RESEARCHES ON THE MEDITERRANEAN COAST OF ANATOLIA
A NEW PALAEOLITHIC SITE AT BELDIBI NEAR ANTALYA
Preliminary Report

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In February 1959, under the auspices of the Faculty of Letters, Ankara University, I undertook palaeoanthropological and prehistoric researches on the Mediterranean coast of Anatolia between Antalya and Marmaris and in the province of Muğla 1. The chief aim of these researches was to take soundings in various caves and rock shelters which I had observed in 1956, when I was a member of a joint European-Turkish geological, palaeontological and palaeoanthropological expedition which was investigating the southern coast of Turkey between Antalya and İzmir. 2 Among the places which had particularly

1 Here I must thank the Professors Council and Research Stations, the Dean of the Faculty of Letters, Ord. Prof. Dr. Ekrem Akurgal and the Chairman of the Division of Palaeoanthropology, Ord. Prof. Dr. Muzaffer Şenyürek, for making it possible for this research to be undertaken. I should also like to thank the General Directorate of Antiquities and Museums in the Ministry of Education for giving the necessary permission for these researches; the Vâl of Antalya, Niyazi Ak, for his co-operation and the Director of the Antalya Museum, Ismet Eroloğlu, for assisting me in the arrangements and accompanying me to Beldibi.

2 A group under the direction of Professor Ewing, of Colombia University, New York, arrived in İzmir on and August 1936 in the 'Vema', a vessel belonging to the Lamont Geological Laboratory, to investigate the depth of the Mediterranean, the various forms of life there and the question of sedimentation. On this ship there was a second party consisting of Italian, Dutch and German members, and this group left the Vema in İzmir and proceeded with the Turkish members on board the 'Arar', a research ship of the Et ve Balık Kurumu, along the coast to Antalya, studying geological, palaeoanthropological and zoological problems. This second group consisted of Professor A. Blanc, of the Human Palaeontology Institute of Rome; Professor R. Koenigswald (Palaeontology) of Utrecht University (Holland); Professor M. Pfannenstiel (Geology) of Freiburg University (Germany); S. Patrizi, Head of the Italian Entomology Institute; Dr. R. E. Paschier, of the University of Rome, working on the species of fish in the Mediterranean; F. Settepassi, studying molluscs; L. Gardini, Professor in the Palaeontology Institute of Florence;
nately there was no time to visit any of these caves, but I was able to see one of two fossil beds in the area, at Madanlar, in Yatağan Kaza, in the garden of the school. The chief items of interest were the tusks of an adult and a baby mastodon, together with teeth and bones.\(^6\)

On my return journey to Ankara, I noticed on the right side of the Isparta road near Burdur Lake a late Neolithic settlement with flint and obsidian industry near a small huyuk and spring called Incirli Tepe. These should also be worth investigation at a later date.

**RESEARCHES AT BELDIBI**

Beldibi is a small village 2-3 kms. inland about 50 miles west of Antalya. It is at the foot of the Elmali range, the north-eastern face of which formed the boundary between the geographical areas called in classical times Lycia and Pamphylia, the latter forming the plain of present-day Antalya (See also note 50). The site of Trissa, one of the oldest cities of Lycia, is situated in the mountains above Beldibi at an altitude of about nine hundred metres.

What I was particularly anxious to investigate further were some paintings situated on the rock face at Kum Bucagi, near a fertile and attractive valley which runs down to the sea a little to the north of Beldibi. Although cultures of the Palaeolithic and many historical periods are rich in the Antalya district, no rock paintings had up to now been discovered.\(^6\)

About twenty-five metres above sea level and 100 metres from the sea, a terrace has been formed by fallen rocks and earth and is now covered by pine trees. This terrace is roughly semi-circular and slopes downwards and the settlement area underneath a hollow in the cliff forms a large rock shelter. In addition there is a cave here which is formed in two parts. The lower section, which is approximately three

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5 The Director of Education at Muğla has sent all this material to the Palaeoanthropology Department of the University of Ankara for examination.

6 At Kara In near the village of Yaşca not far from Antalya, Palaeolithic cultures are being investigated by Kökten. According to his last report, only two objects showing any trace of artistic workmanship have been found in the stratigraphy. (Köktén, 1959, p. 7-9, Plate IV, Fig. VI).

Bosch, 1957, p. 13/15; 49/51.

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attracted my attention were Bodrum, Fethiye, Finike and Beldibi, near Antalya. The latter district is an important one from the Palaeolithic point of view, especially a cave called Kara İn.\(^3\) Beldibi had not, however, been investigated until the visit of the expedition mentioned above. New findings at Beldibi will be dealt with below, and I will describe briefly my researches at Finike, Marmaris and Muğla.

I first visited the rock shelter called Cürcü İn at Yalnız Köy about 15 kms. from Finike during the above-mentioned expedition in 1956. At that time we were able to examine only surface findings and among these I had picked up two flint objects, one of which appeared to be of Mousterian type\(^4\). In 1959 therefore I thought it would be worth taking a small sounding to ascertain the levels. I opened a trench one and a half metres wide and two metres long and at a depth of about one and a half metres reached the limit of the deposits. At one metre ten cms. pottery appeared belonging to historical and protohistoric periods, but no flint tools emerged. The stratigraphy did not therefore confirm the surface findings and there appeared to be no trace of prehistoric occupation of the rock shelter. It is possible therefore that the surface findings mentioned above may have been washed down from the upper terraces and a thorough investigation of the area, which looks a promising one, should be made.

Another preliminary sounding was taken at Kara İn cave at Kozlu Köy near Marmaris. I opened a small trench to a depth of about a metre, which was the total depth of the deposits, but there was no trace of any occupation. There are, however, several other rock shelters and caves in the vicinity which would probably be worth investigation.

At Muğla, the Director of Education had kindly obtained for me from members of his staff the names of several caves and rock shelters in the district which he thought might be worth investigation. Unfortunately and A. Zanelli. The Turkish arrangements were made by Doçent Dr. Nuray Pınar, Deputy for Izmir and a geologist; and E. Lahan (geologist) of the Ministry of Public Works, Ankara, Necat Türker, Zoologist, University of Istanbul, and myself, representing Ankara University (Palaeoanthropology) were the other members of the party. (Pınar, 13, 8, 56. Zafer Newspaper, p. 2)

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4 When Professor Blanc and Professor Koenigswald examined these pieces, they agreed that they might belong to the Middle Palaeolithic.
metres in width, would have been impossible to live in, as it has been filled up to a height of about five metres with deposits of sand, pebbles and other materials. The top of the deposits is 30 metres above the present sea level. The upper section of the cave is about 12 metres above the ground. By placing a fallen tree trunk upright against the rock face, I was able to climb into this upper section and investigate the interior. Its mouth is three metres wide and 3.5 metres high; it is 4 metres long and the back at its widest part measures 5 metres. With its favourable situation facing the sun and overlooking the sea, it would have provided a most suitable place for a family to live, although its height above the ground must have made it inconvenient to get in and out. On the other hand, its position must have afforded good protection from wild animals.

I noticed that there had been a deposit of red earth in the upper cave to a height of about 120 cms. I could see that this had been removed comparatively recently and this was in fact confirmed by one of the villagers working with me, who told me that he had himself thirty years previously climbed into the cave to search for money or other objects of value and had thrown all the deposits to the ground! This solved a problem which had puzzled members of the 1956 expedition, who had collected in the few hours they were there mixed pottery, microliths and various types of flint implements. The stratigraphy in the sounding also showed that above the recent material there were primitive pottery and flint tools which must also have been thrown from the upper cave.

ROCK PAINTINGS AT BELDIBI

The paintings begin 1.45 metres above the present level of the ground and are on the right side of the cave. The area covered is 1.30 metres high and 1.50 metres long. The paintings, of which there are fifteen, are well distributed in the area and most of the flat surfaces are utilised to advantage (Plate I and XV). They are reddish-brown

in colour and some are much clearer than others. The limestone surface is of a warm golden brown colour with patches of white and red, the latter indicating the presence of iron oxide in the soil and this would have been used as the basis of the pigment used in the paintings. This is confirmed by the presence of fragments of natural iron oxide in the sounding and by the discovery in the same layer of pebbles also painted with a similar pigment.

In the composition of the group, there are eight different types of figure and these will be described from the top to the bottom. In the top left-hand corner, there are three cruciform figures, one of which is rather faint (Plate I, No. 1, 2, 3). The largest is 23 cms. in length and and 20 cms. in width; the second is 21 cms. long and 10 cms. wide and the third is 20 cms. long and 15.5 cms. wide.

Crosses are generally considered as a characteristic of the Christian era, but an examination of prehistoric art reveals that this sign has been used since Palaeolithic times as a symbol, sometimes representing a human figure and sometimes the sun. The three crosses at the top of the Beldibi group are probably of the former type. In the

8 Reddish-brown and dark red are the usual colours found in paintings of the Palaeolithic, Mesolithic and Neolithic periods.

9 This was the substance used to colour the Mas d'Azil pebbles. Piette, 1896, p. 389, and those from Abou-Matar in Palestine, Perrot 1957, p. 22, 23, fig. 20, p. 24, fig. 21, p. 25.

10 According to Baudet (1954, p. 57, fig. 1, Nos. 1 and 2), a cruciform figure commonly represents a man in Aurignaco-Perigordian facies and he mentions in particular the neighbourhood of Nanteau-sur-Esore in Seine-et-Marne in France. In Mesolithic times, the cross would also appear to have represented a man combined with mainly triangular forms (Fig. 3, Nos. 6, 7, 8, p. 60) and in Neolithic art a cruciform figure is again commonly used to represent a man (Fig. 5, Nos. 15, 25, 16, p. 65). Brequil and Obermaier (1914) give examples of Neolithic figures in Spain having a cross-like appearance (Fig. 11, p. 239).
central one, the horizontal line extends upwards on one side, which gives the impression of representing an arm. In this way, it resembles the figure on the extreme right of the group (Plate I, No. 10).

Between the two clearer cruciform figures is a very obvious schematic design of an animal, resembling a mountain goat (ibex) (Plate I, No. 5). The pigment which has been used to paint this animal is of much darker red than the other designs. The body is represented by only a straight line, 15 cms. in length, and the legs by four short vertical lines of 4 cms. each. The tail is just indicated by a short stroke at a narrow angle to the body. The most conspicuous feature is the large curved horns which extend 12 cms. over the length of the animal and there is a geometrical shape apparently touching the end of the horns.

This representation of an animal is the most prominent figure in the Beldibi group and is of a very similar type to paintings discovered in the Zarafshan valley in Tajikistan in Asia, of an animal identified as Copra Sibirica, which the local people call Kiyik. (In the Beldibi area this animal is called a Geyik (deer), obviously the same word in origin, although in reality the animal is not a deer but an ibex or mountain goat. This animal, which is still hunted in the district, but is only found rarely, has long curved horns. Its coat is light brown in colour, with a dark-brown line running along the ridge of the back from head to tail, and the underneath of the body is white.) In the Tajikistan area of Asia there are many groups of animal paintings of this type and their finder has dated them as probably of Epipalaeolithic and first Neolithic periods. Engravings in a similar style to the Beldibi painted animal are found at Demir Kapu in North Iraq, near Mosul. In addition, animal engravings have been discovered in Caucasus; on the southern shore of Lake Gokcha, in Syria and in Assouan. On the rocks at Palanlı near Adayaman in S. E. Turkey, engravings were discovered in 1938 which have been identified as mountain goats and the technique is considered to be similar to that of the Magdalenian period. Also in S. E. Turkey, there are schematic designs of animals engraved on the rocks of the Hakkarı-Sat Mountains in the Gevaruk valley, but it is not known yet to what period they belong.

As can be seen from the above, this type of animal painting and engraving is common in Asia and the Near and Middle East, but it cannot be said that they all belong to the same period, for there are considerable variations in the technique of the artists. The people who lived in this part of the world in prehistoric and protohistoric times must obviously have considered this animal as of great importance.

Just touching the base of the right-hand cruciform figure and to the front of the animal, is a circular shape, but with a flattened base, 7 cms. in width, divided into four sections (Plate I, No. 6). The vertical line continues downwards and is 14 cms. in length altogether. At the base there is an inverted semi-circle which, according to Breuil, is an indication of a female figure in the rock paintings in Spain and France and this has probably the same meaning at Beldibi. This figure is also similar in design to some other schematic petroglyphs discovered in Spain and compared by Obermaier with the painted pebbles of the Azilian period from the Mas d'Azil.

There is evidence of crosses of a red colour being used in the Neolithic period in the Ural Mountains on the banks of the Ujier River (Genina, 1954, p. 260, 276. Table I, Nos. 122, 137).

Obermaier, 1937. p. 492. Fig. 9, Nos. 5 a and b.


11 Przeworski, 1935. p. 9-15. Fig. 1.

Pittard, 1939. p. 189.


Pittard, 1939. p. 189.

13 Pittard, 1939. p. 188, 189.


The authors, who were members of an expedition organised by the Austrian Nature Lovers Society and the Elmadag Mountaineering Club, discovered about a hundred of these engravings in the Gevaruk Valley, while they were climbing in the Hakkarı-Sat Mountains in 1956. They did not give any technical information about them, but they recognised that they are symbolic in character and include many geometrical shapes.


In making this comparison, Obermaier remarks that the similarity is too close and too frequent to be by chance and considers that proof is thus supplied that naturalist levantine art had already by degeneracy furnished the motif of symmetrical linear diagrams, from the beginning of the Mesolithic. The schematic petroglyphs are thus more ancient, that is to say Palaeolithic.
It is interesting to note that in respect of winged tanged points from the sounding there are similarities between the Beldibi material and the Parpallo complex of Spain. In the same way Azilian points and painted pebbles at Beldibi can be compared with those from the Mas d’Azil.

A little to the right and below this figure is another similar in design but slightly larger (Plate I, No. 9.). The base is 11.5 cms. wide and the vertical line is 13 cms. long. In each of the four divisions is a round spot, and the extension of the vertical line downwards is not too clear, as the rock face is somewhat uneven at this point, but it appears that the line divides into two.

Underneath the animal and also beneath a slight projection of the rock is the second most striking figure (Plate I, No. 11). This is 13 cms. high and resembles a man with his hands on his hips. The body is comparatively very long and the lines indicating the legs are extremely short. There is a third line in the centre similar to what Breuil considers is a representation of the male organ in the rock paintings of Spain and France.18 The head gives the impression of being horned or of having very large ears. This could be in imitation of an animal and the attempt to combine human and animal characteristics may be connected with fetishism. Figures having a similar position as regards the arms have been found in Spain and Asia.19

We now come to the three figures in the bottom left-hand corner. The first is another cruciform figure, 15.2 cms. high and 9.7 cms. wide (Plate I, No. 12). On the top of the vertical line is a small almost complete circular shape, 4 cms. in diameter, and at the bottom is an inverted semi-circle. At each end of the horizontal line there is a slightly curved vertical line. To the right of this is a figure rather similar to the one already described at the top of the group on the right of the animal (Plate I, No. 13), but instead of a flattened circular shape at the top there is only a semi-circle with flattened base. Similar designs have been described by Breuil among the rock paintings of Eastern Spain.20

To the right of the figure just mentioned, is a rather faint equilateral cross (Plate I, No. 14), which is the sole example of this type of figure in the Beldibi group. This figure is found in the Upper Palaeolithic period as a decoration on bones.21 It also exists on the painted pebbles of the Azilian period from the Mas d’Azil, which, according to Piette, had a symbolic meaning.22 In addition it can be observed in Neolithic rock paintings in Spain which were compared by Obermaier to the Mas d’Azil designs and found to be very similar in conception.23 The equilateral cross has been discovered engraved on the stones of a Neolithic tomb in France; on pottery from lake stations of the Bourget lake; and on first Iron Age pottery.24 There are instances of equilateral crosses in megalithic engravings, on Bronze age ceramics, and it is also a sign of the Phoenician alphabet.25 This sign is seen not only in Europe. It can also be observed in red Neolithic rock paintings in the Urals on the Viser River.26 In Anatolia, at Alaca Höyük a cross-shaped amulet in red carnelian from the Copper Age was discovered and silver crosses appear on the backs of Copper Age statues of deer in bronze and copper also found in tombs at Alaca Höyük.27 Crosses also appear on post-Phrygian pottery from Alaca Höyük and on Phrygian from Pazarlı.28

As can be seen, there are numerous examples of the equilateral cross in various parts of the world and in many periods. No doubt it

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18 Breuil, 1933. Vol. III, p. 96, Fig. 49
19 Breuil, 1933. Vol. III, p. 31, Fig. 17, Plate VIII.
Obermaier, 1937. p. 492, fig. 9; p. 493, fig. 10, Nos. 1 and 2, Series 8b.
Eidestedt, 1932. p. 318, fig. 34.
Gening, 1954. p. 258, Table 1, No. 123.
21 Piette, 1896. p. 401, fig. 33.
22 Piette, 1896. p. 399, fig. 28 and 29; p. 400, fig. 30, 31, 32.
23 Obermaier, 1937; p. 492, fig. 9, Nos. 5 c, d, and e.
Breuil and Obermaier, 1914. p. 299, fig. 11.
25 Capitan, Breuil and Charbonneau-Lassay, 1934. p. 122, 123, fig. 26; p. 124, fig. 27; p. 129, fig. 32; p. 131, fig. 34, p. 132, fig. 33; p. 133, fig. 36; p. 134, fig. 37.
27 Ambr, 1937. Plate CGXXIII, No. AI, 1007, Plate CGII, CCIII, CCIV, CCV.
28 Koçay, 1941. Plate LI, No. 6598, 6599.
Koçay, 1938. p. 7, Plate IV, fig. 11.
has been handed down from Upper Palaeolithic to recent times in an uninterrupted tradition. 39

On a smooth section of the rock face, somewhat apart from the other figures, is a T-shaped sign on its side, formed of three unequal branches (Plate I, No. 15). The horizontal line, which is 8.5 cms. long, extends slightly over the vertical one, which is 14.2 cms. The vertical branch divides into two at the top and bottom and the left side of the horizontal branch also has the same formation. The general impression given is of a cross which lacks one of its branches and it thus resembles the poterne cross which Piette noticed on the painted pebbles of the Mas d’Azil, except for the shape of the extremities of the branches. 40 T and Y shaped flint objects were found in the sounding undertaken in front of the cave. It is hoped that further excavations may clarify the relationship between these objects and the similar shapes in the paintings. 31

There are three small geometrical shapes remaining, one of which has already been mentioned as touching the horns of the animal figure (Plate I, Nos. 4, 7, 8). This combination of geometrical shapes with animals has been observed in the Magdalenic period in Spain (the Parpallo cave) 32 and another example from the Upper Palaeolithic is in Minateda in Spain, illustrated by Abbe Breuil, where a triangular shape is to be seen in contact with the horns of a goat. 33

In the rock engravings at Hakkari-Sat in South East Turkey, there can be seen two ibex or mountain goats facing each other. 34 Attached to the tip of the horns of one of them is a geometrical shape and touching the horns of the other is the point of a not very clear triangle. The authors have observed only one side of the triangle and from the drawing obviously regard it as a representation of a stick in the hand of a schematic figure of human appearance just above. 35 There is a second triangular shape, again not very clear, in between the horns and the body of the same animal. This is reminiscent of the two triangular shapes which appear in the Beldibi paintings (Plate I, Nos. 7 and 8). There also appears to be a geometric shape in contact with the horns of another animal at Hakkari 36 and there is what I consider to be a triangle touching the extremity of the horns of yet another one. 37

After an examination of the above-mentioned pictures, there can be seen a close similarity between the schematic representation of the animals and the geometric shapes in the Gevaruk valley and at Beldibi. Such similarity suggests that this style of art may have a wide distribution in Anatolia, although up to now there is not a great deal of evidence to confirm this. As will be explained below, the discovery of painted pebbles in the stratigraphy may connect the rock paintings to one of the layers in which they were found. Although the pigment used on the pebbles is also iron oxide, there is no exactly similar shape among the rock paintings. It is hoped that further excavations will produce more evidence definitely to date the paintings.

On the extreme right of the composition is another group, only one shape of which can be distinguished at all clearly, as a white deposit from dripping water has covered them. It appears to be a simple schematic design of a man with outstretched arms and a very long body (Plate I, No. 10). It is 20 cms. long and 10 cms. wide. As mentioned above, this figure is similar in style to the central cruciform figure, but it is more obviously a schematic human being.

The general impression given by the paintings is that they reflect the primitive ideas of the occupants of the cave, and each of the designs executed on the rock face has doubt has a symbolic meaning. Although it is not possible to understand the significance of some of the figures, it would seem that the artist has tried to explain in simple form the beliefs of the people. Schematic designs are characteristic not only of the Mesolithic and first Neolithic periods but also of the last stages of the Upper Palaeolithic, 38 all of which cultures are represented in the stratigraphy.

36 Ibid. Plate 3.
37 Ibid. Plate 15.
38 Obermaier, 1937. p. 492.

30 Piette, 1896. p. 401.
32 Obermaier, 1937. p. 496.
33 Breuil, 1930. Plate I.
34 Freh and Uyanik, 1957. Plate 2.
The principal figure in the group is the animal. To assist in their hunting, magic was no doubt practised by the people and possibly the geometric shape touching the horns was placed there for a specific reason in this connection. The figure which seems to combine human and animal characteristics no doubt had the same purpose.

ENGRAVINGS AT BELDI

In the course of this closer examination of the rock face at Beldibi, I discovered an engraving of a jumping deer partially covered by the two painted figures in the bottom left-hand corner of the group. This is a beautiful naturalistic representation of an animal in movement and is in sharp contrast to the schematic design of the paintings (Plate II). This superposition of the two painted figures over the engravings has probably been purposely done, no doubt by later inhabitants of the cave, who portrayed their own schematic representation of a mountain goat higher up the rock face. This engraving of a running deer is the clearest of a collection of animal engravings of different species, some of which consist of only a few lines which together with the natural shape of the rock form an animal shape. The utilisation of natural projections in the rock is known in Upper Palaeolithic art.

About three hours from foot from Beldibi at Yatak Yeri on the right side of the Belmar brook, I was told that there were more paintings in a cave there. I was unable to trace these, but during my search I found far back inside another cave on the rock an engraving of the horn of a deer. The rest of the projecting part of the rock which had been formed like a stalactite by dripping water and which must have carried the animal's body and head, had been broken off, probably by workmen or villagers who had dug there to look for money or gold. I tried to locate the missing piece in the vicinity, but could find nothing. The horn is deeply incised and this was probably done before the stone had become hardened. From the earth excavated by the villagers, I found some flint artifacts from which I gather that prehist-

oric man did not inhabit the cave continuously, but no doubt visited it seasonally for hunting purposes.

OTHER ROCK PAINTINGS IN THE AREA

During an investigation of the district around Kum Bucağı, I discovered another set of rock paintings about six kilometres up the valley near to a place called Hayth Lake in the Arpaklık Mevkii. Underneath them there was a pit which the villagers had dug in an attempt to find money, no doubt thinking that the paintings had some such significance, and in this pit I could see a hole possibly indicating that there was a cave which had been filled up. The paintings, of which there are seven, are all of a cruciform type of different sizes and are of a red colour. Three of them are simple crosses; one of them has a much longer vertical line and at the base there is a second shorter horizontal line at a right angle to it. One of the largest figures is an almost equilateral cross, the extremities of which divide into two. There is also a much smaller cross, of similar type, but this is not complete. The remaining figure in the best position on the rock face is a fairly large circle enclosing a cross.

As mentioned above, the cross has been used since prehistoric times as a symbol and the equilateral type has often represented the sun, which was worshipped in many periods of history and prehistory. Equilateral crosses enclosed in circles have been found in all periods from the Mesolithic to historical times. The Mesolithic is represented in the painted pebbles of the Mas d'Azil; in the Neolithic this sign is found on pottery; in the Chalcolithic it is found on pottery from Yümük Tepe, Mersin, in Southern Turkey.

40 According to Piette, the discoverer of the painted pebbles of the Mas d'Azil, the equilateral cross is an abbreviated symbol of the sun, which is always represented as a disc surrounded by rays. In order to execute it more quickly, the engravers and painters have suppressed most of the rays, only keeping those in the four principal directions, with the solar circle in the centre. To abbreviate further, they have suppressed the circle and the sun has been reduced to a point from which the four rays extend at a right angle. The equilateral cross in its most simple form was thus formed.

Piette, 1896, p. 399, figs. 27, 28, 29; p. 400, figs. 30, 31, 32. p. 401.
41 Piette, 1896, p. 398.
42 Parley, 1915, p. 149, fig. 184.
and there are similar signs on painted pebbles of the same period found at Abou Matar in Palestine; in the Copper Age, there have been discovered in tombs at Alaca Höyük, Central Anatolia, metal discs representing the sun which carry on their edges small circular satellites enclosing a right-angled cross; in the Bronze Age on megalithic engravings at Vendee (France); on pottery found at Yümük Tepe, Mersin, at Tarsus and at Alaca Höyük, all in Anatolia; and in Iron Age pottery from Siakk, near Hashan in Iran. In addition this figure is an alphabetical sign in the Phoenician and other ancient writing and in Proto-Elamite Epigraphy in Persia.

Although this set of paintings is not very far from the Beldibi group, it is difficult to say whether they are contemporary or not, without further investigation.

While I was excavating at Kum Bucağı, one of the villagers informed me that he knew of another group of rock paintings in the valley between the Sarımır and Koca Mountains. I investigated this valley, which is five hours from Beldibi, half of which can be covered on horseback, the rest being necessary to climb on foot. I located these paintings about 500 metres above sea level situated on the western side of Koca Dağ and near to Sarımır spring. They are on the right side of a very large rock shelter, 30 metres long, 15 metres high and about 5 metres deep. They are of a lighter red colour than the ones at Beldibi and are quite different in character, although they are also schematic designs.

Altogether there are sixteen different figures. One is cruciform probably representing a human shape, 19 cms. long by 7.5 cms. wide; at the bottom of the vertical line there is an inverted semi-circle similar in style to one or two of the Beldibi group and the end of the horizontal line extends downwards to resemble arms. There are what appear to be two animal figures, but it is difficult to identify them, although one could be a lizard, about 11.5 cms. long and 9 cms. wide. There are three simple equilateral crosses, one small rectangle and one figure, 6 cms. long and 4 cms. wide, resembling a bean-shape. Besides these, there is a circle divided into six sections and, most curious of all, what appear to me as three alphabetical signs, of (B) and (L) and a triangular shape all on their sides. Here one immediately thinks of the Mas d’Azil painted pebbles, among which there are B and L shapes in red colour.

I consider that these paintings might belong to one of the Beldibi cultures but it is difficult to decide until a full excavation has been undertaken near to the rock shelter. This will be very difficult on account of the large fallen rocks there, no doubt caused by earthquakes after the paintings had been executed. This is confirmed by the fact that on the under surface of one of the fallen rocks near to the rock paintings one of the villagers showed me a figure consisting of two red parallel lines.

The paintings seem to be Mesolithic or early Neolithic in style. They are probably later than those at Beldibi. The district would have been very suitable for prehistoric man to live as there must have been many animals to be hunted. This valley, with its fresh running water and wild fruit, such as grapes, figs, olives, pears and carob beans is a very agreeable place to live in even to-day.

To summarise the account given so far, it can be stated that after a examination of the rock shelter at Kum Bucağı there are two different types of art on the surface of the rock, i.e. schematic paintings and naturalistic animal engravings.

The paintings are executed in a reddish-brown colour and some are much more distinct than others. The pigment was obtained.
from iron oxide, of which there is evidence in the soil and on the material which came to light in the sounding.

The paintings are schematic in character and no doubt have a symbolic meaning. The design of an ibex or mountain goat (Plate I, No. 5) is obviously the most prominent figure in the group, and the geometric shape touching the horns may indicate that magic was practised by the occupants of the cave in connection with hunting. The figure underneath the projection of the rock (Plate I, No. 11), which seems to combine human and animal characteristics, may also be connected with fetishistic ideas. The cruciform figures (Plate I, Nos. 1, 2, 3, 10 and 12) probably represent simple schematic human diagrams and the three figures (Plate I, Nos. 6, 9 and 13) are possibly rather more complicated human shapes, although they could also be connected with fetishism.

The engravings of a running deer and other animals are deeply incised and are obviously older than the rock paintings. They no doubt belong to the lower layers of the sounding (Upper Palaeolithic). The later inhabitants of the cave may have recognised the earlier art and purposely superimposed their own schematic designs on it.

The area round Antalya is an important one as regards Palaeolithic and various historical cultures, but no rock paintings have until now been found either in this district or in Anatolia generally. The discovery of art from more than one period on the same rocks, together with evidence from the soundings to indicate the successive inhabitants of the cave, is therefore of considerable interest and importance. The relationship between the rock paintings and the painted pebbles is still not yet completely clear, as one is entirely covered with red pigment and is older stratigraphically than the one bearing the schematic design (Plate No. III, fig. 1 and 2). This shows a closer similarity to the rock paintings, which are possibly therefore late Mesolithic in date. Alternatively the tradition may have continued into the early Neolithic (Beldibian).

The fact that I also discovered two other sets of rock paintings and one other engraving in the district confirms that a great deal more investigation is needed.
After a thin layer of humus, which would have formed the original top surface, Layer A began. At the top of the layer there were ashes and blackened earth containing small pieces of modern pottery, and towards the bottom of the layer, there was pottery of a plain buff colour of varying thickness and with no decoration of any kind. This belonged to the classical periods. In the same part of this layer, a few pieces of more primitive pottery, together with flint implements, began to appear, both of which had a reddish patina and which were probably intrusive from the lower layers.

The soil in the next layer B was rather more reddish-brown. At the top appeared pottery of very primitive (Neolithic) type, together with flint microliths, including various types of microburin, and lunates, tanged points, tranchets, axes without a polished cutting edge, small ridge-backed sickle-blades, trapezes, stemmed knives and arrow-heads. (Plate IV and V). There was no pressure flaking on either of the latter implements. There were also fairly large burins covered with a patina. (Plate V No. 15). The flint industry shows a Mesolithic tradition which comes from the lower layers. In this layer, there were used bone tools, some flat and some pointed. The potteries are all of the same type of workmanship, varying from 5 mm. to 17 mm. thick. (Plate IV, No. 1). I have been able partially to reconstruct one small round pot which has a comparatively large rough flattened base, 12 mm. thick, tapering to 5 mm. thickness at the top (Plate IV, No. 2). One large sherd gives the shape of another pot which had a flat base, with sides sloping outwards and a straight rim (Plate IV, No. 7). Three examples of lugs were found, one very large measuring 48 mm. long, 45 mm. wide and 21 mm. thick (Plate IV, No. 6, 8, 9). I have reconstructed one pierced lug (Plate IV No. 9). On the inside surface of this sherd there are clearly to be seen three finger marks and there are similar traces on the large lug mentioned above. Most of the sherd's were coarse and not well-fired and all were covered by a thick layer of ocher from the soil. One or two pieces, however, still showed a blackish burnished surface. There was no decoration of any sort on any of the sherds. Towards the bottom pottery gradually diminished and by the end of this layer had disappeared altogether. The conjunction of this pottery with the above-mentioned types of tool indicates a specialised culture which I have named Beldibian.

At the bottom of Layer B there have fallen very large blocks of stone from the rock face and it was necessary to move one of these in order to continue the sounding. This operation took ten men three days to complete. The falling of such large blocks was no doubt the result of a very severe earthquake at the beginning of the Neolithic and there are similar falls in other rock shelters in the district which bear this out. Earthquakes were also probably responsible for changing the level of the spring in the cave which dried up at the beginning of the true Neolithic period. The increasing aridity of the climate at this time was also no doubt a contributory factor. The earth at the bottom of Layer B, underneath these large blocks, is redder and more mineralised which indicates a pluvial period, and contains fewer flint tools.

Towards the middle of this layer (C1), flint implements of Natufian, Capsian and Tardenoisian type began to increase. In the same part, there were various species of sea and land shells, some of which were pierced, and also numerous small pieces of fossilised animal bone, including a large piece of deer horn. In addition some fragments of human skull occurred. Some of the pieces of animal bone and human skull showed signs of having been burned. There also emerged half of a long holed stone object, which would have no doubt been used as a pendant. This was covered as well with a reddish patina. In this section, although the flint industry is mainly microlithic in character, it retains tools of an Upper Palaeolithic type. They include angle, bec-de-flute, polyhedral and microburins, sickle-blades, backed blades, borers, end-scrapers, small flake scrapers, notched blades, small cores and core-scrapers, mostly pyramidal in type, blunted backed type lunates, triangles, trapezes, roughly Chatelperron curved points, one thumb-nail scraper and one very large flake partly retouched for use as a round scraper (Plate VI). In addition, there were

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22 For other examples of Neolithic pottery, see Köktén, 1935, p. 230, Plate IV, Nos. 8, 10, 11 (Kara In Cave near Antalya); Garstang, 1933, p. 10-43 (Yumuktepe, Mersin); Mellaart, 1938 a, p. 3-4; 1938 b, p. 92 and 1938 c, p. 142, fig. 7 (Hacilar Höyük, near Burdur); Stekelis, 1952, p. 31 and 32, fig. 16 and 17 (Uşbıuı) and Stekelis, 1951, Plate 1, fig. 2; Plate 2, fig. 1, 4, 5, 8, 9 (Yarmukian).

23 In general the tools from this layer correspond very closely with those coming
broad-based triangular points of small and medium size, two flakes with prepared striking platform, one hand-axe type tool, or pick, 55 mm. long, retouched on only one ridge and with no polish on any part. One of the characteristics of this section of the layer was small unifaced tanged points and tanged scrapers on flakes (Plate XII No. 11, 12, 13). Two of them were very much like arrow-heads, one chipped on both sides of the tang and the other retouched on one side of the tang and one side of the point, which in this tool is on the bulbar side. A broken fragment of gritty stone, grooved on one side, was found and this would probably have been used as a polisher for bone implements, of which some examples have been met with in this layer. There are three small parallel-sided blades showing the ridge-backed (Heluan) technique which appears in the Natufian culture of the Mugharet el-Wad in Palestine. (Plate VI, No. 10, 10 a). One end is pointed by oblique fracture and the back, instead of being blunted, is ridged and the cutting edge is slightly retouched on one side. This specimen is only 16 mm. in length. Square-ended blades also occurred in this layer with

from the Natufian layer B at Mugharet el-Wad. I was able to examine some of the material from this site in the Archaeology and Antiquity Department at Cambridge and in particular I noticed that techno-typologically the microburins and polyhedric burins, sickle-blades, lunate and cores were very similar. Only a few bone implements have yet been found at Beldibi and no sign of art, e.g. carving, engravings, has yet emerged from the stratigraphy. (Garrod, 1937) p. 30, 31, 32, Plate VIII, No. 7, 8, 9, 11, 12, 33, 36, 43, 45-46.

Similar types of pick are also found in the Natufian layer B at Mugharet el-Wad (Garrod, 1937, Plate VIII, No. 1)

According to Garrod, small arrow-heads, some tanged, occur only in the upper layers of the Natufian culture at Mugharet el-Wad and El-Khiam (Garrod, 1957, Plate IX). There are technical similarities in the tanged points at Beldibi and in Palestine, for example, slightly hollow-based and winged types, but there are more variations at Beldibi, as some have burins and scrapers on the tip.

Grooved stones have been found in Natufian Layer B at Mugharet el-Wad (Garrod, 1937, p. 41) and in the Natufian culture at Mugharet el-Kebareh (Turville-Petre, 1932, p. 276). Other examples have been found in Shamidar Cave in Iraq, Layer B (Solescki, 1935, fig. 106, p. 473); in the Yamnaiian industry in Palestine (Stekelis, 1951, plate VI and in the Axillian beds at Montardit, France (Treat and Vaillant-Couturier, p. 236, fig. 5) etc.

Garrod, 1937, Plate VIII, No. 44

retouch sometimes on one edge and sometimes on both. (Plate VI, No. 11).

In Layer C2 the earth became more red and digging was increasingly difficult on account of the closer texture of the soil. The tools were mainly similar in type to Layer C1, but the scrapers were larger and similar to those found in the Lower Natufian level in Mugharet el-Wad and at Mugharer el-Kebareh (Plate VIII, No. 2). There were also round and fan-shaped scrapers in this Layer and more borers on flakes and blades. At the top of the section microburins of the same type as in the previous section occurred (Plate VII, No. 8, 9, 10). There was a ridge-backed type lunate and two blades with the back not blunted in the ordinary way but trimmed to a ridge by chipping on both faces (Plate VII No. 5). This method is typical of the Lower Natufian of the Mugharet el-Wad. As also found in the preceding section of this layer, blades and flakes with prepared striking platforms occurred. Tanged points were of a greater variety than in

Square-ended blades with ridge-backed technique are smaller at Beldibi than in the Natufian of Palestine.

It is interesting to note that the deposits at Mugharet el-Wad are also of a red colour.

Garrod, 1937, p. 30, Plate XI, No. 3.

Turville-Petre, 1932, p. 274, fig. G, No. 9.

Vauhre, 1933, p. 468, Fig. 11, No. 9, 13, 19-20.

Vauhre, 1936, p. 29, fig. 8, No. 31-46.

Daniel, 1948, p. 418, fig. 3, No. 1, 10, 12-14.

Daniel, 1953, p. 217, fig. 4, No. 40-42, 231, fig. 12, No. 43-45, 46, fig. 13, No. 49.

For microburins, also see Vignard, 1955, p. 207, 209; Bordes, 1958, p. 587, 588, and Müller-Beck, 1954, p. 174, fig. 1-3; The so-called Mesolithic stations so far investigated in Turkey, e.g. Baradız and Telkeköy (Kansu, 1944, p. 177-180, fig. 1-4) have not yet been proved to be such. Geometric tools and especially microburins have been mentioned only at Macucay (Kansu and Ozansoy, 1952, p. 381, 389). At Kara In (Antalya) the Mesolithic industry has not yet been described but Kökten considers that it is mixed with the upper layers of the Aurignacian (Kökten, 1959, p. 9).

According to Garrod, the majority of these blades and of the microliths are retouched in a way which is rare in other Mesolithic industries but which can be considered one of the distinguishing features of the Lower Natufian. Garrod originally called this technique Heluan retouch, but subsequently re-named it 'ridge-backed retouch', as it is in fact rare at Heluan. (Garrod, 1957, p. 215).
the lower layers and they were mostly prepared on flakes. There were also micro-tanged implements. An unusual type was a small T-shaped tool. This was formed from a flake with only the under-side of the arms and the points of the T retouched on the upper surface. Small triangular points also occurred in this section with one edge retouched or without retouch, which is characteristic of micro-lithic industry. Sickle-blades and some lunates showed signs of use. Small truncated blades were retouched at the upper end. Generally the blades and flakes had a tendency for the butt end to be refined on the upper surface.

Perhaps the most interesting discovery of the whole sounding were the painted pebbles which were found in layer C (Plate III Fig 1, 2). These are the first to be found in Anatolia. At the top, the most important one came to light. It is round and is 6.3 cms. long and 4.7 cms. wide. It is painted on one side only with a dark red pigment (Plate III). The schematic design is probably intended to represent a human being. As mentioned above, there is no exact similarity between the design on the pebble and the rock paintings, although there is a certain affinity with one or two of the latter. The pigment used is iron oxide in both cases. Towards the bottom of Layer C2, some other round pebbles emerged, one larger than the one just mentioned. They appeared to have been partially painted with a red colouring, which could be seen only after the hardened earth had been removed. Another smaller pebble seemed to have been incised with a red line, but this again was not very clear, and a further one was completely covered with a red pigment. The two last mentioned pebbles are older stratigraphically than the others. In addition, there were collected some unpainted pebbles, both flat and round, in this section.

In Layers C, D, E the number of bone implements increased and some of them are probably pieces of harpoons (Plate XIII, No. 1) and spear-heads. Two tools are pointed at one end and have V-shaped notches at the other (Plate XIII, No. 5). The bone industry which is mostly in small pieces will be discussed after further excavation.

At the bottom of Layer C2 the flint industry was abundant, but after that the number and variety of artifacts decreased and changed in type. The layer ended with a deposit which contained earth of a much redder colour, though of a finer texture and more mineralised. This indicated that there was another pluvial period and the earth was carried down from the rocks by heavy rain. There is no gap between Layers C2 and D as between the Mesolithic Layer Natufian B2 and the Atilitian Layer C at Mugharet el-Wad.

After this, the earth became more sandy and lighter in colour. The industry in Layer D showed a gradual change from the preceding layers in that there was a greater proportion of larger tools. In this layer steep scrapers on cored tools, angle, polyhedral and bec-de-flute burins (some with the working edge twisted) were more impressive and there were long blades with notches on both sides and end scrapers on blades. A characteristic of this layer was unmistakable tanged points on thick and large flakes and blades. Another characteristic was

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63 Tanged points show a tendency towards having a wing on only one side, but Layer C2 retains Upper Palaeolithic characteristics, as can be seen from the type of burins present.

64 Tanged Y-shaped tools have been found in the Aterian complex of North Africa (Alimen, 1957, p. 156, 157). Alimen mentions that the Abbe Breuil had discovered Tanged Y-shaped tools in Somalliland in the pre-Wilton culture (p. 157) and they are found in various parts of France, Belgium and England, but are not known stratigraphically nor is the use to which they were put. It is possible that they might have a symbolic significance, as mentioned by Fitte. (Alimen, 1957, p. 157).

65 Sickle-blades are rare, while lunates are comparatively plentiful.

66 Although there is no head represented, there is a central line corresponding to the body, which ends in a more or less circular shape divided into four. Lines which resemble arms follow the circumference of the pebble. I suggest that the figure represented is a female one and that the circular shape has a symbolic significance in connection with fertility. It is also possible that the circular shape represents the sun. (Bostancı, Cumhuriyet, 23.6.59, p. 2).

67 Pieces of iron oxide from the sounding have been tested by the M. T. A. Institute in Ankara and proof obtained that it is in fact material: 'The sharp edges of the particles of quartz and felspar in the specimen have been joined to each other by iron oxide.' Here I would like to thank the petrographist, Dr. Gültekin Elgin, at the M. T. A. Institute for his co-operation in this respect.


69 Although Atilitian Layer C at Mugharet el-Wad shows stratigraphically and technologically close similarities with Layer D at Beldibi, no tanged implements are mentioned in the former (Garrod, 1937, p. 41-44). One tanged element is shown by Rust in the Atilitian layer at Jabrud, Syria (Rust, 1950, Table 89, Fig. 4). The important Palaeolithic site at Kara In yielded a tanged point, illustrated by Köktend (1947, p. 299, plate 3), which was mixed with Mousterian type tools. No further information has been given about this tool, but Köktend
the small but finely worked Chattelperron points, small and large curved points, some roughly and some more finely retouched and narrow leaf-shaped blades, some straight, with a blunting retouch on one side, resembling Gravette points. These types of tool also occur in the Atlitian and Kebaran cultures in Palestine. This layer also yielded Mousterian flakes, one of them having a bec-de-flute burin on the tip and the same implement retouched on the bulb bar surface to refine the striking platform on one side. (Plate IX, No. 2). There was one Qimir type point with retouch at the bulb bar end on both surfaces towards the bottom of this layer, but it might be intrusive from the lower layers, as an example with better workmanship was found in the lowest layer. None of the points has prepared striking platforms in this layer, but three flakes with broad base have been found with prepared striking platform. This tradition, which is seen in the upper layers, is also continued in the lower ones. In Layer D some small backed blades occurred, as well as bladelets and a few very small burins together with lunates and triangles, but it is possible that some of these microliths were intrusive from the upper layers. Transverse and obliquely truncated and retouched blades with angle burins on them also emerged, the latter being in the majority. This layer yielded some thick pointed bone implements. In the lower part of the layer were found some small pieces of skull bone belonging to fossil Homo Sapiens.

In Layer E which followed, the trench narrowed on account of the increasing number of large stones which made further digging suggested that it might belong to the Upper Palaeolithic. In 1952 the Palaeolithic material collected from South-East Anatolia which was presented at the IVth Congress of the Turkish Historical Society by Kökten contained tanged points which Şenyürek said should be attributed to the Aterian culture (IVth Türk Tarih Kongresi 1952, p. 269). Up to now there is no other evidence to confirm whether this is so or whether the tanged elements belong to a specialised culture in Turkey, but it is possible that the Aterian culture, which extends to Egypt in the East, might have extended its influence to some contemporary cultures of the Near East, including Anatolia.

**Garrod**, 1937, p. 42.


**This Emìre point is of brown flint with no retouch on the sides and is comparatively thinner at the butt end than the one found in the bottom layer. According to Garrod 'Emìre points proper are only those having the characteristic basal chipping on both faces'. (Garrod, 1955, p. 142, fig. 151. Plate 1, fig. A, B.) The tool at Beldibi shows the same technique.**

difficult. Generally steep scrapers were larger, some with facets slightly twisted, and hoof-shaped scrapers were found, with oblique front and without any working on the back. One hoof-shaped scraper had a polyhedral burin at the top, another a bec-de-flute burin. There were steep round scrapers on small and thick flakes, also end scrapers on flake blades, one large steep nose scraper and other nose scrapers on thick flakes and blades with facets slightly twisted. Five tanged implements were of a different type from the upper layers. They were all on thick and thin flakes; two had bec-de-flute burins on their tips; one had a scraper on the tip and another on one side only. This last one had a finer retouch on the sides but the striking platform is refined on the upper surface and at the sides to form a rudimentary tang. This particular tool also had an angle burin on the tip. Another triangular point had a finely faceted butt of 'Cupid's Bow' style and both margins with a little retouch. Nearly half the upper surface at the bulb bar end is refined by flaking and is very thin. (Plate XI No. 2, 2a.) Other triangular points had faceted striking platforms, while some had plain striking platforms.

**72 This nose-scraper shows very close similarities with one found in the middle Aurignacian in Samandag Cave No. 1 (Şenyürek and Bostanci, 1958, p. 179), and also with some artifacts collected by Pittard near Adiyaman, which have been identified as Middle Aurignacian (Pittard, 1928-9, p. 146, 148, fig. 13 and 25).**

**73 According to Caton-Thompson, unifaceted tanged points made on flakes or flake-blades are the characteristic of the Aterian culture (1946, p. 4). Tanged points carrying burins on the tip are found in the Aterian style Y in Djouf el Djemel (Tunisia). At this site are also found stemmed end-scapers or side-scrapers similar to one found in Layer E at Beldibi (Caton-Thompson, 1946, p. 41, Plate I, No. 18).**

**74 Caton-Thompson considers that the sub-stratum of Aterian techno-typology is Levantinois-Mousterian based on a developed tortoise core technique yielding a high proportion of plain thin flakes with finely faceted buis of typically 'Cupid Bow's' style (1946, iv, plate 3, No. 1).**

**75 In this layer six such points were measured and they vary between 56 and 70 mm. with an average of 53.5 mm. In Samandag (Hatay, Antakya) six specimens from the Upper Levantinois-Mousterian of the first cave varied from 58.4 mm. to 58.5 mm. with an average of 54.65 mm. (see Şenyürek and Bostanci, 1958 p. 202, table II), and in the Plugged Cave, 40 Upper Levantinois-Mousterian points ranged from 30.5 mm. to 88 mm. with an average of 56.94 mm. (see Şenyürek, 1959, p. 44, table III). The average length of 42 peccins from Layer V of the first cave was 52.96 mm. and of 33 specimens from Layer IV was 53.52 mm. (see Şenyürek and Bostanci, 1958, p. 195, table 1; Şenyürek, 1959, p. 44, table 3).**
In this layer, besides the large implements, there were long flakes with and without retouch; thick flakes with bec-de-flute and angle burins on the tip (two with the working edge twisted), polyhedral and angle burins. Other characteristics of the layer were straight blunted back points, some of them having both sides retouched on the tip, practically identical with those in Layer D, 76 and small and long Chatelperron points, some of them similar to those in the upper layers. This layer generally showed close affinities with the preceding layer, but polyhedral and bec-de-flute burins with twisted working edge decreased in number, while scrapers and one Font-Yves type point and one tanged scraper occurred at the bottom.

The last stage of the sounding, Layer F, yielded less material than the upper ones. One broad-based triangular point, 67 mm. long, had steep retouch near to the point at one side and the other side slightly retouched. The characteristics of this point are the thinning of one side of the upper surface on the bulbar end by chipping and the slight retouch at the opposite side on the bulbar face. (Plate XI, No. 1). A typical Emireh point was found in this layer of much finer workmanship than the one mentioned between Layer D and E. (Plate XII No. 2, a). 77 This type of point occurs in North Africa in the Aterian culture 78 and in Palestine it is found overlying the Levalloiso-Mousterian and at the base of the Aurignacian. 79 This type of point has also been found in the Shanidar Cave in Iraq at the bottom of the Upper Paleolithic culture (Layer C) and in 1956, p. 42, fig. 3). In Layer E at Beldibi it can be seen that the points approach the length of those from Samandağ. See also Şenyürek and Bostanci, 1956, p. 82, fig. 5.

76 This type of tool is also present in Layer D1 and D2 at Mughareh el-Wad (Garrod, 1937, p. 44, 45).

77 According to Garrod the Emireh points are made on broad-based triangular flakes, which have the base thinned by delicate chipping on both faces. It is characteristic that the thinning scars are directed always from the base of the flake and never from the lateral edges (Garrod, 1937, p. 56; plate XVI, No. 1, 2, 3, Plate XVII, No. 7, 8).

78 In the region of Tabdablat, the Aterian facies is characterised by leaf-shaped points of a type which elsewhere (in Palestine and Egypt) occurs in definite Upper Paleolithic levels. (Huzuyin, 1944, p. 242).

79 Garrod, 1937, p. 141, 146. 1937, p. 56. Miss Garrod assumes that the Emireh point is a type-implement of the Lower Aurignacian of Palestine.

Layer D; 80 at Mughareh el-Tabûn in the Judean Desert; 81 in Kharga Oasis Aterian style Y; 82 in the Grotte de Porc-Epic at Deri-dawa in Abyssinia; 83 and at Mughareh el-Aliya in Tangier in the Upper Paleolithic (Aterian). 84 In the same layer Chatelperron type points on blades with retouch down the back emerged, some having a curved point and some straight. 85 Other tools were steep scrapers on pyramidal cores some of them being of the oblique-fronted type; long blades retouched on one or both sides, some square-ended; 86 long blades with transverse and oblique retouch, most with angle burins on them; polyhedral burins and burins with the working edge twisted, one with an opposed end-scraper; two unifaced tanged points, one with a steep retouch on both sides of the tang and the other a large thick flake slightly retouched on one lateral edge.

At the very bottom of Layer F long triangular thick and thin flakes increased, some with prepared striking platforms and some without. Among these most were of end-bulb type but there was one side-bulb and the remainder were of oblique-bulb type. One of the latter was a Mousterian type side scraper. It is still uncertain whether this type of tool belongs to a very thin layer or whether they are, as seems the case at the moment, mixed with Upper Palaeolithic tools. The relief of the bottom of the rock shelter is still not very clear, because it will need a much more extensive excavation to establish this. It would seem

80 Solecki, 1955, p. 420. Plate VI fig. i. Solecki presumes that the Emireh points originated in the Eastern Mediterranean region and this would seem to be confirmed by the fact that the examples at Beldibi are closer to those found in Palestine and Syria. (Garrod, 1937 Plate XXVI, fig. 3; Plate XXVII fig 7, 8) than they are to those from the Shanidar Cave.


82 See Caton-Thompson, 1931, p. 82, fig. 4. 1932, p. 130, 131, 1949, p. 43, 43, plate 3, No. 6 and 8.

83 Garrod, 1937, p. 51.

84 Howe and Movius, 1947, p. 12 and 13, fig. 8, No. 6, 7. The Emireh points at Mughareh el-Eliya exhibit careful flaking on the upper face which occurs also in the Upper Palaeolithic layers, but these points differ from the examples in Palestine and Beldibi.

85 See Garrod, 1937, p. 45.

86 Movius mentions that in the 'upper-uppermost' Lower Palaeolithic cultures square-ended blades occur which have been retouched at the end on the under-surface (Movius, 1951, p. 91. Coon, 1951. Cave Exploration in Iran.)
that the bottom of the stratigraphy has not yet been reached, as one side of the rock shelter has more inclination towards the sea than nearer to the wall.

The results so far obtained from the stratigraphy at Kum Bucağı rock shelter at Beldibi may be summarised as follows. The ratio of waste material to worked tools is very high. The material obtained from the top layers of the two soundings shows that after the early Neolithic period there was no continuous occupation of the rock shelter. The surrounding area is mountainous and covered with forests and there were only a few open places in the district suitable for habitation, of which Kum Bucağı was one. Layer A therefore is not so thick and modern pottery is followed by sherds from the classical periods.

In Layer B appears pottery of very primitive type, together with flint microliths and large and small burins belonging to the early Neolithic period. In this section microburins of various types were also present, which shows the continuation of the Mesolithic technique into the early Neolithic period. Up to now no polished hand-axes have been found but there were pebble axes with convex cutting edges.

In Layer C₁ there was no pottery, and the variety of flint tools increased. In particular may be mentioned various types of burin, including microburins, lunates, triangles and sickle-blades; unifaced tanged points; cores and core-scrapers and flakes, some of the latter with prepared striking platforms. Three interesting tools emerged, which show the ridge-backed (Heluan) technique characteristic of the Natufian culture of the Mugharet el-Wad of Palestine. In Layer C₂ the tools were generally microlithic in character and microburins were present at the top of this section only; at the bottom they had disappeared. There were Lower Natufian type tools here, including one ridge-backed (Heluan) type lunate and two ridge-backed blades. There was also a greater variety of tanged points. A painted pebble with a schematic design on it came to light in this Layer, together with two round pebbles painted with red colouring, in the lower part of the Layer, and these are the first to be found in Anatolia. A number of bone implements emerged in Layer C₂, which exhibit a mainly Magdalenian character.

The tools which emerged from Layer C₁ and C₂ show generally an affinity with the Natufian culture of Palestine, except that at Beldibi there is a greater variety of tanged points and less ridge-backed (Heluan) type tools, some of which are of a smaller size than in Palestine.

The tools from Layer D were Upper Palaeolithic in type, in particular polyhedral burins with the working edge twisted, oblique-fronted steep scrapers, nose scrapers, small Chatelperron points and straight blunted-back leaf-shaped blades of Gravette type. These tools are also found in the Atlitian culture of Palestine and Syria, but at Beldibi there were tanged points, which are represented in the Atlitian only at Jabrud in Syria and are not mentioned in the Atlitian culture at Mugharet el-Wad.

Layer E is characterised by oblique-fronted and hoof-shaped steep scrapers and a higher percentage of nose-scrapers and triangular flakes with prepared striking platforms and the upper surface of the butt refined by flaking. In this layer one Font-Yves type point and flakes with steep marginal retouch occurred.

In the bottom Layer F, the material did not change a great deal from the preceding layer, but triangular points were longer and slightly retouched. Chatelperron points were made on blades with retouch down the back, and one tanged point on a large and thick flake occurred. There were still characteristic burins, of various types, including those with the working edge twisted. One Emireh point of finer workmanship than the earlier one was found in this layer. (Plate XII No.2 a). There is a wide distribution in the Middle East and North Africa of this type of tool in different cultures whose origin is mainly Levalloiso-Mousterian. Stratigraphically, this tool would therefore seem to be Neanthropic in character and Beldibi is the most northerly point on the Mediterranean at which it has been found.

CONCLUSION

From the evidence of the stratigraphy obtained up to now, it is possible to recognise the following at Beldibi from top to bottom: early Neolithic with Mesolithic tradition, which I have named Bel- dibian; Mesolithic, showing Natufian affinities; Upper Palaeolithic, comparable to the Atlitian and late Middle Aurignacian of the Mugharet el-Wad which at Beldibi is related to late middle Palaeolithic which originated from an Upper Levalloiso-Mousterian type of industry.
Tanged elements at Beldibi are together with late Middle and Upper Palaeolithic type tools and are different from those of the Font-Robert, Solutrean and Magdalenian types of Europe. They are closer to some found in the Aterian, Capsian and Natufian cultures, which belong to the Upper Palaeolithic and Mesolithic, although some have polyhedral and angle burins on the tang and angle and bec-de-flute burins on the tip.

After my first sounding I had the impression that the main culture at Beldibi was Aterian. On the other hand, after the second sounding, the discovery of many more types of burin, which can also be seen in various industries in the Middle East, suggested that the cultures at Beldibi were more complex than I at first thought and further excavation is still needed to obtain a full stratigraphy and relate the cultures.

The only indication as to the possible age of the rock paintings at the moment is the fact that pebbles decorated with a similar pigment to that used in the rock paintings emerged from the Mesolithic layer of the sounding.

The engravings, which are obviously older than the paintings on account of the superposition of the latter, are Upper Palaeolithic in character, but there is no evidence as yet from the stratigraphy to confirm this.

The Beldibi cultures have developed in a district surrounded by high mountains and forest on one side, with the sea on the other. Although having affinities as mentioned above, they have some distinctive characteristics and these will be discussed in detail in a later report.

LITERATURE CITED


ANEW PALAEOLITHIC SITE AT BELDIBI

EXPLANATION OF THE PLATES

Plate No. 1. Diagram showing distribution of paintings on the rock face at Kum Bacağ, near Beldibi.

Plate No. II. Drawing of engravings over which Nos. 12 and 13 (Plate I) are superimposed.

Plate No. III. Photograph and drawing of painted Pebble.

Plate No. IV. Sherd from Layer B (Neolithic-Beldibi).

Plate No. V. Flint implements from Layer B (Neolithic-Beldibi) found in conjunction with pottery.

Plate No. VI. Burins, microburins, geometric microliths and sickle-blades, etc., from Layer C1 (Mesolithic).

Plate No. VII. Flint implements from Layer C2 (Mesolithic).

Plate No. VIII. Scrapers and cores from Layer C2 (Mesolithic).

Plate No. IX. Various types of burin from Layer D.

Plate No. X. Various types of scraper from Layer E.

Plate No. XI. Points and side-scrapers from Layers D, E and F.

Plate No. XII. Tanged implement (No. 1 from Layer F; Nos. 3, 4, 5, from Layer E; Nos. 6, 7, 8 from Layer D; Nos. 9, 10, 11, from Layer C2; Nos. 12, 13, from Layer C1; No. 14 from Layer B) Emiric point from Layer F (No. 2).

Plate No. XIII. Bone implement (No. 1 from Layer D; Nos. 2, 3, 4, 5, from Layer E; Nos. 6, 7, 8 from Layer C2).

Plate No. XIV. Photograph of rock-shelter (position of upper cave and paintings marked with arrows).

Plate No. XV. Photograph of rock face showing paintings and engravings.
ANKARA’DA BULUNAN KYBELE KABARTMASI

RAÇI TEMİZER


Polos’un hemen altından başlayan ve sağ tarafı tamamen açık olan manto, figürün ayaklarına kadar uzanmaktadır. Bu mantonun sol tarafı hüfeller şekilde pilelidir. Üzerinde, üst kısmı şerit, alt etek kısmı dikey kürvürlü, nisbeten geniş kemeleri, kısa kollu bir elbise vardır.

Kadın figürüinin dışbükeyi büzkürek gövde hissazında duran sağ elinin baş parmağı ile diğer parmakları arasında kulplu ve emziği gaga ağzına benzeyen bir testi vardır. Figür daha kısa ve yalnız parmakları görülen ve sol göğüs hissazında olan sol elinde ise yurtu

1 Bu etkinin hazırlanmasında ve yayınlanmasında krymleti arkadaşımızın eserleriyle huzur Ordu Prof. Ekrem Akurgal’a bilhassa teşekkürlerimi arzederim.


3 Mezarın üst kapak taşı hemen hemen bugünkü yol seviyesindedir. İçinde bulunan çanak çömlek (levha 40) Helenistik devre aittir.