THE BALLYNOE STONE CIRCLE Excavations by A. E. van Giffen, 1937–1938

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I. INTRODUCTION

In the years 1937 and 1938 the late Professor A. E. van Giffen conducted the excavation of the megalithic monument known as the Ballynoe Stone Circle, Ballynoe Townland, Co. Down, with financial support from the Ministry of Finance, Ancient Monuments and Historical Buildings of the Government of Northern Ireland.

The obligation to publish the results of the excavation, incurred by the acceptance of this financial support, was never met by Van Giffen, despite repeated requests. He only sent a couple of preliminary reports to the Ministry. One of these follows below (4.1.).

Professor M. J. O'Kelly, University College, Cork, pointed out the importance of this excavation for Irish prehistory in 1971 to the first named author, who then approached Van Giffen as to the possibility of working out the excavation results jointly. However, Van Giffen himself had already approached the second author with a similar request.

Gathering the pertinent material (correspondence, day notes, drawings, photos, finds¹ and preliminary reports) took longer than anticipated, and the death of Van Giffen in April 1973 brought the plans of joint publication to a close. This must necessarily be reflected in the publication, but we have attempted to present Van Giffen's own observations at the time, giving his original documentation as far as possible. Much to our regret, it proved technically impossible to reproduce the original field drawings (colour pencil on millimeter paper). In re-drawing the plan and the sections for this publication (fig. 2-3), H. Praamstra has tried to reproduce as faithfully as possible the information contained in the field drawings. We hope that it will not be our interpretation which dominates in this publication.

2. BACKGROUND TO THE EXCAVATION

Van Giffen, travelling in Ireland from 20th July to 18th August 1932, first saw the Ballynoe Stone Circle (pl. I) on 15th August. On this visit he also met Miss M. Gaffikin from Newcastle, Co. Down, then an amateur archaeologist. A letter from Van Giffen to Miss Gaffikin reveals that the possibilities of excavating the Ballynoe Stone Circle had already been discussed at that meeting.

In 1937 the plans were realized. Throughout his two campaigns, Van Giffen was constantly assisted by Miss Gaffikin, whom he had asked to act 'as secretary to transact all negotiations and business matters in connection with the excavation of Ballynoe Stone Circle'.²

The excavations took place from 20 to 27th September 1937 and from 7 to 16th June 1938. From correspondence, it appears that Van Giffen considered yet a third campaign to be necessary. In a letter dated 15th January 1939 Miss Gaffikin wrote Van Giffen: 'What remains to be done at Ballynoe? As far as I can remember we have to test for the surrounding ditch, and you said you wanted to look for postholes in the area between the horseshoe of stones and the cairn.'

The excavations were directed personally by Van Giffen, with the assistance of Miss Gaffikin, a friend of hers, Mrs. Anderson, and the latter's son, John. In addition there were some ten labourers under a foreman. Contrary to his usual practice in the Netherlands, Van Giffen did not work with his own foreman/draughtsman, so he himself made the plan, the photographs and the day notes. The sections were possibly drawn by Miss Gaffikin and Mrs. Anderson, who in any case 'finished' them.

3. THE BALLYNOE STONE CIRCLE IN LITERATURE

To date only short reports have appeared concerning Van Giffen's excavations at Ballynoe. Since death has robbed us of the assistance of both Van Giffen and Miss Gaffikin in our reconstruction, and these short reports were written either by Van Giffen or in consultation with him, they will be quoted in full.

They are, in order:

1. By E. Estyn Evans in *PPS* 3, 1937, pp. 453-454.

'Ballynoe Townland, Co. Down. Dr. Van Giffen began excavation on an important site known as the Stone Circle. A ring of standing stones, 100 feet in diameter, surrounds an excentric cairn, oval in shape, retained by a kerb of smaller stones. Work this season has been restricted to a partial examination of the cairn, in which two large marginal cists have been uncovered. They contain incinerated material but their complete examination has been deferred until next year. Three small menhirs were also uncovered, but so far no sherds have been recovered. The excavator regards the site as a 'missing link' between the Henge monuments and certain sepulchral sites in North England.'

2. Idem, PPS 4, 1938, p. 322.

'Ballynoe Townland, Co. Down, Ballynoe Stone Circle. Dr. Van Giffen has continued his work on this site; the excavation of the cairn is now complete and the material had been replaced so as to expose the kerb. One of the two cists uncovered last season was found to be

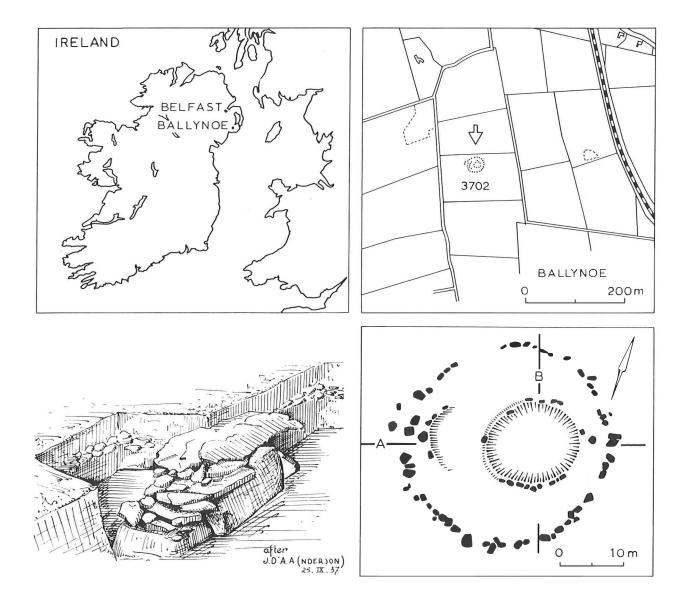
Fig. 1. The Ballynoe Stone Circle; location, general plan with location of the main sections, and sketch of E chamber by J. D. Anderson (1937).

a long segmented structure which the excavator thinks may be secondary. Coarse sherds of developed Neolithic character accompanied small cremation pockets between the cairn and the stone circle, but the cists contained nothing except abundant cremated material. It is possible that a deep fosse surrounds the circle, but tests have so far proved inconclusive. It is hoped that the investigation will be completed in 1939.'

3. In: A preliminary survey of the ancient monuments of Northern Ireland, Belfast 1940, pp. 120-121, pl. 29.

'Ballynoe td, Stone Circle.

About 3 m. S. of Downpatrick and ¹/₄ m. N.W. of Ballynoe Station, from which a lane leads directly to it.



75

Down, Sh. 37, Plan 16, Tr. 2, Alt. 100. This monument is of the greatest importance, as it forms a kind of missing link between the so-called "henge" monuments and the grave mounds. Perhaps the finest megalithic structure surviving in Northern Ireland, it stands in cultivated lowland less than 100 ft. above sea. It consists of an outer ring of massive stones up to 7 ft. in height set in a true circle the external diam. of which is 108 ft. The uprights are irregular in shape and arrangement: they are often in contact but some are collapsed and some apparently removed. They are set in places around a low mound but this may in part not be an original feature. On the W. side are two external uprights 9 ft. from the circle and 7 ft. apart: opposite them, 19 ft. away and inside the circle is a crescent of 5 smaller stones extending for 28 ft. and acting as a kerb to a raised platform which, occupying the rest of the circle, serves to level its interior since the ground outside is sloping down to the W. On this platform, which is 3 ft. high at the W. end, is an oval cairn 48 ft. by 60 ft., surrounded by a kerb 2 ft. high, occupying the E. side of the circle and set on the same axis as the crescent and external uprights. It is 3 to 4 ft. in height. The stones of the outer circle are nearly all composed of local Silurian grit but a few are granite erratics. Two of the fallen stones have large cupmarks, most probably not artificial. Several outlying stones occur near by: while some may be natural boulders, others are set upright. Two on the N. are aligned at distances of 8 and 40 yds. from the circle: and two others on the S. stand at the same distances. Another outlier on the S.W. is 40 yds. from the circle and there are others on the N.W. The cairn was excavated in 1937 and 1938 by Dr. Van GIFFEN and two cist burials found in the edge of the cairn. Except a sherd of early type, nothing was found in the cairn itself. This sherd, so far the only indication of the date of this monument, places it provisionally in the neolithic period. Vested in Ministry of Finance. Plate 29.'

M.G., E.E.E. A. E. van G.³

Van Giffen's excavations are further mentioned in:4. Estyn Evans, *Prehistoric and Early Christian*

Ireland. A guide. London 1966, pp. 94-95.

5. E. M. Jope (ed.), An Archaeological Survey of County Down. Belfast 1966, pp. 87-89.

6. Ancient monuments of Northern Ireland. I. In State Care. Belfast 1966⁵, pp. 44-45.

Reference to a sherd found during the excavation may be found in:

7. S.P. Ó. Riórdáin, Antiquities of the Irish Countryside. London 1953³, p. 90. 8. H. J. Case, Irish Neolithic pottery: distribution and sequence, *PPS* 27, 1961, pp. 174-233, esp. 225.

9. A. Burl, Dating the British Stone Circles. American Scientists 61, 1973, pp. 167-174.²⁴

Finally, in connection with their publication of the Millin Bay Cairn, A. E. P. Collins and D. M. Waterman (1955) discuss Van Giffen's excavation in rather more detail, utilizing all the then available data - i.e. a plan of the 1937 excavation and a few photographs. We shall return to their work later.

4. THE EXCAVATIONS

4.1. THE EXCAVATION IN 1937, A REPORT BY A. E. VAN GIFFEN

By way of introduction we present here a short report written by Van Giffen⁴ in a letter dated 2nd October 1937 addressed to Dr. D. A. Chart, Ministry of Finance, Ancient Monuments and Historic Buildings.

'The preliminary excavation was carried out between September 20th and September 28th using the quadrant method. A cross, oriented to the points of the compass was set out across the centre of the object to be examined with the help of a pantometer or boussole. Our purpose was twofold. In the first place, we wanted to fit the cross into an equally divided square, which enclosed the central part of the monument in the main or entirely, and of which the said cross formed the axes. In the second place, we thought we should be able to fix the lines set out in that manner, and the points more precisely defined on the site with the help of ranging rods, in an existing sketch, which had been placed at my disposal by Miss Gaffikin. It appeared, however, that we could not carry out our second intention, because the sketch was not sufficient to that end. Therefore a new plan of the central part of the monument had to be made, which was done accordingly. On the last day the cutlying stones were plotted. This was then an easy thing to do, because we had not only set out a sufficient number of fixed points on the site, but we had moreover at our disposal a plan of 1 : 2500. Lack of time prevented us from plotting these outlying stones with the central part in the new plan. Meanwhile, from the first day onwards the excavation was begun along the axes outlined in the central part. This consists of

 a) an outer stone circle [= main circle] with a sort of entrance on the W side;

- b) a platform with an arched row of 5 stones [= stone arc] on the same W side inside the outer stone circle, and
- c) an eccentrally situated oval barrow [long cairn] with peristalith, the longitudinal axis of which more or less forms the axis of the so-called entrance mentioned under a and the stone arc mentioned under b.

Because of the short time at our disposal, we did not cause the whole of the SW and NE quadrants to be removed, but only the strips parallel to the axes, three meters wide. In this way we obtained an insight into the structure of the centre of the monument. It appeared to consist of a low barrow which in its turn is formed by a cairn, and a covering layer of stony earth. In some places under the cairn, especially there where there is a slight depression, there is a thin layer of fat clay up to about two cm thick. Contrary to current opinion I do not consider this to be an artificial floor, but interpret it exclusively as a natural infiltration.⁵ It thus constitutes the boundary layer between the artificial barrow and the natural subsoil, the till. It should be noted that the W part of the long cairn was evidently disturbed at some time. In the edge of the long cairn in the central-E and the central-W sections, on the S and N sides resp. a smaller and a larger cist were entirely or partly laid bare. Between the edge of the long cairn and the peristalith there were in the central-N trench two socalled baetyls, in the central-S trench there was only one. These are, therefore, a kind of miniature "menhirs indicateurs", although their meaning as such must yet appear.

The edge of the barrow between the long cairn and the peristalith is apparently a secondary formation, consisting of earth which had come down from the barrow itself. The baetyls, therefore, must originally have stood free between the barrow, which was originally smaller, and the peristalith. Between the long cairn and the till we only found some calcined bones, but not a burial proper, let alone a primary burial. There were no fragments of pottery in the trial trenches. As regards the two cists, the one on the E side was entirely untouched. It consists of two heavy radial side stones, a thin flat tangential closing stone and a large capstone. The entrance is to be found on the outside or W [must be E] side. It is marked by a threshold stone. It was closed by flat stones. In the cist, which contained a layer of earth only at the bottom, there are two floors. Under the secondary one, consisting of a large flat stone, there is a primary interment. On lifting this stone it was found that this interment consists among other things of calcined bones. We did not discover fragments of pottery or other things. Our time was, however, too short to investigate the contents properly. Therefore, we re-

solved to put the stones which had been removed into their original places again. During the final investigation, therefore, it will have to be ascertained what the contents of this cist precisely are. The same holds good mutatis mutandis for the cist, placed diametrically opposite the latter, on the E [must be W] side. This one, it is true, was entirely filled with earth and did not seem undisturbed, but also in this case the earth was only partly removed in order to get a first impression. A great quantity of calcined bones was found in the earth, but no artificial objects. Although only one of the inner peristalith stones was found over the cist [31], its relation and that of this part of the long cairn to the other parts will only become evident during the final inspection. From these results we may, in my opinion, conclude for the present, that the Ballynoe monument dates from the early or middle Bronze Age. It seems to be related to some of the monuments in Wales and S Ireland described by Grimes and O'Neill Henken resp. Other characteristics remind one of monuments in Brittany described by Le Rouzic at Carnac. In my opinion the Ballynoe monument is an extremely important one, a missing link between the typical British henge monuments or sanctuaries, on the one hand, and the sepulchral monument such as Bleasdale in Lancashire and Calais Wold 23 in Yorkshire on the other hand. Therefore, it is at the same time of importance with regard to the problem of the connection between the continental palisade barrows and the British insular "henges"."

4.2. DESCRIPTION OF THE MONUMENT 4.2.1. GENERAL REMARKS

Reference may be made to section 3 and to Collins and Waterman 1955, p. 47, fig. 15, for a general description.

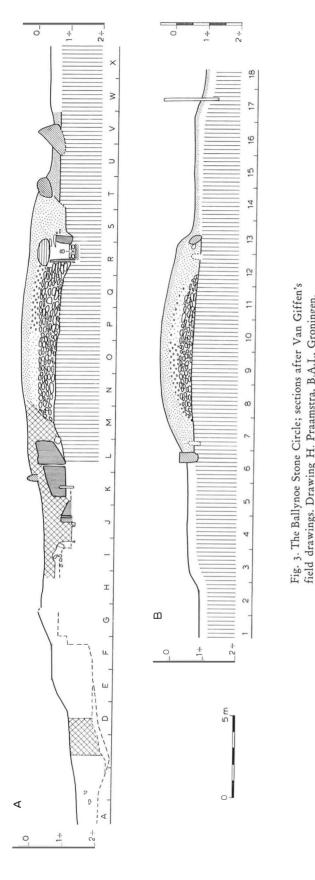
All descriptions published to date are based almost exclusively on the 1937 excavation. The results of the 1938 excavation – essential for the interpretation of this complex monument – have not been included adequately in any preliminary report. Therefore we will first describe the monument with special reference to Van Giffen's own field plan of 1937-38 (cf. fig. 2-3). The interpretation will follow. Both description and interpretation are hampered by the extensive disturbance – possibly due to earlier digging⁶ – of the W part of the cairn, around the W chamber (pl. IIIa). Because of the disturbance it is difficult to establish the original situation with absolute certainty.

The maximum dimensions of the long cairn, as





drawings. Drawing H. Praamstra, B.A.I., Groningen.



established by excavation are L. 21.25 m, W. 9.25 m. The E end appears to be undisturbed. The curious shape of the cairn at the W end is possibly a reflection of disturbances here. Four recesses in the edge of the cairn occur to the N of the chamber and two to the SW.

According to the day notes of 24.IX.1937 the long cairn was composed of both large and small stones. The edge stones were more or less rounded (pl. IIIb) and seem to be indicated on the field drawing by black shading. Though the stones around the entire circumference of the cairn are shaded, including the recesses at the W end, the authors doubt whether indeed the edge was distinguished from the body of the cairn at these points (pl. II, IVa, b, IXb).

4.2.2. THE STONE CHAMBERS (fig. 2-3, pl. Va-Xb)

A small stone chamber (I) was discovered in the E end of the cairn, on the E-W axis of the cairn. The dimensions of the single chamber were, L. 1.00 m, W. at W end 0.75 m, at E end 0.40 m, height from primary floor to lower side of capstone 0.75 m, height from top of secondary floor to lower side of capstone 0.54 m.

Van Giffen describes this chamber in the various day notes as follows: 'wedge-shaped cellar with opening to the E; pretty well empty, below a thin deposit of washed-in earth a lozenge-shaped floorstone [pl. VIIIa] and a few loose stones filling the gaps between the floorstone and the side- and sillstones.' At first Van Giffen considered this to be the primary floor. But on the instigation of Miss Gaffikin and Mrs. Anderson the large, 0.15 m thick floorstone was lifted, to reveal another floor consisting of gravel 21 cm below (pl. VIIIb). The secondary floorstone lay on three large flat stones set on the primary floor.

The chamber was constructed of four sidestones (pl. VIIIa, b) partially covered by a large capstone which projected over the backstone to the W (pl. VIb, VIIa), leaving part of the E end uncovered (pl. VIIb). This part was roofed by three oversailing blocks (pl. Vb, VIa), a sort of corbelling, but which did not act as supports for the capstone.

A long segmented chamber (II) consisting of three compartments, from E-W, segments 1, 2 and 3, divided by septal slabs, was located in the W end of the cairn. All the capstones were missing.

In the day notes we find: 'in the chamber N of the central-W section much loose clay, containing quantities of calcinated bone. Capstones missing. A peristalith stone in or on top of the chamber fill (stone 31) must be in a secondary position'.⁷

This W chamber (pl. IXa, b) lies only partially on the W-E axis of the long cairn. Its W end is set at a slight angle to both the E end of the chamber and the cairn as a whole. The E compartment, segment 1, is formed by a chamber 3 m long, 0.80 m wide. Stone 44 has a maximum heigth of c. 0.85 m (height of chamber?). The dimensions of segments 2 and 3 are L. 1.50 m, W. 1 m, while the height can no longer be reconstructed. Only one of the sidestones of these two segments - that in the S wall of the middle compartment - remains, but the position of the sidestones of the westernmost segment no. 3, could be traced in the soil. The floor of the easternmost compartment was covered with several large flat stones (pl. Xa, b). There is no record of these having been lifted in the day notes, but Van Giffen does mention 'a great number of bones below this [i.e. W chamber] at the bottom of the prehistoric floor'. However, this could just as well refer to segments 2 and 3, which do not appear to have had floorstones (see further under finds no. 9).

4.2.3. THE BAETYLS

(fig. 2, pl. IIIb, IVa, IXa, XIa-XIIb)

On the NE side and then again S of the E part of the long cairn, five boulders were noticed. A sixth may lie in the NW quadrant (stone 30). These boulders, which Van Giffen called 'baetyls', 'baetylstones' or small 'menhirs indicateurs' (*cf.* G. & V. Leisner, 1943, pp. 481-483), are usually round or egg-shaped stones of a kind still to be found in large numbers around the Irish coast, well rounded and polished by the erosive action of sea and sand (pl. XIa). Their position is described in the day notes as follows:

1. In the notes for 21.IX.37 we read: 'in NE quadrant 1 m wide trench dug along the axes; in SW quadrant only along N-S axis, in central-N trench a "beatyl".' (pl. XIb right).

2. Further on in the same notes there is mention of *both* baetyls⁸ (pl. XIb) though no. 2 (pl. XIb left) is not mentioned explicitly. On 24.IX.37 it is stated that it is not yet certain whether the hollow by the E baetyl (i.e. no. 2) is man-made or not.

3. Still in the notes for 21.IX.37: 'in central-S trench same circumstances, but no pits and not progressed as far. In central-E trench, as in central-N and central-S trenches, but no baetyl.' [As in both other trenches?]

4. In the day notes for 9.VI.38: 'In SE quadrant a baetylstone is appearing outside the peristalith.' (pl. XIa, XIIa); in addition in notes for 10.VI.38: 'the baetylstone apparently leans outwards due to stone 10 which seems to have fallen inwards. The baetylstone would thus seem to be primary here. Is the peristalith secondary?'

5. Also in the notes for 10.VI.38: 'In the afternoon a splendid bactylstone appeared under one of the peristalith stones [stone 21] in the NE quadrant on the NE edge.' (pl. XIIb).

6. On 13.VI.38 Van Giffen writes: 'in the early afternoon I saw a new baetylstone'; and further on: 'in NW quadrant a sixth baetylstone.' (= stone 30, pl. IVa left and IXa left). The distance between these six baetyls and the edge of the long cairn is from the baetyl S of stone 25, clockwise, 1, 1, 1.2, 1.7, 1.6, 1.6 m.

4.2.4. THE SECTIONS (fig. 1, 3, pl. XIII)

Information in the day notes pertinent to the makeup of the sections is: '21.IX.37, virgin soil consists of a sort or loam with gravel; 23.IX.37, under long cairn a deposit of fatty clay, in my opinion an infiltration, not a deliberate floor level;⁹

24.IX.37, to sum up, it seems that the clay deposit is layered,¹⁰ and occurs more thickly on sloping terrain, though it is by no means present everywhere; I indeed consider it to be an infiltration deposit. Below this, an old surface level, the humus level, darker in colour towards the top. Deeper down, below the humus level is moranic material (the subsoil is Ordovician).'

Description of N-S section¹¹ (fig. 3, pl. XIII).

The long cairn, measuring 8.85 m wide and 0.42 m high, and built of large and small boulders (pl. XIIIa) was constructed on the undisturbed virgin soil. In the centre the stones are covered by a deposit of 'gravel' (according to Van Giffen, *i.e.* soil containing many small stones), some 0.32 m thick. The whole, between the S and N side of the

peristalith, is covered by a c. 0.50 m thick layer of humic soil (pl. XIIIb). According to Van Giffen: 'A sort of platform seems to be indicated around the peristalith extending out to the main circle? It is uncertain whether we are here faced with a primary or a secondary feature – since it might just as well be material eroded from the barrow within the peristalith.'

Description of E-W section¹² (fig. 3).

In general, similar to N-S section. The gravel deposit runs up against the top of the capstone of the easternmost chamber forming an even surface with it. Since the eastward continuation of this section beyond the chamber was not left standing during the excavation, this part remains somewhat uncertain. Loose soil said to occur between the peristalith (stone 18) and the main circle suggests that stone 18 may not lie in situ. As was mentioned above (4.2.1.). there is evidence of recent disturbance S and E of the W chamber. On pl. IIIa, an excavation from the present surface is clearly visible right of the most E sidestone (stone 44). Consequently the relationship of the long cairn to the chamber could have been observed only on the N side – and here there is no section. As far as may be deduced from the photographs (pl. IXa, b) the top of the long cairn extended at least up to the top of the sidestones, as was the case at the E chamber. Both the E and the W chambers were clearly sunk into the original ground level.

Van Giffen had another trench, some 12 m long, dug in continuation of the E-W section in a W direction (fig. 3) In it, it can be seen that the terrain gradually slopes away to the W. The depression in the old surface level between 23 and 28 m W of the assumed centre of the cairn was considered by Van Giffen to be a deliberate excavation, perhaps extending right around the monument. Statements in the day notes relevant in this connection are:

'9.VI.38, trench to continue last year's section S of central-W axis, begun; continued over stone arc to completely outside monument. In the continuation of the E-W axis a sort of ditch seems to be appearing outside the main circle;¹³

10.VI.38, interesting to note that a ditch is indeed coming to light in the trial trench (0.50 m wide) extended W. A stone on the E [should be W?] face of the ditch talus. This stone seems to correspond to a shallow depression which may be followed right around the monument, about 5 m out, except on the N side where there is a field boundary. The menhir in this wall seems to stand on the outer edge of this ditch, just as the SE stone. Odd then, that both outliers, N of the E-W axis should be placed just in the peripheral ditch. Or is there an entrance here?

11.VI.38, the encircling ditch beyond the main circle searched for, but not yet clearly visible;

14.VI.38, the W ditch seems to argue for natural infill, stony material on gravel or loam.' Does Van Giffen mean the filling of the ditch discovered in the W trial trench here?

4.2.5. THE PERISTALITH (STONES 1-29), THE MAIN CIRCLE AND THE OUTLIERS (fig. 1-4, pl. XIVa)

For a description of the peristalith, the main circle and the outliers (fig. 1, 4 -all accurately surveyed by Van Giffen – see Collins and Waterman (1954, p. 47) and Jope (1966, pp. 87-88, fig. 58-59). We will restrict ourselves here to a few additional facts revealed by the field plan which would seem to be necessary for an accurate interpretation.

1. Peristalith and main circle are not concentric. 2. The peristalith is not concentric to the long cairn, and would seem – considering the position of stone 29 (pl. IXa, XIVa) – to be of secondary construction.¹²

3. The position of stones 10 and 21 of the peristalith is secondary to two baetylstones.

4. Stones 2-14 of the peristalith seem to stand in a straight row instead of being curved as would be expected of the arc of a circle.

5. The position of stone 18 is uncertain in view of the recent (?) disturbance E of it.

6. The line that bisects the chord of the arc described by the five monoliths at the W end of the cairn meets the E-W axis of the long cairn at an obtuse angle. We shall return to this fact, and to the two orthostats lying WNW of the E-W axis directly outside the main circle, later.

7. The stones of the peristalith are dug into depths varying between $\div 0.90^{15}$ (stone 10) and $\div 0.67$ m¹⁶ (stone 17). The variation in the real height of the stones is much greater but, with the exception of such small stones as 8, 13 and 15, all stand

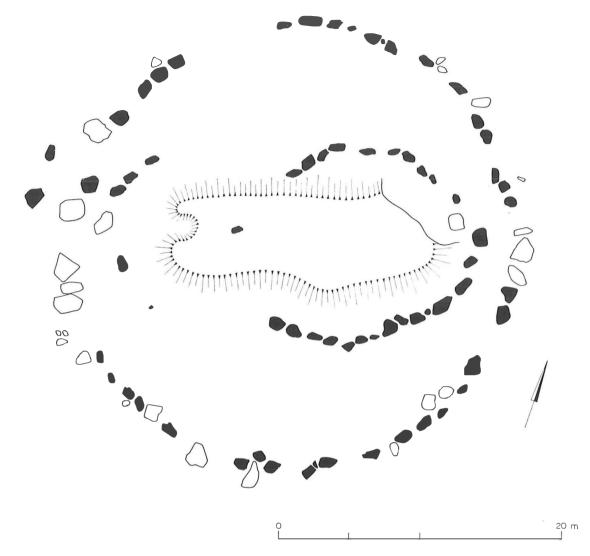


Fig. 4. The Ballynoe Stone Circle and two of the outlying stones. After Jope, 1966, fig. 58. Drawing I.P.P., Amsterdam.

over 50 cm. The foundation depth for only three stones of the main circle is known: I \div 0.77 m, II \div 0.87 m, III \div 0.85 m (fig. 2). The edging stones of the long cairn lie at c. \div 0.70 m, which means that the peristalith stones and the stones of the main circle are not dug in very deeply.

8. Only stone 22 seems to have a sort of stone packing. In a few cases the socket was larger than the stone itself: this could be either primary to facilitate positioning or secondary due to displacement or rolling aside.

9. Baetylstone no. 11, 35 cm long and sunk to \div 0.82 m must have projected some 23 cm above

the old surface level. The measurements for the baetyl under and against stone 21 are 37 cm high and sunk to \div 1.02 m. Since the edge of the cairn is here somewhat lower, c. \div 0.75 m, this baetyl must originally have protruded only about 10 cm, or has it been depressed by stone 21? According to the N-S section (fig. 3) the baetyls in the NE and SW quadrants also protrude some 20 cm above the old surface.

10. Van Giffen also recorded the stones 8 and 15 and the stone sockets directly E of stone 35, N of stone 18 and between 16 and 17 in addition to those illustrated in fig. 4 (after Jope, 1966). 11. The 'cup-marks' on some of the stones (*e.g.* stone 17, pl. VIIIa) cannot be regarded as man-made.

4.3. CREMATION POCKETS

Outside the long cairn, more or less following its margin, several cremation pockets and charcoal patches were found. Van Giffen doesn't describe these pits and patches systematically in his day notes, but most of them are mentioned in connection with finds, *i.e.* nos. 2, 3, 6, 7 and 10. About 1.5 m E of find number 10 (fig. 2). Van Giffen indicated on the field drawing, between $0.70 \div$ and $0.90 \div$ a 'little hearth', but gives no further description.

5. THE FINDS (fig. 2, 5; pl. IVb, XIVb)

5.1. LOCATION AND REGISTRATION OF THE FINDS

Mention of the finds, consisting chiefly of cremated bone, occurs in the following day notes (the find numbers are indicated on the plan, fig. 2).

'23.IX.37, in NW edge, large stones against which many burnt bones.

24.IX.37, NE quadrant now cleared. In centre a few bones (see no. 0). After this, the SW quadrant cleared as much as possible but only a 1 m wide strip along central-W and central-S section done. Here also a few burnt bones found halfway between the cairn edge and centre of central-S cutting [also no; in gravel layer, not belonging to peristalith?].

25.IX.37, NE quadrant further cleared and the chamber in the S section of central-E axis inspected. The chamber is pretty well empty and under a thin layer of washed-in soil is a lozenge-shaped floorstone, a few loose stones which fill up the area between it and the side- and sillstones. On and between these a few charred bones.

27.IX.37, floorstone E chamber lifted with lever. Underneath a primary interment.

7.VI.38, in SE [must be SW] quadrant found: 1) [fig. 5] rim sherd with Peterborough type decoration comparable to 1) no. 174 from Moytirra, a megalithic monument from which also a Bell Beaker sherd.¹⁷ Items in Dublin Museum; 2) Lough Crew sherds, *cf.* Gordon Childe; 2) charcoal with flint scraper $0.75 \div;$ 3) cremation on flat, inside sloping stones. Both (2, 3) in SE [should be SW] quadrant $0.90 \div$. [Thus dug in, for old ground surface seems to lie at c. 0.70-:- cf. level of cairn edge.]

9.VI.38, in NE quadrant found no. 4 on the till a flint scraper cracked by fire. Depth 0.80-:-.

13.VI.38, continued in NW quadrant. Here cremated bones (no. 5) on the top of the stone cist and scattered around it.

14.VI.38, NW quadrant cleared further and partially mapped. Two burnt patches and a cremation found.

15.VI.38, E chamber cleared. Theso-called floorstone raised. Afterwards, bones underneath (no. 8). The W chamber now clear. Under this very many bones, in the bottom of the prehistoric floor.

No. 6, 0.76-:-, burnt path (sample);

No. 7 [pl. IVb], 0.86-:-, large numbers of bones¹⁸ in small stone packing;

No. 8, bones (cremation) from underneath the stone floor in the E cist;

No. 9, bones from the most W cist, above the stones. No. 10, sherds.'

With the exception of no. 0, all the find numbers are noted on the excavation plan (fig. 2). Here follows a brief description of the find spots.

No. o. The place where the bones were found in the central-S section is recorded on the field drawing of the N-S section (= 'kleine beentjes' in N-S section).

No. 1. In SW quadrant c. 0.75 m N of stone 6 (pl. XIVb).

No. 2. As no. 1, c. 0.25 m N of stone 6.

No. 3. In SW quadrant c. 4 m NW of stone 6, c. 0.50 m S of edge of long cairn.

No. 4 In NE quadrant, c. 1 m NE of stone 20, between peristalith and main circle.

No. 5. Between (on) stones 42 and 45 of the W chamber.

No. 6. In NW quadrant, halfway between stones 30 and 32, c. 0.75 m N of the edge of the long cairn.

No. 7. (pl. XIVb). In NW quadrant, c. 2 m W of no. 6.

No. 8. In E part of E chamber (at least, the number is written there).

No. 9. Directly E of stone 40 of the W chamber.

No. 10. In NW quadrant, c. 1 m E of stones 33 and 34 (pl. IXa below left, near group of small flat stones).

5.2. ARTIFACTS

Three sherds were examined by the first named author in the National Museum, Dublin (see note 1). A box marked 'POTSHERDBALLYNOE, CO. DOWN' contained the sherd illustrated by Collins and Waterman (1955, pl. XV: 3; fig. 5) and described by them as (p. 44) "a rim sherd of thick black flaky ware, similar in texture to the Millin Bay bowl, but from a pot with an in-turned rim and a pronounced bevel on the outside of the rim (pl. XV: 3). Decoration is by stab-and-drag with a broad-pointed tool, perhaps the end of a small bird or mammal bone. The lines of stab-and-drag run

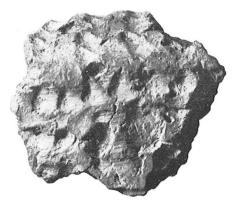


Fig. 5. Find number 1 (cf. fig. 2 and pl. XIVb) found in SW quadrant. Rimsherd, scale 1 : 1, photograph Department of the Environment, Belfast.

across the rim but are arranged zonally on the body of the pot. The rim form, though, of course, widely differing from the Millin Bay example, is quite closely matched at Loughcrew and at Fourknocks 2." Marked in pencil on the sherd is 'Ballynoe I'. This is undoubtedly our find number 1 (*cf.* Van Giffen's description in the day notes for 7.VI.38).

Another box, on which was written "Ballynoe 1938", contained two sherds, one thin walled, of the same fabric as no. 1 and perhaps bearing a single impression, the other rather thicker walled.

Are these the sherds of find number 10? In the same box there were also five pieces of flint, a round nodule with cortex, a flat piece with a drilllike point but without retouch, and three flakes – along with two pieces of natural stone, one of which was quartz, two pieces of cremated bone and two fragments of porous, badly preserved unburnt bone. The scrapers listed as nos. 2 and 4 were not present in the box.¹⁹ 5.3. BONES

For analysis of the cremated remains see B. K. S. Dijkstra, 1976. It proved to be impossible to correlate Van Giffen's list of cremated material with the general find list. He describes them as follows: 'I. Bones cist I

2. Contents of cist II

3-5. Contents of cist II \int = Dijkstra A-D

6-7. Bones surrounding cist II

8-9. No. 2

10. Bones in 'oerzand' [is iron pan material meant?].'

However, in an attempt to make a certain correlation the following possibilities arise:

Bones 10 = find number 0?

Bones I = find number 8 (from under and above the secondary floor?)

Bones 2, 3-5 and 8-9 = find numbers 5? 9?

Bones 6-7 = find numbers 3? 5? 7?

The only firm identification would seem to be Bones no. 1, since Van Giffen mentions cremated material from chamber I only under find number 8. Valuable information concerning the exact contents of chamber II, the cremation pockets in and around the cairn and the separation of material by the secondary floor in chamber I has been lost due to careless treatment in the field (such as muddling with different numbering systems).²⁰

6. INTERPRETATION²¹

The structure at Ballynoe, consisting of two excentric stone circles and a cairn with two chambers, should be viewed as an extremely complex, multiperiod monument. It is difficult to judge how many periods are concerned. The comment in the day notes for 9.IV.38 (see 4.2.3.) indicating that the idea of a multi-period monument had already occurred to Van Giffen.

What is the evidence for multi-periodicity?

1. The main circle and peristalith are not concentric.

2. The main circle is not concentric to the long cairn.

3. The peristalith is not concentric to the long cairn.

4. The W compartments of chamber II do not lie in line with the E part and with the E-W axis of the long cairn.

5. The position of the baetyls in relation to the

long cairn and the peristalith respectively.

6. The stones 2-14 of the peristalith stand in a straight line, seemingly to avoid baetylstone 11?7. The position of stone 29 in relation to the long cairn.

There are, thus, two aspects to the problem: 1) in how far the above points can be related to one another in a hypothetical building succession, and 2) which elements could be contemporary.

A single unit seems to be formed by

I. the long cairn and the E chamber (I) with the E end of the W chamber (II) which all lie on the same axis;

2. the baetyls, three 22 set on equal distance away from the N side of the cairn edge and two from the S edge but set a little further out than those to the N (1.1 m and 1.6 m resp.).

The peristalith is secondary to this construction because

1. it is not concentric to the long cairn;

2. the position of stones 10 and 21 is secondary to the baetyls;

3. the position of stone 29 is secondary to the long cairn.

However, the possibility that the E chamber may be contemporary with the peristalith still remains but it is not very probable, because of the extension of the gravel layer to the top of the capstone and not beyond it. In a previously published section (Collins & Waterman, 1955, fig. 16) this point is not clear, because of a misinterpretation (in the drawing office or by Van Giffen himself?) of the field drawings. Above the cairn *s.s.* there are two separate layers indicated in the field drawings, which are not to be seen on the section as previously published. A separate, secondary (?) construction seems to be formed by

1. the extension of chamber II to the W, not in line with its E end (cf. Corcoran, 1973). During excavation no periodicity was observed in the cairn body itself, neither is anything visible on the photographs. Consequently, just how the extension of the cairn to the W should be visualized is problematical;

2. the stone arc to the W of chamber II, since the axis of the W compartments of this chamber bisects the chord of the stone setting;

3. the two outliers W of the stone circle which flank an extension of the axis of the W compartments of chamber II and the stone arc before it.

Concerning the position of these two outliers in relationship to what he took to be a ditch, Van Giffen wrote in the day notes for 10.VI.38 that these stones either stood in the middle of the ditch or that there was an entry (causeway) here. In the former case (stones in the ditch) the ditch will not have belonged to this phase but would have been primary to the outliers. On the other hand, in the latter case, it may be assumed that the ditch, with the W part of chamber II, stone arc and two outliers were contemporary. Should, moreover, the ditch prove to be concentric to the stone circle, then the possibility of contemporaneity between this circle and our second phase arises. It may be pointed out that the stone circle, and long cairn with stone arc together do form a symmetrical figure, *i.e.* an oval construction within a circular setting. The causeway would, in this case, be formed by six stones (fig. 2): the two W outliers, stone 36 and the stone to the SW of it, both in the main circle, and stones 34 and 35 of the stone arc. Just how the position of the peristalith should be viewed in relationship to the 'second' phase, cannot be determined on present evidence.

The mound will originally have extended E-W from chamber to chamber and N-S not beyond the cairn (i.e. the pebble mound) and the baetyls will have been visible. The barrow was extended later, and was surrounded by stones which formed a kerb for this secondary - or tertiary - structure. Seen in this light, the note on p. 47 of Collins and Waterman (1955) becomes clear. "The survey on which the plan, fig. 15, is based was carried out in September, 1954. The mound now extends considerably beyond the stone kerb on the west, as shown, but it seems certain that this prolongation is not an original feature and must be due to the dumping of spoil from the excavation ... Professor E. E. Evans informs the writers that prior to the excavation the mound, as might be expected, did not extend beyond the limit of the stone kerb."

The question is what is understood under "an original feature". In our opinion, the "now extended mound" was the most original feature, and the mound edged by the peristalith was certainly a secondary one, and, therefore, being the latest structure, remained more clearly visible. The platform with an arc of five stones on the same W side inside the main circle, of which Van Giffen wrote (see 4.2.4.) belongs to our postulated 'second' phase, and may have served as a sort of revetment at the W side of the extended E-W structure.

Dating can only be based on a typological analysis of the various construction elements, since no charcoal has been preserved for C14 dating, and the scanty sherd material, while associated, need not be contemporary with one of the above described features (cf. finds 1 and 10).

Drawbacks to the sole use of typology for dating purposes are firstly, that very few megalithic monuments in the British Isles have been subjected to C14 dating and secondly that few such monuments have been so extensively excavated that the relationship between the construction elements is in any way certain.

In almost every case, a megalith classified by its visible characteristics has had to be reclassified after excavation (*cf.* Henshall, 1974, p. 143).

Jope (1966, p. 15) distinguishes five types of megalithic monuments in Co. Down: long cairns with galleries and forecourts, remnants of possible round cairns containing passage-graves, round cairns normally containing closed short cists, dolmens and standing stones. He is unable to classify four monuments, Ballynoe Stone Circle being one of them. However, now that different phases have been distinguished in the monument an attempt will be made to place it.

Burl's study (1973) is the most useful reference for the stone circle. The Ballynoe circle belongs to the $6^{0}/_{0}$ with a diameter of more than 100 ft (c. 30 m); in addition, the stones are imposing, being in most cases more than 3 ft (c. 0.90 m) high. On the basis of such typological criteria, a couple of C14 dates ²³ and find associations, Burl concludes that circles with a diameter of more than 100 ft and with stones more than 3 ft high, belong to the earliest phase of stone circles, his phase A, which he dates between 2600-2100 b.c., with a continuation in phase B (2100-1600 b.c.). $65^{0}/_{0}$ of these large circles lie "within the Atlantic province, along the western coasts from southwest Scotland to Cornwall, especially in the southwest peninsula."²⁴

With at least five outliers, this monument would seem to be well suited to a Thom-style analysis (1971), but we leave this to someone more competent.

Collins and Watermann considered that there were several points of resemblance between Ballynoe and the Millin Bay cairn (1955, pp. 49-56), which is also one of the four megalithic monuments in Co. Down which Jope (op. cit.) was unable to classify. To a certain extent the comparison is valid, though neither of the earliest chambers at Ballynoe are in any way similar to the long narrow cist of Millin Bay, and inhumation does not seem to occur at Ballynoe. On the other hand, relationship is indicated by the situation of the monument, the oval shape of both cairns, the stone circles, the semicircular stone setting on the N side at Millin Bay, on the WNW side at Ballynoe, the numerous stone cists below and around the cairn at Millin Bay and the cremation pockets at Ballynoe, the stone settings around the cairn (Van Giffen's "baetyls") and the inner stone setting at Millin Bay (= kerb at Ballynoe?). The similarity between a few sherds from Millin Bay and one of the Ballynoe sherds, pointed out by Collins and Waterman, is noteworthy here. Collins and Waterman considered the semicircular stone setting at Millin Bay to be a Carlingford style feature, analogous to the forecourt. Here, we may call attention to the similar setting at the horned cairn at Shanballyedmond, Co. Tipperary (O'Kelly 1958a, cf. also 1958b). The 'second' phase of the Ballynoe monument would in this case have consisted of a segmented gallery grave with a Carlingford style forecourt. We are then faced with a three-chambered gallery, the least common type of court cairn. However, the three chambers may be explained by the two phases in this W chamber. A two-chambered gallery was in fact built onto the pre-existing E compartment of chamber II, thereby extending it into a multi-compartment burial chamber. This is quite in agreement with de Valéra (1960, pp. 23-24) who sees the origin of threechambered galleries as the result of exceptional circumstances. The separation of the chambers is not in the Irish fashion, with jamb stones and sills, but in the Scottish and Isle of Man tradition with slabs placed on edge across the gallery, cf. Ballyalton, Co. Down (Jope 1966, p. 17 and 72, fig. 12). There is no evidence for blocking of the entrance.

Stone circles would not appear to be a normal

feature of long cairns with a forecourt. It is impossible to say whether the main circle forms in itself a completely separate monument. One could also think in terms of a combination of the main circle with the numerous cremation pockets and charcoal patches within it (cf. a similar suggestion for Millin Bay by Collins and Waterman (op. cit., p. 53), who here recall similar features in class I henge monuments). Whether such a feature should precede or succeed the cairn itself cannot, at the moment, be established, since all the cremation pockets seem to lie outside the cairn body.²⁵

7. DISCUSSION

7.1. COMMENTS BY DR. G. EOGAN (16.XII.1975):

From the report it appears that the primary monument is the long cairn. If this can be accepted then other things fall into place. In this country long cairns are court cairn monuments and the W chamber should be considered as a chamber of such a tomb type with three or probably four segments. The incompleteness is due to the disturbance as is noted in the report. And could the arc of stones be nothing more than displaced court stones? The 'kink' in the gallery is a perfectly normal feature if there are more segments. The only reason that one might be hesitant about the court cairn view is the orientation. Court cairns with an opening to the W are rare, probably even otherwise nonexistent in Co. Down. But what about the E chamber? Could this be a large end subsidiary chamber (another rare feature) or could it be the last remnants of another gallery. In other words was Ballynoe originally a dual court cairn?

In trying to answer this question another one must be raised. Could the E chamber be a secondary insertion and if so could it have been the chamber – very small admittedly – of a simple passage grave, the passage of which no longer exists and of which no traces were found during the excavation?²⁶ Apart from the shape of the chamber there are two other aspects that might support this idea. One is the kerb (peristalith) and the apparent secondary mantelling which goes with it and covered the E end of the long mound. The other is that sherd of Carrowheel pottery from the SW quadrant. On this hypothesis we start off with a court cairn and later a passage grave but there is a third monument to be accounted for – the main circle. Our knowledge of the stone circles of Ireland – either typologically or chronologically – is not great, but what we have suggests that they are Early 'Bronze' Age in date. At Ballynoe the building of the stone circle may have been an event of post megalithic tomb times. Stone circles around megalithic tombs are known elsewhere. Newgrange is possibly the best example and with all the Beaker material there is a good chance that it was Beaker people who built that circle. The asymmetry at that site may also be noted.

Like Newgrange the outer stone circle at Millin Bay could have been an addition. The character of its stones differs very much from those used in the tomb – an abnormal type of passage grave. And the cremation pits at Millin Bay could go with the stone circle. At least quite similar pit burials have been found at Monknewtown, Boyne Valley, in a Beaker structure.

7.2. ANSWER TO DR. EOGAN

It is rather unlikely that stones 32-35 and 38 are displaced court stones. Van Giffen found only one stone socket in the area W of the W chamber. If there had been a complete structure formed by these stones Van Giffen would certainly have found the sockets. The same holds true for a possibly destroyed passage E of the E chamber.

We do agree with Dr. Eogan that the peristalith served as a kerb for the secondary mantelling of the E end of the long cairn (see 4.2.4. and 4.2.5.). The interpretation of Dr. Eogan concerning the dating of the main circle is contrary to the opinion of Burl (see note 24), who is, however, very cautious. See also the comments made by O'Kelly below.

7.3. COMMENTS BY PROFESSOR M. J. O'KELLY (letter dated 14.I.1976)

There is no doubt that the monument is a complex multi-period one and my guess at the sequence of events in it is as follows.

1. The outer stone circle and the possible ditch outside it form the primary monument. One could call this a henge (see Fahy, 1962). The Newgrange external peristalith (the Great circle) is not concentric with the kerb of New₇ grange. If it ever were a complete circle (and I have not been able to *prove* that is was), it is likely to have been the *first* monument on the site (I haven't been able to prove this either!). It is possible that the missing stones were taken for use in the kerb of the passage-grave mound. The socket of *at least one* missing peristalith stone had been filled in by the time the Beaker people came and squatted over it.

The outlier stones need not be contemporary with one another and may have been set up at any time. If the W pair are in the line of the ditch and do *not* flank a causeway, they should then be *later* than Phase I.

2. Phase II was the building of the E part of the cairn mound with the E cist. This was a short oval. It lies on a turf-layer (Van Giffen's 'thin layer of fat clay') chemically altered after the building of the cairn. This turf was the vegetation-grown floor of the Phase I stone circle. This cairn mound had a kerb (= peristalith). The kerb may have been continuous around the W side of the Phase II cairn mound and cist. The baetyl stones were hidden by the stone and earth upper layer of the mound which runs out to peristalith (see Collins & Waterman, 1955, p. 48: 'Inspection of the available sections of the mound, however, seem to suggest that the whole of the structure is contemporary, but to disagree with the excavator's interpretation would clearly be unwise in the absence of full details').

3. In Phase III a single-cell cist was added on the W edge of the cairn mound and the peristalith/ kerb was disturbed and extended westwards to include the cist into the cairn mound.

4. In Phase IV a two-compartment cist was added on to the W single-cell cist, but not quite in correct alignment. The cairn mound was again extended (Van Giffen's 'platform', which runs out to the stone arc. This is all that remained of the base of this part of the cairn extension) and the stone arc was added as a kerb for this extension. This cairn with the added cists and extensions of the covering mound belongs probably to the Bronze Age Food Vessel type of burial cult (see Waddell, 1970). 'Thus the cairn mound becomes a sort of multiple cist cairn' – a reasonably well-known type of Irish Bronze Age monument (Waddell, op. cit., pp. 100-101; see also O'Kelly, 1952, and note the extension of this site to contain added graves to be dated now in the early Bronze Age).

The sherd of decorated pottery is almost certainly a piece of Carrowkeel ware. In a recently excavated 'henge-like' monument (henge-like because there was no ditch internal or external, (see Sweetman, 1971; 1976) a complete Carrowkeel ware bowl containing a human cremation was found. I assume that the Ballynoe sherd belongs with the primary main circle. In other words we should not now be surprised at occurrences of Carrowkeel pottery with monuments other than passage graves.

O'Kelly denies absolutely the relationship between the three-chambered $\forall zist$ at Ballynoe and threechambered court cairns, just as a link between the stone arc and the court of a court-cairn, either at Ballynoe or at Millin Bay. He points in this connection to the non-functional arc of stones in mound K at Newgrange, W of chamber and passage and, as these, covered by the first period mound (however; see note 24).

7.4. ANSWER TO PROFESSOR O'KELLY

ad 1. See our suggestions for the completion of Van Giffen's excavations, 7.5. The only reason to see the main circle as secondary to the E part of the long cairn is the supposed connection between the entry through the two W outliers of the main circle, stone 36 and the one S of it (of which only the socket remains), stones 34 and 35 of the stone arc and the direction of the westernmost part of the W chamber. If this relationship doesn't exist, *i.e.* if there is no causeway, which can be proved by excavation, the main circle and external ditch may easily be the primary feature cf. also Burl's ideas, note 24.

ad. 2. The idea of mound with E cist and peristalith being one phase does not hold true, but is understandable because the drawings of both E-W and N-S sections, sent by Van Giffen to Belfast, are not in accordance with the field drawings of the sections (compare, however, fig. 3, especially the N-S sections). The first phase contains a cairn, built of large and small boulders, covered by a deposit of gravel (see 4.2.4.). In the second phase a c. 0.50 m thick layer of humic soil covered the whole between the S and N peristalith stone. In the E-W section the gravel layer extends to the top of the capstone of the E chamber, but not beyond it. We therefore think that the E chamber is an integral part of the first phase of the cairn. Furthermore, it is clear that the peristalith stones 10 and 21 are in a secondary position to baetylstones 11 and the one SW of stone 21 resp. (see 4.2.3. and 4.2.5.). In the drawings sent to Belfast by Van Giffen the layer of gravel is not separately indicated, so it seems that a central cairn was covered by one thick layer stretching from kerbstone to kerbstone.

ad 3. The position of peristalith stone 29 is not understandable if the cairn was extended westwards by disturbing the peristalith (see note 14). Furthermore, no stone sockets were found between peristalith stone 6 and the S edge of the long cairn. Van Giffen, being a very keen observer in the field, would not have missed these, if they had been there.

ad 4. The idea that both the E and W chambers are Bronze Age cists (single and multiple) implies that first the E chamber and the various phases of the W chamber in each phase were covered totally by a mound. In a sketch plan made by O'Kelly with the succession of the different phases, all the cists are placed *inside* a mound, not at the edge. This is certainly not true for the E cist (see also ad 2) and for the W cist it can't be proved that the cairn ever extended more to the W than we see now in fig. 2. This means that the interpretation of the chambers as Bronze Age cists seems unlikely, because these never occur at the margin of a mound.

The lack of proper materials with which to date the several phases (which?) of the Ballynoe monument, either by associated finds or C_{14} has been shown to be a serious drawback in the interpretation of the monument. New excavations will not clear up the problem easily, because it will be very difficult – if possible at all – to take charcoal samples, which would give a unique interpretation.

7.5. SUGGESTIONS FOR THE COMPLETION OF VAN GIFFEN'S EXCAVATIONS

As Van Giffen was himself aware, it is essential to establish the character of the feature which he interpreted as a ditch, and, if his interpretation is correct, to investigate its course and the possibility of there being a causeway associated with the two outliers on the W side of the main circle. Furthermore, there may well be cremation pockets under the long cairn, and charcoal could be collected from the old surface level for post-quem dating. This would, however, involve the total removal of the cairn body where left by Van Giffen. Sockets for peristalith stones are not expected under the long cairn, since this setting is considered to be secondary to the cairn, and Van Giffen did not locate any stone sockets in line with the peristalith in his SW quadrant cutting (pl. XIVb).

8. ACKNOWLEDGEMENTS

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NOTES

- I Several sherds and pieces of flint were examined by the first author in the National Museum, Dublin whilst passing through on 9.IV.72. The finds were brought from Belfast to Dublin especially and Professor M. J. O'Kelly, Mr. L. Flanagan, Ulster Museum, Belfast, Mr. D. M. Waterman, Historic Monuments Branch, Ministry of Finance, Belfast, and Dr. J. Raftery, National Museum, Dublin, are sincerely thanked for their cooperation in organizing the transfer.
- 2 A letter from Van Giffen dated 15th November 1965 indicates that Miss Gaffikin had died previously.
- 3 = M. Gaffikin, E. Estyn Evans and A. E. van Giffen.
- 4 As far as possible in Van Giffen's own words but with correction of the English by the second author and Mrs. C. van Driel-Murray.
- 5 See note 9.
- 6 We read in the day notes for 23.IX.1937 that the edge of the central-W trench consists of stones laid differently to those more to the centre. It seems to be disturbed. The notes for 25.IX.1937 record that the village priest, during a visit, spoke of earlier excavations and promised to send a report. Nothing of this nature was found amongst Van Giffen's documents concerning the Ballynoe Stone Circle, however. According to the then owner of the site, any digging must have taken place prior to 1928 since nothing had been done since he acquired the land.
- 7 In the notes for 15.VI.1938 Van Giffen writes that a farmer told him of ploughing on the site.
- 8 Apparently the trench was widened from 1 m. See also p. 77 (letter from Van Giffen to D. A. Chart).
- 9 Cf. O'Kelly (1951; 1952, pp. 139-140; 1958a, p. 69; 1958b, p. 14), who does not view this as a prepared clay floor, either, but considers it to have been formed naturally, i.e. caused by leaching of the old turf layer underneath the monument. Though Van Giffen is thus the first excavator to regard this as a natural phenomenon, O'Kelly could not have known of his explanation since it was never published.
- 10 M. J. O'Kelly (in letter of the 14th January 1976): 'Does this mean turves laid on old turf surface?'
- 11 Section B in fig. 1-3.
- 12 Section A in fig. 1-3.
- 13 M. J. O'Kelly (in letter of the 14th January 1976): 'in th's connection see E. M. Fahy: "A Recumbent-stone Circle of Reanascreena South, Co. Cork," *JCHAS*, LXVII (1962), 59-68.'
- 14 Even if stone 29 originally stood upright it must, from the very start, have been secondary to the cairn since all the other peristalith stones are prone. If stone 29 was originally also prone and was shifted later, it would have ended up *next* to the cairn, not on top of it.
- 15 How Van Giffen established his base line is unknown, as is the height of his arbitrary datum. All measurements must thus be regarded as relative only.

- 17 The coarse pottery should not belong to the monument (oral communication B. O'Ríordáin, National Museum, Dublin).
- 18 It is not clear whether cremation remains are also included here.
- 19 Were the flakes wrongly described as 'scrapers' or have these last been lost since then?
- 20 However, a letter from Miss Gaffikin to Van Giffen dated 24.VII.1939, mentions a report by professor T. Walmsley, Queen's University, Belfast, concerning cremated material from Ballynoe, found during the 1938 excavation. "The bones from the cist at the E. end are those of a woman, native Irish, the bones from the other large cist which was in 3 sections & from the burials in small pockets around the cairn are of people of a different race." On the evidence of the letter Van Giffen must only have taken the bones from the upper part of chamber I and the W end of chamber II to the Netherlands. This could mean that Dijkstra did not see the complete material, and would explain why Dijkstra describes the bones in chamber I as of a young man, while Walmsley speaks of "a woman, native Irish". In this case, find numbers 3, 5, 7, 8 and 9 must have remained in Ireland.
- 21 See, however, the comments by Prof. M. J. O'Kelly and Dr. G. Eogan, 7.1. and 7.3.
- 22 The fourth, stone 30, is rather isolated and is not included in the discussion.
- 23 Burl (1976, p. 46) mentions as earliest C14 dates for stone circles the three known for Newgrange, grouped around 2500 b.c. and which came from material directly connected with the passage grave. In this case one has to suppose a contemporaneity for the stone circle and the passage grave which is, however, by no means certain (see p. 88). The C14 dates for the Standing Stones of Stenness, Orkney, a circle of twelve tall stones, 31.1 m in diameter, are 2238 \pm 70 b.c. (SRR-351) and 2356 \pm b.c. (SRR-350) (Burl, loc. cit.). The date for the Ring of Brogar, Orkney, one of the biggest stone circles, must, according to Renfrew (1976, fig. 2, without laboratory references and exact dates), be slightly younger.
- 24 In a letter to the first author, dated 17.IX.1975, A. Burl writes 'It possesses all the characteristics of the early megalithic rings: it is circular; it is large; it has many stones; it has an entrance composed of two external portal-stones at the WSW; it occupies a comparatively lowlying position. In these traits it is analogous to the Late Neolithic rings across the North Channel in Cumbria. Indeed, it is remarkably similar to Swinside, Cumberland, from which it is separated by only about 100 miles across the Irish Sea. Swinside (SD 172883), 28.6 m in diameter, consisted of about 55 stones, once almost contiguous, and has an entrance defined by two portal-stones just outside a gap in the ring at the SE. It was excavated in 1901 by Dymond who found only scraps of charcoal and a fleck of cremated bone near the circle-centre. The ring lies on a gentlysloping hillside in a situation much lower than the surrounding hills. Entrances constructed of two stones external to the ring are characteristic of the early Cumbrian

circles. Long Meg & Her Daughters (NY 571373), a flattened circle 109.4 \times 93.0 m, of about 70 stones within an external bank, has an entrance of double portal-stones at the SW. The Girdle Stanes, Dumfriess (NT 254961), a circle 39.9 m, once perhaps of 40 stones set in a low bank, has a similar portalled entrance at the east. A different type of construction occurs at the Carles, Keswick (NY 292236), a flattened circle 32.9 \times 29.9 m where the entrance is marked by two conspicuously taller stones at the north. All these rings have outlying stones. Otherwise, entrances of any form are uncommon in the British megalithic rings.'

References:

 Carles.
 TCWAAS (O.S.) V, 1879-81, 31; VI, 1883,

 Girdle Stanes.
 RCAHM-Dumfriess, 1920, no. 198.

 Long Meg.
 TCWAAS (O.S.) V, 1879-81, 39.

Swinside. ibid, 47; TCWAAS 2, 1902, 53.

Meanwhile the thesis of Burl concerning the stone circles of the British Isles has been published (Burl, 1976). Inexplicable is the sentence at the bottom of p. 238: "Unfortunately the work [i.e. the excavations of Ballynoe in 1937/38] was never adequately published, nor will it ever be now," Burl (op. cit., p. 240) compares the stone arc at Ballynoe not only with the semicircular stone setting at Millin Bay, but also with the arc of three stones to the SW of the stone horseshoe at Croft Moraig, Pertshire (Piggott & Simpson, 1971) and supposes a connection between these stone settings and the discontinuous façade at the SW of Durrington Walls, Wiltshire, which is, as at Ballynoe's entrance, linked to an avenue in this case of posts. Furthermore, he adds: "Hypothetically the arc and the stone horseshoe [i.e. the peristalith] could be early features to which the cairn and the mound were added later, perhaps by people of passage-grave origins." However, see also note 26.

- 25 According to A. Burl in a letter to the first author, dated to.XI. 1975, 'There are several instances of burials being added to circles but the opposite is rare although this may be due to nothing more than our own ignorance. What may be added is that it is much more customary for there to be burial deposits in northern circles than southern where both inhumations and cremations are almost nonexistent. Because of this northern predisposition towards the inclusion of such deposits within the rings I would have guessed that the stone circle belonged to the first phase as seems to be the case at New Grange, at Callanish, at Bryn Celli Ddu, at Temple Wood etc. But nothing is certain about this.
- 26 During a visit by the first author to Ballynoe Stone Circle the 28.IX.1976, together with P. Woodman, the latter noticed that the site location of the monument "in the bottom of a bowl of hills is most unlike the location of a passage grave" (from a letter of P. Woodman to the first author, 28th of October 1976).

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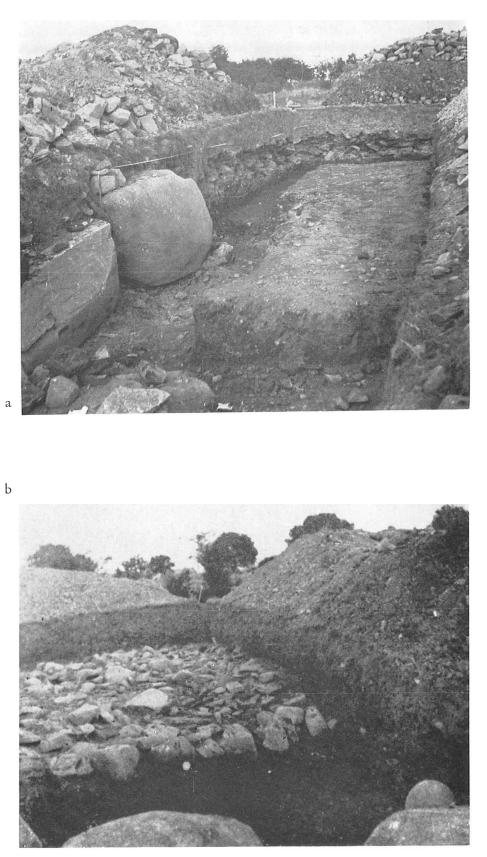
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Pl. I. The Ballynoe Stone Circle; general view from S. Photograph A. E. van Giffen.



Pl. II. The Ballynoe Stone Circle; NW quadrant from E. Photograph A. E. van Giffen.



Pl. III. The Ballynoe Stone Circle.

a: cutting of the central-W axis from W.

b: SW quadrant from SW. Photographs A. E. van Giffen.

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Pl. IV. The Ballynoe Stone Circle; NW quadrant.a: from WNW.b. from N. Photographs A. E. van Giffen.

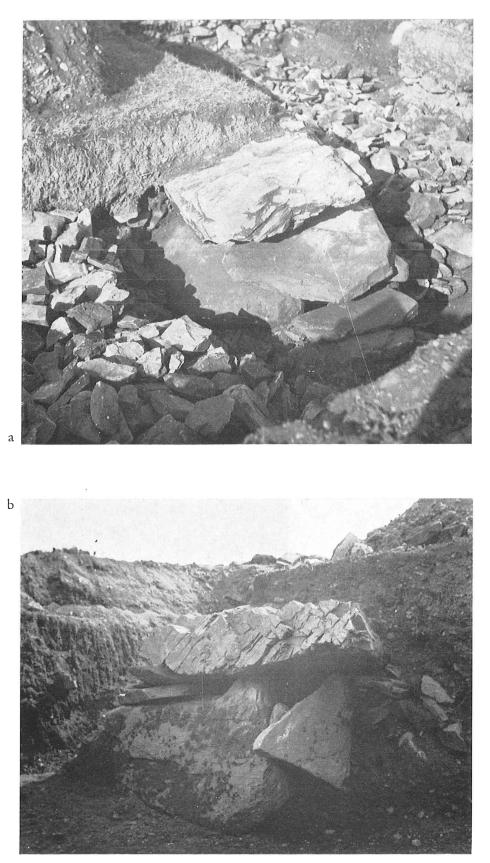




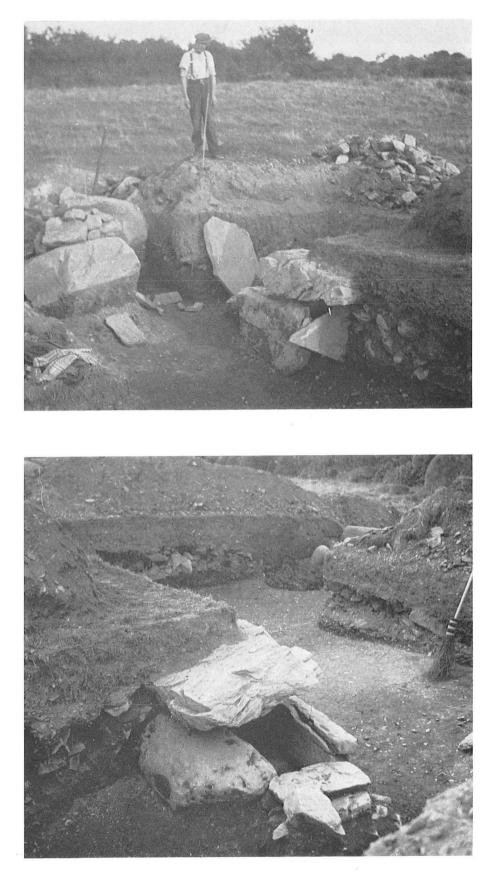


Pl. V. The Ballynoe Stone Circle; NE quadrant.a: central-E section from NW.b: with chamber I from ENE.Photographs A. E. van Giffen.

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Pl. VI. The Ballynoe Stone
Circle; chamber I.
a: from SE.
b: from NNW. Photographs
A. E. van Giffen.

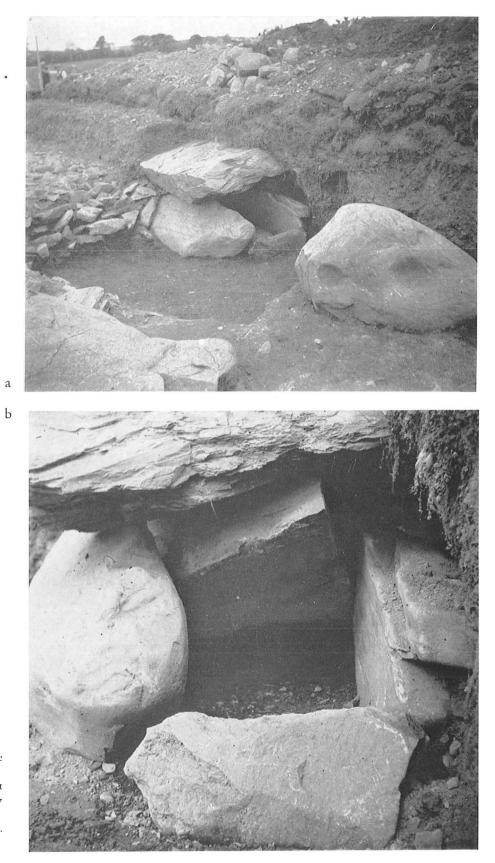


Pl. VII. The Ballynoe Stone Circle; chamber I. a: from NW. b: from SE. Photographs A. E. van Giffen.

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Pl. VIII. The Ballynoe Stone Circle; chamber I. a: from SE, with, from right to left, peristalith stones 17 and 16.

b: from E. Photographs A. E. van Giffen.

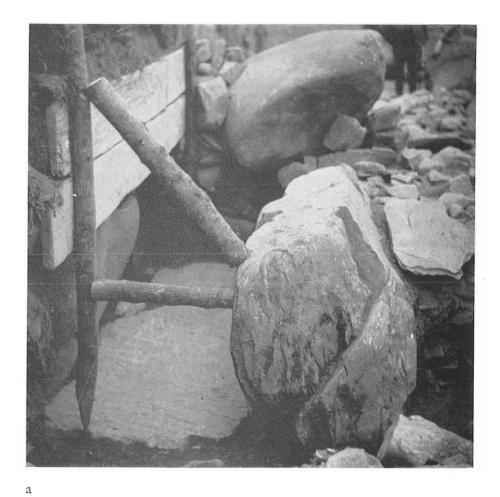




Pl. IX. The Ballynoe Stone Circle.

a: NW quadrant from W. b: chamber II from WNW. Photographs A. E. van Giffen.

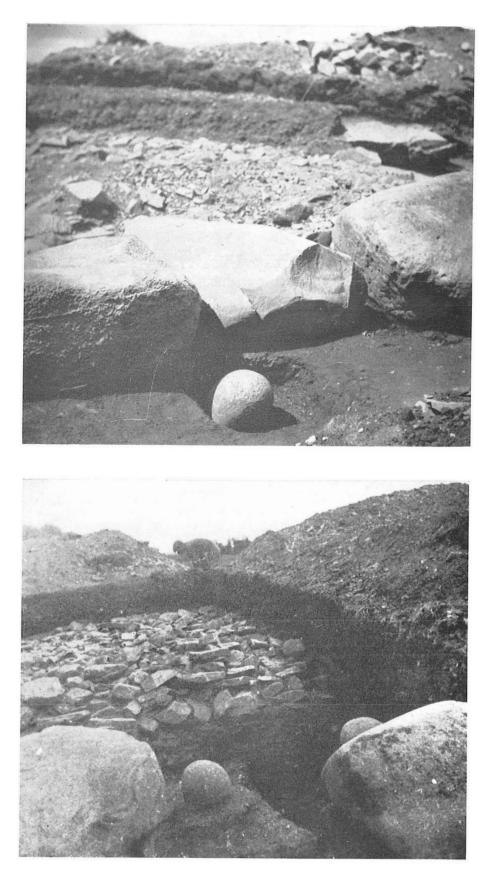
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b



Pl. X. The Ballynoe Stone Circle; chamber II. a: E compartment from E; b: floor from above. Photographs A. E. van Giffen.



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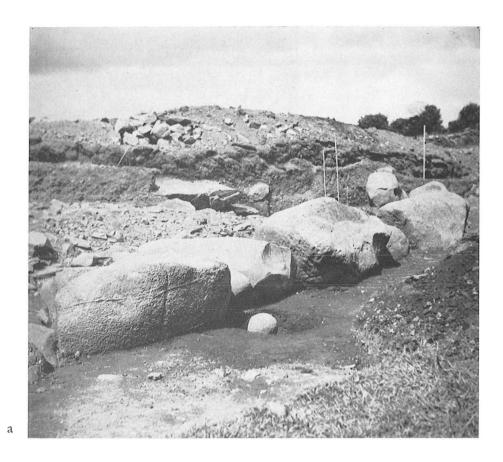
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Pl. XI. The Ballynoe Stone Circle.

a: SE quadrant from SE, with, from left to right, peristalith stones 9, 10 and 12 and baetyl no. 11.

b: NE quadrant from NE, with two baetyls. Photographs A. E. van Giffen.

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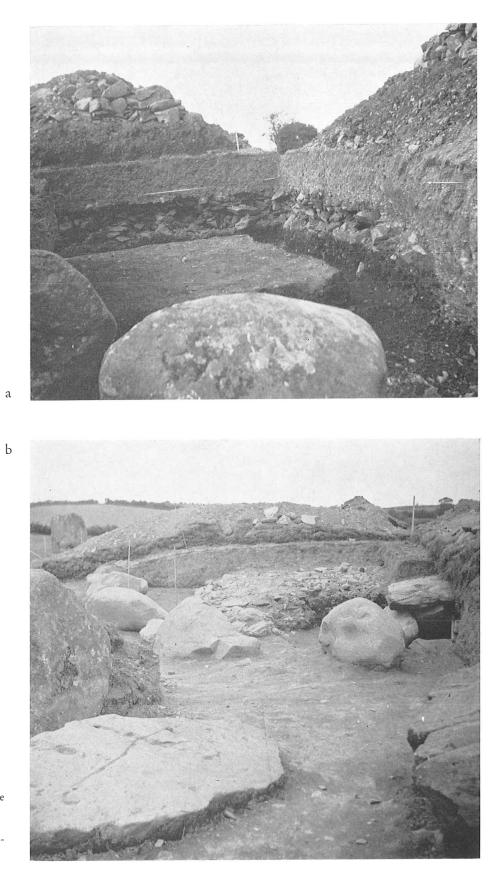




Pl. XII. The Ballynoe Stone Circle.

a: SE quadrant from SE, with, from left to right, peristalith stones 8, 9, 10, 12 and 14, and baetyl.

b: cutting in NE quadrant from ENE, with, from right to left, peristalith stones 23, 22 and 21, and baetyl. Photographs A. E. van Giffen.



Pl. XIII. The Ballynoe Stone

Circle.a: SW quadrant from SW.b: SE quadrant from E. Photographs A. E. van Giffen.

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Pl. XIV. The Ballynoe Stone Circle.

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a: relationship of peristalith stone 29 to the cairn, from S. b: cutting in SW quadrant from W. Photographs A. E. van Giffen.