

II.

A STONE INDUSTRY, POTSHERDS, AND A BRONZE PIN FROM VALTOS, UIG, LEWIS. BY A. D. LACAILLE, F.S.A. SCOT.

Before setting out on a tour of the Outer Hebrides in the spring of 1935 I had a conversation with Dr J. Graham Callander, in the course of which I expressed the desire of furthering my researches in the stone industries of the more remote regions having no native flint supply. Dr Callander recalled that when serving on the Royal Commission on Ancient Monuments in the Outer Hebrides in 1914 he had recorded prehistoric sites at Valtos, not far from Gallan Head, Lewis.¹ Near these he had picked up some pieces of quartz, which he was convinced had been intentionally struck. As Valtos was on the itinerary mapped out, he suggested that I might advantageously investigate the possibilities the locality offered.

The collection of "black houses" and more modern buildings forming the small township of Valtos, in Uig parish, is mainly situated on the high ground above the kyles separating the mainland of Lewis from the island of Pabay More (Pabaidh Mhor), about a mile from where West Loch Roag opens into the Atlantic Ocean. Farther on, to the east, a cluster of crofts and black houses constitutes the hamlet of Kneep, separated from the Sands of Berie (Traigh na Beiridh), extending eastward for nearly $1\frac{1}{2}$ mile, by a rocky headland rising about 50 feet above the sea and joined by an isthmian ridge to the hilly ground on the south. On the south, over 200 yards from low-water mark, the sand-dunes, a few feet above sea-level, have become more or less stabilised by a growth of coarse grass. This vegetation, by arresting the movement of the sand, formerly wind-blown, has been responsible for the permanent obliteration of many ancient dwelling-sites. Nevertheless, in some hollows in the sand-hills a number of ruinous hut-circles were distinguishable, the majority robbed of the more portable stones.

In a depression sheltered from northerly winds on the southern slope of the rocky headland near Kneep, the western extremity of Traigh na Beiridh, and about 30 feet above the level of the sea, there exist several

¹ *Historical Monuments (Scotland) Commission, Ninth Report, The Outer Hebrides, Skye, and the Small Isles*, Edinburgh, 1928, p. 29.

kitchen-middens and dwelling-sites described in the inventory of the Royal Commission.¹ These were the object of my inspection.

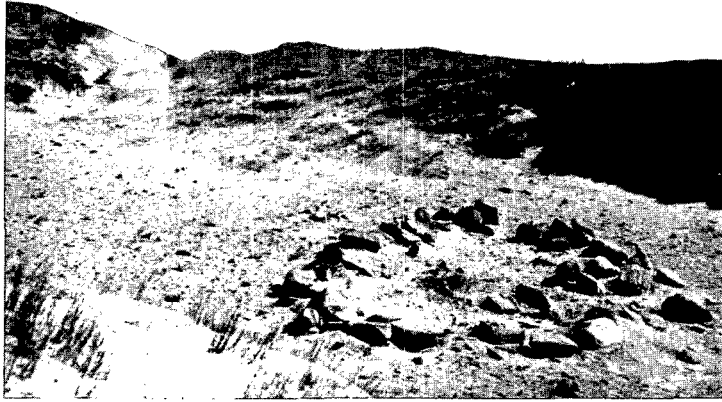


Fig. 1. Hut-circle; Berie Sands.

Not only were weather conditions entirely favourable when the place was visited, but the propitious wind, which had prevailed for several days before my prolonged scrutiny, continued during the course



Fig. 2. Hut-circle and Kitchen-middens; Berie Sands.

of my investigations. Thus I had the advantage of an excellent exposure of the middens and hut-sites. The latter, of which three were still clearly discernible, proved to be elliptical and circular, but the profusion

¹ *Loc. cit.*, No. 98.

of fair-sized and large stones scattered in restricted areas pointed to the fact that a greater number of habitations once occupied the sandy platform (figs. 1, 2, and 3). The convenience of such a quarry was probably not ignored by the crofters, although superstitious regard for the place now exists locally because graves have been accidentally opened. These burials probably post-date the abandonment of the dwellings. The fury of the waves in violent storms through the centuries has wrought havoc with the ruins. Whether the dislodgment of many of the stones was effected by natural agencies or otherwise, it speaks well for the hut-builders that so many of the boulders set up by them remain fast to this



Fig. 3. Hut-circle and Working-floor; Berie Sands.

day. Despite the considerable accumulation of sand it was ascertained that the stones *in situ* are mostly of large size.

The kitchen-middens, ruins of hut-circles, and narrow elliptical dwellings extend over an area approximately 75 by 30 yards, the longer axis of the settlement north and south. As on my first and prospecting visit a few days earlier I had secured pieces of worked quartz, I first concentrated on humanly struck specimens of this stone, obtaining several dozen. In places there lay considerable quantities of chippings indicating working-sites, but at one spot chiefly, near the middle of the assemblage of ruins and kitchen-middens, were concentrated the greatest number of struck pieces. Their abundance would suggest that here was the principal "floor" (fig. 3).

Numbers of pottery fragments were collected within and near the elliptical and best-preserved setting at the northern part of the settlement (fig. 1). Although the sherds are generally of small size, mostly

greatly weathered and acted upon by wind-blown sand, the nature of the ware is such that it can be more readily dated than the associated artifacts of stone. Failing controverting evidence, these relics must be considered as the products of the people who made the pottery. The unaltered state of the former, found in the same conditions as the latter, testifies to the more rapid alteration of the softer material.

Although the Valtos site yields much of archaeological interest and scope for further research, the stone implements collected present features for close study of essentially technical nature. Remarks on the characteristics and peculiarities observed are advanced as a contribution to a neglected side of Scottish prehistory. No artifacts of flint were found nor was a single chip of this material recovered here. This was not surprising, as few flint implements have been discovered in the Outer Hebrides, but I was interested to observe that large pieces of gneissose and granitic stones had been flaked by man at this Loch Roag site. The coarse rock was apparently used only for large and rough tools, probably because quartz did not provide raw material of adequate size. On account of similarity of the rocks out of which they are made, these crude artifacts compare with many of the coarse stone implements found in such districts as the river-basins of the Pyrenees and the Meurthe-et-Moselle department. The handling of large numbers of stone implements from sites in Europe and other continents has proved invaluable for purposes of comparing the effects of various techniques.

THE STONE INDUSTRY.

The vein-quartz of Valtos, while inferior to flint for the manufacture of implements, is not of the poor quality so often met with in localities where other varieties predominate. At Valtos the quartz is virtually granular and its cleavage approaches that of some gritty cherts, fine quartzite, or schistose grit. The implements show that percussion does not always produce these features noticeable in flint intentionally struck. Nevertheless, a large proportion of vein-quartz flakes of the West bear, if not a perfect part of a cone, at least a prominence not unlike the soft swelling seen on flint flakes detached from the cores by the use of a percussion instrument such as a wooden bar.

While numbers of the struck pieces possess features worthy of detailed comment, considerations of space restrict illustration to a series which embodies the salient characteristics of the Valtos quartz industry. The selection figured calls attention to the workmanship, and shows at the same time a few of the smaller and trimmed implements fashioned

in this native rock (fig. 4, Nos. 1-12). Typologically little can be inferred from this local industry, as it is seldom that surface-found artifacts of quartz can be positively assigned to a culture-phase. Here occur few implements of the ordinary conventional forms. Even conveniently shaped stones, rudely or elementarily trimmed, are uncommon. Instead, it is to be observed that as many of the implements consist of flakes—often dressed—obtained from cores, recourse was had to production by methods used elsewhere with better material.

No. 1 may be regarded as a good representative core, many similar examples of which have been noted in Scotland. The scars upon this specimen testify to the removal of fairly delicate flakes such as Nos. 2, 3, 4, and 5. Of these, Nos. 2 and 3 are plain, having been detached by the first blows dealt upon a nucleus or lump of quartz. The two flakes show a pronounced swelling under the point of impact. The cores themselves, from which these flakes were removed, would bear (as does the example, No. 1) hollows corresponding to the more or less conchoidal protuberances on the flakes. Quartz cores, whatever the culture, invariably show well-marked crenellations along the edges where struck.

Several minor facets or scars appear on No. 4, detached after the surface of the core had been subjected to further treatment. The example could have served as a tool without further trimming. None of the easily recognisable features of conchoidal fracture are present, the specimen affording an example of the erratic response of quartz, even of superior quality, to intentional blows. In Nos. 2 and 3, however, features of fracture resembling those inherent to flint exhibit themselves. No. 5, a triangular flake secondarily trimmed near the point, shows on the reverse a definite bulb of percussion, albeit low and diffused. In a foregoing paragraph reference was made to the paucity of implements obtained by trimming suitably shaped fragments, but one example, No. 6, may be illustrated. This consists of a tabular piece of quartz worked to shape by the removal of a few spalls by battering the edges. Similar rude tools of this elementary type have, of course, been found in different parts of Scotland. Generally these simple implements are of stones other than flint.

In No. 7, naturally triangular in section, the lower end bears a number of small facets in addition to the scars of delicate narrow flakes removed from one side. This specimen also shows signs of having been secondarily trimmed in places along the edges. No. 8, a knife, well worked to a sharp edge, now broken, with delicately faceted butt, might have been struck from a piece like No. 7. For an implement of quartz the workmanship is of high order. Scrapers of acceptably conventional

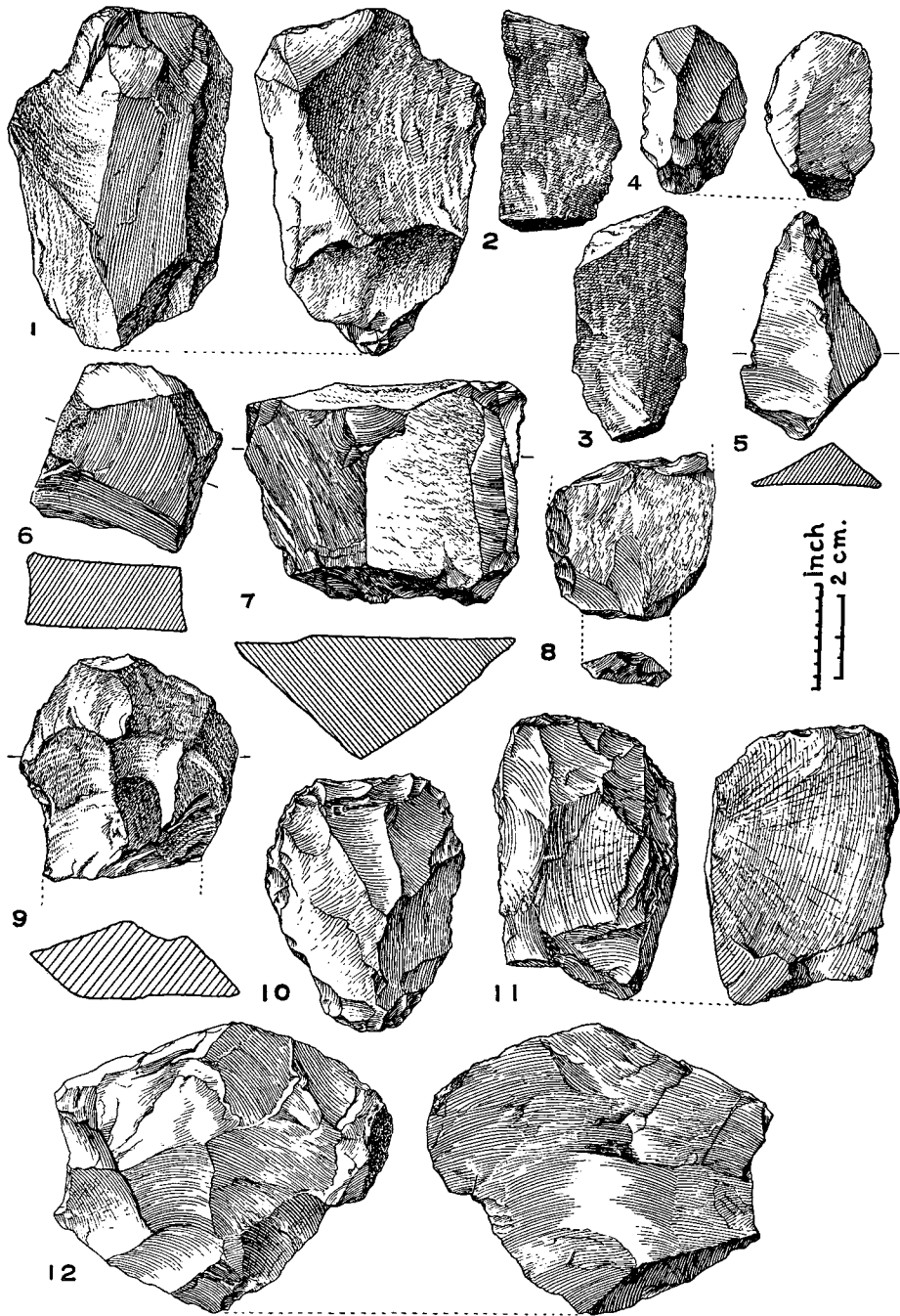


Fig. 4. Berie Sands: Quartz Industry.

forms are represented by Nos. 9 and 10. The first is squat and trimmed to shape by the removal of short, fairly wide flakes from both sides of the lower part, thus imparting a sharp edge to the tool, which bears a close resemblance to certain coarse scrapers, some still inserted in bone or antler holders. No. 10, of finer quartz, is an even better-finished scraper. Not only does its surface bear small facets of flaking, but the edge, horse-shoe in shape, has been secondarily trimmed. Of the series of quartzes, No. 11 is, no doubt, technologically the most interesting specimen as it consists of a worked piece from the uppermost portion of a core. The nether surface shows a concavity corresponding to the almost conchoidal swelling on the detached and vanished flake. As the crushed appearance of the surface on one side indicates, this was presumably removed by repeatedly striking the whole or almost complete nucleus upon an anvil. Similar signs may be observed on numbers of cores, pieces, cores or nodules of flint or of other material treated in like manner by man for the obtention of flakes.¹ The long edge opposite the abraded area and the oblique end have been so trimmed that the artifact affords an example of a side-and-end scraper, the end thin and sharp and the dressed longer lateral edge fairly steep. No. 12 is included on account of its exceptional dimensions, and for the fact that its upper surface is entirely flaked save for a very small portion at a corner which retains the cortex. Little distinguishes the bulbar face from that of a flint flake of good quality. The well-rounded swelling under the inclined and comparatively wide striking platform is pronounced, and the corner under the crust terminates in a sort of hinge. It is apparent that the core from which this large flake derives was a piece of no inconsiderable size, and the numerous and well-defined flake-scars testify to the quality of the raw material.

Materials identifiable in the representative artifacts now mentioned mostly comprise varieties of native foliated crystalline rocks. Acid-gneisses, coarse-grained and fine-grained, occur among the specimens. The appearance of some of the large flakes struck in these is pleasing by reason of the banding formed by the component minerals. It does not seem that the stone-knappers were able wholly to control the fracture of the more coarse-grained rocks. Still, these were capable of being split, and although the flakes obtained were irregular of edge, they were no doubt serviceable enough, and, while not lasting, they could easily be replaced.

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¹ Notably in certain phases of the Chellean (Abbevillian), and, specially Clactonian, cultures, the techniques of which have been recaptured by the experiments of M. Léon Coutier. *Vide* recent references in *Bulletin de la Société Préhistorique Française*, and *infra*, pp. 287-8.

Kensington, to whom I am indebted for preparing microscopic sections from specimens submitted, informs me that among other rocks employed at Valtos are two grades of biotite-granite and mylonite.¹ The first of these, dark red of hue, severely crushed, was apparently favoured because its compactness allowed of some degree of control under working. The second, pale grey normal biotite-granite, seems to have been employed but sparingly at Valtos, and, as only a few artifacts struck in this rock were found, no really useful deduction can be made. One thick piece, however, presents interesting features of intentional fracture (fig. 6).

Judging from the numbers of struck fragments recovered, the rock which, after quartz, most appealed to the craftsmen whose artifacts are under examination was dark mylonite produced by the severe crushing and shearing of what was doubtless a granite.

Considering the character of the native rocks, the large artifacts are surprisingly well made, and the types which occur suggest employment for specific purposes dictated by local needs. The shaped implements are made of the close-grained and more compact rock from which are also derived numbers of large flake implements. These do not differ much from certain tools brought to light in Shetland by the excavations conducted by H.M. Office of Works under Dr A. O. Curle's direction.² The flake implements, and, indeed, the core-tools to be mentioned, are also like artifacts referred to as far back as 1867 by Mr Samuel Laing, who figured examples in a paper on the stone industries of Caithness brochs and other sites regarded as contemporary.³ Professor V. Gordon Childe, in his recent work on Skara Brae, drew attention to the numbers of crude stone flakes yielded by this classic site.⁴ For many years specimens from different parts of Scotland without a flint supply have been studied in respect of features of fracture; and artifacts of various sorts of rocks, ranging chronologically from the Lower Palæolithic to the Metal Ages, from English and Continental sites have provided so many valuable data for comparison. It may be added, too, that the products of modern primitive peoples, some recently exterminated, whose raw material for the making of everyday tools is often found to be rock of intractable nature, also furnish useful and interesting comparative sets.⁵

The dating of massive and rudely worked artifacts without knowledge of conditions of discovery or of associations must necessarily be conjectural, but the Valtos stone artifacts appear to present no

¹ Letter to the author, dated London, S.W. 7, 19th December 1936.

² Particularly those described in *Proc. Soc. Ant. Scot.*, vol. lxi. p. 96, and figured, p. 98.

³ *Proc. Soc. Ant. Scot.*, vol. vii. pp. 73-9.

⁴ *Skara Brae*, p. 114.

⁵ E.g. Henry Balfour's "The Status of the Tasmanians among the Stone Age Peoples," Presidential Address for the year 1924, *Proc. Preh. Soc. of East Anglia*, vol. v. pt. i. pp. 1-15.

difficulty, and reasons are advanced for regarding the stone industries as belonging to a late prehistoric phase. It is held, however, that in working the native material, precisely the same means were employed as from the most remote antiquity in climatically favoured places until stone ceased everywhere to be of account for tool-making. Moreover, the evidence of handiwork expended upon the stone (which is believed to have been treated according to one of the most simple of the methods practised by prehistoric man) is precisely that discernible in localities where similar rocks supplied communities, whatever the cultural conditions wherein they lived.

On examining the Valtos artifacts of gneissose and granitic rocks it is seen that even the most rudimentary tools reveal a high standard of skill on the part of those who made them. Not only so, but one must recognise the artisans' knowledge of the peculiarities of the material employed. In no case did the workman deal a purposeless blow. Further, he so took advantage of the foliation, and sometimes even of an edge of natural origin, that an efficient implement was rapidly produced by the minimum of effort. It is not too much to say that each flake-scar and every flake afford scope for study.

The late Mr George Petrie's experiments in splitting pebbles of flag-stone by dashing them against rocks gave flakes with sharp edges. But the simple process described by him,¹ while answering for the production of flakes, would not be a successful means of shaping implements in such materials as occur at Valtos.

On Nos. 1 and 2, fig. 5, and on some of the heavy flakes are borne unmistakable indications attesting that the anvil method of fracturing and detaching pieces was responsible for the shaping and removal of flakes. By this method the craftsman had considerable control over the finer stones. He struck the core or nodule at the appropriate angle on the edge of an anvil-stone. The edge or edges of each face of the lump operated upon received attention alternately, as prove the pronounced hollows of percussion evident in bifacial implements so fashioned. The earlier Chellean (Abbevillian) hand-axes of flint furnish the best examples of this particular technique; and similar tools, of this and other culture-phases, made of various materials, testify to the same practice. At this juncture it is relevant to mention that Clactonian flakes were obtained by the anvil technique, but the inclination of the striking platform and prominence of the bulb of percussion proclaim that in this culture-

¹ *Proc. Soc. Ant. Scot.*, vol. vii. p. 215. Tribute must be paid to this observant pioneer in research at Skara Brae for having so carefully defined fracture traits noticed in stone artifacts recovered by him.

phase the core was struck at a different angle from that in fashioning hand-axes. Characteristic Chellean (Abbevillian) bulbs and hollows of percussion are not so pronounced as, and the platforms are narrow compared with, those typical of the Clactonian technique, which persisted until the supersession of stone by metal. These methods were particularly suitable for, if not the only means of, shaping implements and obtention of large flakes from such rocks as those now under consideration.

Points arising will be briefly mentioned, but more detailed comment on the crude artifacts made of Scottish native rocks is reserved for a separate communication. Allusion to the response of some of these rocks to intentional fracture, which has been recognised, will, it is believed, demonstrate the interest many artifacts offer, and show that in Scotland there occur greater numbers of products of Mesolithic and later facies than the familiar examples generally known.

True blades not being obtainable from gneissose and granitic rocks, cores in the accepted sense are absent, but several massive lumps bearing regularly disposed flake-scars were collected. Several weigh no less than 5 lb., and some are so worked as to furnish the pieces with a sharp sinuous edge all round. Others are possessed of but one long and usually serrated edge. Whatever the edge, however, the elementary tool usually retains most of the cortex, and is always massive and capable of breaking the thickest bones. What may be described as core-tools were picked up, but two only are figured as the best worked, most typical, and suitable for comparison (fig. 5, Nos. 1 and 2). Intended for lateral prehension and provided with sharp edges produced by alternate regular flaking, they have been split and flaked in a masterly manner. They compare well with certain flint implements, and still more closely with many rude tools fashioned in quartzite and other intractable rocks. Long exposure has given most of these gneissose artifacts from Loch Roag a fine patina which enhances the rich natural hues of the stone.

The "core-tools" may be regarded as side-choppers or even as hand-axes resembling Lower Palaeolithic elementary examples, and also the rude early Neolithic quartzite implements which occur in Lorraine¹ and other regions having no native stone of responsive and controllable properties. A specimen from Kentra, worked in a pebble of green quartzite, kindly lent me by the finder, Dr W. A. Munro (No. 3, fig. 5), is an implement intended to be held by the side. It is figured to show an instance from the mainland, probably of the early Bronze Age, and of a

¹ G. Goury, *L'Homme des Cîlés Lacustres*, vol. i. pp. 251-4 and fig. 78, also pls. xiii-xvi; and André Bellard, *Etudes Monographiques de Préhistoire Lorraine*, "Les Quartzites Ouvrés du Rudemont," Metz, 1935, pp. 17-25, pls. ii, vi, and vii.

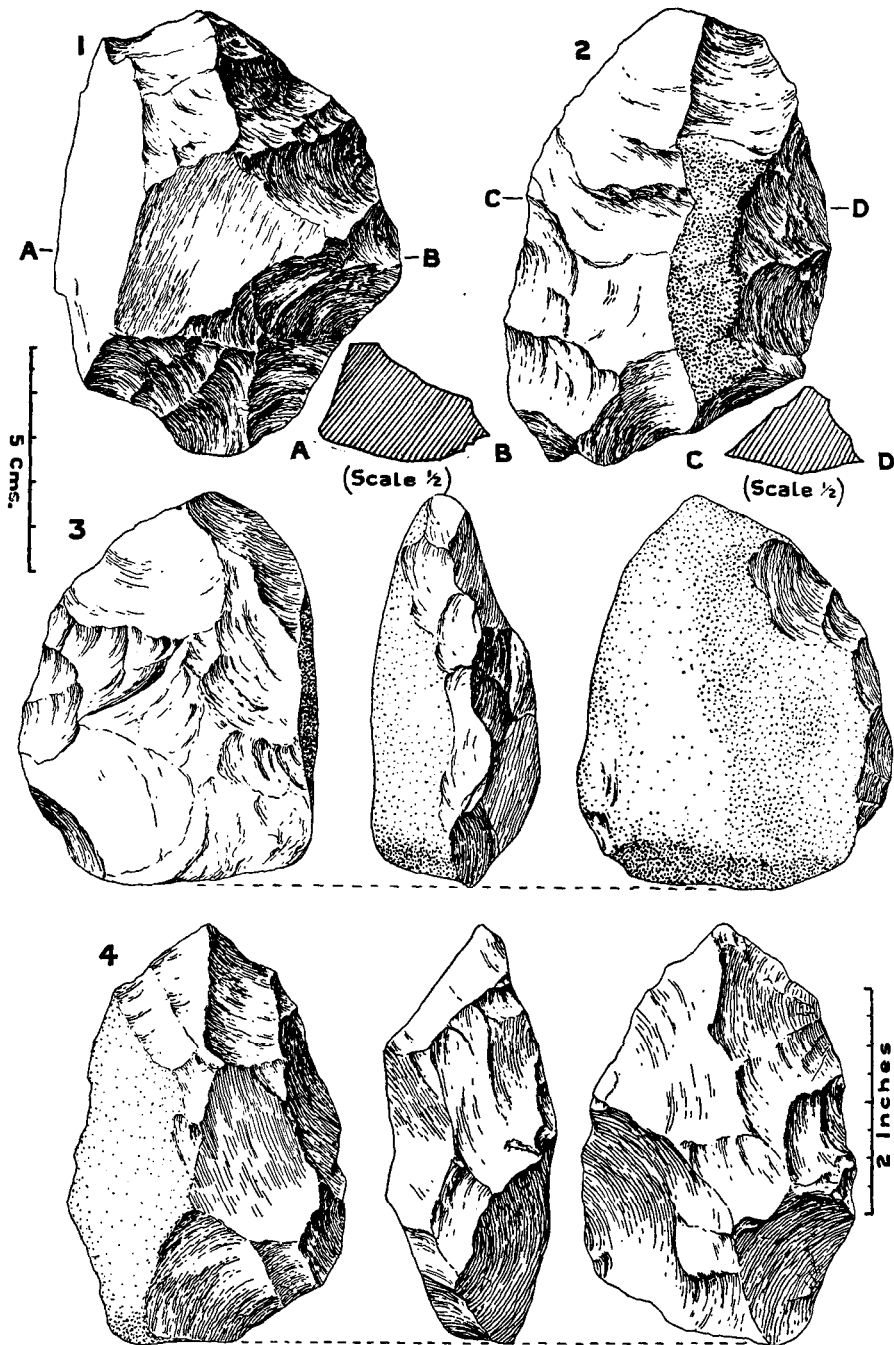


Fig. 5. Hand-axes or Choppers: 1 and 2. Mylonite, Berie Sands; 3. Quartzite, Kentra, Ardnamurchan; 4. Quartzite, Lower Palaeolithic, Montrabe (Haute-Garonne).
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type which has already been recognised in Scotland. The short and shallow flake-scars on the Ardnamurchan piece indicate that the pebble was worked to a sharp edge by means of a hammer-stone. With this western Scottish specimen is shown the drawing of one of the cruder hand-axes of dark Pyrenean quartzite from Montrabe (Haute-Garonne), probably of Acheulian age, and to all appearance flaked upon an anvil-stone (No. 4, fig. 5).

A thick flake-implement of light grey biotite-granite, showing a distinct swelling not unlike a bulb of percussion, is among the specimens recovered. The dorsal surface bears many small flake-scars pointing to

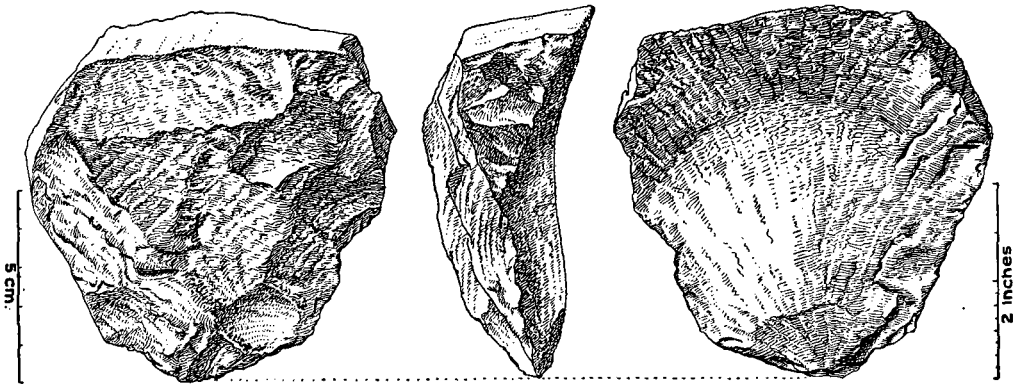


Fig. 6. Berie Sands: Flake-implement of grey Biotite-granite.

treatment of the surface before detachment of the piece from the parent cobble, some of the cortex of which was respected (fig. 6).

Scarcely less massive than the core-tools are some of the flakes. Although very many examples were collected, a few only are figured to show the effects of flaking on varieties of the local rocks, and also what is to be looked for in rocks of this nature when worked for use as implements. All the specimens present analogous features regarded as the characteristic indications of intentional fracture in these materials. The simplest flakes exhibit positive and negative features of fracture as definitely as do humanly struck flakes of flint. Lewis gneiss, granite, and mylonite do not respond to blows in the same way as the favoured material so extensively used where obtainable, but it has been noticed that even these coarse rocks fracture more uniformly than quartz of good quality. In the dark mylonite and red biotite-granite artifacts the evidence of working is clearer, and it is the more apparent when a comparison is drawn between the implements made of

these rocks and those of the local quartz, and even the implements fashioned in the common varieties of quartzite. Bulbs of percussion do not seem to occur in the biotite-granites and mylonite; instead, and just as

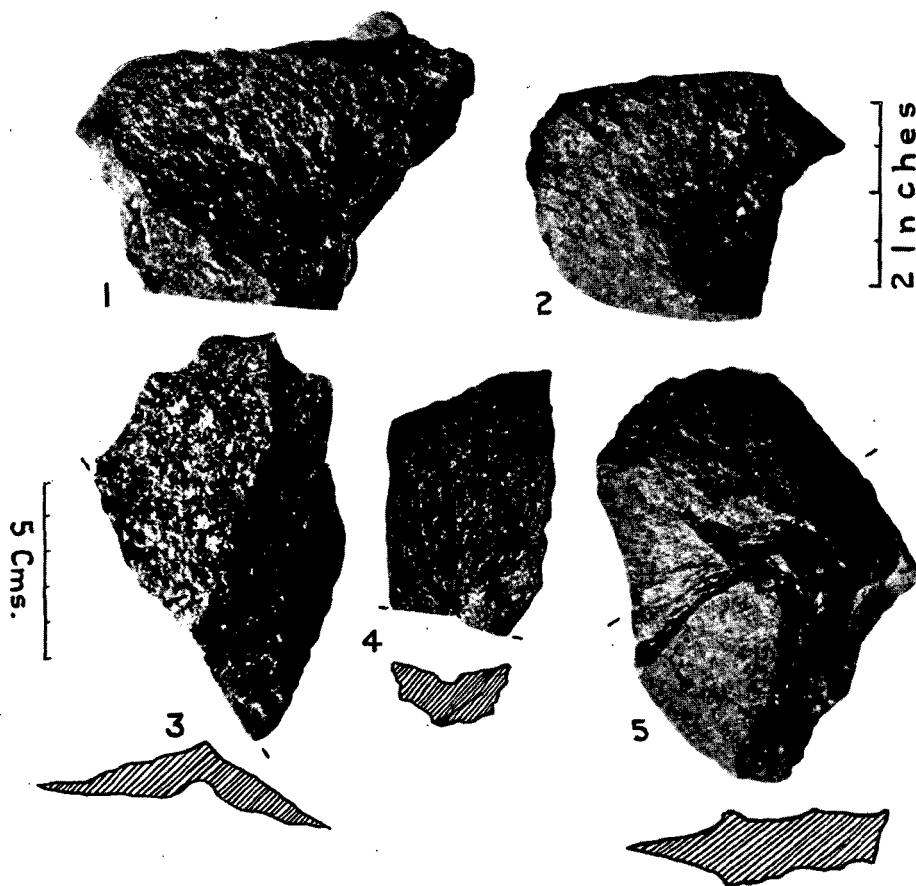


Fig. 7. Berie Sands: Stone Industry, Mylonite and Biotite-granite Flakes.

boldly, there appear distinct ridged protuberances or obvious hollows. Both correspond exactly to what are always regarded as the criteria of human workmanship in materials like flint. Close to the place struck, the penetrative effect of the blow would seem to distribute itself uniformly, but quickly losing its intensity, the force tends to spread irregularly.

Absence of blades and cores suggest that this fact did not escape the stone-knappers, who, nevertheless, profited by the peculiarities of the rocks to obtain the simplest, but at the same time powerful, cutting-instruments from diverse flakes.

Tempting as it is to figure numbers of examples of the coarse stones which have been struck, it is thought that the selection of flakes photographed for this paper conveys to the inquirer the main points observed, and that the series well illustrates features of fracture noted (fig. 7). Nos. 1 and 2 represent large flakes of mylonite, both showing characteristic ridged protuberances resulting from the blows dealt to separate them from the nodule. The first of this pair has been further treated by removal of a large flake from the face shown and from the upper or outer surface, which also displays a number of scars, two large and fairly regular. On the striking-platform the crust remains, indicating clearly that the piece was obtained by knocking a cobble or large knob broken from a rock by striking it against the sharp edge of another stone, *i.e.* by anvil technique.

No. 3, although consisting of a granitic rock less mylonitised than Nos. 1 and 2, bears similar but even more marked features. One face presents a deep hollow of percussion, shown in the section, and determining that the specimen is not a first flake removed from a nodule. The blow which detached it occasioned the very prominent ridge originating at the point of impact; this feature is well seen in the illustration. The negative or hollow may be likened to that visible in another flake of crushed reddish biotite-granite figured as No. 4. On the edge at the point of impact the hollow almost assumes the appearance of a notch. The upper surface also carries the same traits as its predecessor in this enumeration.

A heavy flake, No. 5, having much in common with the core-tools (Nos. 1 and 2, fig. 5), was detached from the parent piece of mylonite after surface treatment. Opposite the slightly worn longest edge, which bears signs of trimming, an excellent hold is provided by the thick flake-scarred butt.

THE POTTERY.

The ware, although mostly greatly weathered and affected by wind-blown sand, can be more readily assigned than the stone artifacts, which, in the absence of contrary information, must be considered as the products of the people who made the pottery. The relatively unaltered state of the worked stone (found in the same conditions as the pottery) would indicate no great antiquity, in addition to emphasising the more

rapid alteration of the softer material. This contrasting feature in the rate of weathering and alteration is well borne out by the fresh condition of the grits, composed mainly of quartz backing the ware.

The ware is generally reddish, ranging from a bright to a dull shade outside and inside, and, although well fired and hard, the core is greyish.

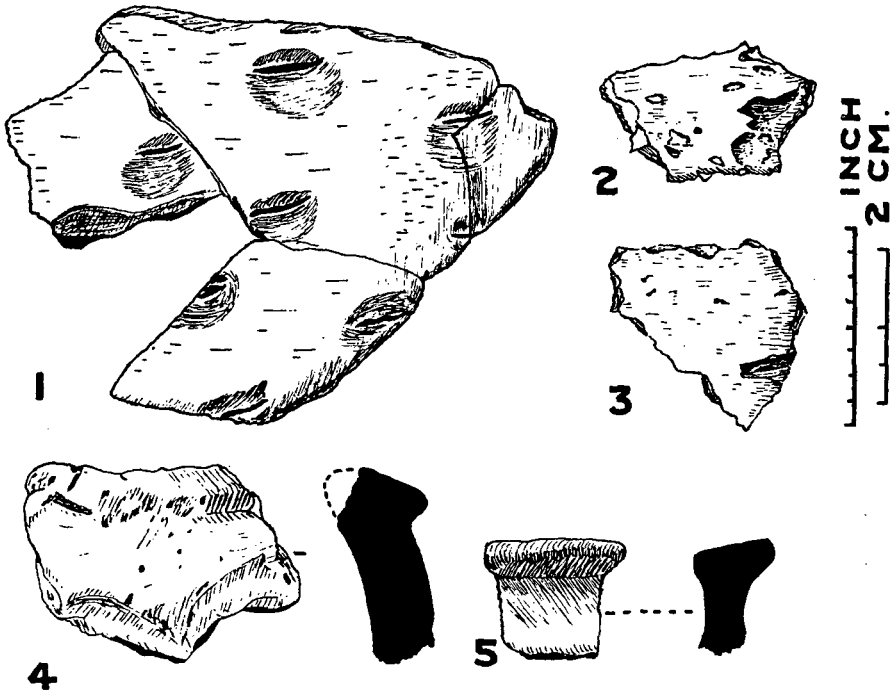


Fig. 8. Berie Sands: Fragments of Pottery.

Some of the sherds are bluish grey throughout; others are red externally with a grey interior.

Little can be said in description of the potsherds (fig. 8). Three different rim fragments, part of a base, and but a few ornamented sherds of two vessels constitute all that calls for more than cursory notice. In the case of No. 1 the ornament was produced by impressing a fingertip so firmly as to leave its imprint and that of the nail in the clay before firing. The process was repeated at intervals. Another sherd, No. 2, also bears a finger-nail impression, but produced by the back of the finger. A third fragment, No. 3, shows the plainest of decoration possible, effected by stabbing the clay with a narrow sharp-edged object. Nos. 4 and 5 are rim fragments.

The largest fragment, a hard ware, dark brown in colour, that of a flat-based vessel, is thick and contains large grits and much sand. The outer surface of the bottom bears an infinite number of rush impressions such as might have been produced by basketwork.

From the flat rims, ornamentation, and quality of the pottery it is evident that the ware is characteristic of the fictile products associated with the brochs. This opinion is shared by Dr Graham Callander, to whom the sherds were submitted. When I showed him the stone artifacts I expressed the view that, although the more shapely quartz tools could not be assigned typologically, they suggested broch-dwellers' workmanship, especially by their association with the more massive coarse stone flakes, which are similar to those found elsewhere in the structures or ruins ascribed to these folks or their contemporaries. Moreover, various relics also found at Valtos support this contention. These objects comprise domestic appliances represented by much-worn saddle-querns and a dark granitic upper-stone, 6 inches in diameter, now scarred circumferentially, the flat nether surface worn quite smooth by long use. A few sawn, split, and worked bones were also picked up in the kitchen-midden debris, consisting mainly of the shells of a variety of edible molluscs.¹

A spherical nodule, 4 inches in diameter, of dense white quartz much injured by use, found near the northernmost ruins with a heap of crushed quartz and components of the local gneiss beside a flag greatly indented of surface, calls for comment. Elementary tools of this sort are usually, but, I think, rather inaccurately, designated under the general term "hammer-stone." This example, pitted and bruised all over, is exactly like the simple implements sometimes found in numbers at prehistoric and even later domestic sites yielding fictile ware. Utilised stones, whether flint or other material, exhibiting similar signs of employment, would, in my opinion, be more correctly described as pounders, for it is believed most served to crush or break up stone for the purpose of making grits for backing potter's clay.² Experiments in triturating stones and pebbles with cobbles on a hard anvil have resulted in producing analogous pittings on the instruments used. In the case of percussion flaking and shaping by means of a stone held in the hand, tests show that characteristic abrasions of a different and distinct kind are imparted to the surface of the rude but veritable hammer. On this, if used long

¹ One of these bones has been identified by Miss Margery I. Platt as a metacarpal of *Cervus elaphus* (Red Deer).

² From a habitation site at Iver, Bucks, I recently recovered a greatly abraded round nodule of flint with a lump of potter's clay, sherds of Neolithic B ware, and worked flints. *Records of Bucks*, vol. iii. pt. 4, pp. 289 and 292.

enough, the marks of injury merge to form flat or slightly sunken areas at these places where the tool has constantly struck the material operated upon. Further, the true hammer-stone shows indications of service only in a few places.

BRONZE PIN.

From the evidence available it appears that the people whose relics have been considered were in their isolation compelled to live in the conditions of a stone culture and were unfamiliar with metal. Yet bronze objects have occasionally been found at sites of this kind, but it cannot be determined if such relics belong to a secondary occupation or are specimens derived from intercourse with more advanced races.¹ An ornamented bronze pin found at this Valtos site cannot be reconciled with either suggestion, as its character points to a date long posterior to the fashioning of the artifacts noted in the foregoing paragraphs. Apparently it was dropped at the place where it lay, until exposed by the wind lifting the sand (fig. 9).

The bronze pin is an important addition to the record of relics bearing some of the characteristically formed patterns analysed and summarised in *The Early Christian Monuments of Scotland*. Although the point is wanting, the curiously ornamented ellipsoidal head is fairly well preserved. In its present condition the pin measures $2\frac{3}{4}$ inches in length, but it is likely that originally it was 3 inches long.

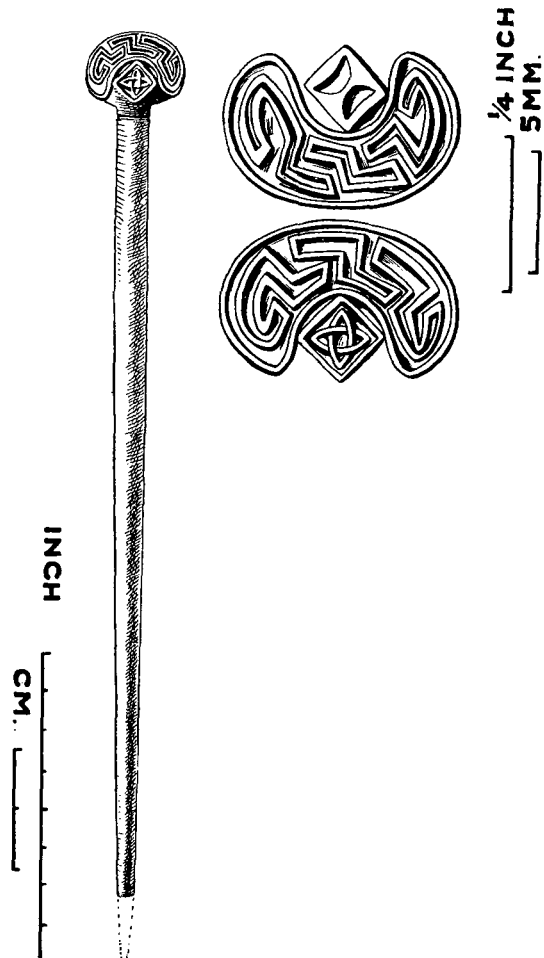


Fig. 9. Berie Sands: Bronze Pin.

¹ The Royal Commission Report, *loc. cit. supra*, states that some slag was found here.

A line encircles the body of the pin immediately below the head. Both convex faces bear almost identical patterns of the nature of frets adapted to the curved outlines of the compartments in which they seem to stand in relief, an effect cleverly obtained by deeply cutting the metal. In each of the two compartments the central motif consists of a Z-shaped design based on the conventional stepped rectangular figure, but with extremities and disposition reversed from the late Mr Romilly Allen's standard.¹ This is flanked on either side by another stepped figure, the outer extremities of which are curved downward and back. A line across the crown, and at right angles to the long axis of the pin, gives the impression that the head is divided. Each ornamented face is triangularly checked in its lower part, thereby enhancing the crescentic form of the compartment above. The metal, left centrally within the horns, formed lozenge-shaped panels for further ornamentation. In one of these two small panels the pattern consists of two looped rings of equal size.² The ornament contained in the other panel, although plainer, is equally interesting. It comprises an adaptation of the well-known double crescent,³ but the two components are separated and do not impinge as is usually the case.

It seems hardly necessary to recall that crescents, disposed singly, in pairs, or forming part of a combination, are regarded generally as female symbols, and as such their origin goes back to remote antiquity. The looped rings are no doubt cognate. In art motifs these symbols are widespread in the Old World, and Scotland alone affords very many instances and variants on stone monuments and articles of personal adornment.

¹ *Op. cit.*, No. 135, p. 67.

² *Ibid.*, No. 489, p. 200. This design appears on the upper part of a bronze pin with movable head, now preserved in the National Museum: *Catalogue of the National Museum of Antiquities of Scotland*, 1892, FC 137, p. 206.

³ *Loc. cit.*, No. 126, p. 63.