2

THE NEOLITHIC

The final season of excavation in 1982 encompassed excavation of the earliest deposits on the site covering two phases (1 and 2) of Neolithic activity. The earliest phase of activity was represented by a pit/setting for a standing stone, a building described as a 'mortuary house' and the partial remains of a structure identified as a stalled tomb; the stone setting lay to the NE of and either predated, or was contemporary with, the mortuary house. This latter structure was remodelled to serve as a forecourt structure at the entrance to the stalled tomb. Both stalled tomb and forecourt structure were levelled prior to the subsequent construction, in Phase 2, of a chambered tomb of Maeshowe type. With the time and resources available, it was not possible to fully investigate all these features or to ascertain whether the standing stone was solitary or formed part of a stone circle.

Little material culture and no human bone were recovered (8.1 and 9 below) from these levels to confirm the function of the structures. Two stone axes and other possible Neolithic stone types were found over the levelled remains of the Phase 1 forecourt structure. Pollen and plant analyses (7.2 below) give some indication of the landscape into which these structures were set; it seems reasonably certain that, by the time the chambered tomb was built, woodland was largely cleared and some pastoral activity established in the area.

2.1 • THE STRUCTURAL EVIDENCE • PHASES 1 AND 2

2.1.1 • PHASE 1 (illus 4)

A pit setting for a standing stone is possibly the earliest remnant of activity on the site. The first evidence of occupation, to the SW of the standing stone, consisted of a sub-rectangular stone building, identified as a mortuary house, which was partly remodelled to act as a forecourt structure when a stalled building, interpreted as a tomb of the Orkney-Cromarty type, was built to the N. Tomb and forecourt structure were separated from each other by a passage; both contained a stone-lined hearth or cist, but neither was excavated. Further modifications to both structures occurred before they were levelled prior to the construction of the subsequent Maeshowe-type tomb (2.1.2 below).

THE EARLIEST EVIDENCE

THE STONE SETTING

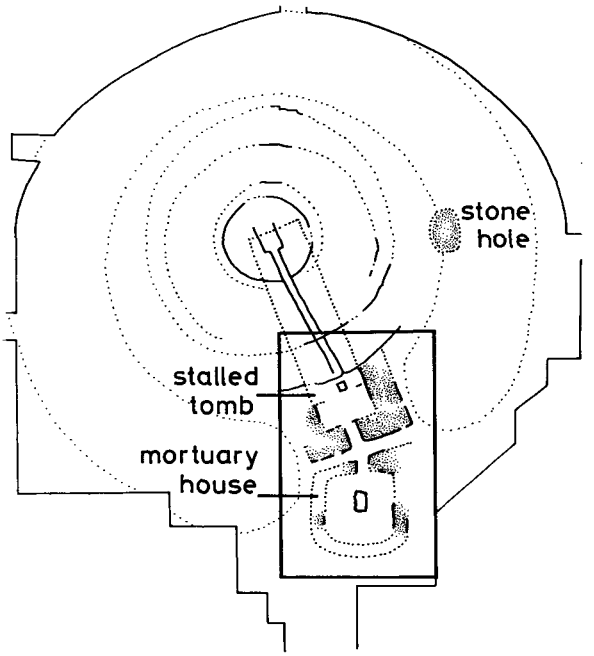
Excavation of the Iron Age levelling deposits below the Phase 7 settlement, revealed a single, large flat-bottomed oval pit (illus 4), filled with stone rubble, chippings and clay. This was a massive pit, 3 × 2m, surviving to a depth of *c* 1 m. At the N end was a shallow sub-rectangular depression *c* 1m across containing a single horizontal slab that must have served as a post pad. The size of the pit setting indicated that it must once have contained a substantial standing stone which rested on the horizontal slab. The oval shape suggested that the standing stone had a rectangular cross section and that the shape of the pit therefore provided some indication of its alignment.

The stone may have survived until the early Iron Age when it was removed completely, and the pit filled with rubble. It is also possible that the stone was removed and the pit filled prior to the construction of the Phase 2 tomb. The damage caused to the top of this pit by the construction of the Phase 7 village meant that the date of its destruction must remain unclear.

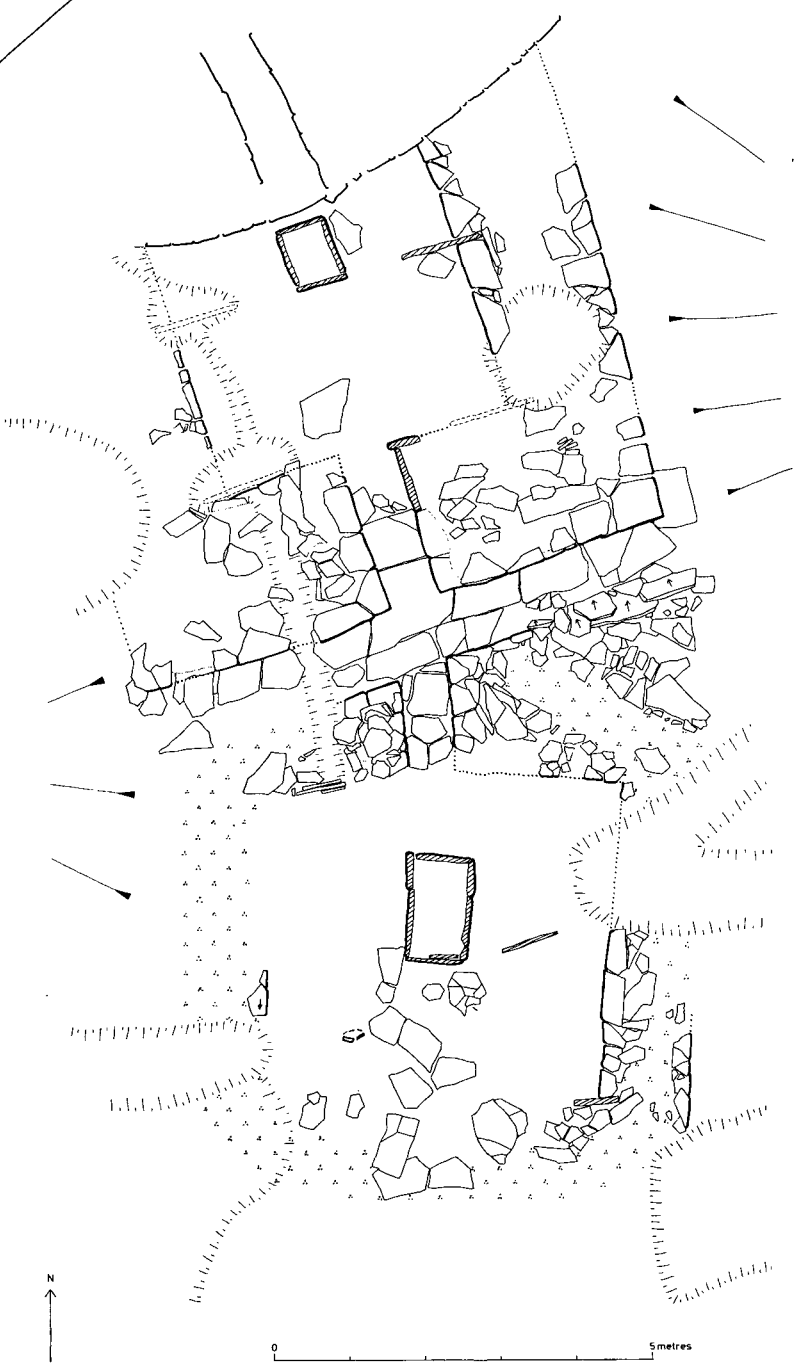
THE SUB-RECTANGULAR STRUCTURE

The first substantial building on the site was a sub-rectangular or pentagonal structure (illus 4, 5a) enclosing an area *c* 4.5 × 5.4m. The walls were 1.8m wide and survived to a height of *c* 0.25m and consisted of a specially deposited layer of clay, 0.15–0.20m, thick with facing stones on either side. These stones were roughly dressed flagstones cut from the underlying bedrock. It was assumed that the clay was only used to provide a flat, firm foundation layer for a conventional drystone wall above. The layer of clay forming the core of these walls clearly overlay, and was different from, the boulder clay found over the rest of the site, being both paler in colour and also virtually stone free. This paler clay only occurred in this structure and it is suggested that it was obtained from one location and only used during this period of the site's history.

The foundations of the N and E walls survived reasonably completely, but little of the W wall and only the corners of the S wall survived. There was no sign of a doorway although it is



Illus 4
Phase 1: detail of earliest structural remains; key logo shows position of stone hole.



Illus 5
a) Phase 1 structure with central hearth and the clay of its wall alignments (revealed but not removed); scales – 2m; from S.
b) Phase 1 stalled tomb with its hearth, showing the relationship to the Maeshowe-type tomb in the upper part of the picture; scales – 50cm & 1m; from S.

assumed to have been in the S wall because of the orientation of the subsequent tomb doorways. The N wall was particularly interesting; it provided the only clear evidence for the two different phases of this building. Initially the N side of the building was defined by two walls running at 45° from the E and W walls to meet at right-angles at the mid point. Unfortunately the actual junction between the walls was subsequently destroyed during the construction of a new entrance passage during the later alterations. These two walls were identical in construction to the rest of the building as described above. Some of the blocks remained in situ whilst the impressions of others survived where the stones themselves had been removed (illus 5a).

The disturbed nature of the interior made it impossible to be certain of the original internal plan. Traces of the pale clay found within the building suggested that originally it had a clay floor, but the central area showed no trace of it. It is assumed that the original surface was replaced during the alterations to the building when a hearth was either added or rebuilt. Evidence for possible roof supports was limited to the identification of a single stone-lined post-hole, SW of the hearth (illus 4). Others may have existed if the surface had been excavated, and it was unclear to which phase of the building the posthole belonged.

This structure was interpreted as a mortuary structure.

MODIFICATIONS AND A NEW BUILDING

FORECOURT STRUCTURE (illus 4)

In the succeeding period the mortuary house was remodelled; this modification took place at the same time as a new structure, identified as a stalled tomb (see below), was being erected; the close association of the remodelling of the mortuary house with the construction of the tomb suggested that the function of the former building had changed to that of a forecourt structure.

The two walls which formed the V-shaped N end of the building were now rebuilt as a single wall on a different alignment, to include a paved passage that led directly to the entrance of the new stalled tomb. Presumably the rest of this structure was also modified at this time although the other walls were retained and possibly repaired as there was no evidence for their replacement.

The new N wall was wedge-shaped to adapt it to the change in alignment of the new tomb. It was 1.8m wide at the W end and 3.15m wide at the E. In the centre was a new paved entrance passage which ran through the wall, almost at right angles to the inner face, but obliquely to its outer face and opened directly onto the entrance of the stalled tomb. The quality of the masonry was equal to that of the stalled tomb, and the outer face rose from a carefully laid plinth of thin paving slabs which abutted those of the adjacent building. The two stone plinths formed the floor of a narrow NE/SW cross passage, *c* 0.8m wide, which separated the two structures and which helped support the weight of the walls above. However, it was unclear whether this passage was roofed.

The inner face of the N wall within the building was lined with orthostats set vertically into a shallow foundation trench and packed with smaller stones as a decorative feature. Following the remodelling of the N wall, the forecourt structure consisted of a rectangular enclosed area, 4.5 × 4m, with a centrally placed hearth aligned on the new entrance passage to the stalled tomb, and presumably with the original entrance to the S still being in use. The hearth was 1.2 × 0.7m, and consisted of upright slabs laid end to end, set into the clay floor. There was, however, no sign of ash or burnt debris round the hearth and it is possible, although unlikely, that it had a different function – perhaps as a cist. Neither this feature nor the area around it were excavated beyond partial cleaning, and no evidence of burnt or unburnt bone was recovered. Although the hearth could have been installed during the remodelling, it is also suggested that it represents part of the elaborate final process which marked the end of this phase of use of the site.

The single identified stone setting mentioned above, may have also belonged to this stage of the building.

STALLED TOMB (illus 4 & 5b)

Only a portion of the structure, subsequently identified as a stalled tomb, was exposed. It measured 7.85m wide at its S end, and had slightly bowed walls, almost 2m thick. The S wall was the best preserved and contained the entrance passage, 0.75m wide and 2.2m long, that opened into the main chamber which was 4m wide. The walls were similar in construction to the forecourt structure, and consisted of a layer of clay 0.15–0.20m deep, faced on either side with dressed stone blocks. With rare exceptions, only a single course of the stonework survived, and as with the mortuary house, this was assumed to be the prepared foundation for a drystone wall above.

Only the lowest course of the entrance facade survived, consisting of a row of slightly larger dressed stones resting partly on the clay foundation and partly on a plinth of paving stones; these formed part of a narrow paved path between the tomb and the forecourt structure. The same detail was found on either side of the tomb entrance passage. The opposing wall of the adjacent forecourt structure was now rebuilt (see above) almost parallel to the tomb wall and was of identical construction, so that its plinth abutted that of the stalled tomb. Although both walls converged slightly at the E end, this still left a cross-passage some 0.8m wide at the narrowest point, that ran the full width of the two structures and appeared to have been open at both ends. Part of a cup-marked stone (SF 7309) was reused to form part of the tomb facade on the S side of the entrance passage, and this would have been clearly visible within the cross passage. A number of pecked hollows on the face of this stone ran off its edges showing that it had been repositioned here. It is probable that it was originally located within the N end of the mortuary structure and was reused in the adjacent wall during the rebuilding.

The only stall to survive *in situ* within the tomb chamber was embedded in the E wall of the chamber, 2.8m from the entrance, and although it had been broken off at ground level, part of the stone and its packing remained. The remains of the opposing slab, which would also have been broken off at ground level when the tomb was levelled, were finally removed during the early Iron Age, when the drain from the Phase 5 roundhouse was laid across this part of the site, leaving only a clay-filled socket which was not excavated.

On either side of the entrance were traces of two further orthostats, set against, rather than flush with, the horizontally bedded wall face. The orthostat to the W of the entrance passage had been removed during the construction of the Phase 5 Iron Age drain, leaving only the stone-lined socket, the S side of which consisted of several courses of dressed stone blocks forming a single-faced wall. This wall was in line with the inner face of the tomb wall and appeared to be part of the same construction, but the top of the setting had been cut away during the Iron Age and so there was no direct relationship with the rest of the tomb wall face. It appeared that these additional courses formed an especially deep wall foundation restricted to this setting and designed to provide support for it.

The orthostat to the E of the entrance had been destroyed when a Phase 7 stone-lined tank was built on the site. When this was excavated the sides consisted of redeposited clay rather than the undisturbed subsoil and it was assumed that this was a clay filling put into the stone setting of the opposing stall following its removal during the construction of the Phase 2 tomb.

It was not possible to excavate the original floor within this tomb, which must, given the level of the paving within the entrance passage, have been some 0.07m below. Only 4m of the interior projected beyond the later Phase 2 tomb. It was assumed that the tomb had a clay floor and that only the entrance passage was paved.

Although the full length of the stalled tomb cannot be conclusively demonstrated, evidence revealed in the main N–S section of the site (illus 164) suggests that it was *c* 15m long. The section had been cut down to bedrock in a number of places and this showed that extensive levelling of the hillside must have taken place prior to the construction of the Phase 2 tomb. It is suggested that initially the site was cleared for the construction of the stalled tomb and that the bedrock was levelled at that time.

FINAL ALTERATIONS

STALLED TOMB (illus 4; 5a; 5b)

After some time, both entrance passages, the cross passage, and the floor of the stalled tomb were resurfaced with a thin layer of clay. A single new flagstone was incorporated into the new floor of the tomb entrance passage, and a second survived amidst later disturbed deposits in the entrance to the forecourt structure. As with the earlier floors, neither entrance passage seems to have been completely paved. Midway between the E and W walls of the stalled tomb chamber, 2m from the entrance, was a small rectangular hearth, 0.8 × 0.6m. It was located precisely at the entrance to the subsequent Phase 2 tomb entrance passage, suggesting that its position had been marked throughout the demolition process (illus 4; 5b). The hearth was formed from four lengths of thin flagstone set on edge in the clay floor, apparently without a stone base. The sides of the hearth were flush with the new floor and in view of the very limited evidence for burning, the hearth can scarcely have been used before the the tomb was demolished. It contained a layer of unburnt clay that sealed the remains of the last fire, which consisted of a thin deposit of burnt material lying *in situ* on the clay floor. Neither the stone sides of the hearth nor its clay floor appeared to be heavily burnt, which suggests that the final fire had not produced intense heat and had been rather small. The construction of this hearth is seen as part of the final deconsecration process prior to the abandonment and careful demolition of the tomb and forecourt structure, and it was possible that the hearth was only used once before being sealed below the clay that covered the levelled remains.

Loose ash and unburnt debris had been cleared from the hearth before it was filled up with fresh clay, and this may have been the source of a thin deposit of ash, burnt bone and clay that lay on the new floor to the S of the hearth. These deposits could not be considered securely stratified as they were directly overlain by disturbed Iron Age deposits containing burnt material. Part at least of these deposits appeared to have been covered by a further layer of clay no more than *c* 0.1m thick within the chamber, which was part of the final sealing of the tomb remains prior to its demolition.

FORECOURT STRUCTURE

At the same time, the entrance passage to the forecourt structure was resurfaced with a layer of clay and a number of paving slabs. It was unclear what happened within the interior besides the hearth being sealed by flat slabs prior to the demolition of the building.

ABANDONMENT OF PHASE 1 TOMB

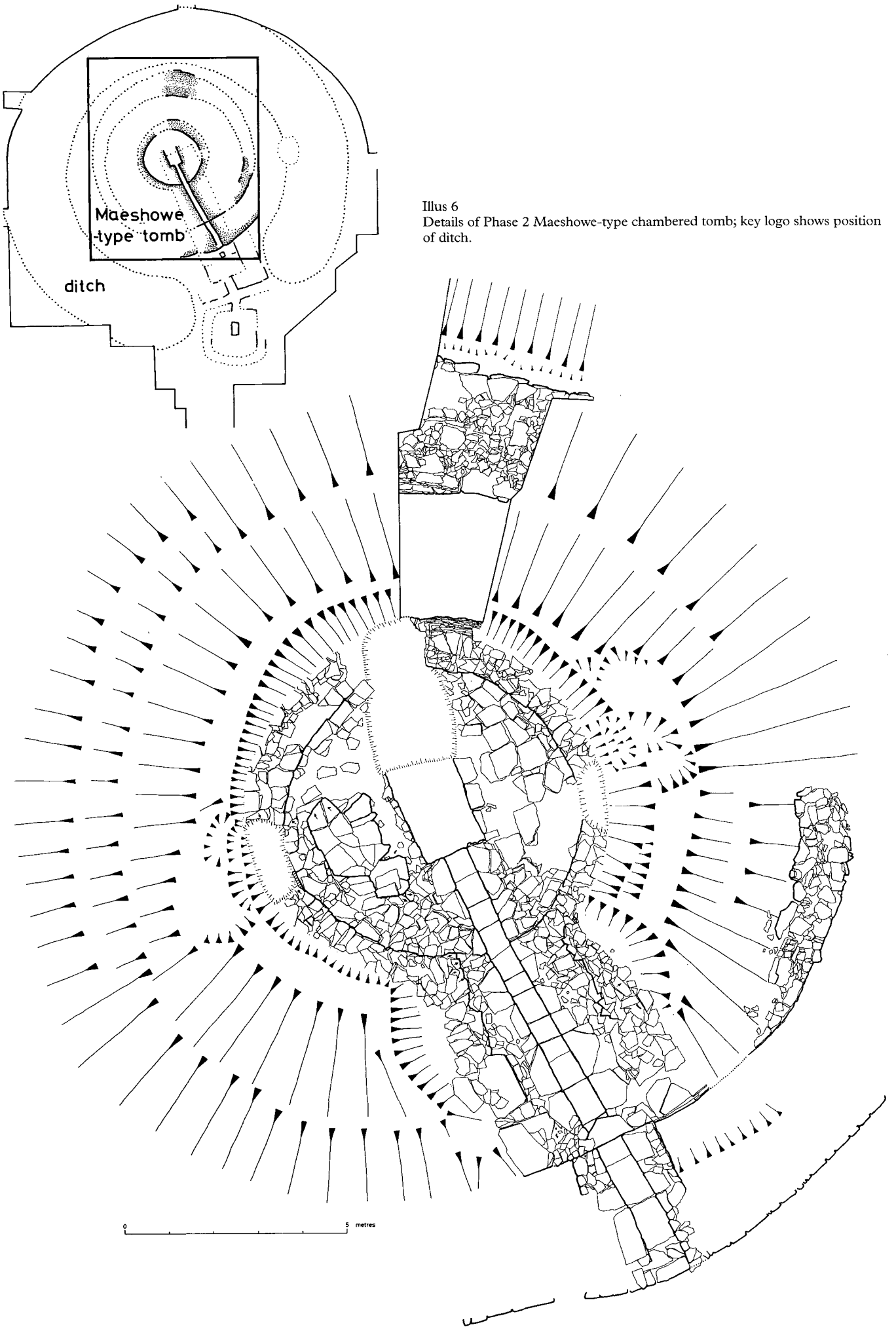
There was no clear evidence for the length of use of either building. However, the end of this phase of activity seems to have been triggered by the settling and partial collapse of the E wall of the entrance passage through the N wall of the forecourt structure. This partly blocked the passage and debris had spread across part of the interior. The wall at the SE corner of the passage collapsed onto the resurfaced clay floor, and the lowest courses of this wall remained tilted at the angle from which they had fallen onto the floor of the passage. If the wall had been deliberately demolished these courses would have remained horizontal, and the angle of tipping from ground level implies settling took place over inadequate foundations perhaps on ground already disturbed by the replacement of the earlier V-shaped wall. Whatever the cause, the complex was abandoned as a result of this collapse and the final levelling of the site left the lowest courses of this wall *in situ* and sealed the rest of the interior to a depth of *c* 0.2m above the original floor level.

This collapse, combined with the relaying of the floor within both buildings, suggests that both structures had already been in use for some considerable time before being replaced. It is suggested that the whole tomb and forecourt were only levelled and replaced by the Phase 2 tomb, when the forecourt structure, at least, was in need of major repairs.

2.1.2 • PHASE 2 (illus 6)

The Phase 1 structures were levelled and covered with a layer of clay prior to the construction of the Phase 2 tomb. The design for the new tomb consisted of a round, vertical sided, drystone cairn, with a central chamber, three side cells, an underground cell and an entrance passage. A freestanding retaining wall was constructed around the cairn, for the reception of a clay mound which covered the structure. A stone facade was also constructed either side of the tomb's entrance. The internal features of the tomb survived in a fragmentary state due to subsequent demolition and quarrying in later phases.

The tomb was surrounded by a shallow ditch which left, as a causeway, the demolished remains of the Phase 1 forecourt structure. The post pit, described above, originally lay to the E of this tomb, on the inner edge of the ditch. No Neolithic artefacts were found *in situ*; later activity is assumed to have removed any tomb contents, if indeed there were any.



Illus 6
Details of Phase 2 Maeshowe-type chambered tomb; key logo shows position of ditch.

Illus 7
a) The Phase 2 Maeshowe-type chambered tomb (top right), showing midden infilling the Neolithic ditch and the remains of the Iron Age defences to the left; scales – 2m; from SE;
b) view along the entrance passage into the Phase 2 chambered tomb; scales – 50cm; from S.

THE MAESHOWE-TYPE TOMB

CONSTRUCTION

This structure was built partially overlying the area of the Phase 1 stalled tomb. Its construction necessitated the demolition of the remains of that tomb and the deposition of a substantial clay levelling layer, *c* 0.1m thick, on which it was placed.

The construction of the tomb comprised a central cairn, covered by a massive clay mound, 19m in diameter, which rested asymmetrically on the N edge of a circular platform, *c* 25m in diameter, surrounded by a 7m wide and 1m deep shallow ditch (illus 6; 7a). The S side of the platform projected a maximum of 3m beyond the edge of the tomb where it formed part of the entrance facade.

A massive well-built drystone wall formed a double circle at ground level, the inner one around the central cairn and the outer one round the mound itself, linked by the entrance passage and all of one build (illus 7b). The stone cairn was 6.5m in diameter and was not bonded into the inner retaining wall, but appears to have been constructed first, containing the central cells and the start of the 2.5m long entrance passage. The retaining walls, and the rest of the entrance passage of 5m in length, were added, abutting the sides of the cairn, after the sides had risen to a height of at least 0.5m (illus 8a). Only after the central cairn and the retaining wall were completed, was the clay mound built up in the 4m wide gap between the finished cairn and the outer retaining wall, and then raised over the central cairn itself. The outer face of the retaining wall would have been visible at the base of the mound, rising from the ditch that surrounded the tomb, except behind the low stone-faced facade which projected 3.5m beyond the tomb. In appearance the tomb would have been very similar to the neighbouring Maeshowe.

THE CENTRAL CAIRN, CHAMBER AND CELLS

The central cairn contained a chamber at the end of the entrance passage that was approximately square with a small cell below the floor and three raised side cells. Much of the tomb was destroyed during the early Iron Age, when the Phase 5 roundhouse was built into the centre of the clay mound. The central chamber and the N cell were completely destroyed during the construction of an earthhouse below the roundhouse floor, and only the small underground cell survived. However the masonry core of the central cairn survived up to 0.5m high in places, including the raised floor of the W cell and part of the foundations for the E one.

The floor of the W cell consisted of a single carefully dressed massive flagstone (illus 6; 8b). This was approximately hexagonal and would have been 2.0 × 1.5m. It was 0.12m thick and had bevelled edges. The rest of this chamber had been destroyed, although some of the drystone rubble packing round the cells still survived. By comparison with Maeshowe, the side cells are likely to have been rectangular and about 1.5 × 1.0 × 1.0m and were 0.42m above the floor of the main chamber – assuming that this was at the same height as the entrance passage. The central chamber would have been *c* 2.5m square.

Below the floor of the central chamber was a small cell 2.0 × 1.2 and *c* 1.1m high (illus 8b; 8c). Its N wall was destroyed when the cell was enlarged to form an earthhouse during Phase 5, and the S wall lay directly below the end of the tomb entrance passage. The walls on either side were single-faced and of drystone construction built against clay. Each wall incorporated an opening which revealed the 1m thick layer of redeposited clay below the tomb mound. These openings appeared to be deliberately placed directly below the entrances to the side cells above, perhaps to mirror the entrances to these cells. They were 0.6m wide and rose the full height of the walls, and were initially believed to indicate a lower level of chambers within the tomb, similar to those found at Huntersquoy and Taversoe Tuick (Davidson & Henshall 1989, 123–4, 160–3). It was not possible to remove the overlying tomb cairn material, and therefore each opening was examined with an auger to a depth of 2m beyond the opening. No variation in the clay was found and the idea that these spaces were blocked openings to a lower level of side cells, was discarded.

The inner retaining wall was built against the walls of the cairn with gaps in its inner face to accommodate stones projecting from the sides of the cairn. Although this wall was a uniform 1m in height, and had a width of 1.2m, where it ran round the outside of the mound both varied. On either side of the entrance passage and behind the facade, the outer retaining wall remained 1.2m wide, but elsewhere, where there was no facade to provide additional support, the mound rose directly above the edge of the ditch, and the retaining wall gradually thickened to 2.7m wide on the N side. It would have been at least 1.45m high. Except around the cairn and along the entrance passage where the inner face was vertical, both faces of the retaining wall had a slight batter. Finally the clay mound was added, parts of which survived to a height of 4.5m until 1983.

The entrance passage projected beyond the outer retaining wall through a low clay platform with a dressed stone face (illus 6; 8a–c). This facade was 3m wide at its widest point and narrowed down on either side of the entrance until it ran into the tomb walls. It consisted of a level clay platform that would originally have been *c* 1m high with a vertical face of dressed stone blocks. Although it had been partly destroyed during the Iron Age, sufficient remained to show that the outer retaining wall of the tomb rested in a shallow foundation trench cut into this clay, demonstrating that the platform had been part of the initial construction of the tomb. The facade, which rose from the edge of the surrounding ditch, was an integral part of the original design of the tomb. This was confirmed by the absence of a break in the sides of the entrance passage where it crossed the outer wall of the central cairn into the platform beyond. The masonry of this outer stretch of the entrance appeared to be of slightly poorer quality, but this was likely to be due to the effects of its exposure during the Iron Age (illus 7b). The surviving slope of the sides of the entrance passage also reflected the shape of the tomb mound after the Iron Age rather than its original slope.

Set into the mound immediately above the retaining wall were the remains of a single-faced wall. It is not possible to be certain that this was of Neolithic date, representing a second stepped support for the mound; it could equally be of early Iron Age date when the tomb mound was altered for a roundhouse.

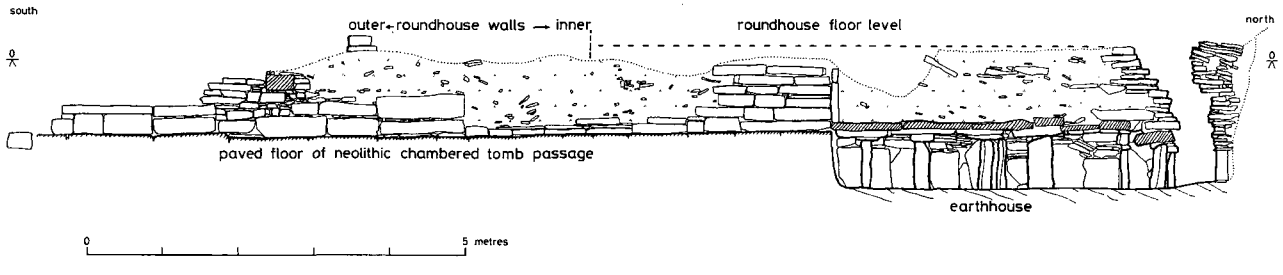
It was considered essential to examine the clay mound of the tomb and a section was cut through on the N side down to bedrock (illus 6). This provided soil and C14 samples as well as confirming the relationship between the inner and outer retaining walls and the tomb mound and ditch. The inner retaining wall at this point had a vertical inner face which survived to a height of 1m on the W side. This however could not have been the full height of the central cairn walls, which would have supported a corbelled roof over the central chamber and its cells. The total height of this cairn was at least 4m above ground level, and the clay mound would have added at least another 1m to this.

Viewed from the SE, the low facade with the retaining wall rising behind, and the clay capping above, would have given the tomb a high, impressive stepped appearance as it rose above the encircling ditch (illus 7a). From the quality of the masonry that survived it is clear that this tomb would have been one of the finest Orkney Neolithic tombs yet discovered, possibly the equal of Maeshowe in its quality and constructional details.

Illus 8
a) Entrance passage and surrounding stonework of the Phase 2 Maeshowe-type chambered tomb; scales – 2m; from E;

b) the tomb entrance, cell pavings and underground structure; the Phase 5 earthhouse shaft is to the left; scales – 50cm & 2m; from W;

c) profile of Phase 2 chambered tomb passage showing relationship with subsequent roundhouse and earthhouse.



MATERIAL FROM NEOLITHIC LEVELS

There is no firm evidence for the dating of either of the tombs; the production of an absolute date from material beneath the Maeshowe-type tomb proved impossible. Few finds were recovered from the Neolithic contexts except for a fragment of a wooden scoop from below the clay of the Phase 2 tomb. However, two stone axes (illus 109), a 'Skaill' knife (all of Neolithic type), a pounder, pounder-polisher, 4 flint scrapers, 1 struck flake, 1 flint arrowhead, 4 pumice pebbles and 11 pieces of pottery, were found over the levelled remains of the Phase 1 forecourt structure. These 26 objects represent less than 0.15% of the total artefacts recovered from the site. Environmental evidence in the form of pollen from the pre-Neolithic land surface suggests (Table 1mf, 1:C5) that at the time of construction of the Phase 2 tomb, the landscape was relatively open and some pastoral farming was practised.

There was no artefactual evidence to support the suggestion that the site had been used over a considerable length of time. It was unclear whether this was due to a real absence of artefacts, to later disturbance, to incomplete excavation, or to the scrupulous cleaning of the tombs and forecourt structure prior to each phase of abandonment.

As with the Phase 1 stalled tomb, there was no direct evidence to indicate that the Phase 2 tomb had ever been used as a burial place. The virtual absence of bone and domestic rubbish from the site until the Iron Age was striking, although it is possible that some of the random scatter of human bone from the Iron Age deposits was in fact redeposited Neolithic bone. Alternatively, the absence of human debris from these levels may result from the careful cleaning out of the tombs prior to abandonment and the disposal of their contents in an unexcavated part of the site. Given the obvious care shown over the demolition of the stalled cairn and forecourt structure prior to the erection of the Phase 2 tomb, a careful deconsecration of the site is suggested. It may be possible to link this with the Bronze Age beaker vessel fragments found outside the entrance to the Phase 2 tomb in disturbed deposits. These sherds do not appear to have been associated with any domestic settlement on the site, which is next occupied during the early Iron Age.

Without the firm evidence of radiocarbon dates, it can only be established that the mortuary house predated the stalled cairn, and that both were superseded by the Maeshowe-type tomb. The relationship of these structures to the standing stone suggests that it belonged to the earliest phase of the site. The overall time span for this phase must remain unclear, but it would be expected to fit the estimated parameters for developments of stalled and Maeshowe-type tombs of the 4th to 3rd millennia cal BC.

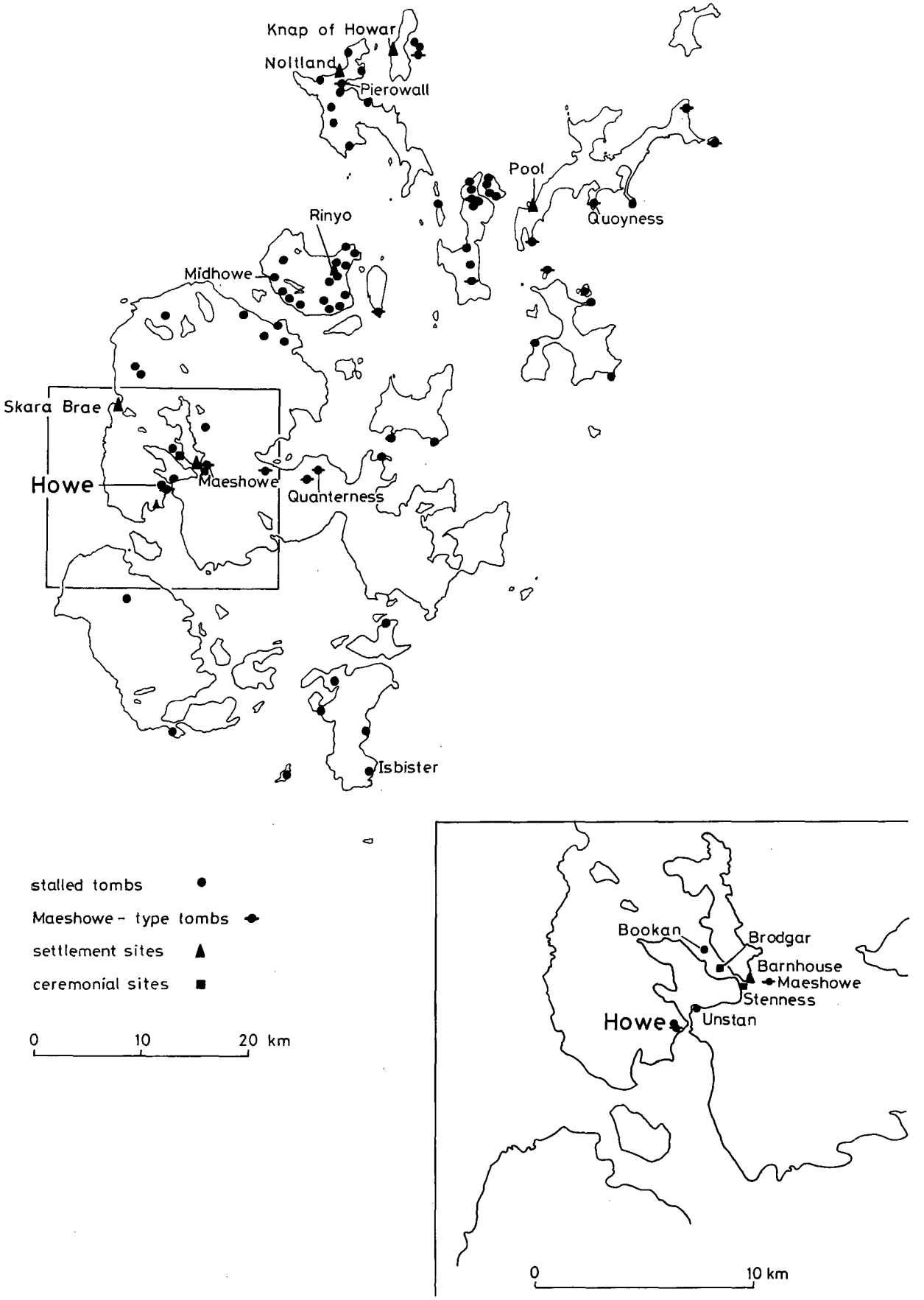
2.2 • THE NEOLITHIC STRUCTURES • DISCUSSION

HOWE IN ITS NEOLITHIC SETTING

The heavy, fairly wet soil, more suitable for grazing than arable cultivation, may have influenced the original location of the site. It is also likely that the site was chosen because of its prominence within the landscape. Indeed a 19th century navigation cairn on top of the settlement mound remained an important landmark for ships approaching Stromness from Scapa Flow and negotiating Cairston Roads, right up to the middle of this century. The site was clearly visible from all directions except where the hill rose behind it to the NW.

Its location on the hill slope did however mean that, although the closer of the two nearby standing stones (removed in the mid 1970's), at Deepdale, Stromness (Burton 1978), would have been visible, the further stone which still survives, would not.

Prior to the excavation of Howe, the only known Neolithic remains in the vicinity (illus 9) were the chambered tombs of Unstan and Maeshowe, respectively *c* 1km and 4.7km to the NE and the two stone circles with henges, the Stones of Stenness and the Ring of Brodgar, 3–3.5km also to the NE. All these monuments are easily seen from Howe on clear days. More recently, fragments of pottery discovered in the cliff section 1.9km to the S of Howe, at Garson (Lynn & Bell 1985, 1986 & 1988), may indicate that other settlements existed nearby. Other recent fieldwork from 1984, and excavation at Barnhouse in the vicinity of the Stones of Stenness, has revealed a complex of both domestic and ritual structures of the Neolithic period (Richards 1986, 1987, 1989). Richards' field work also produced evidence of further Neolithic settlement close to the shore of the Loch of Stenness 2.5km to the NNE of the site.



Illus 9
Howe in its Neolithic setting.

These alone are unlikely to indicate the true pattern of settlement during the Neolithic, nor the relationship of funerary monuments to domestic settlement. However, it can be seen that the potential for future discoveries, especially around the shoreline of the Loch of Stenness is quite high (Richards pers comm).

During the earliest period of Neolithic activity at Howe, which consisted of a standing stone and a mortuary house, the site seems to have been a small and relatively open affair, and it is presumed that the location and alignment of the two features were in some way crucial to the activities that took place there. The site's most obvious links are astrological ones, and it is therefore important to view the site as part of a series of related monuments set within the whole landscape, rather than as a single site in isolation.

From the depth of its setting, it is inferred that the standing stone would have been at least as tall as the largest of those at the Stones of Stenness or the Ring of Brodgar, and therefore may have been expected to have stood to a height of *c* 3–4m above the ground. Before the construction of the Phase 1 tomb, the standing stone and the mortuary structure would both have been clearly seen from Stenness, silhouetted on the hill slope, with the deep cleft of the valley of Trowie Glen on Hoy in the distance. The low angle of the midwinter sun would have meant that it would briefly but clearly illuminate the stone above the hill side as it sank below the hills of Hoy. This would have been visible from several kilometres beyond Stenness in clear weather.

The standing stone was probably earlier than the mortuary structure as its prior existence would provide an explanation for the change in alignment of the construction of the succeeding stalled cairn. This early date for its erection is confirmed by the equally awkward juxtaposition of the stone and the Phase 2 Maeshowe-type tomb, which strongly suggests that it was already in existence when the tomb was built.

With the construction of the Phase 1 stalled tomb on a new alignment to the preceding structure, and the remodelling of the mortuary house as a forecourt structure on its existing foundations, the whole emphasis of the site changed. This suggests that the view southwards from the mortuary house through Cairston Roads towards Flotta, was still an important one, even though a new alignment was considered necessary for the stalled tomb. There were two reasons why the new alignment took place: firstly because of the need to avoid the standing stone, and secondly, because for the first time the view over Ward Hill, Orphir, seems to have been considered a vital one.

The cross passage lying between the two buildings may have been important, as it was aligned towards the valley of Trowie Glen on N Hoy, the Harray Hills and the saddle between Ward Hill and Mid Hill, Orphir. Viewed from Stenness, the two buildings would have shown up as low mounds, and perhaps even the cross passage itself would have been visible under exceptionally clear conditions. Given the alignment of this cross passage, it was clear that as at Maeshowe, the setting sun at the midwinter solstice could have shone down it.

The alignment of the Phase 2 tomb faced the saddle between Ward Hill and Mid Hill in Orphir. Toward the beginning of spring (observed February 22nd, 1982), the sun rising between these two hills, shone down the tomb entrance passage. The alignment was not quite exact as the entrance passage was slightly to the S of the sun's rise. Had the tomb entrance been complete, it would have confirmed that this allowed only a narrow band of light to penetrate to the central chamber.

It can be argued that these sites were part of a complex of religious monuments that all linked together in the Neolithic landscape: the stone circles of Stenness and Brodgar, with their henge monuments, the tombs of Maeshowe and Howe, the cairn at Bookan and the complex of structures at Barnhouse, Stenness; the standing stones at Howe and Deepdale, and the astrological events recorded from these sites over the horizons defined by the hills and valleys of Hoy, Orphir and the Cairston hills. No other area of Orkney has such a well preserved Neolithic ritual landscape which carefully integrated the religious needs with the natural features. Whatever the reason for the distribution and sighting of these sites, their careful choice of location and alignments was not wholly coincidental. In a landscape where so many different monuments were linked together, these tombs should be looked at, not just as burial places but rather as centres of ritual and religious activity.

FUNCTION OF THE STRUCTURES

Although referred to as 'the stalled tomb, the mortuary house and the forecourt structure', there was no direct evidence for the function of the earliest phase of buildings at Howe. However, the absence of domestic debris and the implied presence of at least one standing stone, have been taken to suggest that from the first

the site had a religious or funerary rather than domestic function. Parallels to the sequence of early structures at Howe are, however, hard to find. A number of the Orkney tomb sites including Bigland Round, Calf of Eday Long and Holm of Papa Westray North (Davidson & Henshall 1989), have produced evidence of earlier phases of tomb. Beyond Orkney, the closest parallels to the first building at Howe would appear to be with the mortuary houses associated with the earliest of the Neolithic tombs, the earthen long barrows.

Davidson & Henshall, in their recent revision of Henshall's catalogue of chambered tombs (*ibid*, 52), intimated that the first building at Howe was not a tomb and suggested that its closest parallels lay with the sub-rectangular domestic buildings at the Knap of Howar. David Haigh considers that unlikely, not only because of the absence of domestic refuse, but also because of the nature of the link between this building and the subsequent tombs. When the presence of the standing stone setting is also considered, it seems unlikely that the Neolithic phases of the site were ever purely domestic ones.

The relative chronology of the standing stone remains unclear, although it almost certainly predated the stalled tomb, as it provides an explanation for the change in alignment between the tomb and the mortuary house (illus 4). There would have been insufficient room to construct the new tomb on the same alignment as the existing mortuary house if the stone was still *in situ*. A further argument for an early date for the stone, is that once the cairn mound was constructed, the standing stone would no longer have stood out on the hill slope, which is assumed to have been an important factor in its original location here. If its prominent location on the skyline was important, there would be little sense in erecting the stone once the stalled cairn was built.

It was impossible to carry out a geophysical survey of the surrounding area, and the limited extent of excavation of the Neolithic levels prevented confirmation of whether other stone settings existed. However, the arguments in favour of an early date for the standing stone make it more likely that this stone was an isolated one, possibly a landmark, rather than forming part of a stone circle, such as the ones at Brodgar and Stenness, which seem to be late Neolithic features. In 1991 a single large stone socket with its intact packing was found to the rear of Maeshowe. It was a socket for a large upright stone, which has been interpreted as forming part of a stone circle around the tomb (Richards 1991, 73). A drain and paving earlier than the tomb were also found, suggesting the possibility of at least one earlier phase, paralleling some of the complexities found at Howe.

THE CONSTRUCTION OF THE NEOLITHIC BUILDINGS

Evidence for the constructional techniques used in the erection of the chambered tombs at Howe has added considerable light to the development of chambered tombs in Orkney. Henshall's (1968) classification of Orkney-Cromarty tombs, followed by Fraser (1983), still remains the standard and, whilst recognizing its limitations, was retained by her in the most recent update (Davidson & Henshall 1989, 19–51). The evidence from Howe, however, highlights some of the problems with this classification.

The Phase 2 tomb at Howe clearly fits within the Maeshowe group, which is defined as tombs with a square or rectangular central chamber with side cells, within a cairn with revetments. Included in this group are the tombs of Quoyness, Quanterness, Cuween, Wideford Hill, Vinquoy, Holm of Papa Westray South, ?Pierowall as well as Maeshowe itself. Hedges (1983a) and Renfrew (1979) proposed that tombs like Isbister and Unstan fall within a composite group between Henshall's stalled cairns and the Maeshowe-type tombs, on the grounds that they have both side cells and stalls.

The tomb typology has however, been based mainly on the plan of the central chamber and its side cells, and less attention has been given to the relationship of the ground plan to the covering mound or to the development of each tomb as an entity. This approach was acceptable when few tombs seemed to have had major alterations such as the addition of new chambers, but has become less satisfactory in the face of evidence from a growing number of excavated tombs, which suggests that tombs may have evolved rather than been replaced. Notable examples are the Knowe of Lairo, where there was clear evidence of secondary walling within the main chamber, at Wideford and now Howe itself. It was probable that in the former cases these alterations were of Neolithic rather than Iron Age date.

The problem of the use and age of the various outer skins of masonry added to the majority of these tombs is one which has caused considerable controversy. Two recent writers, Hedges (1983a) and Sharples (1984), deny that walls were added as revetments and see these as primarily for emphasizing the massiveness of the tomb as a monument. Childe (1952) and Sharples argued that there was an inherent instability in the original

conception of these tombs – almost vertical-sided towers rising 3–4m within their outer stone rubble cairns. If one looks at the excavated tombs, it can be seen that most of them show signs of severe structural problems, largely the result of the weight of the central core pushing out the vertical sides of the tomb cairn. The most usual method of repair appears to have been the addition of an external masonry skin to the cairn, which often changed the shape and size of the original design, by making the tomb wider, and giving a lower pitch to the top of the whole mound. Tombs which have had revetting added to them include Midhowe, Quoyness, Isbister, Quanterness, the Knowes of Ramsay and Rowiegar (Davidson & Henshall 1989, 30–32). The situation was unclear at Pierowall, where only part of the inner cairn and outer revetment survived. At Isbister coastal erosion may have led to a major redefining of the forecourt area of the tomb within hornworks, changing what was an oval tomb into a crescent-shaped one. Davidson and Henshall claim that the outer skin was part of the original design at Bigland Round, but suggest that at other sites similar wall faces within the cairn reflect pauses in the building process, supporting Hedges' argument at Isbister.

Excavations at three of Henshall's Quanterness/Quoyness tombs revealed a common design of a central stalled chamber with side cells, enclosed within a stone mound consisting of the central cairn with a series of retaining walls. At Quanterness, Renfrew (1979) argued that these walls were contemporary although there were clear breaks in the masonry where they joined the entrance passage. At Isbister, Hedges argued that whilst the revetments were subsequent additions, they only marked pauses in the construction of the tomb. Smith (1989) confirmed by excavation that the outer retaining walls of the Isbister cairn, were double faced, as was the outer revetment of the monument, suggesting, as at Howe, that they were contemporary with the main period of construction (Hedges 1983a, frontispiece & addendum). Clearly the proof for contemporaneity of revetments would have been provided by the junction with the entrance passage, as at Howe, where the revetment and passage were linked without a break to the inner cairn, as a single phase monument. If however, as at Midhowe or Quanterness, there was a clear break, it was a reasonable indication that the outer wall was a later revetment. The state of the cairn behind the revetments would also show whether they had been added as a structural necessity or an architectural nicety. Unfortunately the entrance details at both Isbister and Pierowall, have not survived, but indications at the former site suggest the outer retaining wall to the cairn was part of the initial design (Smith 1989).

Sharples (1984, 115) noted that 'the cairn at Pierowall was intended to be constructed with two revetments and that the outer was slightly different in construction because it was primarily a facade for display'. He explained this by arguing that the tombs had changed function and that a different architectural style was in order, the crucial change being in the monumentality of these tombs. He argued that at 'monumental sites' like Pierowall, the outer revetment would have risen to the full height of the central cairn, as typified by Childe's excavations at Quoyness on Sanday, where both the cairn and its retaining wall stood over 3m high.

At Howe, there is no evidence to show that the outer retaining wall ever rose beyond its surviving height of 1.5m; similarly at Maeshowe, the wall appears to have been buried. From this evidence, it is clear that these later tombs did not regard the outer wall as important. This is not to say that Sharples was wrong to argue that the ideal for the stalled and composite cairns was of a tall straight-sided monument with a low curving roof over the central chamber. However, the evidence of structural weakness provided by the fully exposed examples of these tombs convincingly shows that the additional masonry skins appear to be in most cases later revetments added to buttress walls which were bulging under the weight of the roof. Thus the final form of most of these monuments reflects architectural expediency more than the original architectural intention.

The analysis of tomb construction was clearly in need of revision given the results of the major excavations of the last few years. Barber's work (1992), based on his excavations at Point of Cott, has more recently helped to remedy this lack. At Howe, the stalled cairn, rather than being repaired, was replaced by a new tomb which was so close in style to that at Maeshowe that it was probable that the same builders were involved. Although only two-thirds of the size, it was clear that the problems of mound instability had been seriously examined and that careful attention had been paid to the revetting of the mound from the start. Particularly important here was the evidence that the external retaining wall was contemporary with the initial phase of construction and was conceived as part of the original design.

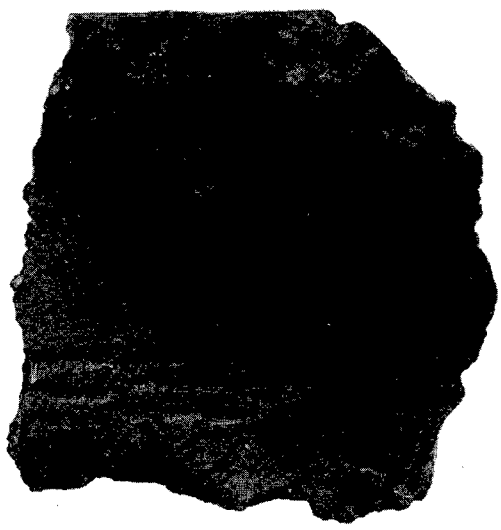
The construction of the Maeshowe mound is uncertain, but given the limited evidence from Childe's (1956) excavations, it appears that there was a different and less stable series of single-faced revetments to the clay mound over the central stone cairn. As at Howe, it was clear that the Maeshowe-type cairn was always

intended to have a covering mound, as can be seen from the construction of the entrance passage, where no break in the masonry was visible at the edge of the central stone cairn until the outer revetment was reached. From the slope of the walls it was clear that they must have been added at the same time that the clay mound was built over the central cairn, as they could not have been freestanding as at Howe. It might be assumed that this outer wall was meant to be exposed, and was only buried following slippage from the mound over the subsequent millennia. However, Childe (*ibid*) showed that the outer limit of the mound was defined by a turf bank and ditch, suggesting that the present diameter was deliberate. It was possible that the mound was raised in two stages, and that the outer retaining wall was only buried when the mound was enlarged. If this was the case one would have expected Childe to have noticed a turf line at the point where the original mound stopped. He did not, and one can only assume that the mound was all of one build.

If it is accepted that the material from the ditch at Maeshowe was used to create the mound, it suggests that the idea of a later date for the ditch at Maeshowe was unlikely. The radiocarbon dates from the ditch were later than those from the other tombs included in Henshall's Maeshowe type, and this has been used to argue that the ditch was a later addition. This seems implausible. It is possible that the ditch was recleaned during its use, and that the C14 dates do not reflect the date of its initial construction. However, a far more likely explanation was that this tomb was later than the others in the group.

It is assumed that Howe is later than Maeshowe, because it appears to be a more advanced form of tomb, with the sunken chamber with its blank openings mirroring the cells above, and its altogether more sophisticated construction. No other tombs have the same rectangular central chamber, the original designed long entrance passage, the same exceptional standard of dressed stonework, the raised side cells, and the same use of a clay mound. The enclosing ditch at Howe, an integral part of the design, was excavated partly to provide material for the covering mound, and partly to enhance the tomb itself. The entrance between the ditch terminals would have served as a forecourt enhancing the grandeur of the tomb.

It seems clear that Howe was a more advanced version of the Maeshowe-type tomb, with the errors learnt, rather than a small scale prototype. Given the clear differences between these two tombs and all the others in Henshall's Maeshowe type, it has been proposed that Maeshowe and Howe do not belong there (Renfrew



Illus 10
Beaker sherd (SF 7377) from the area in front of the Maeshowe-type tomb.

1979). Rather than have a Maeshowe class without a Maeshowe, it is suggested that the other tombs which were basically stalled cairns with side cells, Renfrew's Quanterness/Quoyness type, should be added to Henshall's Bookan tombs to form a group of Composite tombs, midway between the Maeshowe type and the stalled cairns. Maeshowe and Howe stand alone as a culmination of chambered tomb design in the Scottish Neolithic, and the late C14 date for Maeshowe supports this.

USE AND ABANDONMENT OF THE TOMBS

The change in tomb design at Howe from the stalled to the Maeshowe-type reflects changing religious needs, and the design of the Phase 2 tomb indicates that an even more restricted group of people was being served. Certainly the tomb was designed for maximum effect and the forecourt area between the ditch terminals may have now served the same function as the replaced Phase 1 forecourt structure, although no evidence survived of any activity here.

As at other tombs, the absence of human bone has attracted considerable speculation. Only at Quanterness and Isbister have substantial numbers of burials been recovered suggesting that a tradition of selected burial, frequently of already disarticulated skeletons, was the norm. This has been used to suggest that the tombs served a small, select group of the local population. However, given that some tombs appear to have been cleared in antiquity, or were never used as burial places, it is not surprising that the number of burials within a tomb must bear little relation to local population densities. This would suggest that tombs were primarily important as religious foci, and, given the quality of the tombs at Maeshowe and Howe, as status symbols, rather than burial places.

Both Hedges (1983a) and Sharples (1984) have argued that there was sufficient evidence to show that tombs were deliberately sealed, filled in or slighted. Deliberate infilling of chambered tombs has been noted at Midhowe, Wideford Hill, Cuween, Quoyness, Holm of Papa Westray North and Isbister. Sharples pointed to the partial demolition and deliberate levelling of the cairn at Pierowall paralleled at Quoyness, and suggested that this was associated with a general abandonment of chambered tombs as collective burial places. At Pierowall the outermost revetment to the tomb was apparently added to the partly demolished and levelled structure to form a flat platform on which a late Neolithic building was constructed. At Quoyness, Childe (1952) showed that the latest of the retaining walls apparently blocked the entrance to the tomb, and Sharples suggests it was constructed during a partial levelling of the site. It is clear that the Phase 1 structures at Howe were deliberately demolished, and almost certainly this was associated with an elaborate deconsecration process – as the Phase 1 hearths indicate.

There is no evidence for the use of the Phase 2 tomb, none to suggest why it went out of use, nor any to indicate it was slighted prior to the end of its period of use. Was this a tomb which was never used, as has been suggested at Maeshowe, or was this a tomb which was carefully emptied before abandonment? Was this tomb deconsecrated during the Neolithic period as the Phase 1 tomb? The fragments of two Beaker vessels found outside its entrance (illus 10) may mark the end of its importance and the final completion of activities associated with it, as has been noted at Neolithic sites in the NE of Scotland (Shepherd 1986) and elsewhere on Orkney.

AFTERMATH • THE BRONZE AGE AT HOWE

Given the paucity of evidence, it is very difficult to fit Howe into a Bronze Age setting. Primarily, apart from the fragments of Beaker vessels, there were no other indications of Bronze Age activity on the site. The evidence for continued links between the Neolithic and the Bronze Age are lost, if indeed they ever existed. The preservation of Iron Age material was such that if the site had been settled in the Bronze Age, some evidence would have survived. The amount of modern comprehensive information on other Bronze Age monuments such as settlement sites, cists and burnt mounds in the nearby landscape is sadly lacking. Only the continued use of the Stones of Stenness and the Ring of Brodgar discussed above, is well documented (Ritchie 1976). The Bronze Age setting in Orkney is less clear than that of the Neolithic, and Howe's part in it would appear to be extremely small.