4) A start to the resistivity survey of the site.

March 1975.

Brough of Birsay (NGR HY239285) Excavations and Survey 1975: Interim Report Chris Morris

Excavations and survey took place at this site on behalf of the Department of the Environment (Scotland), and Durham University Excavations Committee, for a period of 3 weeks, with some post-excavation work immediately following in Durham and Bradford Universities. The operation was directed by Mr. C.D. Morris of the Department of Archaeology, Durham University, and Mr. J.R. Hunter of the Undergraduate School of Archaeological Sciences, Bradford University. Staff and volunteers came mainly from these two universities, with individuals also from London and Gothenburg Universities.

Excavation took place in two areas: an area adjacent to that excavated in 1974 to the west of the Cathedral, and an area to the north of the Cathedral on the cliff-edge, which began a new phase of excavation in this area of the site.

The area to the west of the Cathedral.

Within this area, excavation was carried out in House L, and areas to the west and south of it. Also some excavation continued in House N, and an area to the south of it. As with House N, the inside of House L was found to have been largely cleared in the pre-war work. However, it was possible to note one or two features — notably the shadow of the upright slabs of a bench along the north side of the building, and extending eastwards for approximately 3.30 metres from the western wall. No clear evidence was recovered for a similar bench along the south wall, although it should be noted that it was recorded in 1939 by William Henderson, the Foreman. "The Signs of occupation at a slightly lower level" there recorded, unfortun-

ately, seem to have been removed, but it is apparent that the building underwent at least one rebuilding phase. Originally the building was some 10 metres long externally by 6 metres wide with walls generally about 1 metre thick – although clearly thicker at the west end, and probably also the east end. These walls were curved at the east and west ends. At some stage the east wall was replaced by a somewhat thinner and straight wall, which cut the house down by some 2 metres in length. An entrance through it was noted; this had been later blocked by There was also a wider entrance through the a large stone. south wall, but it is difficult to tell whether this was a primary There was apparently no paving outside the entrance. feature. Around the external walls of the building was a 'gulley' approximately 75cms. wide, and this has been partially excavated in It had no outlet, and so seemed unlikely to be a drain. 1974. It is conceivable that it both marked out the shape of the house before building, and also was dug to provide grey clay for a base for the walls - which again were of earth with a stone facing on either side. (There is merely a band of natural grey clay c. 10cms. deep at this point of the site, above a much sandier band). After extraction of the clay, the gulley would appear to have been refilled with dark earth, small lumps of grey clay, and stones. It is clear from sections dug across the walls of the house that there was a layer of redeposited natural clay at the base of the walls. (It is curious that House L did not have this feature of the 'gulley' around its walls). Above this 'gulley' was a shallow gravel gulley around the walls of the building, and about 30cms. wide, with broken shell, fragments of glass and a fragment of a small crucible.

No significant features were found to the south of the house, except for a large number of small stake-holes cut into the natural clay. These at present do not seem to fit into a coherent pattern, but may do after further work in adjacent areas. To the west of the building a field-drain, repaired twice (once recently in brick presumably by the D.O.E.), was found. Like that found in 1974, it was triangular in section, with a clay seal below the stones at the base. This drain was parallel to that found in 1974, and has now been traced for c. 12 metres. This clearly cuts through an earlier feature, itself cut into the natural clay. This feature, running in roughly south-west to north-east direction to the west of House L, showed clearly as a dark fill, and appears to have had a clay seal. It seems reasonable to interpret it as a drain, although it is conceivable that it was a boundary-ditch. Again this has now been traced for some 12 metres.

Apart from the glass in the gravel gulley, finds were very sparse in this part of the site, and it would appear that if any middens existed in this area, they may well have been cleared in the past.

Two more sections were cut across the walls of House N in order to investigate possible earlier features underlying the walls. Again, shallow features running obliquely, a few postholes, and burnt areas were encountered. One burnt area, stratigraphically earlier than the walls of the building, contained quite an amount of glassy slag, and other evidence of glass or metal-working. Work to the south of this building revealed a complicated series of features that were only partially investigated. They will be more fully investigated in 1976. A little to the south-west, the triangular stone drain found in 1974 was traced for a further 8 metres to the south.

Cliff-area to the north of the Cathedral.

Work commenced on a relatively undisturbed part of the site to the north-east of the cathedral where the remains of three structures were still visible on the cliff edge. These are known as buildings F, P and R. All three had been severely depleted on the eastern side by the natural erosion of the sea.

It was initially hoped that the general layout, structure and function of the buildings could be ascertained. Their separation from the main area of settlement was also problematic. Richardson's excavations in 1938/9, which appear to have been confined to within the standing walls, suggested that metal

30.

working had taken place.

An area of some 150 sq. m. was opened containing the remains of House F and, in keeping with the policy of the excavation, included a large area outside the standing walls. Initial examination of the wall coursing showed that at least three structural phases had taken place causing slight changes in the alignment and thickness of the walling. There was a small extension of the building to the north.

It soon became apparent that we were dealing with a very complex and important area of the site. House F in its latest phase had contained a large rectangular hearth of upright stone slabs. There was no evidence for benches. The entrance from the South was elaborate and almost porch-like in appearance and is unique to the site. The entire building was surrounded by a shallow gulley c. 15 cms. wide containing loose gravel and shell. This final phase had been reached via a variety of structural alterations indicated not only by the thickness and alignment of the walling but also by the presence of a primary entrance to the south-west and by a blocking in the south wall and a structural anomaly in the north wall.

The walling itself consisted of foundation courses of large stones on the interior and the exterior bonded into a wedge of redeposited natural clay. Above this the two sets of facing stones were separated by a fill of thick black soil. There was no evidence for post-holes. Examination of the north wall indicated that there was a further foundation course pre-dating the structure. Further evidence for this was discovered inside the building where a large burnt area containing charcoal protruded from under the south wall. Other earlier features were evident including possible wall lines.

Outside and to the south was a large flattened area of loose stones associated with the house. This contained patches of burning and two open stone hearths. In the pre-house phase were further areas of burning, shallow pits and the remains of possible post-sockets. More unexpected was the presence of a foundation line of faced stones set into the natural clay at a different alignment to the house and presumably relating to a similar feature underlying the south wall.

The finds from the excavation are significant in themselves. There were no artefacts apart from a bronze pin which was discovered outside the house. There were no traces of midden material or animal bone. The finds consisted almost totally of iron slag and fragments of burnt clay some of which appear to belong to oven bricks or tuyeres. There was also a large quantity of indeterminable iron objects, several of which appeared in the redeposited clay of the wall foundations. Charcoal was collected from several places and a programme of environmental sampling was undertaken.

At this stage it would be fair to assume that the smelting of bog iron was taking place, certainly in the later phase. Analytical work is currently being carried out on the numerous slags found.

The dating of House F has not yet been verified. By association with the buildings from the rest of the site and from elsewhere it would appear to be Norse in origin.

Geophysical Survey

A geophysical survey of the entire site was carried out by Mr. R. Walker from the University of Bradford using a fluxgate magnetometer. This was undertaken in conjunction with the general survey of the site already in operation, and the same co-ordinate grid was used in both instances. Some 15,000 readings were taken covering the whole site and including an area to the south of the site where aerial photographs had shown additional structures. The results are being computerised and will be produced as a dot-density plan of the site.

Site Survey

Mr. F. Bettess of Sunderland Polytechnic continued work on the new site-survey and plan, and roughly one-third of the site was plotted. The results are being computerised, and ultimately will be drawn out with the aid of a graph-plotter when the whole site is completed.

Objectives for 1976

- 1) Excavation of the area to the north-east of House N, possibly including House E and another.
- 2) Small-scale work to answer specific questions arising out of excavation in 1974 and 1975 to the west of the Cathedral, and, where incomplete, to finish this work.
- 3) Continued excavation of House F, and possibly also the other buildings on th cliff-edge to the north of the Cathedral.
- 4) Completion of the site-survey.

Brough of Deerness, Orkney (NGRHY 596087)

Excavations 1975

Excavations at this site were directed by Mr. C.D. Morris of Durham University on behalf of the Department of the Environment (Scotland) for a period of three weeks, with some postexcavation work immediately following in Durham, in September 1975. The excavation team was drawn from Durham University, with a Site Assistant from Gothenburg University. It is a pleasure to acknowledge the skilful assistance, especially in transporting huts and equipment to this remote site, of the D.O.E. staff in Orkney, and in particular that of Mr. John Drever, the Foreman. The onset of gales and wet weather, while not prematurely ending the excavation, hampered work in the second half of the excavation, and it will be continued in 1976.