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# THE WEST AFRICAN ARCHAEOLOGICAL NEWSLETTER

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### Editorial

The first issue of 'The West African Archaeological Newsletter' called forth a number of favourable comments, for which we should like to express our gratitude; and a further list of names of, or requests for copies from, persons or bodies not originally circularised but who wished to be put on the distribution list. Please continue to send to the Editor the names of anyone not yet receiving the Newsletter who wou like to do so.

Please also report any non-receipt of the Newsletter; it seems that a number of copies despatched did not reach their destination.

It should be realised that any type of communication is welcome fo publication. Nothing is too short and nothing — within reason — is too long. This is one of the advantages of the Newsletter form. It may be useful to circulate a piece of news which can be contained in a single paragraph. Contributions can also be in the form of letters, either raising a controversial topic and inviting comment, or perhaps asking for information.

We are grateful to M. Pierre Biberson for allowing us to reprint, chiefly for the benefit of English language readers, an article already published in France but which may be difficult for English readers to obtain. This is an idea which might well be followed by others, for bolanguages. We should particularly like to have information from those West African countries which have not so far been represented. It would greatly assist the Editor if writers in English could provide their own résumé in French, and writers in French provide their own summary in English; but this is not essential.

Apologies are offered for any shortcomings of the current issue, which are due to the Editor's difficulties in getting it out while he is in the field and carrying out an excavation (of which news will be given in a subsequent issue of the Newsletter.) An applicant for employment on this excavation addressed a note with his request to 'The Manager of Itchyology'. We are reminded of the previous occasion when, in discussions on the possibility of excavating a particular site, the question was asked: 'And what are you going to do with the iniquities you dig up?'

# NOTE DU REDACTEUR

Le premier numéro de notre Bulletin a été favorablement accueilli et nous avons reçu à son sujet de nombreuses demandes. Nous vous prions de bien vouloir nous indiquer les noms des personnes qui le désireraient, mais ne le reçoivent pas encore. Nous vous demanderions aussi de nous signaler des cas où des exemplaires expédiés ne seraient pas arrivés à destination.

Nous serions heureux de recevoir des communications de tous genres pour notre Bulletin - articles longs ou courts, lettres, ou reproductions d'exposés faits dans des conférences.

Nous présentons toutes nos excuses pour les défectuosités qu'on pourra éventuellement relever dans le présent numéro; elles sont causées par les difficultés administratives inévitables lorsque l'éditeur est occupé sur le site des fouilles en cours.

# AN ARCHAEOLOGICAL SURVEY IN EASTERN NIGERIA

by

#### Donald D. Hartle

Survey and test excavations have been conducted in the Eastern Region of Nigeria since October, 1963, with intense field work from May to September, 1964, and from January 22 to February 5, 1965. The Research which is being financed primarily by the National Science Foundation, Washington D.C., in conjunction with the Department of History and Archaeology at the University of Nigeria, Nsukka, may be considered in four inter-related categories: (1) site survey, (2) limited stratigraphic test-excavations, (3) intensive large scale excavations, (4) ethnological comparative analysis.

By the end of December, 1964, nearly 100 sites had been recorded which included caves, abandoned villages and markets, monoliths and carved stones, shrines and sacred areas, forts, iron smelting sites, "war" trenches and historically documented buildings and sites. This initial survey was essential since, other than Thurstan Shaw's excavations at Igbo-Ukwu, 1959 and 1964, the over-all picture of archaeology in Eastern Nigeria is virtually unknown.

In 1964, nine sites were test-excavated: a fort and an open site on the Nsukka Campus; a rock shelter at Isiukwu Ibagwa in Nsukka Division; two shrines at Alike in Okigwe Division; and two shrines, a living site and an open site at Enugwu-Ukwu in Awka Division. Approximately 70,000 artifacts have been processed. Intensive large scale excavations have not as yet been begun, but are anticipated in the very near future.

In January - February, 1965, an abandoned compound - site was excavated at Eititi Ulo in Bende Division. Although the processing of the material collected has only just begun, two tentative comments can be made:

(1) A major area of excavation was where, according to local tradition, an Obu had been used until shortly after 1902. Under tropical forest conditions architectural features are difficult to define. However, the Obu was found and fortunately we were able to locate the outer edges of the floor (apparently there were no walls), some post holes, and an altar containing sherds, two metal bells, and a large metal sherds of vessels similar to the Obu was a shrine which contained sherds of vessels similar to the type utilized for palm wine today during ceremonials. Additionally, pits were found and excavated at the edge of the Obu.

(2) The garbage dump said to have been utilized by the chief's compound nearby contained numerous artifacts to a depth of approximately 2.5 meters. Charcoal was found at all levels and this will be submitted for radio•arbon analysis.

We have started a collection of ethnological artifacts, primarily pottery, to use for comparative purposes with the archaeological artifacts. As in other major areas of the world, such collections are critical to the understanding and analysis of technique and design changes. This is of particular interest to Eastern Nigeria where, until now, no systematic study of ethnographic — archaeological materials has been undertaken.

An extensive survey preparatory to excavation is now being conducted in the Obollo area of the Nsukka Division. It is hoped that some aspects of Igala-Ibo contact may be clarified by close study in the area. In May and June 1965, work will shift temporarily to a village in Awka Division where some interesting bronzes were recently brought to light by a farmer. This find has been reported to MAN and will be published in due course.

In summary, the past year has been spent in laying the foundations for co-operative historical-archaeological work pertinent to the prehistory of Eastern Nigeria.

#### Résumé

# Répertoire archéologique de l'Est du Nigéria

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Des travaux ont été entrepris afin de dresser un répertoire archéologique de l'Est du Nigéria; ces travaux seront financés principalement par la National Science Foundation de Washington, D.C. (U.S.A.) et seront effectués avec la coopération du Département d'Histoire et d'Archéologie de l'Université du Nigéria, Nsukka. Le plan des travaux prévoit la classification des sites ainsi que des fouilles et des études d'ethnographie comparative. Neuf fouilles d'essai ont été effectuées en 1964. Presque cent emplacements ont été enregistrés.

Un autel qu'on sait avoir été utilisé jusqu'à il y a une soixantaine d'années a été mis à jour, découvrant les trous des poteaux de support ainsi que la superficie de son emplacement sur le sol; on y a trouvé également des poteries, deux clochettes et un javelot en métal provenant d'un autel. Le fumier de la maison du chef, laquelle se trouvait tout près, a été excavé jusqu'à une profondeur de 2m.50.

Une collection ethnographique de poteries provenant du Nigéria de l'Est est en train d'être constituée, et des fouilles sont projetées pour 1965 sur un site où un fermier a déterré récemment des bronzes intéressants.

Nouvelles découvertes d'industries du Paléolithique inférieur, in situ dans les formations quaternaires de l'Adrar mauritanien.

## par M. Pierre Biberson

(Reproduit par l'autorisation de l'auteur de C. R. Acad. Sc. Paris, t. 258 p. 3074-3076 (16 mars 1964)).

Depuis longtemps l'exploration méthodique de l'Adrar de Mauritanie, notamment par Th. Monod, J. Richard-Molard et R. Mauny, aux points de vue géologique, géographique et archéologique, avait révélé occasionnelle ment la richesse de cette région de l'Ouest saharien en industries du Paléolithique inférieur. D'abondantes collections avaient même été réunies provenant de la surface des regs largement développés dans le Baten au pied du Grand Dhar ou sur le plateau de Chinguetti.

A la suite d'une rapide excursion en 1958, Th. Monod et R. Mauny signalèrent la récolte de 15 pièces préhistoriques recueillies en place dans des coupes naturelles exposant des formations sédimentaires quaternaires. En outre, la trouvaille de nombreux outils dégagés naturellement de ces mêmes formations, avec la gangue encore adhérente, incitait à penser que des recherches plus poussées amèneraient la découverte d'ensembles industriels in situ permettant de déterminer une séquence évolutive du Paléolithique inférieur dans le cadre d'une chronologie relative du Pléistocène de l'Adrar mauritanien.

Deux campagnes d'investigations furent organisées à l'initiative de l'Institut Français d'Afrique Noire en 1963 et 1964. Elles confirment pleinement les premiers résultats entrevus dès 1958.

Outre les récoltes de surface, toujours très abondantes mais souvent difficiles à utiliser en raison des mélanges d'industries d'âges différents, trois types de gisements ont permis d'obtenir des renseignements d'ordres chronologique, typologique et technologique; ce sont: 1º les ateliers de taille; 2º les coupes naturelles des terrasses des oueds; 3º les sites d'habitats sur d'anciens rivages lacustres.

1º Les ateliers de taille se rencontrent sur les lieux où une matière première de choix (le quartzite à grain fin de l'Ordovicien, O, par exemple) attirait l'Homme préhistorique. Il peuvent, comme les regs de surface, avoir été exploités à toutes les époques, mais l'étude des techniques, grâce aux rebuts: nucléus ou éclats bruts de débitage et éclats de taille, donne au préhistorien une grande sécurité de Jugement sur l'homogénéité de certains ensembles. Trois d'entre eux sont particulièrement intéressants: a. au poste d'Ouadane; b. sur le glacis au pied du Tarf Tazazmout; c. au puits d'El Beyyed.

2º Les formations alluviales fournissent une autre catégorie de renseignements. Il existe, notamment au long du cours moyen des oueds obséquents descendus du Grand Dhar pour se déverser dans les bassins fermés qui s'étendent au pied de sa falaise, des terrasses emboîtées au nombre de trois, les plus anciennes — qui sont les plus élevées — ayant été ravinées par l'érosion avant le dépôt de la nouvelle terrasse développée en contre-bas. Elles fournissent un cadre morphologique qui donne les grandes lignes d'une chronologie du Pléistocène régional.

En outre, les coupes vives de chacune des terrasses permettent une analyse stratigraphique des sédiments qui conduit à établir des subdivisions à l'intérieur de ces grands ensembles climatiques.

Or la découverte de nombreuses pièces préhistoriques en place dans ces formations (plus de 200 spécimens dans la terrasse moyenne de l'oued Arhmakou, par exemple) atteste que les niveaux stratigraphiques sont aussi des couches archéologiques.

La terrasse ancienne a pu ainsi être étudiée à Rhallaouia, El Beyyed, l'oued Amogjar et l'oued Aguinjob. La terrasse moyenne a surtout été fertile dans l'oued Mellah, l'oued Tachrakat, l'oued Arhmakou et l'oued Amogjar.

3º Un dernier type de gisements est fourni par les dépôts "lacustres" s.l. qui surmontent fréquemment la terrasse moyenne. On connaît maintenant d'excellentes coupes de ces formations à Aroui, El Beyyed, aux buttes-témoin de Tazazmout-es-Srhir et Tazazmout-el-Kebir. En certains sites, récemment dégagés de leur couverture dunaire appartenant au système de la Maqteir, on rencontre de riches stations de l'Acheuléen évolué pratiquement in situ; c'est le cas à l'Aderg, à Tazazmout et à El Aroui-el-Kebir.

Les données chronologiques, pour dater relativement ces différents types de sites préhistoriques, sont donc fournies par l'étude sur le terrain de la morphologie et de la stratigraphie. Faute d'une faune fossile de Vertébrés ou d'Invertébrés dont l'absence est due à l'acidité et à la nature extrêmement détritique des formations, les analyses pétrographiques et palynologiques des sédiments apporteront sans doute les compléments d'information appréciables.

En attendant le résultat des études en laboratoire des documents irchéologiques et des échantillons sédimentologiques recueillis, il semble que d'ores et déjà une vue schématique du Paléolithique inférieur le l'Adrar, basée sur les premières constatations, puisse être proposée.

S'il reste encore délicat d'affirmer l'autonomie d'industries ré-acheuléennes (Pebble-Culture), des séries encore réduites de pièces écoltées sur le plateau de Chinguetti portant des fragments d'une

gangue ferrugineuse qui semble permettre de les associer à une croûte à pisolithes paraissant pouvoir être rapportée à la fin du Pléistocène inférieur, donnent déjà de sérieuses présomptions de leur existence.

L'Acheuléen ancien, qu'on ne pouvait jusqu'ici isoler que typologiquement dans les mélanges d'industries récoltés sur le "reg ancien" vient d'être découvert in situ, mais fortement roulé dans les poudingues de la "terrasse ancienne", au puits d'El Beyyed d'abord, puis à l'oued Rhallaouia.

Les stades primitifs de l'Acheuléen moyen qui abondent sur les gisements de surface des regs du plateau de Chinguetti se rencontrent roulés dans les conglomérats encroûtés à la base de la "terrasse moyenne" des oueds du Baten tandis que ses derniers stades se développent au cours de l'édification de la moitié inférieure de cette terrasse.

L'Acheuléen évolué apparaît dans la partie médiane de cette même formation alluviale et son évolution se poursuit pendant le dépôt des strates supérieures, jusque dans la "croûte" terminale qui couronne les couches "lacustres" du sommet de la "terrasse moyenne".

Enfin l'Acheuléen final, constitué par des industries assez indécises à éclats, fortement imprégnées d'influences "levalloisoïdes" mais où se rencontrent encore de nombreux bifaces de tradition acheuléenne de très petites dimensions, ne se trouve plus en stratigraphie mais il abonde dans certains secteurs, à la surface de cette même terrasse moyenne, souvent d'ailleurs en mélange avec des pièces atériennes.

Les coupes de la terrasse récente sont rares et aucune industrie n'a été trouvée en stratigraphie dans ses dépôts. Tout ce qu'on peut en dire est qu'elle est sûrement pré-néolithique car de nombreux habitats avec poterie, pierres polies, armatures diverses, se rencontrent à sa surface.

Ces resultats des missions 1963-1964, tout fragmentaires qu'ils soient encore, apportent donc déjà des éléments susceptibles d'orienter les recherches de détail qui posséderont maintenant une base sur laquelle s'appuyer.

#### Summary

Exploration in the Mauretanian Adrar has for some time revealed the richness of this area of the western Sahara in Lower Palaeolithic industries. The recovery in 1958 of fifteen specimens in position, together with the surface collection of others with matrix still adhering, suggested that more extensive research might lead to the discovery of industries in situ, making it possible to work out a cultural sequence of the Lower Palaeolithic in the framework of the Pleistocene chronology of the region.

Work in 1963 and 1964, apart from surface collection, was carried out on three types of site: (i) Workshop sites and chipping floors: (ii) Natural sections cut through water-course terraces: (iii) occupation sites on the shores of ancient lakes.

The workshop sites and chipping floors are found where a particular material (such as fine-grained quartzite) attracted prehistoric man. Work from different periods may be mixed up in such sites but study of re-used pieces, cores and flaking debris sives one confidence in determining homogeneous industries.

Three river terraces were recognised, the study of their relationship and their stratigraphy giving both the major framework and internal subdivisions of Pleistocene history in this area.

The lake-side occupation sites frequently overlie the middle terrace.

No faunal remains were recovered because of the acidity of the soil but petrological and palynological analyses will doubtless help to fill out the picture. Meantime a schematic view of the Lower Palaeolithic in the Adrar can be put forward at once.

It may be still hazardous to assert the independence of a pre-Acheulean Pebble Culture, but a limited series of specimens bearing pieces of a ferruginous matrix apparently associated with a pisolitic crust of late Lower Pleistocene age, makes this presumption more likely.

Early Acheulean material was found rolled in the basal conglomerates of the middle terrace. Late Acheulean material appears in the middle portion of this same terrace and its evolution can be followed during the deposition of the upper layers. The Final Acheulean, composed of rather indeterminate flake industries showing strong 'levalloisian' influence but also still having diminutive handaxes of Acheulean tradition, is not found stratified but is abundant on the surface of this same middle terrace, often mixed up with Aterian specimens.

Sections through the recent terrace are rare and no industry has been found stratified in it. All one can say is that it is certainly pre-Neolithic since numerous settlement sites with pottery, ground stone axes and arrowheads are found on its surface.

# The Department of Archaeology of the University of Chana

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### P. L. Shinnie

During the last two years the staff of the Department has consisted of P. L. Shinnie (Professor and Head of Department), O. Davies (Associate Professor), P. C. Ozanne (Lecturer), R. York (appointed from October 1963 as a Research Fellow for work in the Volta Basin), D. Mathewson (another Volta Basin Research Fellow, appointed from October 1964). At the end of the academic year 1962/63 Professor Davies resigned from the Department but has stayed on as a full time Secretary of the Volta Basin Research Project, and has continued to direct the archaeological work carried out as part of that project. Mr. Ozanne at the end of the same year transferred to the Institute of African Studies, where he will be especially concerned with the interpretation of archaeological material as an aid to research into the last five hundred years or so of the history of Ghana.

The Department, which dates from 1952, was originally established to carry out field research, and to develop the Ghana Museum. With the establishment of the Ghana Museum as a separate organisation responsible to the Government, it became possible for the Department to undertake a teaching programme. Several courses are now offered; one is for a Post-Graduate Diploma in African Archaeology; there are two archaeological options in the subjects that can be taken for the M.A. in African Studies organised by the Institute of African Studies; and the Department also teaches a one term course in African Archaeology which is compulsory for all those taking a History Honours degree.

The main field work during the last two years has been concerned with the area that is to be flooded by the building of the Volta dam, and a large grant has been made available by the Ghana Government for archaeological, biological, geological, and other work. A special committee has been formed to administer this fund and the two special appointments noted above have been made with these funds.

The main direction of this work has been in the hands of Professor Davies. During 1963 he investigated a number of sites in the flood area and, in July of that year, excavated a possibly 17th Century site at Akroso Beposo, and another containing a dump of terracottas in the village of Akroso.

With the arrival of Mr. York in October 1963 it was possible to develop the work in the Volta Basin and he and Professor Davies carried out a survey in the Afram plain and along the lower and middle Volta valley. Many sites which had previously been inaccessible were examined

through the help of the Ghana army which provided transport facilities including a boat which enabled some of the area to be examined by water transport. The whole party were on one occasion tipped into the river by the overturning of a boat, and though equipment and antiquities were lost there was no personal damage.

Subsequently both Professor Davies and Mr. York moved their activities into the area of Kete Krachi, where Mr. York settled to excavate a number of sites, whilst Professor Davies made a general survey of sites in the area. Professor Davies also paid a visit to Bui, where another dam will be built, and carried out a survey of the archaeological potentialities. As a result of this trip it has been decided that Volta Basin Project funds can also be used for work in that area and Mr. York has now (November 1964) gone there to start excavating.

Mr. York reports on his activities as follows:-

"Between January 13th and March 24th, 1964, four excavations were conducted in the Kete Krachi district by the V.B.R.P. On the East bank of the Volta near the present village of Dadiase an 18th Century village was excavated; this was situated in the gallery forest in a position accessible by a small creek but hidden from the river, possibly to give protection from river-borne slavers. Nearby at Awuressi traces of slightly later habitation, including some cult material, were discovered.

Three miles from the modern Gyanekrom, on the road to Banka midway between the Volta and Oti Rivers, a settlement in which Neolithic and Iron Age cultures were stratified together was excavated. The people, at least of the Iron Age strata, were apparently from outside the area, as was shown by the painted pottery which was found, possibly of Gonja origin.

Ahinkro, 1 mile from the modern crossing at Otisu, revealed a wealthy village where tobacco had been smoked in local pipes and gin drunk from imported bottles during the early 18th Century. One grave also yielded a large quantity of beads and other personal decorations.

During the period April 2nd to June 24th 1964, two major excavations and two small investigations were carried out in the Kete Krachi area. At Krenkuase, 12 miles south of the town, earlier exploration had revealed a small eminence half a mile east of the present village crowned by unusually thick vegetation including several baobab trees. It appeared to be partially encircled by a low embankment. Excavation revealed that this had been formed by the refuse, accumulated over some considerable time, from a settlement which had existed on the summit of a small hill. There were some grounds for thinking that at one time this continuous semi-circular

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٤ t midden way have served the secondary purpose of a barrier protecting the village from the east, where the Oti river lies. Several large stones, as well as abandoned grind stones were included in its composition, while the rest of the area was comparatively free of them. Traces were also found of one post-hole in the south-east end. Of the settlement itself the evidence included the floors of two houses which had been made of smooth compressed laterite, and renewed on several occasions; in one of them earthen pots were still embedded, either as storage vessels or as stands for other round-bottomed vessels. Following a precedent discovered the previous month during excavations at Ahinkro, trenches were sunk twelve yards due east of two of the largest baobabs, and one of them revealed, as had been hoped, a grave shaft. This had been cut through a house floor and was empty, though there were no signs of robber trenches.

On May 22nd excavations were commenced near Kadengben (local pronounciation; Kadentwen), at a site 400 yards from the east bank of the Volta and two miles from the existing village, which is two miles north of Krachi. Heavy concentrations of pottery were discovered over a wide area at a depth of 18 inches and extended in some cases as deep as 5 feet. Although no structural remains were found it is evident that a sizeable settlement existed here, extending over several hundreds of yards, until possibly a hundred and fifty years ago. The limits of the habitation area were defined, and considerable quantities of pottery and some other artifacts, including celts and a bone handle, were obtained; but work was finally interrupted on June 20th by the increasingly heavy rainfall.

Besides these two excavations, a 7-foot section was cut in a gravel-pit near Ahinkro, showing in the soil and laterite the changes of climatic conditions in this area over some thousands of years; and a small quantity of microliths was obtained in stratification from a cutting at Worator, 5 miles north of Kete Krachi.

From the material obtained from these and earlier excavations it has been possible to assemble a typology of the pottery of the Kete Krachi region; some 18 distinct types have been isolated with their variants. This should enable us in the future to achieve wider datings from excavations which are still going on in this district."

Professor Shinnie was largely concerned with work on the site at Debeira in Sudanese Nubia, where excavations had been carried on since 1961. The work was concluded in April 1964. The Christian Nubian culture whose investigation was the purpose of this excavation is now known to have spread further west than was previously thought and over the last few years examples of the characteristic pottery of the period have been found in the Republic of Chad, and it is hoped to carry out a survey to see what influence Christian Nubia may have had in the Western Sudan.

Professor Shinnie also carried out two surveys in northern Ghana and the Upper Volta, in conjunction with Professor Wilks of the Institute of African Studies. The purpose of the survey was on the historical side to investigate accounts of Mande penetration and to collect Arabic manuscripts, whilst on the archaeological side a number of mosques were studied, planned, and photographed with a view to publication. An examination was made of the site of old Buipe where the Gonja national hero Jakpa is buried beside the ruins of a mosque.

Mr. Ozanne continued his researches into the Iron Age in southern Ghana, carrying out exploratory work in the Accra plains where a number of new sites were found. He excavated a site at Prampram of the 16th and 17th centuries.

### Résumé

# Le Départment d'Archéologie de l'Université du Ghana

Les principaux travaux pratiques pendant les deux années qui viennent de s'écouler ont été concentrés sur la région qui doit être inondée par le barrage de la Volta, et le gouvernement du Ghana a accordé des crédits importants pour des travaux archéologiques, biologiques, géologiques, etc. C'est au Professeur Davies qu'incombe la direction principale de ces travaux. Pendant 1963 il a examiné quelques sites dans la région qui sera inondée et il a fait des fouilles sur un emplacement qui date probablement du 17e siècle ainsi que sur un autre contenant un dépôt d'objets en terre-cuite. Le Professeur Davies et M. York ont examiné de nombreux sites dans la plaine d'Afram et dans les parties inférieure et moyenne de la vallée de la Volta. Ils ont fait des travaux de reconnaissance afin de prospecter les possibilités archéologiques de la région de Biu, où on doit construire un autre barrage.

En 1964, six fouilles ont été faites dans la région de Kete
Krachi sous les auspices du Volta Basin Research Project. Sur la rive
droite de la Volta, on a mis à jour un village du 18e siècle, tandis
que dans les parages, des traces d'une habitation un peu plus récente
ont été découvertes. A cinq kilomètres de Cyanekrom, des fouilles ont
révélé un village où des cultures néolithiques et de l'âge de fer sont
conservées en couches superposées. Les peuples dont on trouve les traces
dans les couches de l'âge de fer étaient peut-être d'origine Gonja.
Les fouilles d'Ahinkro ont permis de découvrir un riche village où
l'on avait fumé du tabac dans des pipes de fabrication locale et bu
du gin provenant de bouteilles importées au début du 18e siècle. A
19 kms. au sud de Krenkuase, l'excavation d'un monticule montra que
ce dernier avait été le fumier du village. Dans le village même, on
peut voir les sols lisses, en latérite compressée, de deux maisons,
ainsi que plusieurs vases de terre et le trou inoccupé d'une tombe

verticale. Des fouilles effectuées à un peu plus de trois kilomètres au nord de Krachi ont mis à découvert une quantité considérable de poteries ainsi que quelques haches de pierre polie et un manche en os; l'évidence semble indiquer qu'un village d'une certaine importance y existait jusqu'à il y a cent ou cent cinquante ans. Grâce à ces fouilles et à celles qui les ont précédées, il a été possible d'établir une typologie des poteries de la région de Kete Krachi et on ne compte pas moins de dix-huit types distincts les uns des autres. En plus, on a fait une coupe d'approximateivement deux mètres dans une gravière près d'Ahinkro qui montra les changements climatiques survenus dans la région pendant quelques milliers d'années; et d'une coupe faite à huit kilomètres au nord de Kete Krachi on a pu obtenir une petite quantité de microlithes stratifiés.

Le Professeur Shinnie a récemment terminé son travail à Debeira dans la Nubie Soudanaise. On sait maintenant que la culture chrétienne nubienne, qui a fait l'objet de ses recherches là-bas, s'est répandue plus avant dans l'ouest qu'on ne le pensait auparavant, et on espère effectuer des travaux de reconnaissance dans l'ouest du Soudan pour évaluer l'étendue de cette influence. Le Professeur Shinnie a aussi mené à bien deux reconnaissances dans le nord du Ghana et dans la Haute-Volta.

M. Ozanne a continué ses recherches relatives à l'âge de fer dans le sud du Ghana et mis à jour un emplacement du 16e et du 17e siècles à Prampram.

# SCIENTIFIC RECORDING OF POTTERY IN FIELD ARCHAEOLOGY

bу

#### Oliver Myers

When the scientific recording of pottery in Africa and the Near East began with Petrie, for the first time the forms of all the ordinary pots found were recorded. This was, in my view, the biggest step made in connexion with pottery, and subsequent efforts to improve it only confirm this view.

The next step in Egypt (and I shall follow the line in Egypt where it seems to me to be the clearest to follow) was when the Bruntons, Engelbach and Gunn, all working for Petrie in the first place, started adding two things: a general description of the colour - 'drab', 'soft brown', 'hard red', 'black burnished inside' and a dotted line inside the right-nand side of the drawing indicating the thickness. It may be objected that Petrie, in his major classes of the Predynastic, also indicated colour by making classes of "Black-topped", "Polished Red", "White Cross Line", but a moment's thought will show that although those are perfectly understandable as ad hoc descriptions, they are not colour descriptions of the pots which could help a man from another part of the world who had never seen or read about Egyptian Predynastic wares. On the other hand, it can be seen that some of Brunton's descriptions are not solely concerned with the colour, i.e. 'soft brown' includes a description of the hardness of the ware, whereas 'Burnished black inside gives information about the method of firing the pot and also about the finish of the surface.

At the Bucheum in Upper Egypt in 1929 we started to build up the first corpus of Graeco-Romen pottery to be made in Egypt and in doing so came across a considerable variety of different wares with different colours and degrees of hardness, never previously recorded.

Some doubts about the value of our colour recordings arose when I passed a sherd round the staff for a colour description and the answer came back "Grey-green", "Hard Grey", "Greenish-yellow", "Green-grey". Anyone who has tried to follow seriously the colour values given in Stanley Gibbons stamp catalogue for the varieties of the 'penny red, fine-engraved Victoria' will have had the same sensation of hopelessness. I was lucky enough to find a kind specialist willing to give me a damaged example of each Stanley Gibbons variety - but nothing like this could help with pottery records.

On returning to England I called on Winsor and Newton to help me and the chart of colours given in <u>Cemeteries of Armant I</u>, Pl. VII, (Mond, Sir Robert and Myers, Oliver H., London, 1937) was the result

and Mr. J. Scott Taylor of that firm further advised the use of the Ostwald Unesma Colour Album, then issued by them.

At the same time we adopted the geological Mohs' Hardness Scale and devised descriptions of finish, ware, etc. The resultant system was applied very fully in Temples of Armant, (Mond, Sir Robert and Myers, Oliver H., London, 1940) Pls. XLVI to LXXXVI, and many hundreds of sherds subsequently discovered were examined by it, some published, others as yet unpublished.

Later, I was able to test the practical value of Mohs' scale by examining statistically whether sherds left lying on the surface (for not less than about 2,000 years) could be distinguished from sherds of the same series which had remained buried. The full examination is given in my Some Applications of Statistics to Archaeology, (Myers, Oliver H., Cairo, 1950) Chap. III, and I will extract very briefly from this:- 'Mohs' scale of hardness, used alone, cannot convince us that two groups of pottery are identical" but "An archaeologist will look first to form, then to decoration, if any, and lastly to colour, thickness and hardness. The Mohs' scale gives a limited degree of differentiation, and the great bulk of buried wares range between 2 and 3 on it. Hardness can never be expected to be other than an ancillary method of differentiation." Before quoting my conclusion on this matter, I would put the more cheerful side of the work by pointing out that under desert conditions it is possible to distinguish always between 'exposed sherds' and 'buried sherds', and that we found that it is possible to distinguish by hardness alone in 82% of all samples of pottery, though in dealing with 'buried sherds' the percentage drops to 45%. (The main purpose of the operation was to see whether 'exposed' and 'buried' sherds could be distinguished by hardness alone; there is also a colour differentiation which was not examined owing to shortness of time). Finally "The writer feels that Mohs' scale should be used in describing important individual specimens and completely new wares, but otherwise, only with a specific purpose in view. In the latter case the labour entailed is only justified if at least 100 pots or sherds are available and the relevant circumstances, other than those which it is wished to test, are clear".

This is clearly a retreat, but it is a retreat in good order; the subject was thoroughly examined, the possibilities of the use of Mohs' scale were explored to the full, and we are left with a corner of the field clearly gained.

But the position with regard to colour is quite otherwise, for I had great hopes of the use of the Unesma Colour Album. It was produced by the physicist Ostwald, who devised a "colour solid" - a bicone with black at one pole and white at the other, with a chromatic scale of colours round the periphery, and with the tints, shades and shaded tints stretching systematically from the periphery to the two poles. The UNESMA album was a very handy set of plates for use in the field,

covering all the differing colours etc. that an archaeologist could possibly require. I recently applied it to skin colour, using it for analysing the constituent colours and the result was fully confirmed by a dermatologist.

However, when I applied for a new copy of the album, Winsor and Newton informed me that it had been abandoned, that no more would be issued, and that not a single further copy could be had at any price. The Colour Council in the U.K. informed me that some error had been found in Ostwald's descriptions of the yellows and I should now get a totally different chart. The new charts appeared to be almost as practical as the Unesma, though, of course, very much more expensive. But the important thing is that every colour record made by the Unesma chart is now virtually useless. I do not know how many thousands of records have been made, but they must represent many hundreds of hours of work of people whose hours were usually overloaded anyway. Several volumes have pages now covered with meaningless symbols. The damage to one's ego is probably most beneficial, on any metaphysical basis, but the results to a budding science are deplorable. What should be done?

In theory, with unlimited funds and unlimited labour it should be possible to convert all the old recorded colours from the old UNESMA chart (which I still have) to one of the new colour charts, but, even given all that, who would wish to do this? There are better and more urgent things to be done in archaeology than this. Even if it were thought worth doing, who is to say that our colour colleagues of the science world will not find something wrong with the puces in the new colour charts and change them all again? About colour it seems to me that the only answer is 'back to the old-fashioned description again', a real defeat this time, or, in the case of an entirely 'newly' discovered ware of real importance, the publication of a colour plate as good as can be made with the money available.

We need not go so far as to discard scientific recording entirely; there is much that can still be done, particularly for special sherds. In Cemeteries of Armant I, p. 276 A, I published a chart comparing some 11 sherds which it was important to examine, and in the chart there are 16 columns of which it is only necessary to discard that on colour.

Such descriptions as "Chaff-ware", "Grit-ware", or "Shell-ware", "Pebble-burnished", "Point-burnished" or "Scraped" are scientific - if not "Scientific" - and being in plain English are unlikely to need alteration, unless any of them should prove to be inaccurate, which is unlikely to be the case.

## Résumé

Au début du siécle, Petrie a donné les premiers corpora scientifiques, sous forme de séries rationnelles de dessins schématiques montrant la forme des pots. Ses collaborateurs y ont ajouté des indications de couleur, de dureté et de fabrication en language courant. En 1929, j'ai adapté l'échelle géologique dite 'de Mohs' concernant la dureté, et l'échelle chromatique d'Ostwald ('Unesma Colour Album'). Des éxperiences statistiques (Myers, Some Applications of Statistics to Archaeology, Le Caire, 1950) ont démontré la valeur limitée mais sûre du Mohs'. Malheureusement, après la publication de milliers d'observations, les spécialistes de la couleur ont condamné le système du grand physicien Ostwald, et l'Album Unesma, travail consciencieux et complet, est actuellement épuisé et introuvable.

On recommande d'en revenir aux descriptions simples et de se méfier quelque peu de nos collègues 'scientifiques'.