

## Notes and News

### Stratigraphic Disturbance: the Human Element

Excavators, as Professor R. J. C. Atkinson points out, often assume that, once formed, archaeological deposits are static and change only at the surface [1]. Professor Atkinson has also demonstrated that the secular activities of earthworms and the weathering of natural subsoils render this notion false and even dangerous.

Jewell lists some agencies that are known to weather archaeological sites [2]. He points out that the activities of earthworms have perhaps received the most attention and that small burrowing mammals, particularly the rabbit, must be taken into account. Trees and plants are other agencies of biological weathering, their penetrating roots producing consequences that require evaluation.

It has long been recognized that man himself disturbed archaeological sites in antiquity. Agricultural activities lead to the erosion and obliteration of archaeological features, and the later digging of pits and graves in earlier deposits, or the plunder of monuments for treasure or building materials, confuse the archaeological record.

These biological agencies affect established deposits. But man plays a dual role, disturbing deposits *while they are being laid down*. Some writers have drawn attention to this fact. Brainerd notes 'that the admixture of earlier material through the reuse of earth' [3] is important to the stratigraphic interpretation of middens. Phillips, Ford and Griffin remark that for sites in the lower Mississippi alluvial valley:

the principal defect, from the point of view of seriation, in the information provided by stratigraphic excavations is a result of what might be termed migration, particularly upward

migration of material in midden deposits. This is most pronounced in middens in which refuse and soil was accumulated very slowly. Apparently, the activities of Indians who lived on such sites, the digging of post-holes and pits, and overturning the soil in other ways, has tended to bring old pottery and other refuse to higher levels in the growing deposit [4].

It is possible to visualize the development of a deposit at a regularly inhabited site. A rock shelter can be taken as an example.

Debris will begin to accumulate as the shelter is used as a living place. Whatever the sedimentary processes may be, so long as the shelter is a living place there will be one constant factor—the continual activity of the people inhabiting the site. This involves not only the accumulation of refuse from cooking, tool-making and the like but also the use of the shelter as a living floor. The unceasing movement of people, the inevitable scavenging of children and sometimes dogs, the hollowing of hearths and resting places and so forth can only lead to considerable disturbance of the deposit. This disturbance may well be confined to the superficial layers although burials, where they occur, would lead to deeper penetration.

It is difficult to predict the depth through which occupational disturbance might act at any site but it is reasonable to assume that it would affect the top foot or so of a habitation deposit. This zone of disturbance will move upwards as the deposit grows.

Initial occupation of the shelter, we may suppose, has left a foot or so of deposit. This, for the reasons given, may have been considerably disturbed. It is unlikely that the deposit will have been completely and

homogeneously mixed; the oldest objects will tend to be towards the bottom of the deposit and the youngest towards the top. Chance however may well place the oldest object, the first to be discarded in the shelter, at the surface of the deposit. Although the positions of objects in the deposit will tend to reflect the sequence in which they were laid down, it seems unlikely that every object will remain in the precise position to which it fell or in which it was placed.

If assemblage A is followed in the shelter by assemblage B, occupational disturbance may cause elements of assemblage A to become mixed in the deposit with elements of assemblage B. Elements of B will always tend to be stratified above elements of A although mixing has taken place. As the deposit containing assemblage B grows so the proportion of elements of assemblage A migrating in the ascending zone of disturbance will decrease. When 2 ft. of deposit containing B have accumulated, occupational disturbance, which is assumed to be active in the top foot or so, will no longer reach the lower deposit containing the majority of assemblage A.

The proportion of objects belonging to assemblage A that may migrate upwards in the accumulating deposit is a matter for conjecture as the quantitative observations that would help have been made so seldom. Likewise the distance through which objects can be carried is unknown. It may be supposed that the factors affecting such proportions and distances will be many and will vary from one context to another.

A sterile sediment naturally laid down when the site was not occupied would inhibit upward migration if it was sufficiently thick or hard. Disturbance attendant on subsequent occupation would not penetrate to the layers beneath. The presence of a visible stratum, an unbroken layer of ash for example, may not necessarily indicate that no disturbance has taken place. Such a layer of ash may be the well-trodden residue of numerous hearths rather than the undisturbed remains of a fire or fires. Where it can be demonstrated that a layer or lens of ash is an undisturbed hearth

then it may be concluded that occupational disturbance has not taken place at that spot to any great extent.

If occupational disturbance does take place in the way that has been suggested then the distribution of an assemblage in a deposit will assume a characteristic form. When assemblage A is followed by assemblage B the mixing effect will tend to draw elements of A upwards through the deposit (and in their turn elements of B). Although the main distribution of assemblage A will lie below assemblage B there will be some elements of A in stratigraphic association with elements of B; but the proportion of A in such association will decrease as the deposit builds up.

It is not easy to find data to test this hypothesis. However the Council of the Thai-Danish Prehistoric Expedition and Dr H. R. van Heekeren with great kindness made the record of an excavation at Sai Yok in Thailand available for study. The finds from one part of the excavation on a terrace below a rock shelter (section X) have been placed by Dr van Heekeren into three assemblages, Mesolithic, Neolithic and Historic. Although the stratification in the deposit is not horizontal it was possible to make appropriate corrections for every artifact in the deposit with the aid of an IBM 1620 computer [5].

The distributions of the three assemblages are given here (FIG. 1). The bulk of the Mesolithic collection lies between 225 and 325 cm. but a gradually decreasing proportion is present in the layers above. Similar distributions are to be found in the histograms given by Phillips, Ford and Griffin for those Mississippi valley sites where upward migration is supposed to have taken place [6].

The distribution of the Neolithic assemblage does not have this characteristic form (FIG. 1). The size of the sample may be important for there are 858 objects in the Mesolithic assemblage but only 39 in the Neolithic. Approximately 10 per cent of the Mesolithic objects appear to have migrated upwards as a result of occupational disturbance. It would be logical to suppose that a similar proportion of the Neolithic objects would be

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*Sai Yok. Distribution of*

*Historic artifacts*     $\triangle$ — $\triangle$ ,  $N = 38$ ,  
*Neolithic " "*         $\circ$ — $\circ$ ,  $N = 39$ ,  
*Mesolithic " "*        $\bullet$ — $\bullet$ ,  $N = 858$ ,  
*in layers corrected for declination,*  
*section X.*

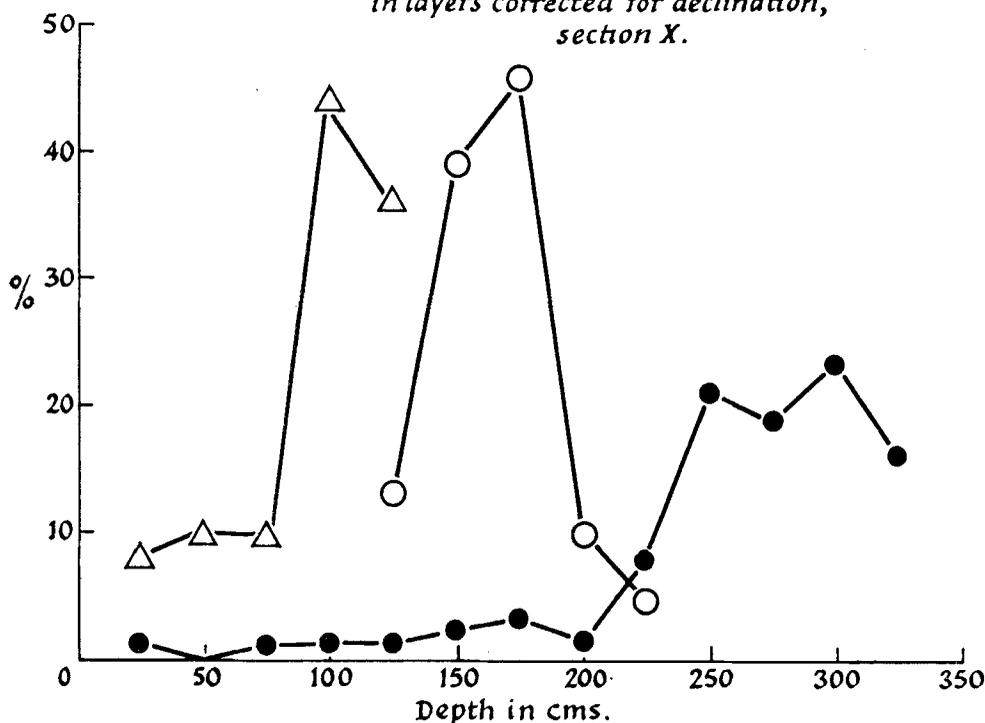


Fig. 1.

displaced. As this would involve such a small number the apparent absence of Neolithic elements from layers above 125 cm. may have little significance.

The distribution of Historic elements does again suggest occupational disturbance but this sample is small so it would be injudicious to infer much from it.

Another explanation can be given for the distribution (FIG. 1)—that artifacts classified as 'Mesolithic' continued in use throughout the period of occupation although their importance declined. This would seem to be unlikely as it would imply the use of 'Mesolithic' implements almost up to the present time, although this is not impossible.

Clearly the distribution of assemblages in a

deposit will not be sufficient to distinguish between upward migration resulting from occupational disturbance and the continued use of objects appearing early in the record by later people. But other evidence may favour one alternative. For example when the earlier assemblage is related to ecological conditions that can be shown to have changed during the later occupation, or when the succeeding economy greatly differs from the earlier, then upward migration resulting from occupational disturbance would be the more likely explanation.

Upward migration of this kind can only be introduced as a postulate that may well have limited application. It would be possible to test the hypothesis by the careful analysis of

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excavation records of sufficient detail. If occupational disturbance has taken place in a deposit then it will be important both to the

interpretation of the history of the site and to age estimations from the radiometric analysis of carbon samples. J. M. MATTHEWS

### NOTES

[1] R. J. C. Atkinson, 'Worms and Weathering', *ANTIQUITY*, 1957, 219.

[2] P. Jewell, 'The Experimental Earthwork on Overton Down, Wiltshire, 1960,' *The British Association for the Advancement of Science*, London (1963).

[3] G. W. Brainerd, 'The place of chronological ordering in archaeological analysis', *American Antiquity*, xvi, 1951, 309.

[4] P. Phillips, J. A. Ford and J. B. Griffin, 'Archaeological survey in the lower Mississippi alluvial valley, 1940-47', *Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University*, xxv, 1951, 232.

[5] J. Matthews, 'The Hoabinhian in south-east Asia and elsewhere', Ph.D. thesis, The Australian National University (1965), 175.

[6] Phillips, Ford and Griffin, *op. cit.*, figs. 25, 27.

## Fossil Sea-urchins from a Romano-British Site

Dr Oakley's reference to the veneration felt for fossil sea-urchins in the Romano-Celtic world prompts me to mention the series of these echinoids from the Romano-British settlement at Studland, Dorset [1]. Eleven examples were found, probably all helmet-urchins (*echinocorys*), located as follows:

Round hut D (mid-1st century A.D.): one fossil;

Rectangular hut C (c. 60-85 A.D.): two fossils;

Rectangular cottage G (2nd century A.D.): three fossils (plus one externally);

Rectangular cottage A (3rd-4th centuries A.D.): one fossil;

Rectangular cottage B (4th century A.D.): two fossils;

Rectangular cottage H (3rd-4th centuries A.D.): one fossil.

The superstition associated with these fossils was in existence at the close of the Early Iron Age at Studland and continued throughout the Roman period. It is noticeable that they seemed to be left in each dwelling as it was abandoned. Could they be house-charms? There is an important and remarkable clue in the find-spots of the fossils from D and C. The round hut D had an inner ring of roof supports and its fossil came from soil *under* a stone wedged against one of these inner posts. It was the only specimen of the 11 that had been deliberately buried. When C replaced D, the diameter of the round hut (14 ft.) was adopted as the width of the new rectangular structure (14 ft. by 18 ft.), built over it. Later in its comparatively short life, C was given

penthouse extensions on three sides. The two fossils from C were found in the clay-earth floor, possibly buried, possibly trodden in. They were only inches apart and most strangely, almost exactly over the find-spot of the fossil from D, nearly two ft. below. It is permissible to argue that the inmates of C remembered the whereabouts of the fossil in D. Indeed they were either the same people or the next generation. While the fossil from D had been carefully buried, the formality was only cursorily observed for the fossils from C, and the later examples all seemed to occur as chance finds, as though merely stored inside the dwelling. It is arguable, therefore, that it was at the round hut stage that the ritualistic significance of the sea urchin fossil was still strongly appreciated. The shape and markings of the helmet-urchin must have resembled a round hut like D in its constructional phase, before walls were daubed and roof was thatched. On the principle of homoeopathic or imitative magic, the strength of the stone would be transferred to the round hut. Thereby, protection would be afforded against the elements, of which thunder has always been the most terrifying symbol. This might be one origin, at any rate, for the various later superstitions ascribing to 'thunderstones' beneficial influence in the household. N. H. FIELD

### NOTE

[1] Interim reports, *Proceedings of the Dorset Natural History and Archaeological Society*, LXXIV-LXXX, 1952-8; final report, *ibid.*, forthcoming.

## British Archaeology and the Metric System

The recent announcement by the Government of the adoption of the Metric System in Britain during the next ten years has implications for British archaeologists which should be considered now. By way of illustration and example, the code of practice adopted by the Department of Archaeology at University College, Cardiff, from 1st August 1965 is set out below.

During the transitional period the provision of British equivalents for metric scales and dimensions, in text and illustrations, will clearly be desirable. Thereafter it will still be necessary for structures and objects of historical periods, whose makers may have been using traditional British units, or approximations to them.

British archaeologists who may decide to adopt the Metric System now should be aware that metric paper inserts for levelling-staffs, and measuring-tapes graduated in feet on one side and in metres on the other, or in the latter alone, are readily available. Metric refill tapes in lengths of 10, 15, 20 and 30 metres will fit without difficulty in existing tape cases designed for lengths of 33, 50, 66 and 100 feet respectively.

1. All field measurements, for plans,

sections and levelling, will be taken in metres and centimetres, and plotted on millimetre paper. Scales will be figured in kilometres, metres and centimetres *and* in miles, feet and inches, as appropriate.

2. In levelling, readings will be taken to the nearest 5 cm. or 0.5 cm. where they have hitherto been taken to the nearest 0.1 or 0.01 ft. respectively. Heights of bench marks above Ordnance Datum will be given in metres, to the nearest 0.05 m. or 0.005 m., followed in brackets by the height in feet given on the O.S. map, to the nearest 0.1 or 0.01 ft. respectively. Use the equivalence: 1 ft. = 0.3048 m.

3. All distances, dimensions of structures and objects, and areas should be given textually in metric units as appropriate, followed by the British equivalents in brackets. Weights should be treated likewise.

4. The appropriate metric units are, for length: kilometres, metres or centimetres; for area: square kilometres, hectares, square metres or square centimetres; and for weight: metric tons, kilogrammes and grammes.

5. The following scales will be substituted:

| British         |                          | Metric  |                 |
|-----------------|--------------------------|---------|-----------------|
| Scale           | Representative Fractions | Scale   |                 |
| 1 in. to 1 ft.  | 1 : 12                   | 1 : 10  | 1 cm. to 10 cm. |
| 1 in. to 2 ft.  | 1 : 24                   | 1 : 25  | 1 cm. to 25 cm. |
| 1 in. to 4 ft.  | 1 : 48                   | 1 : 50  | 1 cm. to 50 cm. |
| 1 in. to 8 ft.  | 1 : 96                   | 1 : 100 | 1 cm. to 1 m.   |
| 1 in. to 16 ft. | 1 : 192                  | 1 : 200 | 1 cm. to 2 m.   |

R. J. C. ATKINSON

## The Predynastic Cemetery at Naqada

Over many years I have built up a card index of material from the original Petrie Excavations at Naqada, and it is now planned to publish this index in the form of a tomb register. Preliminary work on the register is well-advanced. It covers the large collections in both Europe and America, and many small groups, but it is likely that further material

still exists. If, therefore, any museum or private person has objects (bearing a tomb number) from the 1895 Excavations at Naqada, I should very much like to hear of them in time to include them in the Register. Such information should be sent to me, *c/o The Ashmolean Museum, Oxford.*

E. J. BAUMGARTEL

## The Ogam Inscription at Dunadd

Dark Age inscriptions on stone in the peculiar early Irish alphabet called Ogam are well known to exist in Scotland as well as in Ireland, the Isle of Man, Wales, Devon, and Cornwall. In Scotland they belong, with very few exceptions, to the country of the Picts, i.e. to the eastern half of the region north of the Forth, and it is evident that the Picts learned how to use this alphabet from the Gaelic Scots of the kingdom of Dál Riada, of which the nucleus was Argyll. These Pictish inscriptions probably belong mainly to the 8th century and first half of the 9th; none is likely to be any later. The great difficulty about all of them is that though they can mostly be read they cannot be interpreted; we must assume that they are in 'Pictish',\* but if so, Pictish is a language which nobody can understand, and which is not Celtic and not even Indo-European. Or rather, it would be more accurate to say that this is true of the Pictish in which the inscriptions are written, but that there was certainly another 'Pictish' current at the time, which was Celtic, and a dialect of Celtic very closely related to early Welsh. What the explanation of the appearance of the unintelligible 'Pictish' may be, and why it should have been used for inscriptions, is obscure, but the present writer has suggested that it was the language of the pre-Celtic inhabitants of Pictland, borrowed by the Celtic Picts for purposes such as this because of some sort of ancient prestige that it may have inherited as a language of magic, the older population having perhaps had a reputation somewhat like that of the Lapps in Scandinavia [1].

In the parish of Kilmichael Glassary, about

\* There are only two Ogam inscriptions in Scotland (both fragmentary) which are apparently in early Gaelic, and both come from Argyll, as would be expected; one from Gigha and one from Paltalloch about 3 miles N.W. of Dunadd.

† Called *Oengus mac Fergusso* in Irish sources, and (hideously) *Angus mac Fergus* by Skene.

‡ I first heard of it in 1953, when Mr Stewart Cruden, Inspector of Ancient Monuments for Scotland, told me of it; and visited it at that time. In 1963 and again in 1964 I examined it further in the

three miles N.W. of Lochgilphead in Argyll, the well-known Dark Age fort of Dunadd stands on top of an isolated hill in and rising to some 170 ft. above the Moss of Crinan, close to the river Add. This must have been a place of great importance to Scottish Dál Riada in the Dark Ages, a capital fortress of the Dál Riadic kings. It is mentioned twice in the early Irish Annals: once in 683 when it was 'besieged' by some enemy unspecified, and the second time in 736 when Onuist son of Wurguist,† king of the Picts, laid waste Dál Riada, captured Dunadd, burned an unidentified place called *Creic*, and took prisoner Donngal and Feradach, two of the princes of the Cinél Loairn line of Dál Riada, in whose territory Dunadd evidently lay.

Just below the top of the hill there is a flattish expanse of bare rock, on which there is an outline engraving of a magnificent boar, and a depression the size and shape of a human footprint. These have long been known. There is also an Ogam inscription on the rock, close to and apparently associated with the other two carvings, and as this inscription has never been published or discussed in print so far as I know it would be useful to do so now.‡ The surface of the rock is marked at this point by a number of more or less deep cracks, three of them horizontal and roughly parallel, approximately 7 in. apart; two others, again roughly parallel, crossing these diagonally at an angle of about 60 degrees (the right-hand one barely appears in the drawing, FIG. 1); and a third running diagonally in the opposite direction at approximately the same angle. The main feature thus appears to be a rough isosceles triangle with one corner at the top (outside the drawing),

company of Dr Kenneth Steer, Secretary of the Royal Commission on the Ancient and Historical Monuments of Scotland; and I am very much indebted to the Commission's illustrator and photographer, Messrs I. G. Scott and G. B. Quick, who made casts, squeezes, drawings, and a number of photographs. The drawing reproduced here (FIG. 1) was made by Mr Scott, based on all these sources and my final readings in the light of them, and I am grateful to the Commission for their help and for permission to publish this.

traversed by two horizontal cracks. The upper crack is about  $23\frac{1}{2}$  in. from side to side of the triangle and the lower one about 33.

The inscription is written along these two cracks, and wholly within the triangle except for one letter at the right-hand end of the

line; B, L, V, S, N below the line; M, G, NG, Z, R diagonally across the line; and (commonly in Scotland), A, O, U, E, I at right-angles across the line. In Ireland these vowels are usually nicks *on* the base line. The first row of the Dunadd inscription begins with a single

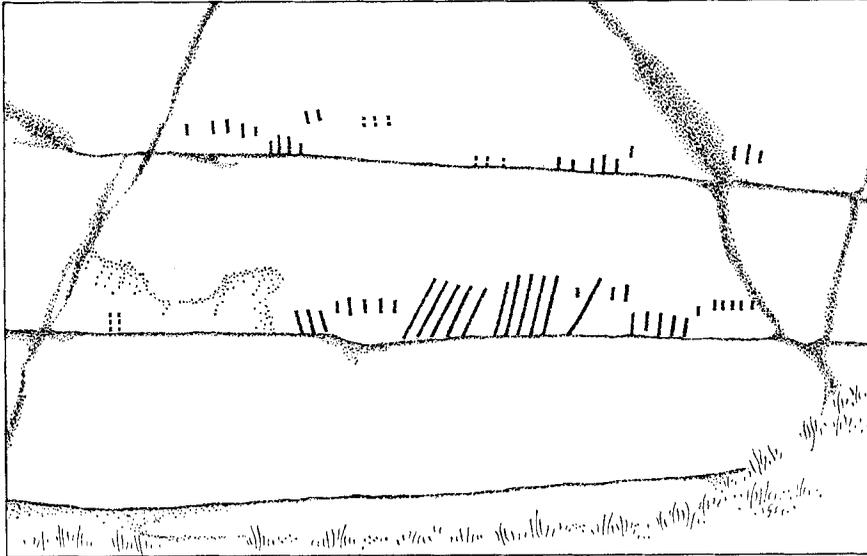


Fig. 1

upper line of letters. An Ogam inscription is normally written along both sides of the angle of the edge of a stone, or along a line traced on the surface of the stone—what is called the ‘base line’—in such a way that some of the letters are above the line, others below it, and others bisected by it. The interpretation depends on their position in relation to the base line. Sometimes, however, no base line appears, and an imaginary one must be inferred, as in the present instance. In the Dunadd Ogam the letters use the cracks like lines in an English ruled exercise book, but these are not the base line and are of no use in explaining the meaning of the letters. Its absence makes it difficult in some cases to tell what letter some of them are intended to be, particularly whether certain of them are vowels or consonants, but on the whole this is not serious. At any rate the cracks were already there when the inscription was cut.

The Ogam alphabet consists of four ‘families’ of five letters each: H, D, T, C, Q above the

stroke of the H group, followed by four others of the same, therefore H and C; what seems at first sight a stroke between them is a slight natural depression. Next come four quite distinct uprights of the B family, i.e. S, followed closely by two slanting ones of the H group, making D. There comes next a gap of nearly 9 in. before the next certain letter is reached, but there are traces of two rather faint ones in the gap, shown with broken lines in the drawing. The first appears to be T; the second is rather more doubtful, but apparently the lower halves of three strokes of the B-group, therefore V. After a gap wide enough for another three strokes, the certain letter just mentioned is N; or, as the space between the second and third strokes is just a little wide, possibly LV. After this there comes an H; then a gap wide enough for five strokes before the diagonal crack; and lastly, after the crack, a T. Some faint marks coming after this are not letters but appear to be accidental scratches.

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At the start of the second line a considerable area has apparently flaked away, leaving only an uncertain trace of two strokes of the B family not far from the beginning, shown with broken lines in the drawing; if so, an L. After the flake the rest of the line is perfectly clear to the end, and reads V, Q, R, R (or possibly I, if the strokes are meant to be upright), H, M, D, N, H and Q. Indicating alternatives in the usual way one above the other, doubtful letters with a dot beneath, and gaps by a hyphen, the two lines of the inscription seem therefore to read as follows:

H C S D - Ṫ - - Ṽ - N H - T  
LṼ  
 L - - - - V Q R R H M D N H Q  
I

This is of course gibberish as it stands. It might be possible to make it look rather less nonsensical by juggling with the hypothetical stem line in such a way as to produce some sorely needed vowels; but this would be highly speculative, and moreover it is only a little more nonsensical than some of the other Ogam's of Scotland, which, though they may have a rather more generous allowance of vowels, are still very odd indeed. The whole inscription, in its layout, the form of its letters, and its unintelligibility, is typical of the enigmatic Ogam's of Pictland, and not of the perfectly

interpretable inscriptions of the Goidelic world.

This raises an interesting point. If it is Pictish, what is it doing at Dunadd, at the very heart of an important royal fortress of Gaelic Dál Riada? The only explanation that seems likely to make sense is that it is an expression of defiance set there by a victorious Pictish army after the final sack of Dunadd and its abandonment by Dál Riada, whether this happened in 736 or on some later occasion about which we know nothing. It would be a kind of 'Kilroy was here', or 'Irish go home'. This interpretation is supported by the fact that the boar itself is very much a Pictish type of animal, and that a carving of this sort, and in such a situation, is without parallel in the Gaelic world whereas animal-symbols of the kind are of course a familiar feature in Pictland.\*

If so, it is not probable that Dunadd could have been in regular occupation any later than this, since otherwise the inscription would surely have been destroyed by the men of Dál Riada as soon as the Pictish army had withdrawn; in fact it is perhaps surprising that this was not done in any case. However, if Dunadd now became wholly deserted possibly no one would bother—we must not necessarily attribute our impulses to the Scots of Argyll in the 8th century.

KENNETH JACKSON

### NOTES

[1] For this and the other points discussed in this paragraph see more fully my chapter, 'The Pictish Language', in F. T. Wainwright (ed.), *The Problem of the Picts* (1955), 129 ff. See also ANTIQUITY, 1960, 41, on the St. Ninian's Isle inscription *resadfilispusscio*.

[2] Since writing this I find that Mr C. Ralegh

Radford [3] and Mr Charles Thomas [4] both assume that the boar is Pictish, and must have been carved there after a Pictish attack. Neither mentions the inscription.

[3] ANTIQUITY, 1953, 238.

[4] *Arch. J.*, cxx, 40.

## The Association for Cultural Exchange

Advice on how to get on excavations abroad and information about archaeological tours abroad is not always easy to obtain. While the Council of British Archaeology does excellent work as regards British excavations, it as yet does not feel it can deal with the problem of overseas

exchange. The newly formed Association for Cultural Exchange, which specializes in organizing international seminars and archaeological field trips, thus fills a need. It is an independent, non-political and non-profit-making organization whose object is 'to promote deeper

understanding between the United States, Britain and other countries of Western Europe, in an informal way and at an unofficial level'. The Chairman of the Association's Executive Committee is Professor J. D. Evans of the Institute of Archaeology in the University of London, and the Secretary P. B. Barnes, with H. M. Blake as Administrative Assistant.

In the summer of 1965 the Association

organized a seminar with practical training centred in Oxford, and two study trips abroad, one to Denmark with the assistance of Professor Ole Klindt-Jensen, and the other to the Rhône Valley and Provence led by David and Ruth Whitehouse. Those interested in the Association and its plans for 1966 should write to the head office: 8-10 *High Street, Haverhill, Suffolk, England.*

## Discovery of *Homo Erectus* in Hungary

*All the important discoveries of fossil man during the last 30 or so years, such as Sinanthropus, Swanscombe Man, Zinjanthropus and the Lantien jaw have been announced in the pages of ANTIQUITY. We are therefore especially grateful to Dr László Vértes of the Magyar Nemzeti Museum, Budapest for allowing us to make the first announcement in England of his tremendous find of Homo erectus at Vértesszöllös. We hope to publish an extended note with illustrations early next year.*

In the travertine quarry at Vértesszöllös, c. 50 km. W. from Budapest, a Lower Palaeolithic occupation site was found. A test excavation in 1963 and full-scale excavations in 1964 and 1965 showed the importance of this site, reassuringly dated as of Mindelian age on the basis of stratigraphical, palaeontological and archaeological evidence. An ample preliminary report has been published [1].

Early this year while sieving material from the lowest cultural layer, I found some hominid teeth including a deciduous lower canine and deciduous lower molar [2].

During the 1965 excavations, on 21st August at 13.30 hours, after hard rock in contact with the same cultural layer had been split by explosion, two workers, J. Futó and L. Skoflek, found the occipital bone of an adult *Homo erectus*. One half of the bone was cemented convexly in the rock, while the other half adhered concavely in the fitting counterpart. Two blocks of rock containing the two matching portions of the occipital bone were transported to the Magyar Nemzeti Museum in Budapest; and in October I removed them from the matrix partly with the aid of hand-tools and partly with acetic acid.

The occipital bone is bordered by the lambdoid suture. Its nuchal part is broken and only a little of the margin of the *foramen magnum* is preserved. The *torus occipitalis transversus* is strikingly thick and very strong. Dr A. Thoma, to whom I have handed over the specimen for study, considers that, as with the children's teeth [3], it fits into the sphere of archanthropic man, not far from 'Sinanthropus'.\*

LÁSZLÓ VÉRTES

### NOTES

[1] M. Kretzoi and L. Vértes, 'Upper Biharian "Intermindel" Pebble-industry Occupation Site in Western Hungary', *Current Anthropology*, VI, No. 1, 1965, 74-87.

[2] M. Kretzoi and L. Vértes, 'Lower Palaeolithic

Hominid and Pebble-industry in Hungary', *Nature*, 9 Oct., 1965, 205.

[3] A. Thoma, 'Human teeth from the Lower Palaeolithic of Hungary', *Zeitschrift für Morph. und Anthropol.* (in press).

\* 'Sinanthropus' = *Homo erectus pekinensis* (Editor).