, R.F., 1930. The archaeology of Kent. London.
- Modderman, P. J. R., 1955. Late-Beaker-ware decorated with impressions made by a thread-wound stamp. Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek 6, p.32-43.
- Piggott, S., 1963. Abercromby and After: the Beaker Cultures of Britain Re-examined. In: Culture and Environment. Essays in Honour of Sir Cyril Fox (ed. by I. Ll. Foster and L.Alcock). London, p. 53-91.
- Sangmeister, E., 1951. Die Glockenbecherkultur und die Becherkulturen (Schriften zur Urgeschichte III). Melsungen.
- Smith, I.F., 1955. Late Beaker pottery from the Lyonesse Surface and the Date of the Transgression. *Eleventh Annual Report of the Institute of Archaeology* (University of London), p.29-42.
- Struve, K.W., 1955. Die Einzelgrabkultur in Schleswig-Holstein und ihre kontinentalen Beziehungen. Neumünster.
- Thurnam, J., 1871. On ancient British Barrows, especially those of Wiltshire and the adjoining Counties. *Archaeologia* 43, p. 285-552.
- Waals, J.D. van der & W. Glasbergen. 1955. Beaker types and their distribution in the Netherlands. *Palaeohistoria* 4, p. 5–46.