L'OR DAMS L'AMTIQUITÉ

DE LA MINE À L'OBJET

Sous la direction de Béatrice Cauuet

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Couverture

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Dos de Couverture

Рното DU HAUT : Bouloun-Djounga (Niger) : mine d'or ouverte dans la latérite (cliché G. Jobkes). Рното DU BAS : Femme Fulbe (Mali) parée de boucles d'oreilles massives à lobes effilés (cliché B. Armbruster). La publication de cet ouvrage a été préparée par Béatrice Cauuet,

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Later Bronze Age Goldwork from Ireland Form and Function

Résumé

La phase Dowris de l'Age du Bronze final fut une période de grande émergence de la production de joaillerie d'or en Irlande. Cette période est de loin celle qui a produit le plus d'objets en or. Les conditions de découverte de ces parures d'or en Irlande font qu'il est difficile de préciser leurs datations et leurs fonctions. La période Dowris est remarquable pour une série de nouvelles productions connues uniquement en Irlande. Ces innovations se limitent essentiellement à des objets en feuilles d'or fin décorées. Un autre développement significatif fut l'engagement conscient de grandes quantités d'or pour la production d'un seul objet. Ce phénomène a dû résulter à la fois de la disponibilité d'importantes sources de matières premières et d'impératifs socio-culturels de nature contraignante. Cet article expose quelques aspects des formes prises par ces objets et suggère une fonction possible par différenciation entre certaines catégories d'objets.

Abstract

The Dowris phase of the Late Bronze Age was a period of major resurgence in the production of goldwork in Ireland. By far the greatest number of gold objects from the Irish record can be dated to this period. Due to the nature of discovery of gold ornaments in Ireland, it is difficult to define close date brackets or function for this material. The Dowris period is notable for a number of new products which are known only from Ireland. These innovations are mostly confined to objects of fine, decorated sheet gold. Another significant development was the conscious commitment of large quantities of gold to the production of a single object. This phenomenon must have resulted both from the availability of rich sources of raw materials and from social or cultural imperatives of a compelling nature. This paper discusses some aspects of the form this material takes and suggests a possible function related differentiation between certain categories of material.

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Introduction

he goldwork of the Irish Bronze Age is known from three main phases of activity. The first phase, during the Earlier Bronze Age corresponds to the period of the introduction of metalworking technology in copper and bronze. Gold ornaments produced during this period are confined both in terms of product, form and technique. A very limited number of objects were produced mainly bands, basket-shaped ear-rings, discs and crescentic gold collars called lunulae. All were made from sheet gold. Due to the nature of discovery of gold ornaments in Ireland, which is characterised principally by the lack of association with burial, workshop or settlement sites (this is a constant feature throughout the entire period of the Bronze Age in Ireland), it is difficult to define close dating brackets for this material. However this initial phase may be dated to approximately 2200-1700 BC.

In common with events occurring in both Britain and Europe, a second phase of gold working commenced at the beginning of the Later Bronze Age during the period known in Ireland as the Bishopsland phase which is conventionally dated 1200-1000 BC. Sheet gold work continued to be produced in the form of armlets such as those from the Derrinboy, Co. Offaly, hoard and as ribbon torcs, the manufacture of which is primarily a sheet gold technique. While the dating of ribbon torcs is still a matter of some debate, the discovery of a ribbon torc and a flange-twisted torc at Coolmanagh, Co. Carlow ¹, supports the assertion of a Later Bronze Age date for much of this product type. The large flange-twisted bar torcs, such as those known from Tara, Co. Meath, dominate this period and while Ireland has been regarded as the source of many of the objects of this type which have been found in

1. Manning, Eogan, 1979, p.20-27.



Fig. l Sheet Gold Collar, Gleninsheen, Co. Clare, Ireland. Later Bronze Age c. 800-700 BC. Maximum lateral width of collar 31,4 cm ; weight 276 g.

Cahill : Later Bronze Age Goldwork from Ireland

Britain and France, recent discoveries from Britain are changing our perceptions of the distributional balance and the nature of relationships during this period of significant development for gold and bronze technology.

Following a further short break in the archaeological record, during which goldwork is not apparent, a major resurgence took place. This period is known as the Dowris phase after the largest hoard of bronze metalwork known from Ireland and is usually dated 900-600 BC. By far the greatest number of gold objects from the Irish record can be dated to this period. Unlike the preceding period when the object types being produced can be paralleled with British and Continental types, the Dowris period is notable for a number of new products which are known only from Ireland. These innovations are mostly confined to objects of sheet gold. Another significant development is the conscious commitment of large quantities of gold to the production of a single object. This feature must have resulted both from the availability of rich sources of raw materials and from social or cultural imperatives of a compelling nature. This paper discusses some aspects of the form this material takes and suggests a possible function related differentiation between certain categories of material.

During the Dowris period two principal types of goldwork were produced - objects made from sheet gold (including foil) or from cast or hammered bars and ingots. Less than thirty objects of sheet gold are known whereas several hundred objects of bar or ingot work exist. Objects made substantially of gold wire called lock-rings are also known. Wire may be used also either as an embellishment or as a structural component in the construction of complex pieces.

Gold objects may be found in hoards or as single finds. Hoards may contain objects made solely of gold or a combination of objects of gold and other materials such as bronze tools, weapons and ornaments or necklaces of amber beads. Both sheet and bar gold are found together in hoards. Certain types of objects seem to have been produced in pairs. These include lock-rings, boxes and reels.



Sheet gold

heet gold products are quite limited in number, type and distribution. The principal ornament type is a large gold collar (fig. 1) with terminals formed from double discs which are often attached to the collar by means of stitching with gold wire. Eight substantially complete collars survive. The collars are decorated by concentric ribbing alternating with panels of rope-moulding which is produced by a combination of repoussé and chasing techniques. Each terminal is formed from an upper and a lower disc held together either by lapping the edge of the lower disc over the upper disc or by attaching a length of C-sectioned tubing to the circumference of both discs. Only the upper discs are exposed to view (fig. 2). They are decorated with patterns of finely stamped concentric circles, round or conical bosses and raised herringbone or rope patterns. The lower discs of the terminals are obscured and are decorated with much simpler patterns of small bosses often poorly executed and incomplete. As the number of motifs is very restricted, the main difference between one object and another is the variation in the spatial arrangement of the motifs while maintaining a constant pattern of concentricity which evolves from the positioning of the central boss as the primary motif.

Fig. 2

Terminal of Gold Collar, Gleninsheen, Co. Clare, Ireland. Later Bronze Age c. 800-700 BC. Diameter of disc 10 cm. 270

Two Sheet Gold Boxes. Later Bronze Age c. 800-700 BC. Left : one of a pair said to be from near Mullingar, Co. Vestmeath, Ireland. Diameter 5,8 cm ; weight 18,7 g. Right : from Ballinclemesig, Co. Kerry, Ireland. Diameter 6,5 cm ; weight 36,2 g.



Fig. 4 Sheet Gold "Reel", from a hoard found at Ballinesker, Co. Wexford, Ireland. Later Bronze Age c. 800-700 BC.

Diameter 7 cm ;

weight 36,76 g.



Closely related to the collar terminals, in terms of their structure and decoration are two other types of ornament whose functions remain unexplained. These are sealed boxes, which normally occur in pairs (fig. 3), and the recently identified "reels" or "spools" which may also occur in pairs (fig. 4)². The same gold working techniques and decorative patterning are used to produce both these object types and the collar terminals. However the deliberate mechanical sealing of the boxes, some of which are known to have contained very small gold balls, means that they were not intended for everyday use. The reels or spools are of more complex structure but maintain the same essential features. One example also contained small gold balls.

Decorated foil was used to cover a range of objects made from other materials. These include sun-flower pins, penannular rings and the purse or heart-shaped objects called *bullae* (fig. 5). The rings and *bullae* are often finely decorated with motifs from the same closely defined range. Enigmatic forms such as the decorated penannular rings and *bullae* survive only in small numbers. While the *bullae* are capable of being suspended, it is not known if this was their primary purpose.

Distribution

he distribution of sheet gold ornaments is largely confined to the counties adjoining the lower reaches of the River Shannon in the south west (Counties Clare, Limerick and Tipperary) but there are also significant occurrences in the south east in County Wexford. A small number of related objects are scattered through the midlands towards the northeast where the predominant object types are the *bullae* and the foil-covered penannular rings.

2. Cahill, 1994, p.21-23.

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Cast or Hammered Bar Goldwork

ithin this category is a great variety of material ranging from small plain, solid rings, generally known as ring-money, sleeve-fasteners, plain and decorated rings with or without terminals many of which might have been worn as bracelets while others are categorised as dress-fasteners (*fibulae*).

Dress-fasteners are formed of two equally sized, conical or sub-conical terminals joined at their apices by a curved bar which may be solid or hollow. The terminals may lie in a fully horizontal position or they may be slightly inclined. Dress-fasteners vary greatly in size and weight. Amongst the objects conventionally assigned to this category is a group of exceptional objects which while generally conforming to the description outlined above must, because of their extreme size and weight, be considered as something more than the ordinary class of dress-fastener. A group of twenty examples have so far been identified ³. They vary in size from 18 cm to 28 cm in maximum length. The minimum weight of objects in this group is 311 g (10 ounces Troy).

Both plain and decorated examples are known and as is the case with sheet gold work the range of motifs is limited. Decoration, in its simplest form, is confined to a serie of concentric, raised ribs on the terminals. The ribbing is present on both the internal and external surfaces. The number of ribs varies but the positioning is always immediately inside the rim of the terminal. Further elaboration of the

3. Cahill, 1998.

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Fig. 5

Gold foil-covered lead *bulla* from the Bog of Allen, Co. Kildare, Ireland. Later Bronze Age c. 800-700 BC. Length 6.4 cm ; weight 147 g. 272

Fig. 6

Gold Dress-fastener from near Clones, Co. Monaghan, Ireland. Later Bronze Age c. 800-700 BC. Maximum length 21,2 cm ; weight 1032 g.



prejudicial term "cupended ornament", which avoids any functional implications. Until a more tenable explanation of their function has been defined it is unlikely that an acceptable terminology can be devised. In the present discussion the term "Clones type dress-fastener" or "super-dress-fastener" has been used in order to distinguish this group from other forms of cup-ended ornament. While accepting that this

group is essentially an

piece may take the form of "incised" decoration using a limited repertoire of motifs including hatched triangles, hatched lozenges, zig-zags, bands of cross-hatching and groups of lines. This type of decoration is normally placed against the innermost rib on the terminal, internally or externally. The area around the junction of the bow and the terminals may also be decorated. The reason for decorating this area is most probably to disguise any remaining traces of the bow/terminal joins which have not been obliterated by polishing. Exceptionally, on the example from near Clones, Co. Monaghan (fig. 6), a motif consisting of a punched dot centrally set in a series of compass-drawn, incised, concentric circles is used to decorate the outer surface of the terminals. This is a unique use of both this motif and technique within this group of objects. A comparable use of a similar motif and technique can be seen on a pair of unprovenanced sheet gold boxes 4 and on the face-plates of the lockring from Cooper's Hill, Alnwick 5.

Only two complete (near Clones, Co. Monaghan and Castlekelly, Co. Galway) and two fragmentary examples (Bog of Cullen and Clohernagh, Co. Tipperary) survive. The remainder of the group are known from replicas, antiquarian drawings and descriptions. No entirely satisfactory name has yet been assigned to these objects. Amongst the terms used in the past have been *patera* (or double *patera*), an archaic antiquarian term suggesting a vessel. The term "*fibula* with horizontal discs" which implies a functioning garment pin (as does the more recently used "dress-fastener") has also been used. Some recent authors have preferred the less exaggerated form of the smaller dress-fasteners of the type well-known from hoards such as Mountrivers, Co. Cork ⁶, their extreme size and weight impels their consideration as exceptional products commissioned to serve specific demands within the framework of Later Bronze Age society in Ireland.

Apart from the exceptional size of objects in this group, the most outstanding feature is the weight of the individual specimens which range between 311 g/10 oz and 1353 g/43,5 oz. The strongest determining factor of gross weight is whether the bow is hollow or solid. The three specimens with solid bows all weigh over 1000 g - near Clones, Co Monaghan, near Dunboyne, Co. Meath. and an unprovenanced example. The remainder of the group all weigh between 311 g and 746,48 g. Within the range of gold ornaments known from the Irish record this type is by far the heaviest and, in the more exceptional case, shows a profligacy unmatched at any other period. The total reckonable weight of this group amounts to 9,54 kg or 306,71 oz Troy.

The number of other objects of solid, cast or hammered bar work of Dowris phase date, from Ireland, which compare in terms of the amount of gold consciously committed to one object is comparatively small. They include the plain penannular bar with expanded ends from Kilcommon, Co. Tipperary (878,24 g/28 oz, 4 dwt, 17 gr); the decorated

- 5. Eogan, 1969, p.122, n°35 and fig.3.
- 6. Eogan, 1983, p.77 and fig.38.

^{4.} Armstrong, 1920, p.88-89 and frontispiece.

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penannular ring with deeply hollowed terminals from the hoard from "near New Ross", Co. Waterford (542,5 g/17 oz, 8 dwt, 20 gr); the decorated penannular ring with deeply hollowed terminals from near Lurgan, Co. Armagh (398,46 g/12 oz, 16dwt, 4gr) and the large ring with smaller ring attached from Mooghaun, Co. Clare (365,15 g/11 oz, 14dwt, 19gr). When sheet gold products are taken into consideration, there are only two objects of exceptional weight. These are the collar from Co. Clare (514,1 g/16 oz, 10dwt, 13gr) and the dismantled collar from Gorteenreagh, Co. Clare, the component parts of which weigh 358,43 g/11 oz, 10dwt, 11gr. The average weight of a gorget is approximately 223,32 g/7 oz, 3dwt, 14gr which very simply means that an object such as the dress-fastener from near Dunboyne could have provided the raw material for six to seven gorgets. If compared with the average quantity of gold used for the lunula of the Earlier Bronze Age, the "near Dunboyne" specimen would have represented an unparalleled resource, given that it could have provided between twenty to forty lunulae depending on how much metal was assigned to each object.

Distribution

he distribution is scattered in a broad band through the middle of the country with specimens recorded from the extreme north-east in Co. Antrim to the south coast at Youghal, Co. Cork. There are two small concentrations, one in Co. Galway where three examples are recorded and another in the west Tipperary/north Cork/Limerick area where six are known. There are no recorded examples from the north-west, south-west or south-east.

Discussion

When viewed as a whole it may be seen that three different types of ceremonial artefact can be distinguished in the classes of material discussed above.

1. Ostentatious personal ornament - objects worn perhaps for a time by a specific person before being ritually discarded. Sheet gold collars which are elaborately decorated and spectacular in appearance belong to this class. The presence of a small pierced hole on either side of the inside upper edge of the collar suggests that a cord or light chain which would hold the collar in position across the back of the neck was originally present. The collar from Borrisnoe, Co. Tipperary retains a gold wire link in one of the holes. It is also apparent that of the eight surviving examples, six were folded before deposition perhaps in an act of ritual mutilation.

2. Objects of solely votive or ritual purpose. These include *bullae*, decorated foil-covered rings, boxes and reels. These are severely restricted in terms of numbers and are of no obvious utilitarian purpose. However, many of them are elaborately decorated and skilfully made, presumably to serve in ceremonial display. As the outer surfaces of both boxes and reels are decorated with patterns which incorporate raised elements, some of which are in quite high relief - the most extreme example being the central conical bosses on the reels from near Enniscorthy, Co. Wexford - it seems plausible to suggest that these objects were intended to be viewed from each side (i.e. to stand on edge rather than to be placed with one decorated face down).

3. Objects of overt power, rank or status such as the super-dress-fasteners which have been discussed above. These retain the form of smaller, more functional types but are, essentially, skeuomorphs as they are incapable of being worn. They may have functioned as physical representations or concentrations of power and wealth. They may have been used to exert territorial control or as symbols of authority or they may have been intended for deposition as dedicatory or propitiatory offerings. It may be significant that these are all single deposits (perhaps with one exception) although some may have been consigned to the ground in areas where multiple deposits of material took place, such as the Bog of Cullen, Co. Tipperary, rather than as a single episode hoard deposition.

The singular nature of much of the Irish goldsmiths' repertoire clearly indicates that they were reacting to a demand for highly specialised sheet and bar gold products, many of which must have been imbued with hidden symbolism. The presence in Ireland of such a large number of Dowris period gold ornaments suggests that substantial sources of raw materials were available. However the location of these sources is not known. Both access to and supply of the raw materials must have been well organised and controlled. The maintenance and support of highly skilled groups of craftsmen require the ability to manage the process from supply of raw materials to the provision of work-

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shops, food and housing and assumes that strict regulatory procedures were enforceable.

It may also suggest that gold was not simply a commodity to be bartered or traded in the normal way but that its production at source was to serve the needs that society demanded of it whether that need was a hierarchical prerequisite or a religious dogma. It is a notable feature of the Irish record, for example, that so few cup-ended ornaments occur in bronze. This was not because bronze was in short supply but that it seems not to have been considered an appropriate material. The complete absence of any known association with burials or other monuments for objects of this type has been noted many times. Their purpose was therefore other than that of grave goods although many were intended to be purposely discarded in non-funerary contexts. This argument reflects the idea suggested by Barrett and Needham 7 that the production of a certain type of object may have been "instigated in anticipation of its ultimate destiny". This does not mean that all goldwork was intended for the sole purpose of ritual deposition but perhaps it does allow the consideration that certain types of product were restricted conventionally in terms of function and numbers produced. These objects cannot be consigned to the category of decorative assets. Likewise, contrary to Hawkes' view 8 that very heavy objects are a form of bullion, the discovery at Gahlstorf, Lower Saxony, buried in a ceramic vessel, of a gold cup-ended ornament of Irish type, weighing 475 g/15 oz, 5dwt, 10gr, supports the idea that these objects were deliberately manufactured to serve special purposes. Clones-type dressfasteners represent, in effect, a society which could afford to devote large quantities of an extremely hard won resource to a single object whenever that demand had to be satisfied. Bullion was far more likely to have been present in the form of ingots or bars which are unlikely to survive. Sheet gold objects, whose distribution is more markedly concentrated than the bar gold, constitute a small group of very highly specialised and formalised types of peculiarly Irish origin. While sharing a common background with European metalwork in terms of technique and some decorative elements, the forms differ greatly suggesting an innovative response by Irish goldsmiths to continental influence while at the same time meeting the needs of their own society. This may relate to the Ireland's relatively isolated position vis-à-vis mainland Europe.

The amount of goldwork produced in Ireland during the Later Bronze Age has always been the subject of much discussion and questioning. Antiquarian sources reveal that what has survived is but a fraction of what originally existed. Ongoing research into the nature of relationships between Later Bronze Age monuments and the find places of significant metalwork types is showing, that in spite of the problems caused by the lack of orthodox archaeological associations between the two types of evidence, we can begin to understand how this very important body of material can contribute to a fuller appreciation of the complexity of Later Bronze Age society in Ireland ⁹.

8. Hawkes, Clarke, 1963, p.193-250.

^{7.} Barrett, Needham, 1989, p.127-140.

^{9.} All photographs in this article are from the National Museum of Ireland.

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