

## BRITISH SCHOOL OF ARCHAEOLOGY IN JERUSALEM

### ANNUAL GENERAL MEETING

THE Seventeenth Annual General Meeting of the British School of Archaeology in Jerusalem was held at the rooms of the British Academy, Burlington Gardens, London, W.1, on Thursday, 28th October, 1937. Sir Frederic Kenyon, G.B.E., K.C.B., President and Chairman of Council, presided over the business meeting of subscribers, and The Rt. Hon. Lord Lloyd of Dolobran, G.C.S.L., G.C.I.E., D.S.O., presided at the open public meeting which followed. At the latter meeting Miss Dorothy Garrod discussed "Recent Palaeolithic finds in Palestine" and Mr. Welbury Kendall, A.R.I.B.A., described the "Architectural Results of the Colt Archaeological Expedition to Esbeita and Auja Kafir."

*The Minutes* of the Annual Meeting, held on 24th November, 1936, were read and confirmed.

*The Report and Accounts* for the season 1936-7 were presented and adopted.

*The Officers* were re-elected as follows: Sir Frederic Kenyon, President and Chairman of the Council; Sir Robert Mond, Honorary Treasurer; and Professor J. L. Myres, Honorary Secretary. The four retiring members of Council were re-elected, namely, Professor S. A. Cook, Sir Arthur Evans, Mr. J. W. Crowfoot, and Mr. G. M. FitzGerald. Colonel S. F. Newcombe and Mr. A. M. Hyamson were unanimously re-appointed as Honorary Auditors, and thanked for their services.

*The Open Public Meeting* followed, with the Rt. Hon. Lord Lloyd of Dolobran, G.C.S.I., G.C.I.E., in the chair.

Miss Dorothy Garrod gave a *Summary of Seven Seasons' Work at the Wady el-Mughara*, as follows:

The results of our seven seasons' work at the Wady el-Mughara have been published year by year as digging progressed. Now, on the eve of definitive publication (*The Stone Age of Mount Carmel*, Clarendon Press), the time has come to give a general survey of the work, and to outline the conclusions which have resulted from a detailed study of the material. This has led, among other things, to a modification of some of

my earlier ideas, and to a partial change of nomenclature, with which I will deal as each point arises.

The caves of the Wady el-Mughara have proved more fruitful than we could possibly have hoped, even in our most optimistic moments, when excavation began. I need not insist on the finds of fossil human material, which are being studied by Sir Arthur Keith and Mr. T. D. McCown. A less spectacular, but no less solid result has been the discovery of a nearly complete succession of archaeological deposits covering the long period of time from the Tayacian to the end of the Natufian; this establishes on a firm foundation a large part of the Stone Age sequence for this area of the Near East, and it has already been tested by excavations made in other Palestinian caves by M. René Neuville and Dr. Moshe Stekelis, working on behalf of the Institut de Paléontologie Humaine in Paris.

A single diagrammatic section combines the sequence of deposits in the three caves of the Wady el-Mughara. It will be seen that the overlap between the Mugharet el-Wad and the Tabūn enables us to build up this section with as much confidence as though the complete sequence had actually been present in a single cave.

The Tayacian layer (Tabūn G), which lies immediately on the bedrock, is the oldest archaeological level so far found in any Palestinian cave. It exists also at the Mugharet Umm Qatafa, in the Judaean desert, where it was found by Neuville in 1932, a year before we first reached Layer G in the Tabūn. We owe to the Abbé Breuil the identification of this Palestinian industry with the Tayacian of La Micoque. It is characterized by an abundance of small utilized flakes, the majority with plain striking-platforms, and by a great scarcity of true implements with secondary working.

The Upper Acheulean of Layer F is above all an industry of hand-axes, flake-tools being absent at its base, but appearing in relatively small numbers towards the top. This level appears to correspond to the Upper Acheulean Layers E and D<sub>2</sub> of Umm Qatafa, where hand-axes predominate.

The succeeding horizon (Tabūn E) I originally labelled Acheuleo-Mousterian, but I have now abandoned this in favour of Upper Acheulean. Thanks to Professor Breuil and

Mr. Harper Kelley I have lately been able to examine a large collection of Acheulean material from the river deposits of Northern France, and I find that the thick racloirs with resolved flaking which are so abundant in Tabūn E do in fact occur as a typical component of the Acheulean culture in Western Europe. The hand-axes of Layer E include a good number of true Micoquian forms, especially at the horizon Ec and this stage can therefore be equated roughly with the top layer of La Micoque itself. During a visit to Les Eyzies two years ago I was able, by courtesy of M. Peyrony, to make a study of the La Micoque material, and I was very much struck with the relatively close correspondence of that site with our lowest layers at the Wady el-Mughara, and with Umm Qatafa.

Layers C and D of the Tabūn I originally classified as Lower Mousterian, and Layer B (including the Chimney deposit) with Wad G as Upper Mousterian. Later Tabūn C and D, with the Skhūl industry, were dubbed Levalloisian, the overlying levels remaining as Upper Mousterian. This was done partly in order to conform with Neuville's nomenclature, but it suggested a more marked difference between the upper and lower levels than in fact existed, and I have now, in consultation with Professor Breuil, adopted the term Levalloiso-Mousterian for the whole cycle, the change from Lower to Upper, which occurs between Tabūn C and B, being marked by the disappearance from the fauna of *Rhinoceros merckii* and hippopotamus. The different stages of the Levalloiso-Mousterian have been found by Neuville in a number of Palestinian sites, but notably in the cave of Jebel Qafseh, near Nazareth, where human skeletons corresponding roughly in age with those of the Mugharet es-Skhūl have been discovered.

The Levalloiso-Mousterian of Palestine has affinities with the Middle Palaeolithic of Egypt, in which the Levallois flake predominates to the exclusion of classic Mousterian forms, and differs from that of Europe, in which industries of Levalloisian tradition alternate with those of true Mousterian type.

With the arrival of the Upper Palaeolithic, contact with Egypt and North Africa apparently ceases, and Palestine is assimilated to Europe. The Lower Aurignacian (Wad F) is better represented in other sites (e.g. Jebel Qafseh) than at

the Wady el-Mughara, where it occurred in a layer of erosion which also contained residual material from the Upper Levallois-Mousterian. It is an industry more or less in the Châtelperron tradition, but more delicate and less primitive than that of the Châtelperron level of the west, and with certain original features. It is distinguished in particular by the presence of a special type of triangular flint point with thinning at the base, which occurs also, but very occasionally in the Aterian of North Africa. I have named this the Emireh point, from the Galilean cave el-Emireh, excavated by Turville-Petre, in which it was first found *in situ*.

The oldest horizon of the Middle Aurignacian (Wad E) is characterized by the presence of a special type of small spiky flint point with fine retouch which is known also from the European sites of Krems and Font-Yves, both referred by their excavators to a fairly early stage of the Aurignacian. The industry of the following layer (Wad D) with its keeled scrapers and nose-scrapers, is a well-developed classic Middle Aurignacian, though it cannot be referred exactly to any one of the subdivisions of this stage which have been worked out for Western Europe, and which probably have only a local significance. Layers corresponding to Wad E and D were found by Turville-Petre in excavations carried out for our expedition in the Mugharet el-Kebarah near Zichron Jacob, and by Neuville in various sites, of which the most important is Erq el-Ahmar in the Judaeian desert.

If we look at a distribution map of the Middle Aurignacian we see it lying as a broad band across Central and Western Europe, the whole southern shore of the Mediterranean being left on one side. In the absence of any evidence for a European origin it seemed probable, even nine years ago, that we should have to look to Asia for its centre of diffusion. The evidence we now possess of the presence in the Near East of a highly developed, unmixed industry of this type throughout the greater part of the Upper Palaeolithic (covering, that is, roughly the period of the Middle and Upper Aurignacian and the Solutrean in the west), brings strong support to this view—in fact promotes it from probability to practical certainty.

The Upper Aurignacian of Wad C which presumably takes the place occupied by the Magdalenian in the western sequence,

I originally described as Capsian, but a closer comparison soon showed that this identification was not valid. This very rough and peculiar industry, with its abundant polyhedric burins, cannot be compared exactly with any other Upper Palaeolithic facies yet known. In some ways it has the aspect of a degenerate survival of the Middle Aurignacian, but the reappearance of the Châtelperron point, absent since the base of the Upper Palaeolithic, suggests the arrival of outside influences.

The Natufian (Wad B1 and B2), in spite of certain general features common to the great majority of microlithic industries, is definitely original, as indeed might be expected, since by this time local differentiation all over the world is much more marked than in earlier periods. Natufian art shows no Pre-dynastic affinities, nor, in spite of certain superficial resemblances, can it be linked with that of the Magdalenian, to which it is inferior. In the matter of Natufian origins we have everything to learn, but it is a fairly safe guess that excavation in Anatolia would throw light on this problem.

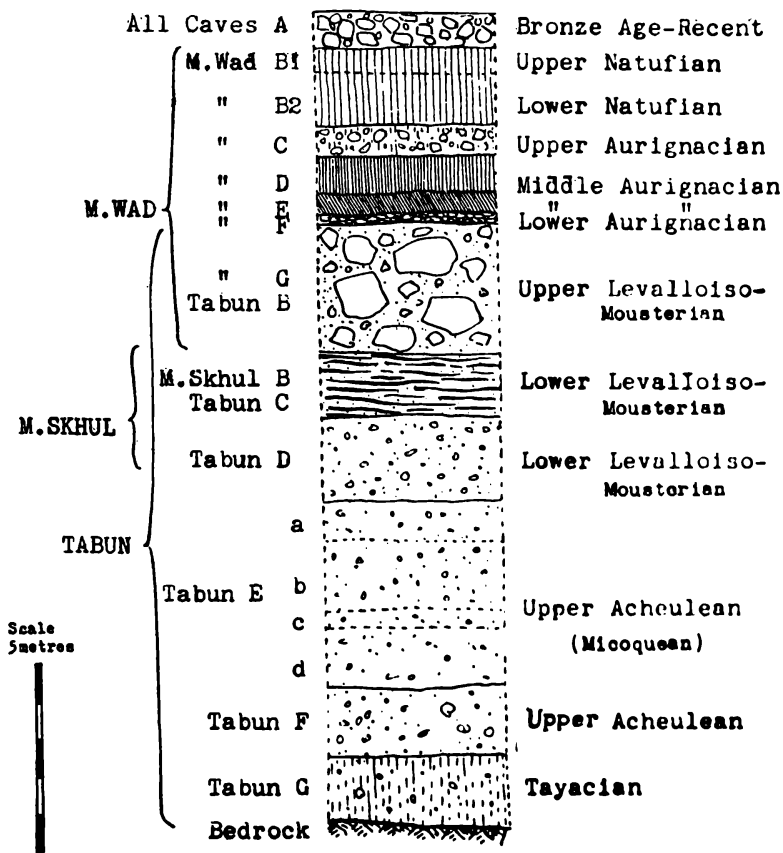
Neuville has recently attempted a fourfold division of the Natufian, based on his soundings in various sites. According to this scheme, the industry of Wad B2 would correspond with Natufian I, and that of B1 divided between Natufian II and Natufian IV (the latter being characterized by notched arrowheads). In the main Neuville's classification appears to be valid, but it needs to be confirmed, especially as regards the middle stages, by further excavation.

It is not yet possible to establish a clear correlation between the various archaeological layers found in the Wady el-Mughara and elsewhere, and geological deposits outside the caves, but Miss Bate's study of the fauna throws light on climatic conditions. The most recent work on the Jordan Valley is that of Picard, who distinguishes in the Pleistocene two main Pluvials (A and B), separated by an Interpluvial marked by volcanic activity, and followed by a period of increasing desiccation (Jungdiluvium), with a possible slight pluvial episode before the beginning of the Bronze Age. Picard's Jungdiluvium can be identified with fair certainty in the Mugharet el-Wad, where the gradual replacement of deer by gazelle in the Upper Palaeolithic layers suggests increasingly dry conditions from the Lower Aurignacian onward. The

evidence of the underlying layers is not so easy to interpret. Tabūn G yielded no animal bones; those from Tabūn F are rather scanty, but suggest sub-tropical conditions. At Umm Qatafa, however, the lower layers, which correspond to Tabūn F, yielded neither rhinoceros nor hippopotamus, and the fauna was a holarctic one which did not suggest particularly damp conditions. Tabūn E on the other hand contained an abundant fauna which included *Rhinoceros merckii* and hippopotamus, and points to a rather warm, wet climate. The same conditions persist throughout Tabūn D and C, but in B rhinoceros and hippopotamus disappear, and two species of deer (*Cervus elaphus* and *Dama Mesopotamica*) are extremely abundant—a fact which suggests continued high precipitation but a lower temperature. We therefore have evidence of fairly dry conditions in the early part of the Upper Acheulean, followed by a long rainy period throughout the Micoquian and the Lower and Upper Levalloiso-Mousterian.

The study of the coastal deposits of Syria and Palestine offers a promising field, since these are now known to contain archaeological horizons. Père Bergy S. J. has already done interesting work in this line in the Beirut region, but we are still too much at the beginning of things for conclusions to be permissible. Still less is it possible at present to attempt correlations with glacial periods in Europe, but I am hopeful that within the next decade prehistoric studies in Palestine, moving step by step with geology, will have made a further advance at least as great as that achieved in the period from 1926 to the present day.

Mr. Welbury Kendall described the architectural results of the Colt Archaeological Expedition to Esbeita and Auja Kafir, a report of which we hope to publish in the April number.



Composite section of the layers in the three caves of the Wady el-Mughara.