
NEWSLETTER OF THE SOCIETY OF AFRICANIST ARCHAEOLOGISTS IN AMERICA

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Slightly before Nyame Akuma No. 6 was published the Society (abbreviation SAAAM) whose name now appears above was founded at the meeting in Boston held in April 1975. Nyame Akuma now becomes the official newsletter of the Society but for the time being editorial location and policy remain the same. It will continue to be issued free of charge, at least for the immediate future.

Because of the nature of the financing of the journal the distribution at present is intended to be for individuals, who need not be members of the Society, interested in the subject matter. It is not intended for institutions and libraries, though I have used my discretion in making it available to some. I have however been rejecting recent requests from libraries, and even more so the peremptory demands from some organizations that I make it available to all those employed by such organizations. I have given polite refusals. If and when a charge is made then it will be available without restriction to all those who pay. In the meantime perhaps readers would be mindful of Mr. Robertson's remarks concerning the failure of the culling operation; if anyone does not wish to continue to receive the newsletter I would be grateful for that information.

It had been my intention to publish abstracts of papers given at Boston - I have to date only received two. Space can be found for others in Nyame Akuma No. 8.

This number publishes for the first time some rather longer reports, see especially the Ghana section which shows much activity - highly appropriate in view of the name of the newsletter. I shall certainly be happy to continue this policy and publish longer reports, and if desired, line drawings.

The location of the 1977 meeting of SAAAM is not yet decided, invitations have been received from Berkeley and Calgary. The Steering Committee (Sampson, Lubell, Miller) are considering the matter.

P. L. Shinnie

Minutes of the Society of Africanist Archaeologists in America

The organization met in Boston April 27-29, 1975 hosted by the African Studies Center of Boston University. The business meeting was held the evening of April 28, at the Center.

The first item on the agenda was a unanimous and enthusiastic vote of thanks to Professor Creighton Gabel of Boston University and Professor Charles Nelson of the University of Massachusetts at Boston, along with Susan White and other graduate students and assistants, for organizing such an excellent meeting. The preparations were well coordinated, and five formal sessions of papers covered a series of broad topics. In addition, the Center also hosted SAAAM members for refreshments, cocktails, and an outstanding buffet dinner.

Members had been given with their registration materials copies of the Charter of SAAAM, proposed by a Committee selected for the task at the Dallas meeting in 1973. Discussion of the various aspects of the proposed Charter concerned two items in particular. On the issue of membership, a variety of positions competed; it was finally agreed that interest in the field should be the only defining criterion for membership. The other item, that of costs of the official newsletter Nyame Akuma, was left for the present as it stands. SAAAM members and interested parties who ask to be on the mailing list will receive the publication at no cost to themselves or the organization, thanks to the generosity of the Editor Peter Shinnie and the Department of Archaeology at the University of Calgary. If it becomes necessary to set a fee for the newsletter, the cost will be determined by the Editor and the Steering Committee of SAAAM.

At the end of the discussion, the proposed Charter was adopted by unanimous vote.

On behalf of the Berkeley members Professor Glynn Isaac invited the Society to meet in Berkeley in April, 1977. This generous invitation was favorably received by the membership present. However, discussion indicated that it would be advantageous to meet in tandem with some other major organization so that members could have the advantage of attending two meetings for a single travel expense. Since the dates and places of other organization meetings for 1977 were not immediately known, it was decided that the Steering Committee should publish a set of several possibilities in Nyame Akuma, and ask the membership to mail in votes for the most convenient. This should occur promptly so that a one year advance notice of the meeting can be given in accordance with the recently adopted Charter.

A further issue which occasioned active discussion was the proposal of the Society for American Archaeology that a list of officially registered archaeologists in America be organized and maintained. Since there was no written proposal in the hands of SAAAM members at the meeting, there was considerable confusion as to the intent and mechanics of the proposed list. The primary purpose seemed to be to assist U.S. government agencies in selecting qualified professionals for contract archaeology projects. What criteria would be used for acceptance onto

the list, and who would make the critical decisions, remained in question. Another point of concern was the relationship of such a list to archaeologists who work primarily outside the United States. Whether or not the list would be consulted by officials of other countries when requests were made for permits to excavate there was a major issue. When the members present were asked to vote on supporting such a list, the record was: 17 yes, 4 nos, 6 abstain. Professor Art Jelinek was asked to convey the decision and the several serious concerns of the members of SAAAM to the Board of SAA at their next meeting.

In accordance with the regulations of the Charter, the Steering Committee which will act until the 1977 meeting was elected. The new Chairman is Professor C. Garth Sampson. At that point he took over the gavel from Professor Sheryl Miller, who had chaired the business session. The two members of the Steering Committee were then elected. They are Professor Miller, and Professor David Lubell.

Following additional words of thanks to those who had been responsible for the meeting and those who had stayed on till the end, the Chairman declared the meeting adjourned.

The following are the only two abstracts of papers read at Boston to have been received.

J. Bower, Early Lower Paleolithic tools of sub-Saharan Africa

Data have been gathered on a series of attributes of choppers and scrapers from Oldowan and Lower Acheulean assemblages. Mean values for the attributes have been statistically compared with a view toward clarifying taxonomic relationships among the assemblages and identifying crucial aspects of variability in the industries.

Augustus Sordinas, A Visit to the Tassili Summer 1974

A short announcement primarily to emphasize the comparatively easy access to the plateau via the Aroum Pass and a visit to the Jabbaren frescoes. There are excellent opportunities for ecological studies, archaeological research, or simply educational travel. The generosity and enthusiasm displayed by the Algerian authorities at the oasis of Djanet is stressed. Inquiries should be addressed to Messrs. Said Halilou or Zamaki Mokhtar at Djanet for the securing of competent guides, land-rovers, and supplies. These are responsible government representatives and - among other things - will guarantee the protection of the sites from pilfering or vandalism. On the whole a most stimulating experience that can easily be organized on a Co-operative basis by several universities.

NEWS ITEMSBotswana

An evaluation of the archaeological resources of eastern Botswana has recently been completed by Professor Morgan Tamplin from Trent University in Peterborough, Canada. A special research grant enabled Professor Tamplin to record archaeological sites in Botswana and make recommendations on their preservation and development. The archaeology of the area was also evaluated in terms of specific research problems.

The survey was undertaken by Trent University at the request of the National Museum of Botswana. The involvement of this University in such a project came about because of Trent's long-standing interest in establishing liaison with an institution in a developing African country. Such affiliation could be with a university or other educational institution, a museum or an government agency.

Local support and direction was given by the Director of the National Museum of Botswana, Alec Campbell. A space in the museum was provided for the organization of equipment, notes, and collected artifacts and the museum's Land-Rover was used during the survey. Because of his long experience with and interest in the archaeology of the country, Mr. Campbell provided information on most of the sites visited and during the last week of the project, he personally guided the survey to sites in the northeastern part of the country.

Altogether Professor Tamplin spent six weeks recording sites in eastern Botswana within an area covering approximately 50,000 of the country's 230,000 square miles. An estimated 2,000 miles were driven within Botswana, mostly on gravel roads and dirt tracks, and another 500 miles were covered visiting important sites in adjacent countries. Over 40 sites were seen in Botswana,

most of which had been previously discovered but not formally recorded. The vast majority of the sites are Iron Age, however some late, middle, and early Stone Age sites were found including an unmixed Oldowan pebble tool site on a high terrace near Kanye. It is believed that this is the first recorded instance of such a site in Botswana and is undoubtedly of very great antiquity.

Stone-walled Iron Age sites were found on most of the hilltops visited in the survey. In the southern region, sites in the Kanye, Lobatsi, Gaberones and Molepolole area are of the stone wall ring variety, similar to sites in the northern Orange Free State and northern Transvaal. Further north and east, sites similar to Mapungubwe in South Africa are extremely abundant. North of Francistown there are at least two Zimbabwe sites of major proportions. Earlier sites, similar to Leopard's Kopje and Bambata Cave in Rhodesia, were also recorded.

Professor Tamplin commented on the number, variety and richness of the archaeological sites and also on the fact that most were relatively untouched, either by professional archaeologists or looters. Many sites do suffer the effects of vegetation growth, erosion, and animal activity and steps should be taken to preserve the remaining structures.

C. K. Cooke, Curator of Monuments in Rhodesia, is at present re-examining the Wayland collections of stone material hoping that the results may form the nucleus of an archaeological survey for Botswana. The late Dr. Wayland was Director of the Geological Survey of Botswana; fortunately he left a complete record of his findings and coded every artefact.

One of the objectives of this survey is to make recommendations to the government of Botswana as to the designation of particular sites or groups of sites as historic monuments so that these may be developed into park areas and preserved for the people of Botswana as part of their national heritage. It is hoped that all this survey will serve to alert Botswanans to the great antiquity of many of the sites in their country and to the great diversity of their prehistoric cultural heritage. As public awareness of the importance of these sites increases, however, provisions must be made to protect and preserve them for posterity.

(Editorial Comment; this looks like the left hand not knowing what the right is doing. Perhaps Drs. Cooke and Tamplin will collaborate.)

East Africa

The British Institute in Eastern Africa

It was not possible to carry out the season of excavation at Aksum as planned for early 1975. However, over a short period in May the Director, Mr. Neville Chittick, took part in emergency excavations at a fresh site in Aksum. This work was done in association with Monsieur Eric Godet of the Ethiopian Institute of Archaeology and Mr. Richard Wilding of the National University, Addis Ababa. The excavations were prompted by parts of an Aksumite building having been exposed (and damaged) in the course of digging the foundations for a new hotel opposite part of the main group of stelae. The Aksum building concerned is of considerable size (rather over 20 metres square) and the walls stand to a maximum height of about 3 metres. The nature of the building, which appears to be of late Aksumite date, is not yet apparent. It does not appear to be a church and yet the plan is different from any known Aksumite house. Of considerable interest was the discovery of two furnaces in post-Aksumite levels from after the destruction of the building; these are believed to be the first such ancient furnaces to be found. A preliminary account of the first two seasons' excavations (1973 and 1974) is published in Volume IX (1974) of Azania. It is planned to resume full-scale excavation with a substantial team in January 1976.

In northern Kenya Mr. David Phillipson, the Assistant Director, has embarked on a survey of later prehistoric sites: particular attention is being paid to the inception of pastoralism in the area and to illustrating possible contacts with southern Kenya and the Ethiopian highlands. Reconnaissance was carried out in the Marsabit-North Horr area and "Late Stone Age" occupation of the shore of Lake Rudolf attested from at least the middle of the third millenium B. C. Mr. Phillipson also carried out a brief archaeological reconnaissance of the Wajir and Mandera districts in the Northeastern Province. No attempt was made to locate sites earlier than those of the "Middle Stone Age". Abundant evidence was found for wetter conditions in earlier times, which linked with "Middle Stone Age" occupation. The Stone Age industries of later times show a marked resemblance to those described by J. D. Clark from areas of Somalia immediately to the east. Of particular interest is the extreme scarcity of pottery, which was only recovered in any quantity at Melka Re (JBJ 3238). Only in a very few restricted areas of the Wajir and Mandera districts does the geology indicate the possible occurrence of rockshelters.

In August and September Mr. Phillipson carried out excavations at a site near Loiengelani south of Lake Rudolf which yielded harpoons. A further account of this will be given in the next issue of Nyame Akuma.

Mr. Chittick has been invited by the Government of the Democratic Republic of Somalia to participate with staff from the Ministry of Culture in a survey, beginning toward the end of October, of the coastal sites of Somalia.

Mr. Patrick Pender-Cudlip, the Staff Historian, having completed his thesis, Iramba Society and History, has now left the Institute.

Mr. Garlake, a former member of the Institute's staff, reports: "I visited Mozambique in March 1975 to look at the prospects for archaeological research. During this visit I was able to locate and identify the stone-walled ruin of Manekweni. It lies only 50 km. from the coast near Vilanculos, nearly 500 km. south-east of the nearest known zimbabwe. The single elliptical stone walled enclosure, 50 m. by 65 m. across, has walls of limestone 1.50 m. high and 1.5 m. wide. Outside there are large middens over a wide area, evidence of more intensive and extensive settlement than all but the largest inland zimbabwes.

Three weeks were spent in test excavations in June. Chinese porcelain and a large assemblage of trade beads suggest that the site was inhabited into the 17th century. The Ceramics fall into two groups, the earlier a distinct facies of the Khami phase of the Zimbabwe tradition. As this is the first later Iron Age excavation in Mozambique for 45 years it is not yet possible to place the finds in a regional context. Carbon samples are presently being processed. There are good grounds for arguing that Manekweni was the Shona court of Gambe, established in the fifteenth century by migrants from the area of Great Zimbabwe in Tonga country, and visited and described by Fernandes and Silveira in 1560. It is hoped to continue this work on a larger scale next summer.

The work was undertaken under the auspices of the University of Lourenco Marques and with very close cooperation of the new Frelimo provincial and district administrations. It was financed by the British Institute in Eastern Africa. I have just taken up a post as a lecturer in the Department of Anthropology at University College, London."

Mr. Stuart Munro-Hay, a ph.D. student from the School of Oriental & African studies in London has been awarded a Research Studentship by the Institute to enable him to work on his thesis, a study of Aksumite foreign relations in the fourth century A.D. He is examining buildings in the Yemen at the time of writing.

Mr. Michael Mehman carried out excavations at the important Stone Age cave site at Apis Rock in northern Tanzania and was assisted in this enterprise by the Institute, although it was mainly financed elsewhere.

The Institute's publications, in addition to Azania IX, have been as follows: Memoir No. 3, J.E.G. Sutton, The Archaeology of the Western Highlands of Kenya B.I.E.A., 1973 Hardcover 1974 £6 (Distributed by Thames & Hudson)

Memoir No. 4, J.S. Kirkman, Fort Jesus: A Portuguese Fortress on the East African Coast, Clarendon Press, 1974 £12.50

Memoir No. 5, H.N. Chittick, Kilwa: An Islamic Trading City on the East African Coast, Vol. 1. History & Archaeology; Vol. II The Finds, B.I.E.A., 1974, £25 the set.

All prices with 33 and one third discount to members.

Ethiopia

Récherches Archéologiques dans la Région du Soddo en Ethiopie

Francis Anfray

En 1974 fut entrepris l'inventaire des sites et des monuments anciens que conserve la région du Soddo au sud-sud-ouest d'Addis-Abeba. Quarante-sept sites furent répertoriés; tous les monuments photographiés et bon nombre d'entre eux dessinés.

Les travaux ont été poursuivis cette année, en mai et juin. Vingt-neuf sites ont été visités dans les cantons de Souten et de Limen. Neuf de ces sites étaient déjà connus par des témoignages anciens. C'est donc vingt-neuf sites et de nombreux monuments qui ont été découverts en 1975.

Certains de ces sites, par la quantité des sépultures, constituent de véritables cimetières antiques. Deux au moins de ces cimetières ont plus de deux cents tombes. Celles-ci sont rectangulaires ou polygonales. Des pierres plates enfoncées dans le sol, de chant, en délimitent les contours. Ces pierres sont mitoyennes assurant ainsi l'étroite contiguité des sépultures qu'aucune dalle ne recouvre.

Des monolithes dressés (ou qui le furent) offrent des aspects variés. La plupart sont ornementés. Le décor est fait d'éléments figuratifs dont la signification n'est pas claire.

Les monuments étudiés cette année dans le Soddo peuvent être classés en trois catégories:

- stèles, avec ou sans décor;
- pierres monumentales à forme humaine;
- pierres hémisphériques ou coniques.

Beaucoup de ces pierres marquent l'emplacement de sépultures. Il y a donc lieu de leur attribuer un caractère funéraire. Ainsi qu'à leur décor.

Les stèles ont entre un et cinq mètres de hauteur. Nombre d'entre elles sont couchées au sol. Quelques-unes, épargnées par le temps et les hommes, se dressent encore à l'endroit où originellement elles furent plantées.

Elles ont deux côtés. L'un est aplani et présente une figuration d'objets symboliques, sculptés en champlevé. On reconnaît des épées à forme romaine; en-dessous, des symboles sybillins provoquent l'imagination: figures géométriques et "plante stylisée", ainsi désignée à cause de sa ressemblance avec un palmier.

Les épées sont toujours représentées avec les géométries, mais celles-ci peuvent à l'occasion occuper tout le champ de la stèle, sans les épées.

L'ordonnance des épées et des symboles montre des traits constants. Les épées sont toujours sur la partie haute de la stèle et les géométries sur la partie basse. Les épées ont leur pointe dressée ou abaissée; elles ne sont jamais disposées horizontalement. La plante est presque toujours en bas. Entre la plante et les épées figurent le plus souvent deux disques et un semblant de W versé (cette marque présente des variantes).

On remarque cependant que si les figures sont pareilles, leur disposition change d'une stèle à l'autre. Et notamment le nombre des épées. L'ensemble évoque une composition héraldique. Il offre l'aspect d'armoiries qui pourraient s'interpréter comme une allusion à la qualité du mort ou de sa parentèle. Ce n'est là qu'une amorce d'hypothèse.

Ces stèles à décor sont nombreuses. On en a recensé une soixantaine. Plusieurs restent à inventorier. Un même site peut en comporter de une à trent-trois.

Certaines stèles n'ont ni épées ni géométries mais exclusivement une figure humaine réduite à ses contours linéaires. En relief. La face ronde n'a d'autre visage que trois bandes verticales parallèles. Ces images taillées dans la pierre, actuellement connues, sont au nombre de cinq.

Les pierres anthropomorphes ont une silhouette très schématique: un tronc duquel deux bras se détachent et que surmonte une tête rectangulaire où deux petites cavités figurent les yeux, tout cela compose un corps à forme humaine, simplifié à l'extrême. Des traits gravés décorent la pierre linéairement. L'un de ces monuments, massif, mesure près de trois mètres.

Ces monolithes sont à l'écart des sites à stèles. Quelquefois à proximité.

D'autres pierres sont façonnées en forme d'hémisphères ou de cônes réguliers. Le diamètre des pierres hémisphériques est d'un mètre, approximativement. Un mètre est également la longueur des pierres coniques; environ soixante centimètres le diamètre de leur base.

Les pierres hémisphériques sont parfois disposées en demicercle. La partie plane de ces pierres est en haut, curieusement. Le reste est enfoui dans le sol.

Remarques générales

Une houle de collines, tel est l'aspect du Soddo, notamment dans la région de Tiya. Les hameaux sont dispersés. Des sentiers, parmi les buissons, les relient les uns aux autres.

La plupart des sites sont établis sur les collines, au sommet; mais pas tous. Certains se trouvent au pied.

Les stèles ne montrent pas d'orientation déterminée. Leurs faces sculptées sont tournées dans des directions variées.

Des similitudes essentielles entre les monuments du nord et ceux du sud les assignent au même ensemble culturel. Par exemple, à tous la "plante stylisée" donne un caractère d'unité. Des différences cependant permettent de distinguer deux groupes à traits spécifiques. Au nord, un souci de symétrie caractérise les monolithes à épées. Au sud, le décor, sur les deux faces des stèles, offre une apparence tarasbicotée.

Ces monuments sont l'expression culturelle d'une ethnie qu'il est difficile d'identifier. Son habitat ancien n'a pas été repéré.

De multiples questions se posent. A quelle époque ces monuments ont-ils été taillés et dressés? En fournissant des données concrètes et notamment des vestiges organiques, des fouilles apporteront quelques éclaircissements utiles. Quatre sondages effectués cette année n'ont livré aucun indice de datation. Dans trois tombes, aucun fragment d'os n'a été recueilli. Il serait surprenant qu'on ne découvre rien qui puisse favoriser une détermination chronologique.

Les recherches de l'Institut éthiopien d'archéologie seront poursuivies dans le Soddo en 1976.

Il y a lieu de signaler qu'à l'occasion de ces recherches, en 1975, deux sites paléolithiques ont été découverts, à Sombo-Menisa et à Tiya. Hachereaux et bifaces de l'acheuléen final.

Kenya

Reconnaissance at the northern end of Lukenya Hill (27 miles east of Nairobi, Kenya) in an area of the hill that had only been cursorily explored up to this time resulted in the discovery of an extensive cemetery of the East African Stone Bowl culture. The cemetery consists of two groups of cairns in rockshelters and crevices on a pair of rocky knolls. A third group of burial places, which may be of later date than the others, occupies a neighboring knoll, locally known as Hyena Hill. The burials on Hyena were made in small rockshelters, the entrances of which were carefully sealed with rock slabs. Bone preservation is excellent for the Hyena Hill burials.

Since some of the cairns showed signs of having been recently disturbed, permission was granted to the National Museum of Kenya to carry out salvage excavation of two of the East African Stone Bowl culture cairns. The largest of the two yielded 3 stone bowls of volcanic tuff, pestle-rubbers, gneiss palettes (for preparing ochre), obsidian blades and other implements, and miscellaneous manuports. The smaller cairn, evidently a single interment, contained a stone bowl of volcanic tuff, a spheroidal pestle-rubber, and worked obsidian. In neither cairn was human bone discovered due to the highly acidic fill.

Presently the excavated specimens are being studied and drawn, and the results of the salvage operations will appear in a forthcoming number of Azania. The Lukenya Hill finds provide a useful series for comparison with East African Stone Bowl culture burials elsewhere in Kenya and Tanzania as the cemetery is the first of its kind to be reported east of the Rift Valley. Further excavations are planned.

R.M. Gramly
C.M. Nelson
J. Onyanjo-Aubje

Dr. Osaga Odak of Nairobi writes that he has been involved in the Research Programme of Kenyan Antiquities for the last three years and his programme concerns:

- a) Systematic survey and prospect for prehistoric sites and (national) monuments in all areas and all periods of Kenya and to conduct preliminary investigation (and possible salvage) of sites reported by the public, especially those about to be destroyed by natural or man-made alterations, particularly in so far as the said sites and monuments have been established, through evaluatory exercise or otherwise, to be important aspects of our country's history, culture and nature.
- b) Compilation and keeping up-to-date record of all known sites of antiquities (prehistoric sites and monuments) and prominent relics in Kenya and to evaluate, whenever possible by standard test-pit technique, such sites of potential importance and that need immediate attention.
- c) i) Arrangement of preservational possibilities for identified sites (if such preservation is deemed necessary) and investigation into the best methods of preserving and protecting sites for which commitment for preservation has been made ii) attention to conservation projects of Kenyan antiquities and monuments and also constant report on the conditions of various monuments and prehistoric sites in the country.

In line with the above, I have compiled an inventory of Kenya's prehistoric sites and monuments. Since this cannot be accomplished within a short time period, it is hoped that the inventory will be continually up-dated as new information emerges from the archaeological and allied researches being conducted under the auspices of the British Institute, University of Nairobi's department of History, Department of History of Kenyatta University College, the National Museum and other related institutions.

Besides, it has been decided, within the framework of Research Programme on Kenyan Antiquities, to undertake specific case studies of certain aspects of Kenyan antiquities which require immediate attention. One of these is Prehistoric art in Kenya. Since little is known on this subject, beginning from September this year, I have embarked upon the study of prehistoric art in Kenya with a special attention to:

- (a) Aesthetic, magical and religious elements in Kenya's prehistoric art
- (b) distribution of prehistoric art localities in Kenya, and
- (c) prehistoric art and ethnology in Kenya.

In other words, the idea is an attempt to emphasise the ethno-archaeological aspect of prehistoric art.

This study is expected to last about three years including one and half years' field work.

I am therefore requesting readers of NYAME AKUMA and their friends working on similar or related fields to keep me informed of their progress. I would also be very much appreciative to receive any material on Kenya's prehistoric art from any reader who may happen to possess the same.

Dr. J.R.F. Bower writes:

"I am reporting on behalf of both Charles Nelson and myself since I have recently joined Charles's expedition to study variability in the Late Stone Age and Stone Bowl Cultures of the Nakusu-Naivasha basin. The expedition, which includes 12 undergraduates from the University of Massachusetts (Boston), a smaller number of African students, and various technical, excavating and supervisory staff, arrived in Kenya in July and will be in the field until August, 1976. So far, in addition to preparing the students for field work and working out sundry logistical problems, the excavation of 2 burial cairns with stone bowls has been completed and an open site thought to represent an early pastoral culture has been opened. All of these sites are at Lukenya Hill, about 50 km. east of Nairobi, where the expedition has been head-quartered during its "tooling up" phase. We expect to complete excavation of the open site and shift our focus of operation to the eastern Rift Valley by mid October."

Tanzania

Mr. A.A. Mturi, the Director of Antiquities, send the following report:

Ngorongoro (Stone Bowl) Burial Mounds:

The Department of Antiquities, under the direction of A. A. Mturi, undertook the excavation of another burial Mound during September, 1974. The mound excavated was situated in Rumbe Hill near the one excavated in 1973 and reported in Nyame Akuma No. 4. Apart from skeletal remains which indicates multiple inhumations and the usual grave goods of stone bowls, grinding stones, pestle rubbers, obsidian artifacts and chalcedony beads, another iron ring was found associated with pestle rubbers and a complete pot. This association strongly suggest the contemporanety of the iron ring with the stone bowls. Bone from the area of the iron ring has been submitted for Carbon-14 dating.

(II) Lake Nduta:

The excavation started in 1973 and reported in Nyame Akuma No. 4 and No. 5 was continued by the Department of Antiquities in 1974. The area from which the hominid skull was recovered was excavated down to the greenish clay layer on which rested considerable amount of lithic and faunal materials. The Area of the excavation was extended in an attempt to recover more hominid remains but none was found.

Mr. Ron Clarke has completed the reconstruction of the skull found in 1973. The preliminary report on the skull and on the site and Archaeology of the find have been completed and will be published soon. A date of 500,000 years from bone recovered from the first floor which contained the skull has been obtained by using the Amino-Acid dating technique. However, Amino-Acid dating technique is still experimental and the date should be taken as tentative, though a similar date has been obtained for the Makek bed of Olduvai Gorge.

(III) West Kilimanjaro:

The archaeological reconnaissance as well as test excavation of one of the areas from where stone bowls, pottery, obsidian artifacts and bored stones (stone-rings) have been recovered during farming activities were reported in Nyame Akuma No. 4. Charcoal obtained from the test excavation of the Maua Farm was submitted to Geochron Laboratory and the following determinations have been obtained. GX 3346 4140 ± 200 (2190 B.C.), GX 3347 2160 ± 190 (210 B.C.) and GX 3348 1545 ± 140 (405 A.D.). The samples of GX 3347 and 3348 came from two different sites 15-30cm. below surface.

Although no stone bowls were found in situ it is, however, probable that the Stone bowls which have been recovered during farming activities come from the level from which the two carbon 14 determinations were obtained. This might indicate that the stone bowl people lived in the area until the first half of the first millenium A.D. and this might explain the presence of iron objects in the Ngorongore Stone Bowl Burial mounds. The presence of pottery in the level of sample GX 3346 is another interesting occurrence.

The Department of Antiquities undertook another general reconnaissance work and excavation in the area during February/March, 1975.

(IV) Nasera (Apis) Rock Shelter:

Mr. Michael Melham of the University of Illinois started the re-excavation of the site in April, 1975. He completed his field work towards the end of July and he is now analysing his finds. Enormous quantity of artifacts and bone (more than 500,000 pieces) have been recovered from two horizons- one at 70 -100cm below surface which is Later Stone Age and the other 1.5 metres below the surface which is Middle Stone Age.

(V) Olduvai Gorge and Laeotil

Dr. M.D. Leakey continued with her work in Olduvai Gorge. During July/August, she mainly worked at Laeotil site in the Endulen area of the Ngorongoro Conservation Area. Laeotil has produced hominid remains which are either contemporary or earlier than the earliest hominid remains recovered from Olduvai Gorge.

In connection with the last item Dr. R. L. Hay sends the following:

Field work in the summer of 1975 was devoted to the stratigraphy of the Laetolil Beds, which border the Olduvai region (Tanzania) on the south. These are chiefly wind-worked tuffs and contain a rich terrestrial fauna including remains of hominids found by M. D. Leakey in 1974 and 1975. The Laetolil Beds are substantially more than 3 m. years old, thus considerably extending the record of hominid evolution in northeastern Tanzania.

Mr. Masao, of Simon Fraser University, reports:

I am still working on the LSA and the rock paintings of Central Tanzania. I hope to have the final draft of my dissertation ready by the end of Spring 1976.

Mr. Waane, S.A.C., now a graduate student at the University of Illinois and attached to the Department of Antiquities in Dar es Salaam is planning to return to Tanzania in December in 1975 to do archaeological site survey in the Tukuyu - Kyela District areas. The project will be inclusive of both Iron and Stone Age sites, but Mr. Waane's interest is the Iron Age.

As far as I know, Mr. Jonathan Karoma of the University of California (Berkeley) and attached to the University of Dar es Salaam is doing his field work in Central Tanzania for his Ph D.

Egypt

Dr. T. R. Hays writes:

During October and November, 1975 I will be directing excavations at a Pre-dynastic site located on the west bank of the Nile near the village of El Khatarra. The research is funded by grants from the National Science Foundation and the Smithsonian Institution.

Ghana

Professor M. Posnansky sends the following information about the activities of the Department of Archaeology in the University:

1. A new annual publication, Sankofa, has been issued. (For details see page).
2. Mr. E. Effah-Gyamfi has now been awarded his M.A. for his thesis on the Oral Traditions and Archaeology of Bono Manso and has been appointed to an Assistant Lectureship as from October, 1975.

Mr. J. Anquandah has been appointed Lecturer from October, 1975.

We will have 2 vacancies in October, 1976 in the Lectureship-Senior Lecturer grade (Salary scale for Senior Lecturer, £7,100 x £200 - £8,600; for Lecturer £4,900 - £7,200, \$1 = £1.15). Applicants should preferably have had postgraduate research experience in Africa and must possess a postgraduate qualification. The appointment will be for candidates with specialities in Stone Age studies and Primatology, Cultural Anthropology and General Old World Archaeology and Archaeological Technique. Applicants should in the first instance write to Professor M. Posnansky, Department of Archaeology, University of Ghana, P. O. Box 3, Legon, Ghana for further details. The fringe benefits include subsidized furnished accommodations, free medical and dental care, child and car allowance and biannual leave.

3. University Museum of Archaeology: During the year the general rehabilitation of the Museum was continued and a grant for further new cases provided by Unesco. Mr. J. Anquandah has been appointed Chairman of the Curatorial Committee of which the other members are Mr. Effah-Gyamfi and Mr. K. Agyei-Henaky. Mr. S. Apea-Dankwa on a grant from the Inter-University Council has been receiving advanced training in Archaeological Conservation at Durham University and has obtained the Museums Association Certificate in Conservation.
4. The following press release gives information on radio-carbon dates from Begho:

PROGRESS IN DATING GHANA'S PAST

Dates obtained from radiocarbon determinations made on charcoal samples sent from Begho in Brong Ahafo to Japan Radioisotopes Laboratory and just released have great significance for our knowledge of the early history of Ghana. Of particular importance is a date of around A.D. 130 obtained from an iron furnace site. This is the earliest well authenticated date for ironworking west of Nigeria. Previously the earliest known dates for iron technology in Ghana were around A.D. 780 from New Bupe in Gonja. The earliest for iron working in West Africa are from around Jos in Nigeria and are about 2500 years old. Dates were also released for the Nyarko quarter of Begho of around A.D. 1020 and 1095. The town of Begho is the oldest known town site in Ghana and was famous as a market centre for gold and kola nuts which the traders from the Empire of Mali came down to buy from such important medieval towns as Jenne on the Niger. It is believed that a major expansion of world trade from A.D. 1250-1350 led to an intensification of the demand for gold from Ghana and the growth of towns immediately to the north of the forest. As well as towns the important state of Bono Manso east of Techiman also grew up. The new dates for the Nyarko quarter indicate that the long distance trade may have been important even before the thirteenth century.

Excavations have been conducted at Begho every year since 1970. In 1972 the University of Ghana established a research centre at Hani, the village nearest to the mounds which mark this once important town. Hani is situated some 30 miles west of Wenchi. In July and August more than 20 students, staff and volunteers from the United Kingdom and United States of America will continue their researches under the direction of Merrick Posnansky, Professor of Archaeology at the University of Ghana, Legon.

5. Miss Nygaard has undertaken excavation at a 'middle' Stone Age site at Tema and Dr. A.B. Smith has completed the re-excavation of the Legon Botanical Gardens Stone Age site.
6. In addition to the articles in Sankofa and the West African Journal of Archaeology the following papers on Ghanaian archaeology have been published (or are in the press) during the year.

Merrick Posnansky, 'Archaeology, Technology and Akan Civilization', Journal of African Studies, II,1 (1975) pp.24-38.

L.B. Crossland and Merrick Posnansky, "Pottery, People and Trade at Begho" in The Spatial Organization of Culture, ed. I. Hodder (Duckworth, London).

Merrick Posnansky, 'Archaeology' in Africa in the Seventies, ed. P. Nitecki, (Occasional Paper No. 8, Department of Library and Archival Studies, Legon) pp.15-30.

K. Myles, 'The Contribution of Archaeology to our Study of the Past', in West African Journal for History Teachers, Vol.1, No.1, 1974.

J. Anquandah, "Archaeology and the Arts of the Akan of Ghana", Proc. of the Inter-University Conference on the History of the Peoples on either side of the Ghana-Ivory Coast Border, Kumasi (Legon History Department).

After our excavation at Begho, where I'll be joined by Rod McIntosh, I'll send a full report on our Begho work but it may have to wait until issue No. 8 in April 1976.

The following reports from Ghana have also been received:

EXCAVATION AT THE D2 SITE ON THE DWINFUOR QUARTER OF BEEO

During the course of excavation on the Nyarko quarter of the ancient site of Beeo (7°51'N, 2°28'W) in the Brong Ahafo region of Ghana in March-April 1975, a new site littered with clay crucibles, pottery, and what appeared to be pottery gold-weights was discovered by Mr. T. Gerrard during a reconnaissance exercise to the west of the Dwinfuor site which had been partially excavated in 1972. Oral traditions collected in the neighboring modern village of Hani stated that the "Dwinfuor" was the artisans' quarter of ancient Beeo.

In August 1975, this site named Dwinfuor 2 (D2) was excavated under my direction with the help of students from the University of Ghana, Legon, Dartington College, England, and Educational Expeditions International, U.S.A. The site is almost flat with a gentle rise towards the north eastern corner. An area 36 metres x 30 metres was surveyed, and four large trenches as well as eight pits (2 m x 2 m) were excavated.

STRATIGRAPHY:

The occupational deposit was up to 0.70 metres thick and there were two main layers of occupation underlain by thick red clay and laterite.

CULTURAL MATERIAL:

1) Industrial material- Nearly five hundred fragments of clay crucible and ten complete crucibles were found in all trenches and pits fairly evenly distributed in both layers in association with charcoal, ash, and numerous pieces of slag and furnace walling. Preliminary study of these crucibles indicates that they were probably used for melting copper as a number of the crucibles have in them deposits that appear to be copper or copper alloy. There is thus strong evidence to suggest that this was a small-scale industrial site where various smiths

(copper, gold, or black-smiths) probably worked. It is hoped that analytical studies on the crucibles and slag now in progress in the Universities of Ghana and Cambridge will throw more light on the nature of the industries, at the Dwinafuor 2 site.

2) Metal work- Less than a score of metal objects were found including a large metal bracelet, one copper or brass ring, and several iron objects (arrowheads, knife blades, rods, nails, and fish hooks). As there were no traces of houses in the excavation and not many finished implements and tools were found, it would appear that this was essentially a workshop site and that most finished objects were taken to the residential area of the artisans' quarter, the Dwinafuor 3 site where L. Crossland's excavation of collapsed houses yielded a much greater harvest of metal implements, beads, and smoking pipes.

3) Pottery- Ethnographic studies confirm the archaeological data that pottery used in conveying water to the site served as part of the regular equipment of the smiths. In addition, the smiths brought domestic pottery to the site for cooking and serving food (bones of domestic animals were found in the occupational material). In general, the pottery types previously found in the Brong and Kramo quarters of ancient Beo occurred at Dwinafuor 2. Particularly in attendance was the overall painted-slip and rouletted 'Beo ware' so characteristic of the 15th to 17th century Beo sites. However, the presence of a few slipped sherds with linear painting such as occurred in the 12th Century 'Nyarko' quarter site about half a kilometre north of Dwinafuor 2 site are suggestive of occupation during a period antedating the main period of occupation.

DATING

Several fragments of smoking pipes, occurred consistently in layer 1 (up to 0.33 metres) and imported glass and carnelian beads as well as a piece of European imported earthenware were found in the same layer. No pipes occurred in the lower layer. It is likely therefore that the Dwinafuor 2 industrial site was in use sometime- we guess- between 1500 A.D. and 1750. It is very much open to question whether the workshop began as early as 13th Century.

CONCLUSION

The archaeological importance of Dwinafuor 2 probably lies (1) in its role as a bridge between the earlier Beo settlement (Nyarko phase) and the later settlement (Brong 1 and 2 and Muslim Quarter phase) and (2) in the fact that here we have what seems to be, to all intents and purposes, a Brong Akan indigenous smithing site which used crucibles probably for copper working perhaps at about the same time as, if not earlier, than the ancient Akwapim-Akan smithing industry so well described by Professor C.T. Shaw from his Dawu site.

REFERENCE

- Posnansky, M., 1973 West African Trade Project-Report on Research in 1972, Department of Archaeology Mimeograph, Legon.
- Shaw, C.T. 1961 Excavations at Dawu (London).

James Anquandah

SUMMARY OF EXCAVATIONS AT THE NYARKO AND DWINFUOR SITES
OF BEGHO 1975

During the short Easter vacation, work was undertaken at the Nyarko site located north of the Dwinfuor quarter. Traditions claimed that the settlement was founded by Afua Nyarko and formed part of Begho. In addition to the excavation, survey work was conducted to delimit the extent of the site which was found to spread out to the north and east along the farm road running to the north-east.

A three metre grid was laid out over a wide area in which an irregularly shaped shallow depression was situated approximately 18 metres across. A total of 5 units, two measuring 6 x 1 and one half metres and three measuring 3 x 1 and one half metres were excavated. In all only two main stratigraphic units were recognized; a thick black soil rich in humus about 80 cm thick containing large potsherds and animal bones underlain by a sterile red laterite gravel. This stratigraphy was a feature of the lower area of the site. The area of higher ground had a thin black top soil underlain by compact collapsed wall material, consisting of subsoil mixed with potsherds largely measuring less than 5 cm across. Two charcoal samples were obtained, one collected from the thick black layer provided a date of 1120 ± 75 A.D. (N2141) and the second from the top of the sterile layer a date of 1045 ± 80 A.D. (N2142).

FINDS

The pottery is quite different from the 15th-18th century red slipped Begho type pottery associated with the Brong, Kramo, and Dwinfuor quarters. Micaceous and Design-painted pottery were found and has close similarity with material dug recently from the D2 site north of the Nyarko and west of the Dwinfuor quarter and characterized by large numbers of crucibles associated with the latter in surprisingly large quantities. The pottery is heavily weathered and has a high incidence of notching on rims and of carved roulette motifs on the body sherds.

One interest of the site lies in the abundant and well-preserved animal remains throughout the occupation with a prevalence of bovid remains and a large number of worked fragments. There was neither ivory nor evidence of weaving or smoking although evidence for the use of copper and iron was found.

1975 Begho D3

During the long vacation of 1975 a third site on the Dwinafuor quarter was excavated towards the central area of the quarter about 70 metres east of the D1 site excavated at Easter 1972. The D3 site consisting of a series of mounds with two depressions was chosen for excavation firstly to provide more material for comparison with the other Begho sites, and secondly to locate a house mound site which would enable Mr. Rod McIntosh to conduct experiments on well dated collapsed walls.

A total of 8 units, 4 measuring 6 x 2 metres each, an L shaped trench measuring 5 x 5 x 2 metres and three units each measuring 2 metres square were dug. The structure of the site indicates two phases of activity. The S.E. area embodying Trenches 1, 3, and 5, revealed a shallow circular trough beneath the occupation layer about 2 metres below the present surface which measured about 6 x 3 metres across. This trough was probably dug as a borrow pit to obtain earth for the mud walls of nearby buildings. The trough was later filled with 90 cms. of rubbish and at a later phase a building was constructed on the spot.

Very good traces of collapsed wall material and probable wall stumps standing on thin lines of laterite platforms were found in the stratigraphy of Trenches 1 and 5. The stratigraphy of the northern area of the site indicates a thick rubbish layer of loose black earth with large potsherds overlying an old land surface of laterite rocks. The rubbish dump may probably be contemporaneous with the main occupation.

Three burials were found. The one in Trench 1 was found lying in a loose ashy layer below the building. The second and third in the L-24 Extension, was that of an adult and a child. All the three skeletons were buried lying on their right shoulders and facing to the east. Brong burial customs in the area explain that men were buried facing to the east and women to the west.

FINDS

a) Pottery-The pottery is closely similar to the pottery excavated from the Kramo, Brong, and the Dwinafuor D1 sites.

b) Smoking Pipes-184 smoking pipe fragments were found, the largest number yet recorded from Begho. The predominant style, the ring base was restricted to the lower layers, and the foliate or quatrefoil varieties associated with the upper layers.

c) Metallic Objects-114 ferrous objects comprising arrowhead fragments, bangles, rings, knives and discs, the size of 20p. coins were found. Less than 10 pieces of iron slag were found and the discovery of a nearly complete crucible and small clay furnace plugs near to what appears to be a smithing area indicates probably that small scale working of metals other than iron was carried out at the site. 9 pieces of cuprous or cuprous alloys were found including a fragment of twisted bangle.

d) Ivory-3 ivory objects or fragments of ivory were recovered including a small carved comb with circular engravings similar to the decorative motifs on the side-blown trumpets excavated from B2 site in 1972.

e) Bones-A characteristic feature of the bones is the predominance of bird bones and that of small animals as compared to the Nyarko site, from which larger animal bones were obtained. Fresh-water molluscs were collected probably from the nearby Nimpene stream. 4 cowrie shells and a number of land snails of various species were also found.

f) Beads-57 glass beads and one bead made from quartz crystal were found.

g) Spindle Whorls-24 spindle whorls of about four different shapes were found.

DISCUSSION

As far as can be deduced from the material from the two sites, the Nyarko site represents a different phase in the chronological history in the Begho area. The ceramic tradition is quite distinct and unlike the pottery yet excavated from the 16/18th century phases at the Brong, Kramo, and Dwinfuor D1 and D3 sites. Nyarko pottery displays close similarities with that from the Dwinfuor D2 site and the two sites probably belonged to the same tradition.

L.B. Crossland

IRON FURNACE EXCAVATIONS AT SREDE AND DAPAA (DEBIBI)

Excavations have been conducted at Begho since 1970 but inadequate information has been obtained on technology other than pottery. The 1975 season was designed to place a priority on technological information. To this end a study of spinning and weaving in the Hani area (which has its focus at Debibi) was undertaken. The metal workshop at D2 was excavated and the various sites where iron slag occurs in abundance on the surface were excavated. Altogether 11 iron slag occurrences were plotted and appear to have a random distribution though all were found because they were outcropping along footpaths or were noted near the tracks during farming activities. It is thus obvious that many still await discovery. The oral traditions of all the villages around Hani clearly indicate that iron smelting was not undertaken within the last 80 or 90 years within the general area though smithing was quite prevalent till the middle of this century. At Easter the nearest large occurrence of slag to the village of Hani was investigated 0.5 km. to the south-east of Hani on the road to Nasana. The site known as Atwetwebooso (the place of iron stones) or Nami consisted of a dense scatter of slag, tuyere and furnace fragments up to 10 cm thick with the actual furnace focus clearly defined. A date of A.D. 1820±80 (N-2140) was obtained which is the earliest well authenticated date for iron working in Ghana. During the excavation a further

- B.M. ?

site (Srede) was noted some 2.87 km west of Nami along the same road whilst in the course of collecting oral history Messrs Anquandah, Crossland and Garrard discovered a series of large slag mounds to the south of Debibi and it was decided that both sites should be excavated during the long vacation.

Srede:

This site proved to be somewhat disappointing. A total of 17.25 square metres was excavated. Nowhere was the deposit more than 5 cm. thick. It was evident that the site was very denuded and probably old. All the slag fragments were small, very few furnace fragments were found and none were more than 10 cm. across. Only 31 recognizable tuyere fragments were found, none of which were whole or more than 15 cm. long. No focus of the furnace was located nor were any pieces of charcoal found suitable for dating. Part of a possible broken hammerstone was the only other find recovered. The total area of the main slag distribution was approximately 55 sq. m. oval in shape measuring 11 by 6 metres. It was evident that the smelting activity was on a relatively small scale and possibly contemporaneous with that of Atwetwebooso.

Debibi:

Because of the problems of clearing the thick vegetation only test excavations were conducted. The site, an iron working complex, is situated some 2 and one half km. to the south-east of Debibi along the footpath to Hani across the valley of the Mampa river. The complex lies some 50 metres to the north of the mounds marking the old town of Dapaa which the oral traditions of the Pantera speaking peoples of Debibi indicate was settled by refugees from Begho and may have been in turn abandoned in the eighteenth century when the present town of Debibi was founded. Though the existence of the slag mounds is well known and they are noticeable landmarks in the dry season there are no extant oral traditions about iron smelting.

The site:

Altogether 14 slag mounds were located in an open circle formation some 50 metres across. Four of the mounds were large ranging from 20x10 metres across to 24 x 12 metres, each had smaller satellite mounds associated which averaged some 6 x 4 metres across. The large mounds were between a metre and a metre and a half in height, the smaller mounds were lower, up to around 70-80 cms. high at the most. The mounds were composed of loose cinder slag with many pieces of furnace pipe or tuyere and furnace fragments clearly visible. Because of the loose nature of the mounds most were covered by small trees and bushes.

On the surface of the mound nearest the track (Mound 1) a broken dimpled hammerstone and a pottery disc goldweight were found.

a) Mound 1 was somewhat L shaped with its main axis 20 metres long in a E.N.E. direction and its minor axis 12 metres long in a N-S direction. A 5 x 1 1/2 metre trench was dug through the mound to the underlying lateritic gravel some 1.40 m. below the surface at its greatest depth. The mound was largely made up of very loose, black slag with lenses of red furnace and tuyere fragments. The thickest lenses were on at least 4 main levels indicating that the furnace had been destroyed and the slag and broken furnaces thrown onto the slag midden. There was very little trace of an old ground surface as if the soil had been scraped up when the furnaces were erected. What appears to have been the bases of two furnace hearths were located the largest of which was oval in shape and 50 x 65 cms. in diameter. Large amounts of charcoal were collected. A wall stump of a probable pre-existing wall was located.

b) Mound 3 was egg shaped some 7 metres long and 5.50 metres broad. A 3 metre square was dug and the lateritic gravel lay 65 cm. below the surface. As compared to Mound 1 it was largely made up of furnace fragments and tuyeres with a surface cover of loose black humas and slag up to 20 cms. thick above. It gave the appearance of being the remains of one or more collapsed furnaces from which the slag may have been thrown on to Mound 1 which lay 10 metres to the north west.

Finds:

Other than furnace fragments etc. the only finds consisted of small quantities of pottery which included some with slight affinities to that of Begho. There were no smoking pipes, though on the nearby Dapaa mounds an interesting pipe with a foliate base and steeply angled stem believed to be of mid-eighteenth century date and transitional between the class 3 foliates of Ozanne and steeply angled highly decorated pipes of the late eighteenth century may provide a clue to the age of the iron furnace complex and Dapaa itself from which pottery similar to Begho was found by L.B. Crossland in April, 1975.

Furnace Reconstruction:

Though very large numbers of furnace fragments were found, because of digging in the wet season, many were in a friable state. Sufficient pieces were however recovered which clearly indicate that the furnaces were of the narrow shaft variety. The furnace fragments were fairly thick (up to 10 cm.) and had gently fluted exteriors. The furnace pipes and/or tuyeres, of which several hundred were recovered, though none complete, were of an average bore of 10 cm. with their ends vitrified. Several clay dome-shaped plugs with their flat, oval surfaces measuring 10 x 15 cm. and 10 cm. high were found, and presumably were used to block up the furnace pipe holes. Several pieces of furnace from which the slag was tapped were found with the opening vitrified and slag coated. Work is proceeding on the analysis of the furnace fragments. Two small fragments of what is assumed to be bloom were also found.

It is hoped to continue work on the Dapaa slag mounds during the Easter vacation of 1976.

Mr. Kofi Agorsah, Assistant Keeper-in-charge of the Volta Regional Museum at Ho, sends the following note, which resulted from his work in Brong-Ahafo:

A great deal of debate by historians, archaeologists, ethnologists and the like has been made about the so-called polished stone axes (Nyame Akuma (Akan), So fia, (Ewe)) but the mystery of its derivation still remains a problem. But the Ghanaian stone age man seems to have manufactured and used a more mysterious object which for several decades has been a centre of attraction for discussion by archaeologists particularly. This object generally is cylindrical and oval-sectioned and of either stone or terracotta, with geometric scorings on one or both faces, and has been variously referred to as terracotta cigar, stone rasp, or terracotta rasp.

Up to date it is difficult to tell the origin of the 'rasp', its uses and even the material from which it was made- clay or stone. Although the 'rasp' has always been associated with early food producing societies of Ghana dating to some 4,000 years ago, no one is certain whether it could be older. The main sites from which these objects were found include Kintampo, in Brong Ahafo, Ntereso in Northern Ghana near Tamale, Mumute in Brong Ahafo, near Wenchi, and Chukoto and at many other archaeological sites in Ghana. The intention of this article therefore is to draw the attention of Ghanaians, particularly field workers, to efforts being made to unravel the mystery surrounding this object by collecting any data about them.

Attempts have been made to present the form of the objects in a classificatory manner. Generally the 'rasps' are flattish and fairly wide, some between 6.20 cm. at the widest parts and fairly thick, varying between 1.0 cm. - 3.5 cm. Some are oval to completely circular sectioned with sides which have the tendency of being parallel, but while in some the sides converge acutely towards the end, others do not and most often end in rounded or straight ends. Very few of the pieces recovered are whole to help give a general length measurement. Those with which the writer is acquainted have lengths ranging between 10 and 15 cm.

The main patterns of scoring decorations on the rasps include grid pattern criss-cross, single line and pecked decoration. Some 'rasps' have combinations of two or more of these.

'Rasp' finds were reported in the Gold Coast as far back as 1912 but the objects were not closely studied until about 1952 when certain archaeologists attempted to explain what they were, their source, and the raw materials from which they were made. They were first called "terracotta Cigars" because it was thought they were hard baked clay with the appearance of cigars. Scholars who thought otherwise called them 'rasps' made from some other kind of sandstone probably of volcanic origin. The author managed to get six pieces sectioned which he had from the site of Mumute in the Brong Ahafo region of Ghana. The results of the analysis indicated that the objects in question were of some type of fine clay with some element of iron content. It seemed the objects were baked after having been dried in the sun. The faces were then carefully scored with geometric patterns.

'Rasps' were exclusively manufactured by the stone age man of Ghana because definite parallels have not been found outside this geographical area. Stones scored with similar designs from food producing sites in the Republic of Guinea and from the northern Savannah and the Sahara region have been reported. Similar objects have also been found from the Hoggar mountain area. Also similar but slightly curved objects have been reported from the lower Congo area.

For what were the 'rasps' used? No definite use is known for them. Some people call them "message sticks", others "tablets" from their resemblance to Hittite tablets. The current name for it is 'rasp' though it is thought to be too soft for use as such. Some scholars think that they were "ritual objects" for lack of an alternative suggestion. The 'rasps' have even been thought as musical instruments or even sweat removers. All these are attempts to establish the possible use for which the stone age man of Ghana made the objects in question. But no solution has been found yet. The archaeologists, particularly those concerned with the prehistory of Ghana still continue to battle their ideas on the issue.

Any attempt to suggest use for the 'rasps' should take into consideration their forms, sizes, the geometric patterns on the faces, the wear on the faces and other associated finds and their abundance as well as the material of which they were made and the source of the materials. These considerations should throw some light on the problem connected with their function in the absence of any ethnographic parallel.

The general form of the 'rasps' has a significance. All of them have a fairly uniform shape, rather like flattened maize or millet cobs. The variations in shape probably indicate attempts to produce varied results. It is also possible that the differences in form were meant for use at different stages of the same process. Perhaps there were differences in shape because they were used by different classes of people. One could also suggest that the smaller sized ones were used by young and very old people, and the larger ones by the adult group.

That the rasps were significant as objects for decoration is indicated by the wide variety of geometric patterns scored on them. Some of them even have different patterns on each face.

Taking the very large proportion of the 'rasps' that have the geometric decorations and the whole lot of scoring into consideration, and especially the deep and wide variety of the designs, one suggestion is that the 'rasps' were used for stamping patterns on skin of animals or on bark cloth (Kyenkyen).

In 1953, Artamanov excavated similar objects, but of bone, from the site of Sarkel in the U.S.S.R. The pattern of scorings on the bones were similar to those found on the Ghanaian 'rasps'. These, according to the excavator were used as stamps, for decorating skin. Bark-cloth or skin of animals is not likely to be preserved in the archaeological record of Ghana especially considering the length of time involved.

Another use of the 'rasp' was possibly for making pottery in a similar way in which modern potters in the area use maize cobs for shaping vessels. But whether the 'rasp' could have been used for decorating vessels is difficult to tell. The reason behind this suggestion of the use of 'rasp' for pottery making is that the introduction into West Africa in recent times of maize probably resulted in the abandonment of use of the 'rasps' since it was more tedious to make them. This seems to have occurred several generations before the modern potters who do not seem to have any idea as to what the 'rasps' were and of what use they were. The time gap is quite long. No evidence has yet been found for this assertion but it seems that if the 'rasps' were used for making pottery at all, it was more likely to have been used for shaping rather than decorating.

The abundance of the 'rasps' at the site of Mumute, as at the Ntereso and Kintampo sites, suggests that they were related to something produced on a large scale. The overwhelming majority of them had been worn down and abandoned only after they had broken, possibly by the force of pressure on them, though it is hard to tell how they were used. The wear patterns on the 'rasps' suggest that they could have been used for activities that involved pushing them back and forward lengthwise, perhaps as tools for grinding and shaping designs on wood or stone or for grinding some kind of material, rather in the way that the name 'rasps' suggest. As is well known with modern steel 'rasps' the main work is done by the numerous teeth and projections produced by grooving the steel in a soft tempered material. The 'terracotta rasps' from Mumute do not seem to have the hardness adequate enough for rasping even wood since the teeth would break off and fall away quickly. The wear patterns as mentioned above, however seem to support the use of the 'rasps' for rasping but for what, one cannot tell.

Besides the original purpose for which the 'rasps' were made, the objects seem to have been used for other secondary activities. 'Rasps' from the Ntereso site have been found with conical holes perforated near one end, and with grooves similar to grooved stones supposedly used for bead polishing. It appears that the original form of the 'rasp' could be changed by using it for some other purpose. The perforated 'rasps' could have been used as pendants such as finds from Ntereso, Ti-n-deher and El Kel areas of the Sahara seem to suggest. The use of the 'rasps' as magical objects is the reason why conical holes are made in them for use as pendants.

No conclusion can be drawn at this stage of study of the function of the 'rasps'. It continues to be a great puzzle in the archaeology of Ghana, a puzzle which cannot be solved by one person nor a study of such objects from only a limited number of sites. Also there is the need to bring out certain hidden significant traits that could throw light on the problem.

Mali

Dr. Liesegang of the Frobenius Institute in Frankfurt-A.-M. sends this report:

From December 1973 to March 1974, Klena Sanogo of the National Museum of Mali at Bamako and Gerhard Liesegang of the Frobenius Institut, Frankfurt, W. Germany, excavated four iron age mounds and some graves near the village of Famanbougou, arrondissement de Dogo (7°18'20" W, 11°54' 25" N) about 160 km SSE of Bamako.*)

Three Carbon 14 dates have now become available from the 14C Laboratory of the Niedersächsisches Landesamt für Bodenforschung in Hannover:

Hv 6421 920±40 BP

Hv 6422 1335±75 BP

Hv 6423 1320±60 BP

The first date is from charcoal in an ashy layer in the highest of the settlement mounds which contained approximately 3.5 m of cultural layers. The charcoal was associated with a ware which is characterized by patterns impressed with small carved roulettes (diameter c. 0.7-0.8 cm, length 2.2 -2.7 cm). Similar wares were also found at Niani (République du Guinée) especially in the spits or layers III and IV of the "Station 6D" by Filipowiak and others. The ware was therefore provisionally called Niani-6D-III ware. At Niani 6D only layers below the above mentioned have been dated. There are two dates for Layer VI (KI 293 - 1090±65 BP and KI 294 - 1030±35 BP.) (cf. Filipowiak, 1968, p.648). The new date therefore fits into the accepted C14 chronology.

The two other dates came from charcoal associated with a whitish or buff coloured ware tempered with quartz grit and a little mica and decorated with a plaited bark roulette. Already during the excavation it had been concluded that this type of pottery was earlier than the Naini 6D-III ware and this is confirmed by the dates. It is possible that the co-called "hypogée" type of graves (cf. Mauny, 1961, p.127) is contemporary with this quartz-mica tempered ware. There are several cemeteries consisting of "hypogées" in the arrondissement of Dogo. There are several interments in every grave and usually only the last one is undisturbed. The scarcity of grave goods makes it difficult to associate them with the known settlement sites. There is a Carbon 14 date for skeletal remains which were collected from a grave near Dogo in 1971 (Hv 3874 - 530±100 BP). This does not agree with the hypothesis that these graves are contemporary with the quartz-mica ware. But the question is open whether this is due to some kind of contamination of the bone sample or if the sample comes from a very late burial.

* The research was sponsored by a cultural aid program of the Foreign Office of the Federal Republic.

Ceramics produced in the area in the moment are different from those described above. They are similar to described for the Sarakolé by Gally and are mostly cord rouletted. The ancestral ware can be found on historical settlement mounds in the Dogo area which can be attributed to the 19th century.

A Xerox copy of the report on the excavation is available from the Frobenius-Institut to researchers planning or doing archaeological research on Mali, République du Guinée, Côte d'Ivoire and Northern Liberia. It is in German with summaries in French and English.

References:

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1968 Les recherches archéologiques polono-guinéennes à Niani en 1968.
Materialy zachodniopomorskie, Szczecin, XIV, 575-648.

Galley, A.

1970 La poterie en pays Sarakolé (Mali, Afrique Occidentale), étude de technologie traditionnelle. J. de la Soc. des Africanistes, XL, 1. 7-84.

Mauny, R.

1961 Tableau géographique de l'ouest africain au moyen age. Mémoires I.F.A.N. no. 64, Dakar.

Mr. Colin Flight, Centre of West African Studies, University of Birmingham, reports:

Excavations at Gao (Republic of Mali) in 1974

The medieval Muslim cemetery at Sané, near Gao, in the Sixth Region of the Republic of Mali, partly surveyed in 1972 (interim report in W.A.J.A. 5 /1975/, forthcoming), was investigated further in 1974. As in 1972, the writer was accompanied by M. Cheick Oumar Mara, of the Institut des Sciences Humaines du Mali, who contributed very largely to the success of the expedition. Though the intention had been to stay in Gao for a period of approximately two months, in the event only three weeks work was possible, in September and October.

The two brick-built structures which are referred to in previous descriptions of the site (e.g. by Mauny, Bull. IFAN. 13 /1951/, 837-52) were excavated in 1974. Rather they were re-excavated, for both had been dug before, more than thirty years ago. Two phases of construction are represented. The primary structure is a long rectangular building (F) with internal dimensions of 10.80 m from west to east and 3.20 m from north to south. The foundations are of stone set in mud, and the walls were built with baked bricks, carefully bonded. It is interesting that the bricks were made in at least two regular sizes. The standard unit is a square brick measuring roughly 22 by 22 by 5 and one half cm (the length of which perhaps corresponds to one 'span'. Arabic shibr), but a half-sized brick, roughly 22 by 11 by 5 and one

half cm, was also used in alternate courses. There are four doorways, one in the west wall, three in the south, 1.10-1.20 m wide; it is probably safe to assume the existence of a fifth doorway in the east wall, though this was entirely destroyed, together with the north-east angle of structure F, by a previous excavator. F was originally adjoined on the east by a second structure (H), only one corner of which has yet been traced. This was then razed to the ground and rebuilt on a different plan. The new structure (G) has internal dimensions of approximately 5.40 m from west to east and 3.60 m from north to south; it is of similar construction to F, but the walls are badly aligned and the brickwork does not show such careful bonding. It lacks a separate foundation. There is a doorway in the south wall, and a large rectangular niche, 1.40 m wide by 1.00 m deep, at the north-east corner. Perhaps at the same time a few alterations were made in structure F: one of the doorways was blocked, for example. Structures F and G together form the grand caveau, or 'great vault', as it was described by Mauny. The petit caveau is a small detached building (K), almost 20 m away to the south, roughly 5.00m by 2.50 m internally, with a narrow doorway in the west wall. It resembles G in construction. Finally a crude wall was built (J) enclosing an area to the east of G. It seems that the brick structures were already in ruins by this time.

Because there is no record of any digging at Sané except in August 1939, it was assumed initially that structures F, G, and K had all been excavated then, in a single operation. But this was probably a mistake. From a combination of archaeological and documentary evidence it would now appear that structure F alone was dug in 1939, and that afterwards other work was carried out no news of which ever reached the outside world. The indications are, therefore, that the twelfth-century royal inscriptions which make the site so important historically were found inside structure F, but the circumstances remain very obscure. (The inscriptions in question are those published by Sauvaget, Bull. IFAN. 12 /1950/, 418-40, as Nos. 1, 3, 4, 6, 7, and possibly 8; Nos. 3, 4, and 7 were subsequently published again by Vire, Bull. IFAN. /B/ 20 /1958, 368-76.) Several new inscriptions were recorded in 1974, including four which are dated 1095 (?), 1113 or 1115, 1123 or 1125, and 1142 respectively. That the brick buildings are of similar date is not unlikely but has not been proved. It does not seem too much to hope, however, that in the next stage of the investigation some direct link may at last be found between the epigraphic evidence and the structural sequence.

Nigeria

Dr. J.E.G. Sutton, who is head of the Archaeology Section of the Centre for Nigerian Cultural Studies at Ahmadu Bello University sends us this report:

Archaeology and early African history (based largely on archaeological sources) have been taught for a few years at Ahmadu Bello University, but on a small scale within the History Department. Mr. H.M.A. Obayemi has been principally responsible for such teaching; but, now that he is fully engaged in field research (leading to a Ph.D.) while course demands are increasing, further teaching appointments are to be made in due course. Furthermore, Archaeology has already achieved fuller recognition through being strongly represented on the research side in the Centre for Nigerian Cultural Studies, which was established in this University in 1972. The Centre's various sections are concerned with research and the promotion of their subjects throughout the northerly and middle-belt states of Nigeria. Till 1975 it has been directed by Professor Michael Crowder, who is now being succeeded by Professor S.I. Wangboje. The Centre expects in 1976 to obtain a building on the University's main campus which will be developed into a museum and will include a working base for Archaeology.

In 1975 there are four regular research staff in the Archaeology Section, as well as a Visiting Research Professor. Mr. C.D. Bala is undertaking a detailed survey of part of Tangale-Waja in North-Eastern State. Here he has located numerous stone-walled remains of former villages, as well as some fascinating terracotta figurines, and he is correlating his archaeological evidence with ethnographic and oral-historical enquiries. In 1975/76 he will be joining the graduate class in Archaeology at the University of Ghana. Since joining us recently from Ibadan, Mr. S.G.H. Daniels has been devising statistical techniques and research design principles relevant to the work of the Section and to archaeology in Nigeria generally. He is to lead a workshop/seminar on these subjects in December 1975. Mr. H.M.A. Obayemi has been working on Iron Age problems in several districts; at present he is completing a major study of part of the Niger-Benue confluence region, especially its south-western sector where intensive survey has proved extremely rewarding. Professor Thurstan Shaw will visit during the dry season and is specially interested in questions of the Early Iron Age and of the origins and development of agriculture in Nigeria. He is planning intensive field work in the Kaduna and Niger valleys. Surveys of the greater rivers are also being undertaken by Dr. J.E.G. Sutton, in the first place to discover remains of fishing communities and marsh-cultivators of both recent and more distant times. The Kebbi valley, with occupation mounds and forts of the Kebbi kingdom, appears especially interesting. Also being planned is a project on Zaria City, its walls and its settlement evolution, and its historical relationship to the neighboring inselbergs (around which settlement is reckoned to be more ancient), thus to follow up work earlier undertaken by Mr. Obayemi.

Dr. Bassey Andah of the University of Ibadan writes:

I have just concluded a first reconnaissance survey of the Katsina-Ala Donga river basins of Benue Plateau State of Nigeria. The reconnaissance which lasted two months yielded several important sites mostly of Neolithic/Iron Age character. I also began excavating the rock shelter section of one of the sites discovered, namely the site of Tse Dura (near Ushongo) and unearthed a sequence going from Iron Age, back possibly to the Late Stone Age.

Pottery present in the Neolithic/Iron Age levels was especially prominent both with respect to variety and quantity. Charcoal was abundant all through the sequence and one human skeleton possibly post late Stone Age, has so far been recovered. The present phase of the work was made possible by a modest research grant awarded by the University of Ibadan, to whom I am very grateful. I hope to continue with this work in the first three months of 1976, if I succeed in obtaining further financial assistance. Any suggestions or offers will be gratefully entertained.

Rhodesia

C.K. Cooke, Co-ordinator of Monuments, National Museums and Monuments of Rhodesia is updating the archaeological survey of Rhodesia as a continuous working plan. The production of 1:250,000 maps covering Rock Paintings, Early, Late and Middle Stone Age, as well as phases of the Iron Age is well advanced and should be completed within the next few months.

Mr. Cooke also provides the following information:

The issuing authority in Rhodesia for Archaeological or Palaeontological work is the Director, National Museums and Monuments, P.O. Box 8540, Causeway.

To obtain a permit it is first necessary to fill in an application form giving details of qualifications, previous excavations and site or sites of proposed work.

Study collections for both Stone Age and Iron Age are housed in the National Museum, Bulawayo and the Queen Victoria Museum, Salisbury.

The Archaeological Survey is housed in the National Museum, Bulawayo, but duplicate card systems are held in Salisbury and Umtali Museums.

All material collections belong to the country, but temporary export of archaeological and palaeontological material is allowed for study purpose to recognised institutions.

Present work is being undertaken:

Dr. T.N. Huffman is currently working on the Rhodesian Iron Age and is running the Annual Ranche House School of Archaeology at Zimbabwe.

N.J. Walker is working on the Late Stone Age of Rhodesia, but is currently on study leave at the University of Cape Town for his Honours Degree.

Senegal

This report has been received from Messieurs Thilmans and Descamps:

Les sites mégalithiques du Sénégal viennent de faire l'objet d'un recensement pratiquement exhaustif par V. Martin et C. Becker (ouvrage en préparation).

Depuis une soixantaine d'année, ils ont donné lieu à d'assez nombreux sondages (Duchemin, Jouenne, de Saint-Seine, Bessac, Mauny, Girard) montrant qu'il s'agissait de monuments funéraires datés, par la méthode du radio-carbone, de la seconde moitié du premier millénaire après J. C.

Poursuivant l'effort d'investigation entrepris depuis quatre ans sur la protohistoire sénégalaise, le site de Boussoura-Tiékkène, à 4 km au N. de Koumpentoum, a été choisi, sur les conseils de V. Martin et C. Becker, pour faire l'objet d'une première campagne de fouille. L'autorisation de fouille selon la loi du 25 janvier 1971 a été sollicitée et obtenue du Directeur du Patrimoine National.

Déroulement de la fouille

L'équipe de l'IFAN s'est rendue sur les lieux du 21 novembre au 21 décembre 1973.

Elle comprenait :

G. THILMANS, Chargé du Dépt. d'Anthropologie physique

D. BADIANE, Aide Technique

I. N'DIAYE, Aide Technique

et 6 manoeuvres recrutés sur place

C. DESCAMPS, Chargé du Dépt. de Préhistoire et Protohistoire,
a visité régulièrement le chantier, ainsi que V. Martin et C. Becker.

Le site de Boussoura-Tiékène comporte 9 cercles mégalithiques, 18 cercles de blocs ou pierriers et un nombre difficile à préciser de tumulus (fig. 1). Au cours de cette première campagne, seul le plus grand des cercles (n°9 du plan) a été fouillé.

D'un diamètre de 8 m, ce cercle est composé de 35 mégalithes, ce qui semble constituer un maximum dans l'aire sénégalienne. Sur ces 35 mégalithes 18 sont encore dressés, et 17 cassés et renversés, presque toujours à l'extérieur du cercle (fig. 2).

Une pierre en V flanque le cercle à l'Est-Sud-Est ; ses deux branches, cassées et gisant par terre, ont été replacées sur les moignons de la fourche pendant la durée de la fouille.

Pour prévenir un éventuel effondrement des mégalithes, tout en maintenant un carroyage métrique, la fouille a concerné une aire cruciforme de 32 m² entièrement située à l'intérieur du cercle ; celle-ci a été décapée par tranches horizontales de 20 cm jusqu'à une profondeur de 1,20 m. A ce stade, seuls les 4 m² centraux ont été poursuivis, jusqu'à 2,40 m.

La totalité des déblais ont été tamisés.

Plusieurs sondages de contrôles ont été effectués à l'extérieur du cercle, dont une fosse (AB) tangente à l'Est et une autre (CD) entre le cercle et la pierre en V.

A la fin des travaux, toutes les excavations ont été remblayées, afin d'éviter les accidents et le renversement des mégalithes.

Inventaire du matériel recueilli.

Le mobilier archéologique recueilli dans la fouille du cercle s'est révélé extrêmement pauvre. On peut noter :

- un objet biconique perforé en terre cuite, long. = 25 mm
dans le carré BB33, 20 à 40 cm de profondeur.

- une lame en silex, long. 53 mm
dans le carré B 11, 60 à 80 cm de profondeur.
- une dent non identifiée
- enfin plusieurs centaines de tessons, dont 187 de bords, mais aucune poterie reconstituable.

Ces objets ont été enregistrés dans les collections du département sous le n° SEN-73-~~61~~.

Principales observations.

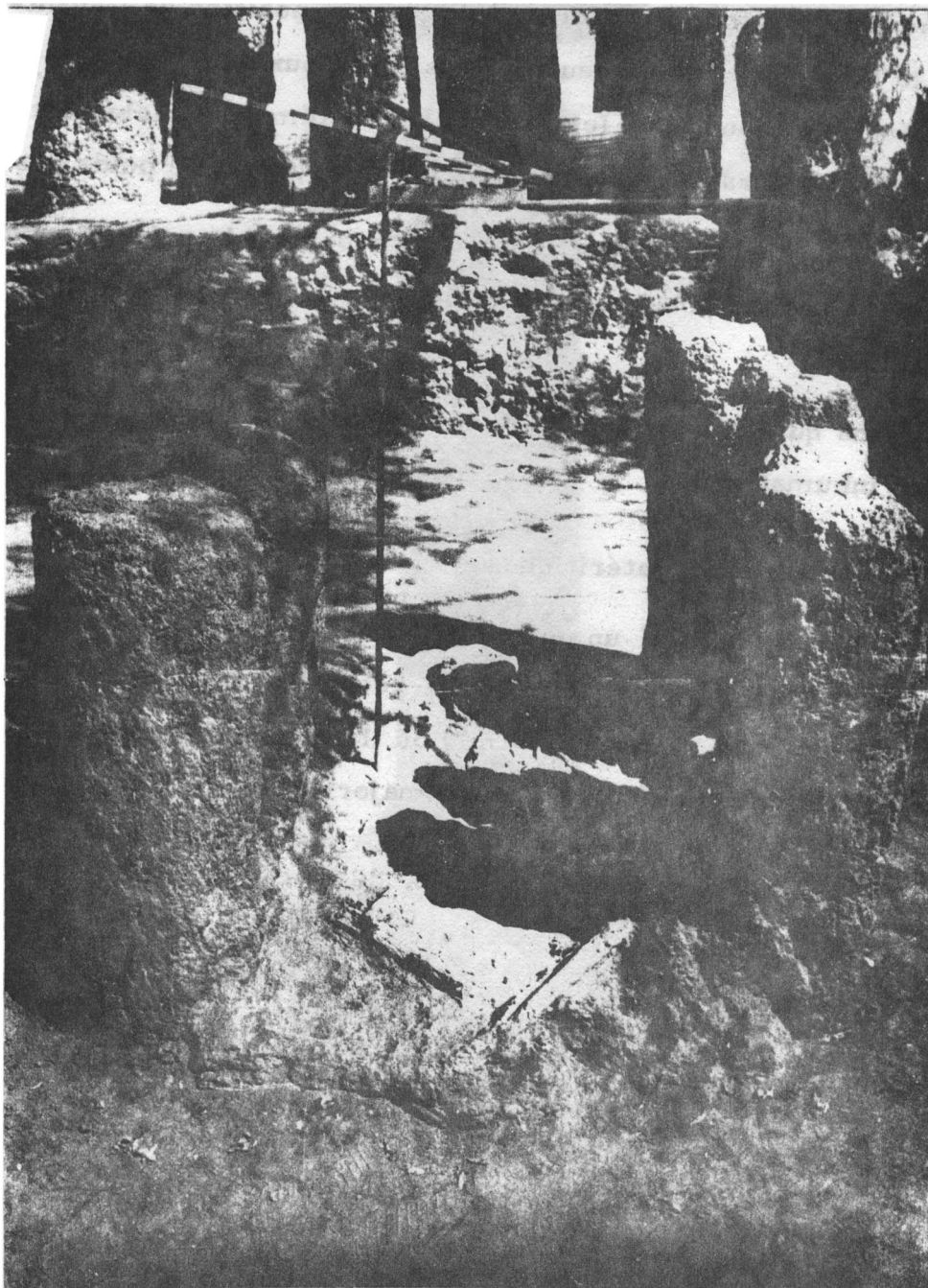
1 - Présence d'une enceinte funéraire centrale

Cette particularité du cercle fouillé, inédite jusqu'à présent, constitue le résultat le plus remarquable de cette première campagne de fouille à Boussoura-Tiékhène.

Deux rangées, orientées est-ouest, de monolithes cylindriques, implantés verticalement, ont été dégagées, au centre du cercle ; l'alignement nord était formé de 4 pierres, celui du sud en comportant 5. Les dimensions extrêmes des pierres sont 72 et 122 cm en longueur, 24 et 39 cm en diamètre. Les extrémités supérieures étaient pratiquement dans un plan horizontal, enfouies sous une dizaine de centimètres de terre.

Le démontage de cette enceinte a réservé une surprise : dans deux cas il s'agissait de monolithes à cupule apicale implantés à l'envers. Il semble donc que ces monolithes centraux soient des matériaux de récupération, prélevés probablement sur les lignes frontales de "tombelles" voisines.

Un squelette occupait à 90 cm de profondeur, l'espace rectangulaire (long. 160 cm, larg. 80 cm) délimité par ces pierres. Le corps était orienté Est-Ouest et le crâne, à l'Est reposait sur le côté droit, (un fort écrasement l'a fragmenté et déformé)



**Structure mégalithique centrale et squelette du cercle n°9
de BOUSSOURA-TIEKENE (photo R. Guitat)**

Malgré le mauvais état de conservation des os (dont les épiphyses avaient disparu) la position du corps était bien observable : coudes en flexion, main gauche sous le menton, main droite (d'après la position de l'avant-bras) à 20 cm devant le front, jambes un peu repliées et genoux écartés. Il ressort d'une observation minutieuse que les articulations, fémoro-tibiales ont dû basculer vers l'extérieur lors du recouvrement du corps, sous le poids des terres.

L'état de dégradation de ce squelette n'a permis la prise d'aucune mesure, ni même aucune observation anatomique, à l'exception d'une usure prononcée des dents.

Rappelons qu'il n'a été trouvé aucun objet de parure ni dépôt rituel accompagnant l'inhumation.

2 - Présence de petits blocs latéritiques

Au cours de la fouille, un nombre élevé de petits blocs latéritiques (grosseur moyenne d'un ou deux poings) a été recueilli. Leur répartition a permis de distinguer une zone centrale (12 m²) où ils étaient rares, et une zone périphérique (20 m²) en contenant la grosse majorité.

Profondeur en cm	Nombre total de blocs	Nb. de blocs centraux	% de blocs centraux
0-20	1513	244	16
20-40	1536	50	3
40-60	1051	10	1
60-80	433	16	4
80-100	2	0	-
100-120	6	2	-
120-140	0	0	-

Des sondages ont montré que le nombre de blocs devait être élevé dans la zone périphérique non fouillée. Il en a aussi été retrouvé dans les fosses extérieures (A et D) au voisinage des mégalithes.

Ces blocs ont été amenés par l'homme et leur répartition, horizontale et verticale, permet de retrouver les phases de l'édification du cercle mégalithique (fig. 3).

- 1 - creusement d'une fosse circulaire d'environ 9 m de diamètre et 0,80 m de profondeur
- 2 - édification de l'enceinte centrale, dépôt du corps à l'intérieur, et comblement de la partie centrale, de la fosse par la terre des déblais jusqu'à recouvrement de l'enceinte.
- 3 - mise en place du cercle mégalithique par bascule des mégalithes sur les parois de la fosse.
- 4 - calage des mégalithes et comblement général par des blocs amenés à cet effet et le restant des déblais.

3 - Présence de tessons

Les nombreux tessons trouvés lors de la fouille ne sont pas liés au monument mégalithique, mais préexistaient sur le site. Les remaniements consécutifs à l'édification du cercle n'ont fait que les brasser et les enfouir davantage.

L'étude de leur répartition aboutit au tableau suivant :

Profondeur (en cm)	Poids moyen (en g.)
0-20	252
20-40	246
40-60	144
60-80	189
80-100	95
100-120	55

120-140	16
140-160	4
160-180	2
180-240	0

Rappelons que jusqu'à 120 cm la fouille a concerné 32 m², et de 120 à 240 cm, 4 m².

Cette répartition confirme l'observation faite sur les blocs latéritiques : une fosse a été creusée jusque vers 0,80 m de profondeur lors de l'édification de l'ensemble mégalithique.

La forme et le décor des tessons sont caractéristiques de l'aire mégalithique : parmi les 187 tessons de bord utilisables, 88 présentent une nette angulation à l'épaule (observée aussi à Sine-Gayène, Kodiarn, Ndiao, etc...) Parmi les autres tessons de bord, signalons un type sur lequel l'ouverture est limitée par un bandeau engobé et bordé vers le bas par une légère rainure.

Le décor, quand il est encore observable, est le plus fréquemment à la cordelette. Quelques tessons montrent des faisceaux de stries parallèles obtenues probablement au peigne végétal. L'impression de noeuds roulés, caractéristique de la céramique de Dioron Boumak, n'a été reconnue que sur deux tessons, dont un à épaule angulée.

Conclusions et recherches envisagées.

Cette fouille d'un premier cercle à Boussoura-Tiékkène, assez décevante pour le mobilier archéologique, a surtout permis des observations nouvelles sur l'édification du monument et le rituel d'inhumation. Il est bien sûr trop tôt pour généraliser mais d'ores et déjà, deux faits peuvent être mis en évidence :

- la présence d'une structure d'inhumation complexe, et non d'un simple cercle, antérieur (ou postérieur) à une sépulture en pleine terre ;

- la présence d'un unique individu dans cette structure, ce qui n'est pas toujours le cas dans les cercles précédemment fouillés.

Ces deux caractères orientent vers un rapprochement avec les tumulus de Rao et ceux du Mali, plutôt qu'avec ceux de l'estuaire du Saloum (Dioron Boumak).

Des charbons, prélevés dans le carré C₁ entre 95 et 115 cm de profondeur ont été confiés au laboratoire de Radiocarbone de l'IFAN en vue d'une datation absolue.

Il est prévu d'effectuer une nouvelle campagne à Boussoura-Tiékène pour fouiller un autre cercle, plus petit, et aussi un pierrier et un tumulus.

D'autres fouilles auront lieu dans les sites mégalithiques en association avec les chercheurs travaillant en Gambie (équipe de M. HILL), l'unité de l'aire sénégalienne impliquant une action étroitement coordonnée de part et d'autre de la frontière.

Seconde campagne de fouille à

BOUSSOURA-TIEKENE (arrt. Koumpentoum)

Rapport Préliminaire

par G. Thilmans et C. Descamps

Déroulement de la fouille

A la suite de la fouille effectuée du 21 novembre au 21 décembre 1973 sur le site mégalithique de Tiékène, une seconde campagne avait été décidée.

Elle a eu lieu du 4 mars au 2 avril 1974.

L'équipe de l'IFAN comprenait:

G. THILMANS, Chargé du Dépt. d'Anthropologie physique

D. BADIANE Aide Technique

I. N'DAIYE Aide Technique

et 6 manoeuvres recrutés sur place

C. DESCAMPS, Chargé du Dépt. de Préhistoire et Protohistoire, a visité régulièrement le chantier.

Ont été fouillés:

-un tumulus-pierrier (n°10 du plan)

-un cercle-pierrier (n°18 du plan)

Description des monuments fouillés

1) Le tumulus-pierrier se présente comme un tumulus à surface hérissé de petits blocs de latérite. Diamètre: 8,50 m, hauteur= 0,60 m. Au SE se dressent 2 pierres frontales.

Il a été décapé par tranches horizontales de 20 cm jusqu'à -80 cm. A ce niveau une fouille centrale de 6 m² a été poussée jusqu'à -260 cm. Le quadrant NE de la périphérie ainsi que 2 m² au S et à l'W ont été dégagés.

La totalité des déblais ont été tamisés, et remis en place à la fin de la fouille.

2) Le cercle-pierrier se présente comme une file circulaire de blocs latéritiques enchassées dans le sol, de 5,30 m de diamètre. A l'intérieur du cercle le sol est plat, sans blocs latéritiques. A l'extérieur, 4 pierres frontales vers le SE. Une fosse centrale de 6 m², orientée N-S, a été décapée par tranches de 20 m. jusqu'à -220 cm. La moitié est de cercle a été dégagée, afin d'étudier la disposition des blocs de l'enceinte. Tous les déblais ont été tamisés et remis en place à l'issue de la fouille.

Résultats

Comme lors de la fouille du premier cercle (voir rapport précédent), le mobilier archéologique trouvé dans les deux fouilles s'est révélé extrêmement pauvre.

Il s'agit de tessons de poterie, de blocs de latérite et de quelques fragments d'os et de dents.

Le tumulus-pierrier renfermait une inhumation très mal conservée entre 15 et 107 cm, et une squelette en assez bon état de conservation, à 240 cm (voir phot).

Des données anthropométriques ont pu être recueillies sur ce squelette, celui d'un individu mâle, à caractères négritiques marqués mesurant 1,80/1,82 m.

Le cercle-pierrier renfermait un unique squelette, aux os très poudreux s'effritant au moindre contact, à - 140 cm.

Différents prélèvements ont été effectués pour datation.

Travaux envisagés

Le site de Tiékène-Boussoura comprend une trentaine de monuments. Les fouilles pourront donc se poursuivre encore sur plusieurs campagnes.

Mais d'ores et déjà les données recueillies dans les 3 premiers monuments fouillés, de type différent (un cercle mégalithique, un tumulus-pierrier et un cercle-pierrier) sont suffisamment importantes pour donner lieu à une publication.

Celle-ci, un article d'une quarantaine de pages et 21 figures, est prévue dans le Bull. de l'IFAN, série B, n°3-1974 et devrait sortir de presse avant la fin de l'année 1974.

South Africa

1. HIGHLIGHTS OF THE PALAEO-ANTHROPOLOGICAL PROGRAMME, 1974-1975

by Phillip V. Tobias

(i) No fewer than 19 new hominid specimens were discovered at Sterkfontein, making this the best single year for such discoveries since our programme of field work at Sterkfontein started 9 years ago.

(ii) Considerable clarification of the stratigraphic sequence at Sterkfontein and at Makapansgat has emerged from the researches of the last decade, culminating, during the year under review, in T.C. Partridge's proposed stratigraphy and nomenclature for both the Sterkfontein and the Makapansgat Formations.

Dr. T.C. Partridge, as a result of work he commenced in conjunction with our excavation programme, has proposed the formal recognition of the breccias in the Sterkfontein cave as a 'Sterkfontein

Formation'. Within this Formation, he has recognised and designed 6 constituent Members, some of which are subdivisible into beds. This first systematic attempt to clarify and classify the entire Sterkfontein Sequence was presented to the Conference of the South African Society for Quaternary Research at the South African Museum, Cape Town, between 30th May and 3rd June 1975. Formal proposals have subsequently been placed before the Tertiary/Quaternary Group of the South African Commission for Stratigraphy.

(iii) Our researches have clarified the relationship between the 'upper cave' at Sterkfontein and the 'lower cave' (designated 'Daylight Cave' by J. Wilkinson): It now seems virtually certain that the two caves deposits are part of a single cave sequence. This development is very important as it has the effect of approximately doubling the known total depth of the Sterkfontein sequence of deposits.

(iv) As a result, the entrance to the Daylight Cave has been fenced and a lockable gate erected- as this cave opens, not off the security-fenced area, but off the underground tourist circuit. We are thus ready, at this stage, to start excavation within the Daylight Cave. The breccias therein would seem to represent an appreciably earlier time-period than that represented by the Main Quarry deposits from which most of the Australopithecus africanus fossils have been derived.

(v) Another important breakthrough during the year under review has been the isolation and identification by Professor Aharon Horovitz of the University of Tel-Aviv of fossil pollen from the Sterkfontein breccia. Working at the Institute of Professor E. van Zinderen Bakker at the University of the Orange Free State, Bloemfontein, for the best part of a year, Professor Horovitz succeeded (where others had failed before) to obtain good pollen samples from the breccias of Sterkfontein and provided some suggestive evidence of palaeo-ecological change. He has now been furnished with a comprehensive suite of samples from both Sterkfontein and Makapansgat, representative of all Members within each of the two Formations. His work on these continues.

(vi) The work of Dr. E. Vrba of the Transvaal Museum, Pretoria, on the bovid fossils from Sterkfontein has continued and has led her to infer probable ecological changes between the time represented by the Australopithecus rich Member 4 and the later Member 5 (and possibly also Member 6, the final stratum in the Sterkfontein cave-deposit). The changes inferred by her have received some measure of corroboration from those inferred by Horovitz from the preliminary pollen analysis.

THE MODE OF ACCUMULATION OF THE BONES IN THE MAKAPANGS GAT LIMESWORKS
GREY BRECCIA (upper part of Lower Phase I of Brain; Member 4 of
Partridge)

A study of almost two thousand bones accumulated by porcupines at a single lair in the Kalahari Gemsbok Park in the Republic of South Africa shows that the damage inflicted on these bones, by the gnawing of porcupines, resembles strikingly the damage seen on the fossil bones from the grey breccia from the Makapansgat Limeworks.

A preliminary re-analysis of the Makapansgat grey breccia fossil bones shows a percentage gnawing of and damage to these bones by porcupines far in excess of the very low percentage assumed by Dart in his osteodontokeratic culture hypothesis.

It is now suggested that the grey breccia fossil bones were accumulated by porcupines after being collected at the sites of hyaena and other carnivore kills on the veld.

It is intended to publish these findings and their implications in full elsewhere.

Alun R. Hughes

RECENT RESEARCH ON AUSTRALOPITHECES AFRICANUS INFRA-CRANIAL REMAINS
FROM MAKAPANGS GAT

Recent research has been carried out during the past nine months on the affinities of three intra-cranial remains from the Makapansgat early hominid cave site. These specimens, MLD 7 and MLD 25 (ilia), and MLD 8 (ischium), are under radiological, metrical and non-metrical analysis.

Early results of comparisons with pongid and human skeletal material suggest that the sexual attribution and racial affinities of the ilia published by Dart may need revision, and that the juvenile age status assigned to the ischium is questionable. Radiological analysis shows a new set of anatomical features, hitherto unrecorded, which distinguish the ilia and ischium from the comparative material.

Further work, reappraising all of the South African early hominid infra-cranial fossils, is also in progress. Their positions in human evolutionary history will be postulated in a thesis being prepared under the supervision of Professor Phillip V. Tobias, Anatomy Department, Old Medical School, University of the Witwatersrand.

Dr. R. Summers sends this note:

So far as South Africa is concerned foreign archaeological expeditions are made welcome here provided they attach themselves to some institution, either a museum or a university. Within the last few years there have been six archaeological expeditions, four Americans,

one German, and one British, working in the Republic of South Africa or in South West Africa. Permission to excavate has to be obtained from the National Monuments Council, P.O. Box 4637, Cape Town and one of the conditions is that material excavated must be deposited in some South African institution although permission is usually given to remove material temporarily for the purpose of study.

There are archaeological departments with professional archaeologists in charge at the South African Museum, Cape Town, the Natal Museum, Pietermaritzburg, Natal, the Transvaal Museum, Pretoria, the Albany Museum, Grahamstown, Cape and the McGregor Memorial Museum, Kimberley. The State Museum in Windhoek (S.W.A.) also has an archaeological department but at the moment there is no professional archaeologist there.

So far as universities are concerned there are archaeological departments in Cape Town, Stellenbosch and the Witwatersrand (Johannesburg). All the universities and the larger museums (Cape Town and Pretoria) have quaternary palaeontologists as well as archaeologists on their staffs, hence it is to the universities and these two museums that foreign archaeological expeditions usually look.

South West Africa

L. Wadley reports:

In mid 1974 and April, 1975, excavations were carried out in Big Elephant Shelter (Erongo Mountains, South West Africa). The site can be divided into two sections; a shallow N.E. shelter containing a sparse scattering of late Stone Age occupation debris and a N.W. shelter containing three distinct occupation hollows which were once partially enclosed by brushwood screens. A total of 12 metre squares has so far been excavated, one metre square from the N.E. shelter and 11 metre squares from the N.W. shelter.

A vast quantity of extremely varied botanical remains was recovered, these were brought into the shelter for use as bedding, food and the manufacture of tools. The small faunal collection, examined by Dr. R.G. Klein, includes the remains of large and small antelope (the latter predominating), Hyrax, reptiles and birds. One sheep and possibly a cow are represented in the surface deposit.

Firedrills, arrowshafts, a digging stick, points, pendants, wooden, bone and eggshell beads are amongst the non-lithic artefacts recovered. The ceramic sample is small and the only diagnostic pieces are two decorated rim sherds and a broken smoking pipe. The Late Stone Age lithic industry is dominated by scrapers of varying sizes. Backed tools, segments and ground stone work have low frequency representation.

Radiocarbon dates are not yet available for the site.

Sudan

Polish Excavations at Kadero

The 4th season of excavation at Kadero lasted from the end of January to the beginning of March, 1975. Altogether 743 sq.m. of the site were excavated last season which brings the total excavated area at Kadero up to now to 1,434.-sq.m. *The field party was composed of two physical anthropologists: Professor T. Dzierzykray-Rogalski and Assistant Professor E. Prominska, as well as of Dr. Randi Haaland, prehistorian from the University of Bergen, Norway; the field work was directed by the author.

Further 84 sq.m. were excavated within the Neolithic settlement in the north-western portion of the site. Several fireplaces were discovered in the pits and these fireplaces were built of fragments of worn grandstones. Animal bones and shells of land and river mollusca were found around these features. A large number of fragments of upper and lower grindstones again comprised the major component of the cultural deposit in this portion of the settlement, similar to the situation observed in the southern part of the site.

Several more Neolithic inhumations, all of them heavily contracted were discovered just outside the limits of the settlement deposit. It now seems that those of the Neolithic graves discovered in the eastern portion of the site occur in two groups. This may indicate a close relationship of the temporal and/or social nature of the deceased buried within each group.

A number of graves of Meroitic age were discovered in the north-western portion of the site. They seem to come from the cemetery of local type. The graves were usually furnished with some beads of faience, stone or bone, copper ear-rings and pottery of domestic ware. The grave of a male adult individual was furnished with a stone "archers' ring", and arrow-head of iron and few beads of faience. These graves are probably of Late Meroitic date, assuming that the iron arrow-heads were in common use in the Central Sudan since about the 2nd century A.D.

The discovery of major importance made so far in the course of the examination of the material excavated at the Neolithic Kadero settlement is the presence of a large number of bones of domesticated cattle /Bos/. These are accompanied by a much smaller amount of bones of domesticated sheep and possibly also goats. These all undoubtedly are the remains of extensive butchering of domestic stock on the Neolithic settlement.

The technological and stylistic characteristics of the material from the Neolithic Kadero permit to place its age within the Khartoum Neolithic archaeological development. The samples for radiocarbon dating from Kadero are still in processing.

* Cf. the report on the 3rd season by the author: "Polish excavations at Kadero". Nyame Akuma, no. 5:October 1974, pp. 30-32.

It would now seem that the Neolithic Kadero marks the beginnings of a well established food producing economy in the Upper Nile Valley. This seems to be based on cattle herding and possibly also on cultivation of tropical summer grain plants (sorghum) as the large number of worn grindstones left on the settlement might indicate. No remains of cultivated plants have been found at Kadero up to now.

The next season of excavations at Kadero is to be carried out in January and February, 1976.

Lech Krzyaniak

TABO (ARGO ISLAND), Northern Province, Sudan

The activities of the Joint Expedition of the Henry M. Blackmer Foundation and the Centre d'Etudes Orientales of the University of Geneva during the 1973-75 seasons were equally divided between office and field work in an effort to complete the documentation on material from previous campaigns with a view to publication, and to restrict field activity to limited areas chosen so as to round out our knowledge of the history of the site. The former work included making definitive drawings of the decorated faces of more than 400 blocks reused in the 25th dynasty temple foundations and elsewhere (many of them unfortunately fragmentary), completing the photographic files, continuing the drawing and analysis of pottery types, etc. The field work consisted of further clearing southwest of the temple in order to ascertain the limits of the Meroitic cemetery where the foundations of small mud-brick pyramids had previously been found, and of a certain number of limited soundings below the level of the temple floor where signs of utilisation previous to the construction of the latter, or of repairs to the floor itself, had been noticed. One of these soundings just within the doorway opening south from the court produced an unexpected find. In a hole filled with sand situated slightly below floor-level lay a bronze statue of a Meroitic king in a excellent state of preservation except for superficial oxidation. The statue is about 50cm. high and represents the king (whose name is unfortunately nowhere mentioned) standing holding an unidentified iron object in front of him. The statue was originally covered with a thin coat of plaster and gold leaf of which parts remain. The eyes are inlaid. The cleaning and restoration of the statue will be undertaken by the Mission on behalf of the Sudan Antiquities Service.

KERMA TOWN

At the request of Sayed Nigm-ed-Din, Commissioner of Antiquities, the Mission also conducted an emergency excavation within the limits of Kerma town where building operations had brought to light part of a large stone circle.

Two seasons of work have permitted the Mission to terminate the excavation of this structure, of a type hitherto unknown in connection with the Kerma Culture. It is a funnel shaped construction

of stone descending to a depth of five meters through the alluvial sand, its diameter at the surface being 17m. and at the bottom 8m. A flight of 22 steps interrupted in the center by a landing leads down to the bottom. Excavation was abandoned at 2m. below the underground water level in the steril soil.

Taking into consideration the discoveries made in the surrounding area, the type and distribution of the archaeological material found, (fragments of statues, tiles and various other objects of faience, pottery models, beads, etc.) as well as the plan of the structure, and the strata of ashes found in the filling, we propose tentatively to consider this ensemble as a tomb. However, no human skeletal remains have so far been identified although animal bones are present.

If the pottery found in the fill is contemporary with the structure, it is probable that the latter dates to the period of the XVIIIth Egyptian Dynasty.

Mr. H.F. Reed, of the University of Calgary, reports that a sample of potsherds decorated with relief designs, recovered by the University of Calgary/University of Khartoum Joint Expedition to the townsite of Meroë during the 1974/1975 season, are currently undergoing analysis at the University of Calgary. Special emphasis is being given to the implements and the techniques which Meroitic potters used to decorate their pots, the particular area of the pot that was decorated, and lastly, the motifs. Comparison of this material with pottery from other sites, both Neolithic, C-group, and Meroitic, is planned and results will be forthcoming.

Zambia

The following has been received from Mr. R. Derricourt:

1. A supplementary Bibliography of the Archaeology of Zambia 1967-1973, by R.M. Derricourt, is now available (\$0.80 plus postage) from National Monuments Commission, P.O. Box 124, Livingstone, Zambia. It details and indexes 73 publications and supplements D.W. Phillipson's Annotated Bibliography, available on similar terms.
2. Mr. N. Kataneke, Assistant Keeper of the Livingstone Museum, is now acting in charge of its Prehistory Department. Miss Emily Maluma has joined the staff of the Zambia National Monuments Commission as a second archaeologist.

ITEZHITZHI

A second season of the salvage work in the Itezhitze area of the Kafue River was carried out from June to August 1975. Aimed as a rescue operation before the flooding of the new Itezhitze dam,

the 1975 season concentrated on excavation of selected sites, supplemented by some survey and by a continuation of the studies of oral history and contemporary resource use in the area which forms an essential component of the project.

A total of 83 Stone Age localities were discovered in 1974-75. These fell into three broad categories: isolated find spots, gravels and quarry locations, and camp sites or specific activity areas. Surface collections were made and excavations under Leslie R. Peters (S.M.U. Dallas) investigated selected sites more intensively.

The majority of the artefact samples are technologically parallel to the ~~Zambian~~ Wilton industry of the Later Stone Age, although small and undiagnostic surface samples of chert artefacts could represent an earlier industrial groups. The assemblages of Wilton type were found in open locations in a range of contemporary environments, and test excavations were carried out. Further work took place at Kavumba Loop Kopje site, one of two sites in protected low hilltop positions examined in 1974. Rare potsherds and some charcoal samples came from the site, together with a large sample of artefacts currently under analysis.

Three Iron Age sites were excavated in the 1975 season. Two were later Iron Age village sites of single occupation, with some transitional elements between earlier second millennium material and the recent Iron Age of the Ila in the area. On Kalala Island excavations revealed a series of village and fishing camp settlements, in which Later Stone Age and Early Iron Age occupations were overlaid by a succession of "Middle" or later Iron Age villages. These were represented by daga wall and floors and a number of adult and infant burials, most of which had glass beads necklaces, and one a series of bone armlets. Other bead assemblages - up to 614 per necklace - were recovered. There were some three hundred other small finds from the Iron Age sites, of bone, shell, iron, copper or stone. Faunal remains indicate a very wide exploitation pattern, and it is hoped to use the studies of contemporary and recent studies to relate economic, political and trading factors to changing settlement patterns.

Dr. Karl Butzer has sent the following. Since it covers several regions as well as a list of publications, it is published as received:

EGYPT

Prof. Karl Butzer, Chicago, has completed a monograph on the origins and development of 'hydraulic' civilization in Egypt. It will be published as 'Perspectives on the emergence of civilization in Egypt: floodplain ecology, irrigation and settlement' in the University of Chicago Press series Prehistoric Archeology and Ecology, Vol. 3, 1976. Other publications include articles 'Bahr Jussuf', 'Birket Qarun', 'Bitter Lakes', 'Delta' and 'Dungul' in the Lexikon der Ägyptologie; 'Modern Egyptian pottery clays and Predynastic buff ware', Journal of Near Eastern Studies, V. 33, 1974, pp. 377-382; and 'A Silsilian site of the Kom Ombo Plain, Upper Egypt', Quaternaria, v. 17, 1975, pp. 343-386 (with J.L. Phillips).

ETHIOPIA

The site of ancient Axum was examined by Prof. Karl Butzer, Chicago, in 1971 and 1973, with complementary data provided by the excavations of the British Institute in Eastern Africa (H.N. Chittick). Three generations of soil erosion products can be identified, the first well underway by A.D. 350, the second in the 5th and 6th centuries, the last and most ubiquitous culminating in the 8th and 9th centuries. Landscape denudation and ecological deterioration are implied, with possible repercussions for the economic base of classical Axum.

SOUTH AFRICA

In 1974 Prof. Karl Butzer, Chicago, completed a series of site context studies, begun in 1969 and continued annually, of some 3 dozen archeological or paleontological sites. These include Taung and the Transvaal australopithecine sites, Border Cave, Bushman Rock Shelter, Heuningneskrans, Rose Cottage Cave, Cornelia, Florisbad, the Orange River Valley, Doornlaagte, Rooidam, Wonderwerk, Klasie's River Mouth, Robberg, Swartklip, and Melkbos. Laboratory analyses are nearing completion, and publication has begun (see below).

Late Cenozoic evolution of the Cape Coast between Knysna and Cape St. Francis, South Africa. Quaternary Research, v. 2, 1972, pp. 143-169 (with D.M. Helgren).

Alluvial terraces of the Lower Vaal River, South Africa: a re-appraisal and re-investigation. Journal of Geology 81, 1972, pp. 341-362 (with D.M. Helgren, G.J. Fock and R. Stuckenrath).

Paleo-hydrology of late Pleistocene lakes in the Alexandersfontein Pan, Kimberley, South Africa. Nature, v. 243, 1973, pp. 328-330 (with G.J. Fock, R. Stuckenrath and A. Zilch).

Pleistocene 'periglacial' phenomena in southern Africa. Boreas, v. 2, 1973, pp. 1-12.

Quaternary environmental changes in southern Africa. Soil Science, v. 116, 1973, pp. 236-248 (with E.M. Van Zinderen Bakker).

On the geology of a late Pliocene Mammuthus site, Virginia, Orange Free State. Researches, The National Museum (Bloemfontein), v. 2, 1973, pp. 386-393.

Re-evaluation of the geology of the Elandsfontein (Hopefield) site, western Cape, South Africa. South African Journal of Science, v. 69, 1973, pp. 234-238.

Geology of the Cornelia beds. Memoirs, The National Museum (Bloemfontein), No. 9, 1974, pp. 7-32.

Alluvial terraces of the Lower Vaal River, South Africa: reply. Journal of Geology, v. 82, 1974, pp. 665-667 (with D.M. Helgren).

A provisional interpretation of the sedimentary sequences from Montagu Cave (Cape Province), South Africa. In: C.M. Keller, Montagu Cave, University of California Press, Berkeley and Los Angeles, 1974, pp. 89-92.

Geology of Nelson Bay Cave, Robberg, South Africa. South African Archaeological Bulletin, v. 28, 1973, pp. 97-110.

Geo-archeological interpretation of Acheulian calc-pan sites: Doornlaagte and Rooidam (Kimberley, South Africa). Journal of Archeological Science, v. 1, 1974, pp. 1-25.

Reflections on the stability of Holocene environmental zonation in South Africa. Proceedings, second SASQUA Conference (1973), 1974, pp. 37-38.

Provisional comments on the sedimentary sequence from 'E' Quarry, Langebaanweg, Cape Province. Quaternaria, v. 17, 1975, pp. 237-243.

Paleo-ecology of South African australopithecines: Taung revisited. Current Anthropology, v. 15, 1974, pp. 367-382, comments and replies pp. 398-420, bibliography pp. 420-426.

Spring sediments from the Acheulian site of Amanzi (Uitenhage District, South Africa). Quaternaria, v. 17, 1975, pp. 299-319.

Dr. D.A. Livingstone, Professor of Zoology, Duke University, sends this report:

The news here is that Miss Margaret Bolick has completed her M.S. thesis on the pollen stratigraphy of the Momela Lakes in Northern Tanzania, and has submitted the results for publication. Mr. Thomas Harvey and Mr. Stephen Holdship are writing doctoral dissertations on the diatom stratigraphy of the past 30,000 years in L. Mobutu Sese Seko in Uganda and the past 55,000 years in L. Manyara in Tanzania, respectively. Dr. Patricia Palmer is continuing her studies of the cuticles and phytoliths of African grasses, while Miss Christina Levesque and Miss Jeanie Richards are building up our collection of reference slides and scanning electron micrographs of African pollen grains. During the past summer Mr. Joel Kingsolver applied the scanning electron microscope to a number of families of vascular plants that contain important African forest trees, but whose pollen cannot be identified to genus easily or certainly by light microscopy. His results suggest that a considerable improvement in the accuracy of fossil pollen identification may be possible.

In addition to improving our techniques of identification and working over old cores, we are preparing for future field work in equatorial Africa during the summer of 1976. Although plans are not yet final, I hope to be in Ghana with one assistant next summer, to raise a short core from L. Bosumtwi near Kumasi and explore the suitability of Bosumtwi as a site for a complete vegetational record for the African Middle and Upper Pleistocene.

This letter was received early this year and is published here for general information.

British Institute in Eastern Africa
P.O Box 47680
Nairobi,
Kenya

Eighth Panafrican Congress on Prehistory and the study of the Quaternary

"I am writing this letter pursuant to my earlier communication of 23rd May 1974, concerning the framing of themes for papers to be discussed at the above Congress.

I have now been informed by the Vice-President of the Congress, Professor Thurstan Shaw, that the Congress is to be deferred, partly until September 1977. This is, I understand, partly consequent on the fact that the Congress has now been affiliated to the Union Internationale des Sciences Pré- et Protohistoriques, whose policy is that conferences under its auspices should not be held more often than once in five years.

Professor Shaw hopes that there will be an interim meeting of the Permanent Council of the Congress next year. If this meeting takes place, it is intended that there shall be a discussion in principle of the question of themes for the Congress. Professor Shaw has asked Mr. Richard Leakey, organizing secretary of the Congress, and myself, to delay any further action with regard to this matter."

Sincerely,

H.N. Chittick

Dr. Fekri A. Hassan has joined the Department of Anthropology, Washington State University (Pullman, Washington 99163) as a geologist and archaeologist in the Quaternary Program. Dr. Hassan will direct a Geo-archaeological laboratory equipped for sedimentological and geochemical investigation. He will teach courses on the interpretation of Quaternary terrestrial sediments and the physical stratigraphy of archaeological sites.

NEW PUBLICATIONS

There have been a number of requests to insert news items and information about new or forthcoming publications. I am glad to do this and if sufficient information is forthcoming such an item can become a regular feature - so if you want to draw attention to your own, your friends', colleagues' or departments's new publications please let me know.

The Legon Archaeological Society of the University of Ghana announces the publication of its journal SANKOFA, which from a leaflet just received seems to have started publication in June 1975. The contents of this number are:

- I. New perspectives in West African Archaeology
PROFESSOR M. POSNANSKY, Legon
- II. The Pre-Borbor Fante States
DR. JOHN FYNN, Institute of African Studies, Legon
- III. Ancient Akan burial rituals
A. CRAKYE DENTEH, Language Centre, Legon
- IV. West African Trade in the 16th and 17th Centuries
DR. D.F. McCALL, Professor of African Studies,
Boston University, U.S.A.
- V. Archaeology and Problems of pastoralism in the West African Sahel
DR. A.B. SMITH, Legon

- VI. State formation among the Akan of Ghana
JAMES ANQUANDAH, Legon
- VII. Goldweights from Ghana
T. GARRARD, Attorney General's Office, Accra
- VIII. Traditional textile industry in Brong Ahafo- the
archaeological and contemporary evidence
L. CROSSLAND, Legon
- IX. Pottery as 'documents' of culture history of the Ghana-
Ivory Coast Border
B. PRIDDY, Ghana Museum
- X. 'Operation Feed Yourself' in 2nd Millennium B.C. Ghana
Y. OPOKU GYAMFI, Legon

NEWS FROM THE FIELD

- XI. On Zambia . . . E. MALUMA, Legon
- XII. On Akim Kotoku, Ghana . . . D. KIYAGA MULINDWA, Keeper
Kampala Museum
- XIII. On Efutu Excavations, Ghana . . . E.K. AGORSAH, Ghana
Museum
- XIV. On Volta Basin Excavations, Ghana . . . F.B. MUSONDA,
Legon
- XV. On Ancient Wenchi archaeology and history . . . J.
BOACHIE-ANSAH, Legon

Ordering information is "Crossed orders to: Sanofa Publications Fund, University of Ghana, P.O. Box 3, Legon, Ghana." I take it this means that crossed cheques for the subscription which is, Ghana ₵1.50, Overseas \$2.50 (or by airmail \$4.00), should be sent to that address which I know to be the post office box number of the Department of Archaeology. The notion of crossed cheques is I believe unknown in North America, so this probably just means a cheque.

There is a bibliographical problem since the leaflet sent to me suggests that this is a new publication just issued in June- however I have copy of a journal of the same name, but spelled with a slight difference 'SANKAFA - The Ghana Archaeologist'- the copy I have is No. 3, June 1973, but I have seen no others. Perhaps Professor Posnansky would clear this matter up.

Dr. Graham Connah of the Department of Prehistory and Archaeology at the University of New England, Armidale, N.S.W., Australia draws attention to the publication of his report on excavations at Benin in Nigeria and adds:

"It took longer to publish than it did to write and it took longer to write than it did to do the fieldwork. The fieldwork was done so long ago that I now regard it as a rather outmoded piece of work. Nevertheless the book does something that is not done frequently enough in African archaeology; it provides a chunk of new data on an important subject. For those who, like me, grow weary of the dreary

papers that forever re-examine the same old evidence, here is something to try their teeth on! Now, you can warn your molar-grinding readers, I may even find time to sort out Daima and Co. After the difficulties experienced with monographic publication for Benin I am uncertain as to the most efficient way to accomplish this but everyone can be re-assured that it will happen just as I said Benin would eventually happen. Anyone who runs a teaching department in a University will appreciate the many reasons for delay."

Details of the book are: G. Connah, the Archaeology of Benin: excavations and other researches in and around Benin City, Nigeria, Clarendon Press, Oxford. Price: pounds sterling 14. Dollar equivalent is about \$30 but with usual bookseller's mark-up I assume will sell in U.S.A. and Canada for \$40 or more. It is not yet, in fact, available as I know from having placed an order with Blackwell's.

M.C. Descamps of I.F.A.N. Dakar draws attention to the Bulletin de Liaison which is published by ASEQUA (Association Sénégalaise pour l'Etude du Quaternaire Africain).

Dr. W.Y. Adams of the University of Kentucky writes:

"You might like to mention that my 'long-awaited' (at least by me) cultural history of Nubia, Nubia: Corridor to Africa will be published next year (1976) by Allen Lane in England and by Princeton University Press in the United States. The book (for the benefit of your readers) covers the whole sweep of Nubian cultural development from the earliest prehistory to the present day, treating it for the first time as the continuous history of one people rather than a series of disconnected episodes by different actors."

Mann, A.E. 'Some paleodemographic aspects of the South African australopithecines.' University of Pennsylvania Publications in Anthropology 1, Philadelphia.

The report can be ordered from the Publications Office, Department of Anthropology, University Museum, University of Pennsylvania, Philadelphia, Pennsylvania, 19174. The cost is (US) \$4.95.

Report of the 1973 Conference on 'Problems in Prehistory: North Africa and the Levant'. S.M.U. Press. \$25. The contents are as follows:

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I am publishing the following note at the request of Mrs. Johnson:

OPERATION SPINDLE-WHORL

The origins of the West African loom and narrow strip weaving are obscure; attempts have been made to trace it back to the pit looms of the central and eastern Sudan, Arabia and ultimately India (Marion Johnson, Conference paper on Manding Weaving, Manding Conference, London 1972), and to relate it to the weaving from sites in Syria of the first centuries AD (Boser-Sarivaxevanis, Les tissus de l'Afrique occidentale, Basel 1972). This kind of problem could, ideally, be solved by archaeological evidence; unfortunately West African looms are made of bits of wood tied together with pieces of string, and are singularly unlikely to survive in the archaeological record as anything more than four post holes. Of the whole cotton industry, the only item likely to survive in recognisable form is the spindle whorl. It ought to be possible, from a survey of datable finds, to decide whether cotton yarn was spun first in the far west, as Mme Boser-Sarivaxevanis would think, or on the eastern side, as I would suggest; with luck, it should also reveal whether cotton or wool was first spun in West Africa, since the spindle-whorls used for wool have to be considerably heavier than cotton whorls. While it is possible that cotton was spun in West Africa before the introduction of the strip loom, it would be interesting to know whether spindle-whorls are reported before the period of intense islamisation of the tenth and eleventh centuries, and from which direction they appear to arrive. Cotton weaving on a considerable scale is attested in a literary source of the later eleventh century.

I would therefore be very grateful if archaeologists could let me know what information they have relating to this problem. Though I am mainly concerned myself with West African weaving, information from other parts of the continent would be no less welcome, for the sake of completeness. Even negative evidence would be welcome.

If the results of this inquiry are useful enough to justify publication, anyone who has contributed to it is guaranteed an off-print; if not, a summary of the information received will be circulated privately.

Spindle whorls from archaeological sites in Africa

Locality (name of site, country, latitude and longitude)

Layer or period (if from an excavated multi-component site)

Phase or culture (if defined)

Dating (with some indication of method)

Number of spindle whorls (or some indication at least of their frequency)

Material

Size (diameter and height; ideally one would like to know the weight as well)

Any other evidence suggesting a textile industry

Where published

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Dr. J.J. Janssen of Leiden reports that the Annual Egyptological Bibliography with Abstracts, vol. 1971 (no. 25) has appeared, in which for the first time the responsibility for the Nubian-Meroitic publication is entirely for Dr. Inge Hofmann, Hamburg.