TEST EXCAVATION MADE IN A CAVE IN THE VICINITY OF SAMANDAĞ IN 1938
(Preliminary Report)
MUZAFFER ŞENYÜREK

During the course of prehistoric researches which I made in the Hatay province in May and June, 1938, on behalf of the Turkish Historical Society, I collected new Palaeolithic tools at Altündere (Avratlar deresi) and made a test excavation in a cave near the village of Mağracık in Samandağ. During the course of this field work Dr. Oğuz Erol, Docent of Physical Geography and Geology in the University of Ankara, accompanied me for awhile and worked on the geology of this region.

THE TEST EXCAVATION MADE IN THE PLUGGED CAVE NEAR THE VILLAGE OF MAĞRACİK

During the course of this trip I made a test excavation in a new cave which stands about 83 meters above the present-day sea level (see Pls. I and II). This cave which I have named Tikah Mağara (Plugged Cave) has been filled close up to the ceiling with rubble. The Plugged Cave is located between the First and Second Caves which I excavated together with Dr. Enver Bostancı, but at a higher level. The Plugged Cave, which is a natural cave, has been formed,


I wish to extend my thanks to the Turkish Historical Society for providing the necessary funds for the researches I made in 1938.


3 For the First and Second Caves see Şenyürek and Bostancı, 1938[a], Pl. I.

together with the First and Second Caves, in a formation of relatively pure limestone of Helvetic Age.

As a result of its being filled up close to the ceiling, those parts of the mouth of the cave remaining above the level of the earth appeared like three separate openings. However, a brief examination showed that these three openings joined immediately below the surface of the earth and thus formed a single mouth. Although two other openings, which are also filled, were seen at a little distance to the east, it could not be determined whether these were connected with the Plugged Cave or not.

The width of the mouth of this cave, looking southward, is 2.4 meters at the level of the earth filling. In this field season I made a test excavation only on the western part of the cave mouth. I took as datum point, the place where the hanging part of the ceiling between the first opening, which is on the west, and the second opening adjoining it, touches the surface of the earth.

At first I opened a pit of 3x6 meters in the western part of the mouth of the cave and after digging one meter, I narrowed the pit and dug deeper in an area of 3x4 meters. In the upper part of the filling, I found parts of a column in front (see Pl. II, fig. 1) and pot-sherds of late Hellenistic and Roman periods. Inside the filling I located three terra-cotta water-pipes of Roman period, extending parallel to the mouth of the cave. The water-pipes appear to traverse the mouth of the cave from end to end. The reason for the filling of the cave close up to its ceiling is thus understood, i.e., the Roman period inhabitants of Seleucia, in order to protect the water-pipes, had filled the cave to the neighborhood of its ceiling with rubble (stones, potsherds and earth).

At 160-190 centimeters below the datum point in this test excavation a couple of flint pieces appeared together with the ceramics. The occurrence of potsherds came to an end at a depth of 190 centimeters and here there appeared a layer of yellow earth containing, in places, especially in its upper part, red earth (terra rossa). In this undisturbed layer of yellow earth I found typical flint implements.


5 On the surface also a potsherd of Byzantine period was found.
This layer of yellow earth continued to a depth of 325 centimeters. In other words, the thickness of this Palaeolithic layer is 135 centimeters. In this stratum of yellow earth, although typical flint tools were found, very few bone fragments (animal bones) were encountered and no hearth traces were observed.

Three hundred twenty-five centimeters below the datum point and beneath the layer of yellow earth, there appeared a deposit of marine sand, sloping from the north to the south. This deposit of marine sand is about 80 meters (79.75 meters) above the present sea-level. On top of this sand deposit are large rock fragments. These pieces of rock which have dropped from the ceiling, show the existence of an interval of time between the regression of the sea and the formation of the Palaeolithic stratum. It appears probable that this deposit of sand belongs to the Sicilian stage. However, for a correct determination it is necessary to wait for the result of the analysis of the samples of sand which I have taken.

Amongst the Palaeolithic tools found in the single layer located at the mouth of the cave, the forms that are most frequently seen, as in the VIth and IVth layers belonging to the Upper Levalloiso-Mousterian culture in the First Cave, are points (see Pl. IV) and racloirs (see Pl. V and Pl. VI, figs. 1-2). In addition to these, in this layer were found two specimens of knives with one edge blunted (see Pl. VI, fig. 3), two concave scrapers (see Pl. VI, fig. 6), two small disks and some Levallois flakes of moderate size (see Pl. VII, figs. 1 and 3-4).

Most of the Palaeolithic implements which I found in this layer possess, as is characteristic of the Levalloisian culture, a prepared striking platform and a 90 degree angle. On the other hand, again an important portion of these tools exhibit the step-flaking which is more frequently seen in the Mousterian culture. The length of the smallest of the implements found is 30.5 mm. and that of the largest is 98.0 mm. However, the length in approximately three-fourths of these is 42-64 mm.

Of the 14 worked points encountered in the Palaeolithic stratum twelve are of triangular form. Six specimens are of the Chapeau de gendarme shape, which is a characteristic form of the Levalloisian culture. Of the triangular points, five are of standard Levallois and two of diagonal Levallois kinds. Of the 31 racloirs found in the Palaeolithic stratum, in 27 only one edge is seen to be trimmed. Twenty-five of the 31 racloirs are of the “end-bulb” kind. In a portion of the points and racloirs a “bulbar scar” is seen on the lower surface. Two specimens show an intermediate form between the points and racloirs (see Pl. VI, figs. 4-5). In one of these intermediate forms one edge of the lower surface is retouched. One of the two concave scrapers found has at the same time been used as a side-scraper (see Pl. VI, fig. 6). Both of the two disk specimens found in this excavation are atypical. In this stratum of yellow earth a large number of flakes were encountered. About one tenth of these flakes, some of which represent Levallois examples of medium size, have been utilized.

The implements found in the stratum of yellow earth in the Plugged Cave belong to the Upper Levalloiso-Mousterian culture. The Palaeolithic culture of this cave will be described in greater detail elsewhere.

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7 See Şenyurek and Bostanci, 1950 [a], p. 131 and 1956[b], pp. 171-175.

8 The drawings of the implements published in this report have been made by Miss Refikat Çiner, Assistant of Palaeoanthropology in the University of Ankara. On this occasion I wish to extend my thanks to her.

9 For the Levallois flakes see Burkitt, M. 1955. The Old Stone Age. A study of Palaeolithic times, p. 70.

10 The same situation is also seen in the First Cave (see Şenyurek and Bostanci, 1950[b], pp. 172-174).

11 For step-flaking see Leakey, L.S.B. 1953. Adam’s Ancestors. An up-to-date outline of the Old Stone Age (Palaeolithic) and what is known about Man’s origin and evolution, p. 49.


14 For bulbar scar see Burkitt, 1955, p. 40.
detail following the excavation I shall carry out in September of this year.

In a new search I made at the beginning of this trip, at the place at Altundere (Avratlar deresi) where we had collected tools last year, I found four hand-axes, of which three are complete and in one its greatest part is preserved, half of one hand-axe, a fragment of another hand-axe and a concave scraper. These tools come from a layer of gravel, of about one meter thickness, which covers a terrace on the west side of Altundere, which has an elevation of about 13-15 meters from the level of the stream at the bridge over the Belediye Caddesi (Municipal Road).

Of the hand-axes found one is of lanceolate (see Pl. VIII) and the other of cordiform shape (see Pl. IX, fig. 1). In the other two hand-axes, on the other hand, in place of a more or less pointed end a slightly convex edge is observed (see Pl. IX, fig. 2 and Pl. X). We thus determine the presence of square-ended hand-axes at this locality. It is probable that the half hand-axe shown in Pl. XI, fig. 1, also belongs to a square-ended specimen. The fragment shown on Pl. XI, fig. 2, belongs to the butt-end of a hand-axe that has been trimmed on both sides. The flake scars on the hand-axes found in 1958, as is the case in the specimens collected last year, are shallow. In the concave scraper (see Pl. XI, fig. 3) which has a maximum length of 90 mm., a maximum width of 60 mm. and a maximum thickness of 27.3 mm., the bulb of percussion is prominent and the angle between the single-faceted striking platform and the bulb surface is about 108 degrees. This concave scraper which probably belongs to the same culture with the hand-axes found at Altundere, that is to the Upper Acheulean (Micoquian) culture, has been made with the Clactonian technique.

The average, minimum and maximum values of the measurements I have taken on a small series of hand-axes found at Altundere (Avratlar deresi), consisting of the four specimens I found this year, the three hand-axes I collected with Dr. Bostanci last year and of the example found by Mr. Nurettin Can in 1943, the picture of which has been published, are listed below in millimeters.

<table>
<thead>
<tr>
<th>Specimens</th>
<th>Maximum Length</th>
<th>Maximum Width</th>
<th>Maximum Thickness</th>
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<tbody>
<tr>
<td></td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Mean</td>
<td>89.72</td>
<td>67.07</td>
<td>38.75</td>
</tr>
<tr>
<td>Range</td>
<td>72.5-109.0</td>
<td>58.0-80.0</td>
<td>31.0-52.0</td>
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In his study of 1945, Dr. Ş. A. Kansu mentions, together with the hand-axes from Altundere belonging to the Upper Acheulean (Micoquian) culture, hand-axe Number 138 found at Etiyokusu. This specimen, which is on exhibit in the Division of Anthropology and Ethnology of the University of Ankara, and which approaches the triangular form, has been made of a thick flake. The retouch is found on the edges and some of the flake scars show hinge


Dr. Kansu had attributed another hand-axe, found by Mr. Nurettin Can in 1943, to the Chellean culture (see Kansu, Ş. A. 1943, Anadolu'da yeni Paleolitik buluntular. Neue paleolithische Funde in Anatolien. Ankara Üniversitesi D. ve Tarih-Cografya Fakultesi Dergisi (Revue de la Faculté de Langues, d'Histoire et de Géographie de l'Université d'Ankara), Vol. 1, No. 5, p. 189). In his study of 1945 Dr. Kansu, while listing the article cited above in his bibliography, does not mention this hand-axe (see Kansu, 1945, pp. 295-296), but in his general article of 1947 he classifies an example coming from Altundere as Acheulean (see Kansu, Ş. A. 1947. Stone Age cultures in Turkey. American Journal of Archaeology, Vol. 51, No. 3, p. 227 and fig. 1, B). It is understood that this hand-axe described as Acheulean is the specimen that had been classified as Chellean in 1945. I am merely recording here this specimen, which I have not yet been able to see.

The length of a hand-axe with the tip portion broken, found in 1957 (see Şenyürek and Bostanci, 1958 b, pl. XIII, figs. 1-3) and that of the specimen without its tip found by Mr. Nurettin Can in 1943, of which a picture has been published (see Kansu, 1945, fig. 1), have been taken after their missing tip portions were restored with plasticine. The measurements I have taken on the hand-axe found by Mr. Nurettin Can are as follows: Maximum length 77.0 mm., maximum width 69.0 mm. and maximum thickness 31.0 mm.
fracture, that is, step-flaking. Thus this small specimen should not be confused with the hand-axes found at Altundere, which represent the Acheulean tradition. This specimen found at Etiyokusu should be considered a constituent part of the Levalloiso-Mousterian culture.

During the course of this trip I found natural caves, presenting a suitable situation for Palaeolithic settlement, just north of the village of Saylica which is about 9.5 kilometers to the north-east of the village of Magracik (see Pl. III, fig. 1). In September of this year I intend to carry out a sounding in one of these caves behind the village of Saylica. Moreover, during this trip I noted some caves near the village of Battayaz.

EXPLANATION OF THE FIGURES
Plate I. Figs. 1 and 2. The Plugged Cave.
Plate II. Fig. 1: The Plugged Cave. The view of the cave after the excavation.
Fig. 2: The view of the Plugged Cave from the South. In the same photograph the First Cave is also seen.
Plate III. Fig. 1: The view of the caves in the vicinity of the village of Saylica from Battayaz road. Fig. 2: The hand-axes found in 1937 and 1938 at Altundere (Avratlar deresi).
Plates IV-VII. The Palaeolithic implements found in the stratum of yellow earth in the Plugged Cave.
Plates VIII-XI. The Upper Acheulean (Micoquian) implements I found in 1938 at Altundere (Avratlar deresi). In Plates VIII and IX specimens are shown from different sides.

21 For hinge fracture and step-flaking see Leakey, 1953, p. 40.
22 Another specimen found at Guadal in Central Anatolia by Dr. Kılıç Kökten and attributed to the Micoquian culture is probably only natural. For this specimen see Kökten, M., 1952 Anadolu'da prehistorik yerleşme yerleri ve 1944-1948 yıllarında yapılan Tarih öncesi araştırmalar, IV. Türk Tarih Kongresi (Ankara 10-14 Kasım 1948), Türk Tarih Kurumu Yayınlarndan IX. serü-No. 4, fig. 4.
23 For the hand-axes seen in Levalloisoian culture see Leakey, 1953, p. 95.
TYCHO BRAHE SİSTEMİ HAKKINDA XVII. ASIR BAŞLARI NA AİT FARSÇA BİR YAZMA

AYDIN SAYILI


"Bi'smi'l Eb vel İbn ve'r-Râhi'l-Kudus, el İlâh el Vâhid" sözü ile başlayan bu mektup, lâtince bir broşürün farsça tercümnesini ihitâa etmektedir ve esasen mektup bu broşûru tanıtmak maksadı ile kaleme alınmıştır. Broşür Christorphorus Borros adlı Milânuî bul Jezvit papazı astronomun yazığı ve kendisinin Çîn'den Hindistan'a yaptığı seyahat esnasında bir firtunada kayıp olan bir kitabının özgüvî imiş (s. 3b, 4b). İyte bu özgüvî Petrus della Valla farsçaya tercüm ederek mektubuna dercediyor. Eldeki nüshamın mektubun asıl olma- dâğı muhakkaktır. İtalyanca tercümesi ile birlikte bulunmuş bunu gösterdiği gibi, mektubun yazıları farsçasını bilmediği bazı terimleri veya tercümelerini tereddütle yaptığı bazı kelimelerin karşılığını hasiyelerde lâtince olarak verdiği söylemektedir ki (4b), bunlara da bu nüshada râslanmyor.

Mektup sahibinin, farsçayı epeyce bilmekle beraber, kendî itiraf ettiği gibi, bu dile tamamen hâkim olmadığı görülüyor. Bu sebeple