Excavation of a double cist burial from Gyre Farm, Orphir, Orkney

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ABSTRACT

In 1971 a cist was excavated at Gyre Farm, Orphir, Orkney, by D D A Simpson. The structure can be classified as a double short cist which appears a relatively rare and unusual short cist variant. The cist contained a series of disarticulated human remains.

INTRODUCTION

In 1971 a cist burial was discovered on Gyre Farm, Orphir, Orkney (NGR: HY 3409 0464) (illus 1) by farm workers who were in the process of digging an agricultural bank. Prior to this accidental discovery, no surface indications of the site were apparent. Following this initial discovery excavation was undertaken over a two-day period in July 1971 by D D A Simpson on behalf of the then Ancient Monuments Inspectorate, Department of the Environment, in order to record the structure and to determine whether any human remains or artefacts were contained within the cist (Murphy & Simpson 2002).

EXCAVATION

A single trench 3.3m north-west/south-east by 2.35m north-east/south-west was excavated over the cist in order to expose the entire structure. With the removal of the topsoil (C1) the upper levels of the structure were found to consist of four large stone slabs (C2) set in a near-circular arrangement (illus 2). However, a central capstone (not shown) had been dislodged, probably during the agricultural works which had initially exposed the structure, and in consequence the underlying chamber had filled with topsoil (C3).

The removal of the south-eastern capstones and the topsoil fill revealed two conjoined chambers (C12 & C17) (illus 3 and 4). The north-west chamber (C17), the larger of the two, was rectangular in plan measuring externally (at its widest) c 2.1m north-east/south-west by 1.75m north-west/south-east, with a depth of c 0.25m. The walls of the chamber comprised single, upright stone slabs along the north-west (C18), south-west (C19) and north-east (C20) sides. The south-east limit of the chamber was demarcated by two upright stones (C21 & C22) with a central opening (C23) which led into the conjoined south-east chamber (C12). The north-west chamber contained two human skulls (C4 & C5) at its south-east end which had been placed on the earth floor (C24) of the cist.

The adjacent south-east chamber (C12) was smaller than the north-west chamber, measuring externally (at its widest) c 1.32m north-east/south-west by 0.87m north-west/south-east. However, its construction was similar, as it used single upright stone slabs to define the south-east

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(C13), south-west (C14) and north-east (C15) sides of the chamber (illus 3 and 4). The north-west side of the chamber was defined by two upright stones (C21 & C22). A concentration of human bone was also present within the interior of the south-east chamber and these remains appear to have been placed in the double cist in a defleshed and disarticulated condition (see below) (illus 5).

The cut (C25) of the pit dug to contain the cist was also identified. Apart from the cist this pit contained a number of packing stones (C9, C10 & C11) which had been placed against the south-west and north-west walls of the
south-east chamber. Once the cist had been constructed and these packing stones put in place, the sides of the pit were then backfilled with soil (C8).

POST-EXCAVATION

The only finds recovered during the excavation at the Orphir cist were disarticulated human bones. Photographs taken during the excavation would tend to suggest that the remains had been placed in the double cist in a defleshed and disarticulated condition. The photographs indicate that at least five human skulls were present in the interior of the structure, while correspondence contained within the site archive stated that ‘there are matching limb-bones of four individuals but the remains of five skulls’ (Murphy & Simpson 2002). Unfortunately, the only bones that now survive from the excavation are four femora that were recovered from the south-eastern burial chamber. Analysis of the bones has revealed that they were derived from four different individuals (see below). As such, samples of the femora were submitted to the SURRC for AMS dating. Unfortunately, at some stage between the removal of the bones from the cist in 1970 and their submission for dating
in 2002, all four samples were discovered to have been contaminated, and no dates could be obtained.

**HUMAN REMAINS**

Eileen Murphy

**Femur 1**

The bone comprised the proximal two-thirds of an adult right femur, and displayed a degree of fragmentation and erosion. On the basis of a metrical analysis of the femur, it was not possible to determine whether the bone had originated from a male or female individual. Details of the metrical analysis are provided in Table 1.

**Femur 2**

The skeletal element comprised a near complete adult right femur. The distal metaphyseal and epiphyseal areas were not present and slight surface erosion was evident. On the basis of a metrical analysis of the femur, it was not possible to determine whether the bone had originated from a male or female individual. Details of the metrical analysis are provided in Table 1.
Femur 3
The bone comprised a near complete diaphysis of an immature left femur. The distal metaphyseal region was fragmentary and a degree of surface erosion was apparent. The absence of epiphyseal fusion is an indication that the individual was younger than 15–20 years (cf. Brothwell 1981, 66). The diaphyseal length of the bone was estimated to be 350–360mm, which would tend to suggest that the femur had originated from an individual with an age-at-death of approximately 11–15 years (cf. Ubelaker 1989, 71). The age-at-death methods therefore indicate that the individual was a younger adolescent. The bone appeared to have notable curved antero-posteriorly at its proximal third. Without the remainder of the individual’s skeleton, however, it is difficult to ascertain if this was a normal variation or if it had been caused by a palaeopathological process such as rickets.

Femur 4
The skeletal element consisted of the distal two-thirds of an adult left femur. The bone was in a good state of preservation and only displayed a small amount of surface erosion. The bicondylar width of the femur was large (c. 80mm) which may indicate that the bone had been derived from a male individual (cf. Pearson 1917–19, 56). The results of the metrical analysis of the femur are presented in Table 1.

SUMMARY
Only four femora of the assemblage of disarticulated human remains recovered from the interior of the Orphir double cist are still extant. Three of the bones had originated from adult individuals, one of whom was possibly male. The fourth femur had derived from an adolescent, with an age-at-death of approximately 11–15 years.

DISCUSSION
The cist burial from Gyre Farm would appear to have some parallels with the short cist burials that are found in relative abundance across the Orkney Islands (Øvrevik 1985). Attempts at
classification have been hampered by a lack of extensive, modern excavation, and by the great variation in use and morphology which these burials display. Melia Hedges (1977) compiled a loose classification of cists within mounds based on her excavations at the Knowes of Quoyscottie and comparisons with other similar barrow cemeteries. These she described as ‘scrape barrows’ (Hedges 1977, 141) constructed above ground and occurring in cemeteries of small, regular mounds on upland sites. Primary burials at Quoyscottie were usually cremations and grave goods, when present, were normally ‘functional and basic’ (Hedges 1977, 144). Broad criteria were also drawn up by John Hedges (1980) to categorize the ‘Lower Ellibister’ or ‘flat’ short cists, which he describes as roughly rectangular in form, with a long side of around 1m in length; dug into the ground surface; evincing no discernible mound and containing cremated remains but no grave goods (Hedges 1980a, 47). While these burials have usually been found and excavated singly, John Hedges also noted that the discovery of multiple cists at a number of sites, such as Lochside, Stenness (Greig 1931), may indicate that flat cists also occurred in cemeteries (Hedges 1980a). It is possible that the position of the flat cists within cemeteries may originally have been marked in some cases, since probable stone and post markers have been discovered in close proximity to a number of short cists found within the barrow cemetery at Linga Fold, Sandwick (Downes 1994).

Unfortunately, a more recent synthesis of Orcadian cist burials is lacking. However, it is evident that the criteria for describing both mound and flat short cists are not at all clear-cut, and recent excavations have reiterated the variations among cist construction that can be encountered. Three cists were discovered at Ferndale, Rendall, for example; two of these had a fairly typical ‘cist in mound’ construction, and were of Bronze Age date, while a third subterranean cist was positioned within a large rock-cut pit. This latter cist contained two parallel rows of dry-stone walling, which appeared to form a passage on its western side, and it had no above ground features. Unfortunately, it was not possible to ascertain the stratigraphic relationship between the three cists (Duffy 2005, 15). Beverley Ballin Smith’s work (2008) at Crantit and Kewing, Rendall, has revealed cists which display parallels with the rock-cut cist at Ferndale (cf Duffy 2005), both in the manner of their construction within a large pit and the incorporation of dry-stone walling in their construction. The south-east cist at Crantit was subterranean and constructed within a large pit.

<table>
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<tr>
<th>Femur measurement</th>
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<td>FeL1 Max L.</td>
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<td>FeL2 Oblique L.</td>
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<td>FeD2 M/L D Sub. T.</td>
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<td>FeD5 Long. D. Head</td>
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<td>C Circ. Mid. Shaft</td>
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<td>FeE1 Bicondylar width</td>
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in the subsoil. A single-faced wall of drystone masonry had been built to line the east, north and west sides of the pit. Similarly, the slabs of the subterranean cist at Kewing were supported with dry-stone masonry, within its large pit.

There are also chronological problems associated with short cists due to the general absence of diagnostic grave goods and radiocarbon dates, the latter factor in no small part due to the inability to date cremated bone until relatively recently. When grave goods have been recovered these generally include cinerary urns – often inverted over a cremation deposit – which suggests a Bronze Age currency for at least a proportion of short cists. Other diagnostic Bronze Age artefacts recovered from Orcadian cists include Middle to Late Bronze Age amber beads and buttons, gold discs from Knowes of Trotty (Beck & Shennan 1991) and a Late Bronze Age socketed knife from a cist at Little Crofty (Coles 1960). The construction and use of short cists should not be solely viewed, however, as a clear and characteristic feature of Bronze Age funerary practice. For instance, it is highly probable, as John Hedges (1980a, 49–50) has convincingly argued, that the use of short cists might have continued well into the Iron Age. Indeed, as will be discussed below, it is also possible that some cists are of Neolithic date.

The Gyre Farm cist would appear to correspond in its basic morphology to the Lower Ellibister, or flat short cist tradition described by John Hedges (1980a). It is rectangular in plan, measures around 1m in length, dug into the ground surface and is lined with single upright stone slabs (Hedges 1980a; Moore & Wilson 1995). However, the cist is notable in being one of around nine examples of short cists in the region to have been constructed with multiple cells. These structures vary greatly in morphology; often consisting of ‘stories’ of cells, stacked one above the other, such as at Blackholm (Mooney 1926), Summersdale, Stenness (RCAHMS 1949; Ashmore 1975), Newbigging, Kirkwall (Petrie 1864–6) or Crantit (Cursiter 1910). Conversely, cists at Lochside, Stenness (Greig 1931) and Antabreck, North Ronaldsay (Traill 1875), comprised a main chamber and a smaller adjoining cell, while one of a group of cists from Brodgar Farm, Stenness, was composed of three chambers joined end-to-end (Marwick 1925). Backakeldy, Holm, uniquely, has adjoining chambers positioned both contiguous to, and directly above, the main cist (Marwick 1928). Sometimes, as at Antabreck and Backakeldy, differences in construction techniques suggest that one chamber was a later addition, although it is not possible to make such a supposition for the Gyre Farm cist.

Gyre Farm cist is also one of a minority of short cists that have been found to contain unburnt human bone. There can be great variation in the forms of interment found in short cists, and examples have been found that contain articulated and/or disarticulated unburnt bone, from one or more individuals. In some cases cremations occur in isolation, while in others they accompany inhumations. Cists with apparently successive interments are not unknown. Crantit (Cursiter 1910) and Summersdale (RCAHMS 1949, Ashmore 1975), for example, both contained inhumation and cremation deposits; at Sand Fiold, Sandwick, the cist contained inhumation and cremation remains and appeared to have been specially constructed to facilitate reopening (Dalland 1999). A similar situation may have arisen at a cist at Newbigging, Kirkwall, where George Petrie (1864–6) noted the poor condition of Skeleton 2 when compared to Skeleton 1 and the apparent ‘huddling’ of the former individual’s remains. The positioning of the bones indicated that the poorly preserved Skeleton 2 had been deposited within the cist after Skeleton 1 had been interred. Petrie suggested that Skeleton 2 was either a secondary burial or that the body had been dismembered prior to its interment. He also reported a very similar arrangement for another cist at Isbister, Rendall, where a possibly disarticulated skeleton appeared to have been interred within the cist at a date...
later than a well preserved inhumation (Petrie 1864–6). The smaller of two contiguous cist cells at Antabreck, North Ronaldsay, was found to contain the disarticulated and incomplete remains of two individuals, while the larger, better made cist contained a cremation deposit (Traill 1875). The best parallels for the possible use of Gyre Farm cist, however, may be drawn from the cists discovered at West Puldrite, Evie and Rendall (Corrie 1929), and Backakeldy, Holm (Marwick 1928). The former construction contained the remains of two individuals that had evidently been pushed into a corner of the cist to make way for an articulated crouched inhumation. The Backakeldy double cist comprised a well-made cist, measuring 1.1m by 0.5m in plan, which contained a flexed adult male inhumation burial and a cremation deposit, and a roughly made, smaller, conjoined cist, measuring 0.5m by 0.4m in plan. The smaller chamber contained the disarticulated remains of an adolescent.

It is very unfortunate that it was not possible to derive radiocarbon dates from the Gyre Farm cist since it is clear that the site does not fit entirely comfortably within the Bronze Age cist tradition in Orkney both in terms of its construction and the nature of the interred human remains. The most obvious peculiarity is the double chamber, which is a comparatively rare feature of Orcadian short cist morphology. It is possible that the smaller chamber may have been used to create space when depositing successive burials. At Gyre Farm, unlike Backakeldy and Antabreck, the smaller chamber appears no less well constructed than the larger, suggesting the two chambers may have been contemporary. The opening between the chambers may also have facilitated the movement of older deposits into the smaller cist, formalizing its role as a kind of ossuary. The presence of unburnt bone also distinguishes the Gyre Farm cist from the greater number of Orcadian short cists. The disarticulated remains recovered within the cist appear to be indicative of secondary burial and may indicate the practice of excarnation was, at times, a feature of Bronze Age mortuary practice. In the absence of scientific dating evidence, however, it is not possible to be certain that the site is Bronze Age in date. Indeed, when explaining the complicated history of the unusual cist at Sand Field, Sandwick, John Barber and Magnar Dalland (1999, 409) drew attention to the fact that a well-established tradition of burial within cists also exists for the Neolithic period of the Irish Sea Province. On the basis of radiocarbon dating evidence they suggested that the rock-cut chamber and large cist at Sand Field may have been constructed during the Neolithic period when the bones of a foetus were deposited (c 2900–2500 cal BC). The structure then appears to have been re-used during the Early Bronze Age (c 2200–1900 cal BC), when an urned cremation and young adult human remains were added, followed by more re-use later in the Bronze Age (c 1000–800 cal BC) when a further cremation deposit was added. Further evidence for the existence of Neolithic cists within Scotland’s Northern Isles has been forthcoming at Sumburgh on Shetland, where a large (c 1.2m by c 2m), subterranean, boulder-defined cist was found to have contained the disarticulated remains of some 18 individuals. Radiocarbon dating indicated the cist was Neolithic in date (Hedges 1980b).

In the absence of radiocarbon dating the Gyre cist must remain an enigmatic site. The nature of its construction could place it within the Early Bronze Age short cist tradition of Orkney. Conversely, there are a number of elements – the double-chamber of the cist, the disarticulated nature of the remains, the implication of formalized, successive interments, and the interment of at least five individuals within the cist – that also find resonance with what we currently know about Neolithic burial practices in the Northern Isles. It can only be hoped that future excavation might produce parallels to the Gyre cist that can be scientifically dated, thereby enabling a clearer understanding to be gained of Neolithic and Bronze Age burial practices in Orkney.
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REFERENCES


Ballin Smith, B 2008 Crantit, Kewing and Nether Onston, Orkney: the transition between tomb and cist. Kirkwall: The Orcadian Ltd.


Duffy, P R J 2005 ‘The excavation a mound and three cist burials at Ferndale, Rendall, Orkney’, Scot Arch Internet Rep 16.


Petrie, G 1864–66 ‘Notice of a barrow containing cists, on the farm of Newbigging, near Kirkwall; and at Isbister, in the parish of Rendall, Orkney’, Proc Soc Antiq Scot 6, 411–8.

