EDITORIAL

Last April, SAAAm met in Phoenix, Arizona. A number of issues were raised at the business meeting (see Pamela Willoughby's report which follows this editorial), and at a meeting of the newly constituted Executive Committee (minus the Editor who was unable to attend the Phoenix meetings) several of these recommendations were adopted. Thus, effective immediately, the following changes have been made to the structure of both the organization and *Nyame Akuma*.

1. SAAAm is henceforth to be called the Society of Africanist Archaeologists (SAFA).

2. The editorial office of *Nyame Akuma* will remain at the University of Alberta, but subscriptions will now be dealt with by SAFA, at the University of Florida in Gainesville (see opposite page for details).

3. The cost of an annual subscription will rise to US$20, with a reduced rate of US$15 for bona fide students. Thus, what has always been implicit is now explicit: membership in SAFA will include a subscription to *Nyame Akuma* (and vice versa). A small proportion of the increased cost will allow SAFA to subsidize separate mailings (e.g. meeting announcements, renewal notices). Furthermore, by relieving the editors of the burden of managing subscriptions, we hope to ensure that NA appears more regularly - in November/December and May/June.

While I am concerned by the response from subscribers overseas (to whom the increased cost may be seen as onerous, and to whom membership in SAFA is likely to be less attractive than to North Americans), I believe these changes are necessary. It is no longer possible to manage *Nyame Akuma* effectively in the way we have had to until now. Institutional support is required, and this appears to be forthcoming from the Center for African Studies at Gainesville.

In my report to the SAAAm meeting I stressed our precarious financial situation, and I repeat some of those observations here. The subscription list now includes 186 paid subscriptions, 37 gratis subscriptions and 5 exchange subscriptions. That is a substantial drop from preceeding years and makes it almost impossible to operate without running a deficit.

Just over 50% of the paid subscriptions are North American, nearly one third are from Europe, and the remainder from Africa and Asia. Of those who subscribed in 1985, 46 did not renew; from 1986 the figure is 37 (most of these are North American subscribers). Despite constant additions to the list, the loss of 83 subscriptions (most, I am convinced, through neglect rather than intent) means that our revenue is only about $1800 per year (based on 150 personal subscriptions at $10 each and 25 agency subscriptions at $12 each). That is not sufficient to continue producing and mailing each issue in the way we have been doing so far. We have made some adjustments to resolve these problems, but it is still necessary to raise our price. We now have an agreement with the University of Alberta Printing Services for a guaranteed cost per copy for at least the next two years which is lower than we have been paying. As well, *Nyame Akuma* will now be sent in bulk to Gainesville and mailed from there, as United States postal rates are substantially lower than Canadian ones. However, it is not yet clear if we will be able to continue sending copies to overseas subscribers by air mail, and the question of gratis subscriptions (and how they will be sent) also needs to be discussed.

At the request of Peter Shinnie, I include in this number a list of all current and gratis subscribers. I have added a list of those who have let their subscriptions lapse in the last several years. I would like all readers to examine the gratis list, bearing in mind an excellent idea from David Killick who suggests that a "solution [to the financial problem posed by the gratis subscriptions] might be to appeal to paying subscribers in North America [and elsewhere?, ed.] to volunteer to pay for one additional subscription each". Such payments would remain anonymous if the donor wished. It would also be a great help if all readers will encourage those on the lapsed list to renew, and those not on any of the lists to become subscribers.

Finally, I wish to emphasize once again that *it is absolutely imperative that all who can do so send us their manuscripts on floppy disk or by electronic mail. In future, unless there are absolutely irresolvable technical problems, I will reject material that I know to have been prepared on a word processor if it is not accompanied by a disk*. In this number there are two papers that I was forced to type myself despite two (unacknowledged) requests to the authors for disk or e-mail copy. I will not do this again.

David Lubell

REPORT ON THE 1988 SAAAm BUSINESS MEETING
April 26, 1988, Phoenix, Arizona

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The business meeting was held at the Phoenix, Arizona meeting of the Society of Africanist Archaeologists in America on the evening of Tuesday April 26, 1988. This account is an attempt to give a summary of the discussion, rather than represent formal minutes.

The business covered included the following:

1. Proposal to formally reconstitute the Society

Steven Brandt mentioned that there was some dissatisfaction with the way the Phoenix meeting was called. An announcement was enclosed with the latest issue of *Nyame Akuma* and mailed to paid-up members. Other people found out about it through word of mouth. Steven Brandt reminded the society that many universities need a formal invitation to present a conference paper in order to release travel funds. He suggested that the group be more formally structured as a society, with an executive committee responsible for mailings of notices and organization of meetings. He also offered to help organize the society, in association with Peter Schmidt, both of whom will be giong to work at the University of Florida (Gainsville) in the next few months. It was agreed to search for copies of the SAAAm constitution in order to see if this is the way we should already be operating.

2. Proposal to schedule future meetings with those of the African Studies Association

Merrick Posnansky proposed that SAAAm consider meeting with the African Studies Association in the future. Advantages listed include the strengthening of inter-disciplinary ties, and the administration of the society could be made easier (i.e. as an affiliated group of the ASA). In addition, this would link us with funders of African studies, and would increase the possibility of African participation. At ASA meetings, up to twelve Africans are funded to attend from overseas, and the U.S. Information Agency often funds up to twelve additional participants. The meetings are always held in locations with significant numbers of Africanist scholars, and are held annually between the end of October and the beginning of November.

3. Proposal to schedule future meetings with those of the Society for American Archaeology

Garth Sampson suggested that we affiliate with the Society for American Archaeology (SAA), because of our disciplinary connections. Among other advantages, this would enable current research in African archaeology to gain a larger profile in the North American archaeological community. Following the model of the Society for Archaeological Sciences, we could organize our own symposia independent of the review process of the SAA, and one would be able to participate in these without being a member of the SAA. Perhaps the biennial meetings of SAAAm could proceed as the Phoenix one did (i.e. a couple of days before the SAA), and in alternate years the symposium approach could be used.

2. and 3. Discussion

Discussion of the two proposals basically came down to whether or not we should affiliate, and if so, do we attempt to maximize our Africanist or our archaeological connections? After extended discussion, the consensus was that we would like to maintain our existence as a separate group. It is possible that we will decide in the future to meet with one or the other of the organizations listed above, but members of the society enjoy the freedom of action of being SAAAm.

4. Progress report on *Nyame Akuma* (Pamela Willoughby)

Pamela Willoughby presented a report on the status of *Nyame Akuma* on behalf of the editor, David Lubell, and herself [see Editorial this number]. She reported that it was becoming increasing expensive to produce the newsletter, and that the editors were investigating cheaper and more efficient desktop publishing methods. It was suggested that production time would be cut if more authors could submit text on word processing diskettes, as was suggested in the last NA editorial. An extended discussion took place on ways to improve the distribution of the newsletter. Many members expressed willingness to pay an increased subscription fee (suggested at $20.00, with a $15.00 price for students), if they could be assured of better notices of meetings and, if necessary, multiple renewal requests. It was also proposed that we make these dues to an organization, a part of which would

go for the production of *Nyame Akuma*. It was suggested that we might split the production of the newsletter from the maintenance of the membership subscriptions and mailings. This would reduce the burden on the editor, but might create confusion with separate addresses for article submission, journal production, and subscription payments. These issues will be discussed by the new executive committee (see 5 below).

5. Other business

It was decided to create a schedule for future meetings. Tentatively, the next two biennial meetings will be held as follows:

1990- University of Florida, Gainsville, Florida. Hosts: Steven Brandt and Peter Schmidt.

1992- UCLA, Los Angeles, California. Host: Merrick Posnansky.

It was decided to appoint the local organizers of these meetings to a new steering committee for SAAAm. So the new committee is composed of:

Steven Brandt Secretary/Treasurer
Peter Schmidt President
Merrick Posnansky
and the editor of *Nyame Akuma*, ex officio.

Two of these members were also given titles to facilitate the organization of a more formal society, as above. It was decided to have the executive jointly negotiate the future of the society and its newsletter.

DIX ANNEES DE RECHERCHES ARCHAEOLOGIQUES AU BENIN (1978-1988)

Alexis B.A. Adande & Comlan Adagba
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L'Equipe de Recherche Archéologique Beninoise vient de fêter le dixième anniversaire de sa constitution cette année. C'est, comme il se doit, une occasion de presenter à la communauté scientifique internationale ne serait-ce qu'un bilan succinct des activités de ce groupe de recherche qui s'est doté d'un programme d'investigation et qui s'attache, malgré des conditions de travail difficiles, à réduire le hiatus que constituait, il y a quelques années encore, la République Populaire du Bénin (ex-Dahomey) dans le domaine de la connaissance archéologique dans le Golfe du même nom.

Dans un premier moment seront rappelées les principales périodes de la recherche archéologique dans ce pays, puis les principaux axes d'action de l'Equipe, et enfin les perspectives qui s'offrent à la recherche archéologique dans le contexte de la sous-région et en relation éventuellement avec d'autres parties du continent et du reste du monde.

Les périodes de la recherche archéologique au Bénin

On peut, en gros, distinguer trois périodes dans la recherche archéologique sur le territoire de l'actuelle République Populaire du Bénin.

Les trouvailles dues au hasard et les recherches ponctuelles

Cette période couvre, pour l'essentiel, l'époque coloniale et un peu au-delà. Elle commence avec les découvertes fortuites du Lieutenant Brot in 1908, de haches polies dans le nord de la colonie du Dahomey. Par la suite des administrateurs et des géologues ont fait la collecte d'outils lithiques et de matériel archéologique divers (vestiges de métallurgie du fer, tessons de poterie, perles etc.), repérant par la même occasion de nouveaux sites préhistoriques ou historiques (Marchesseau 1966; Mauny 1950).

Il faut attendre les années 50 avec les deux visites du Dr. Oliver Davies alors en poste à l'University College of Legon en Gold Coast (actuellement Ghana), successivement en 1956 et en 1958 pour que soient organisées les premières prospections archéologiques dans le pays (Davies 1956, 1959). Cependant aucune collection n'a été constituée et entreposé sur place, tous les produits des diverse collectes on été expédiés soit au Musée de l'Homme à Paris, soit au siège de l'Institut Français d'Afrique Noire (I.F.A.N.) à Dakar, soit encore au Départment d'Archéologie à l'Université de Legon au Ghana. Il convient de faire remarquer qu'aucune fouille ni même de sondage n'a été effectué selon les règles, durant cette époque de cueillette des artefacts.

La création de l'Université et les premiers enseignements en préhistoire

En 1970 a été officiellement inaugurée la nouvelle Université du Dahomey (depuis 1975, Université Nationale du Bénin) qui prenait la suite de l'Institute

Supérieur du Bénin, commun au Togo (où se trouvait l'Ecole des Lettres à Lomé) et au Dahomey (qui abritait l'Ecole des Sciences à Porto-Novo). Avec la création d'une section d'Histoire débutait un enseignement d'initiation à la préhistoire, assuré jusqu'en 1977 par une coopérante française, Josette Rivallain. Mettant à profit son séjour dans le pays, elle amorça des enquêtes, particulièrement sur la poterie (Rivallain 1981).

Des travaux de paléoécologie et de paléoenvironnment menés par des chercheurs de la jeune Université permettent désormais de mieux entrevoir le cadre d'évolution et d'activités des anciennes populations qui ont occupé la partie méridionale du pays (Adande 1986; Paradis 1976; Paradis et Adjanohoun 1974).

C'est dans ce contexte que, solicité par les autorités académiques de l'Université, le Professeur Jean Devisse (de l'Université de Paris I) élaboré en 1975 une série de propositions pour une politique de recherche archéologique en République Populaire du Bénin (Devisse 1975; Devisse et Medeiros 1977).

La formation d'une équipe et l'organisation de la recherche archéologique au Bénin

Ces propositions ont servi de base à partir de laquelle l'Equipe qui se constitue en 1978 autour de François de Medeiros qui en est l'animateur, tire son programme d'activités.

Cette équipe qui compte.des historiens et des archéologues et qui accueille au besoin d'autres spécialistes, s'attèle à organiser la recherche en préhistoire et en archéologie historique au sein du Département d'Histoire qui devient alors Département d'Histoire et d'Archéologie.

Définir les priorités, mobiliser des moyens au demeurant très réduits, accroître les connaissances sur le potentiel archéologique du pays en même temps qu'assurer une amélioration de la qualité des enseignements en préhistoire et en archéologie historique, sont autant de tâches auxquelles s'est affrontée des le début de l'equipe.

Les actions de l'Equipe de Recherches Archéologiques Béninoises

L'élaboration en cours de la carte archéologigue

Une préoccupation constante de l'equipe est de doter la recherche archéologique d'outils indispensables de travail parmi lesquels la carte archéologique de Bénin. Certes nous disposions de la carte des sites préhistoriques produit par Davies (1957, 1959; Clark 1967), mais il faut tenir constamment compte des apports des enquêtes conduites par des membres de notre équipe en divers points du territoire national (Adagba 1978, 1987; Adande 1981, 1982, 1984). Un première synthèse très provisoire a permis d'obtenir une première esquisse de carte archéologique du pays (Fig. 1).

En effet de nombreux sites nouveaux ont été répérés, d'autres nous ont été signalés mais n'ont pas encore pu être visités (Medeiros *et al*. 1980). La physionomie actuelle de la répartition et de l'indentification chronologique des sites est encore loin de refléter une image fidèle de la réalité archéologique mais elle indique bien que le potentiel existe et qu'il est important pour le moins.

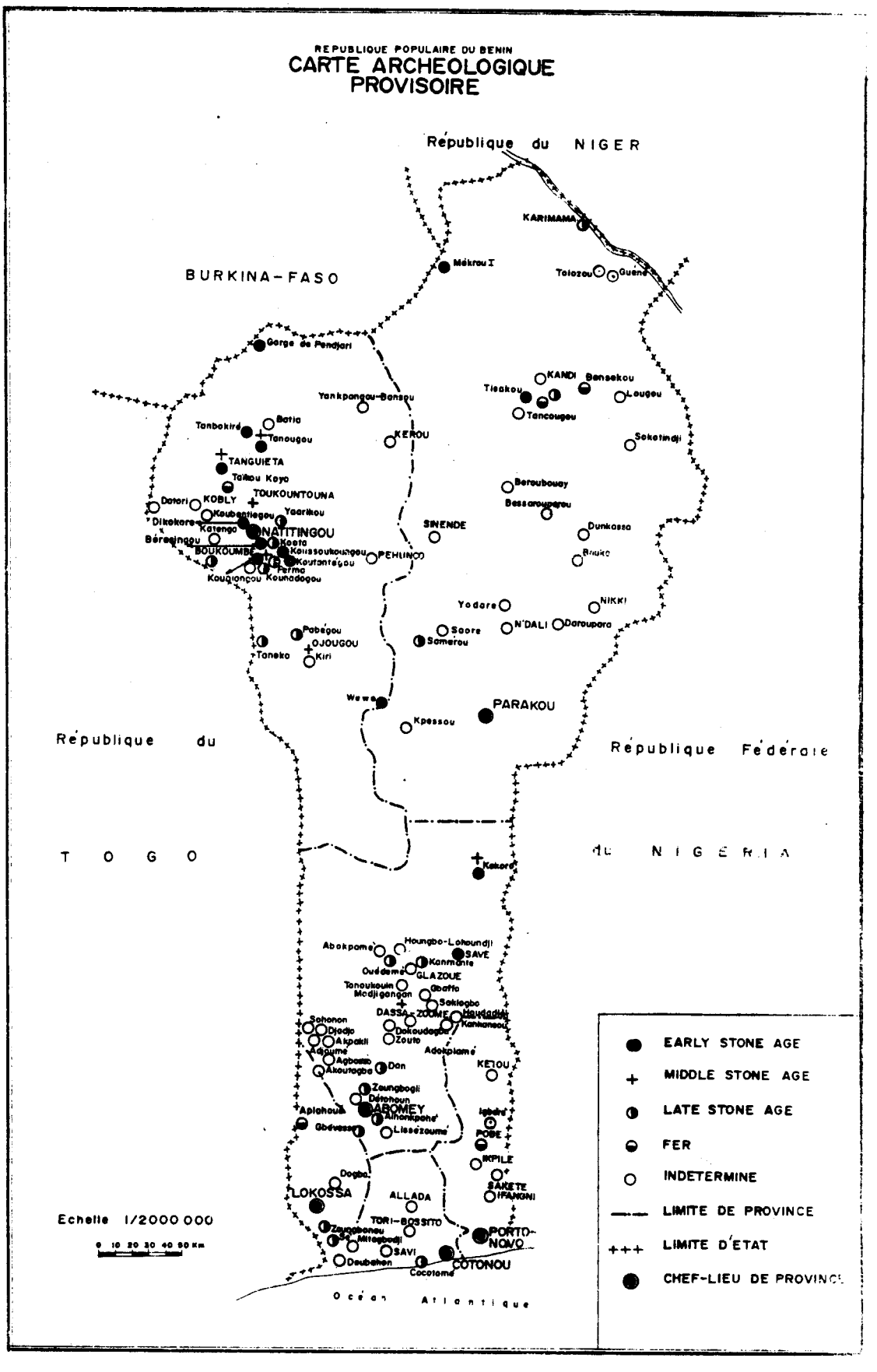
La poursuite de l'inventaire des sites, leur repérage systématique et leur charactérisation demeure une priorité du programme de recherche de l'Equipe dont la réalisation souffre d'une modestie des moyens quasi paralysante.

L'Archéologie et l'histoire des ville précoloniales: les recherches sur le Grand Ardres

Dans le cadre de l'étude des anciennes cités historiques, ont démarré durant les saisons 1981-82, les premiers travaux de reconnaissance et de sondages archéologiques sur le site de Togudo-Awutè qui est désigné par les sources orales comme étant le lieu où s'élevait, jadis la résidence des souverains du royaume d'Allada - le Grand Ardres des navigateurs européens (Great Ardrah en anglais). Ces investigations qui se sont fondées sur les sources orales confrontées aux sources graphiques (cartes d'époque et documents écrits de tous genres) ont permis de clarifier plusieurs points jusqu'ici quelque peu confus. Ainsi par exemple, la confusion souvent faite dans les travaux d'historiens contemporains sur l'identification du site du Grand Ardres avec la ville moderne d'Allada (Adande 1982, 1984, 1987a).

Ces recherches commencées sur des fonds personnels ont bénéficié aussi d'une subvention de l'Agence de Coopération Culturelle et Technique pour le biennum 1982-83 dans le cadre de son programme "Tradition orale: archéologie et culture". Les travaux sont, ici également, loin d'être achevés, il faudra plusieurs années de fouilles et de nombreuses analyses de laboratoire ainsi que de nouvelles datations radiométriques pour avoir une meilleure vision de l'importance du site principal et de ceux qui lui sont associés.

De plus, le territoire béninois renferme plusieurs autres sites historiques tout aussi intéressants qui n'ont pas encore fait l'objet d'étude archéologique ni même historique.


REPUBLIQUE POPULAIRE DU BENIN
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Koundogou
Yodare
NIKKI
Pobégou
OJOUGOU
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N'DALI
Darouporo
Taneko
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Samerou
Wewa
PARAKOU
Kpessou
République du TOGO
République Fédérale du NIGERIA
Kokoro
Abokpomé
Houngbo-Lohoundji
SAVE
Kanmanie
Ouédamé
GLAZOUE
Tanouskoin
Modjigangan
Gbaffo
Sokiogbo
DASSA-ZOUME
Hounkpatin
Kantanou
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Akoutogbo
Dan
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Zoungbogli
Détohoun
Aplahoué
ABOMEY
Alinankponé
Gbévessa
Lissézoumé
Igbéré
POBE
IKPILE
Dogbo
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IFANGNI
LOKOSSA
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Les enquêtes sur les traditions technologiques

Tant pour des raison méthodologiques qu'heuristiques, il importe de procéder d'urgence à l'enregistrement systématique de ce qui reste des traditions technologiques en Afrique, vue la rapidité actuelle des mutations sociologiques et leur impacts sur la culture matérielle en transformation accélérée.

L'Equipe de recherche, tout en prenant en compte les travaux antérieurs (Lombard 1957; Rivallain 1981; Savary 1970) s'attache à organiser et incite au recueil des information sur les technologies anciennes (Equipe de Recherche Archéologique Béninoise 1981a; Goudonou 1985; Metinhoue et Adande 1986; Wantchecon 1983, 1987). C'est dans une perspective d'ethnoarchéologie que les recherches on démarré sur la poterie (Adande 1987a; Adande et Metinhoue 1984) mais la préoccupation diachronique n'est pas absente. Depuis la rentrée universitaire 1985-86 est organisé au sein du Départment d'Histoire et d'Archéologie, un séminaire de recherche ouvert aux étudiants de 4è année dont l'objectif est de développer nos connaissance sur l'histoire des diverses techniques d'acquisition, de transformation et d'élaboration des produits nécessaires à la vie quotidienne des populations africaines.

L'expérience paraît concluante malgré les problèmes inévitables d'une recherche nouvelle pour l'historiographie africaine.

Les perspectives des recherches

Les apports à l'historiographie

Le développement programmé de l'archéologie au Bénin est une grande contribution à l'historiographie de ce pays. Outre le fait que c'est le seul moyen d'étendre le champs des connaissances aux périodes préhistoriques, c'est également un instrument privilégié pour l'élaboration de cadres chronologiques solides pour les périodes ultérieures en appui des données de chronologie relative des sources orales ou de dates rares essaimées dans les documents écrits, quand il en existe.

Par ailleurs, dans le cadres du projet d'étude archéologique et historique du Grand Ardres par exemple, il apparaît que de nouvelles pistes peuvent être explorées par une exploitation judicieuse des traditions orales et du matériel archéologique. Ainsi il est possible de suivre les premières traces témoignant de la présence humaine sur le site, puis les témoignages de l'intégration de la région à la traite négrière apparaissent sour forme d'éléments caractéristiques (pipes d'importation, tessons de bouteille du genre gin ou schnapp, fragments de vaisselle en porcelaine ou en faïence etc.) dans le mobilier recueilli dans certaines strates. C'est en quelque sorte le pendant de ce côté-ci de l'Atlantique de ce qu'on développe de l'autre côté de l'océan sous le nom d'"archéologie des plantations." La complémentarité des travaux devrait être évident pour ceux qui mènent des travaux des deux côtés mais des échanges scientifiques demeurent, apparement, assez limités dans ce domaine.

Un autre apport de l'archéologie est de faire apparaître le charactère incontournable de recherches extensives au-delà des frontières nationales actuelles si les études veulent garder une portée significative sur le plan scientifique. Aussi bien en préhistoire qu'en archéologie historique, l'étude des sites implique la connaissance des développements régionaux débordant les cadres politiques des etats africains contemporains. Les enquêtes sur la poterie dans le Mono nous l'ont rappelé (Metinhoue et Adande 1986) et la catastrophe culturelle qu'impliquent des aménagements hydrauliques de la vallée inférieure de fleuve Mono sans qu'au préalable un survey n'ait été organisé, constitue comme un avertissement dramatique contre la désinvolture avec laquelle est généralement traité le patrimoine culturel archéologique dans la sous-région.

Les orientations didactiques et la protection du patrimoine culturel

Conscient de la dimension éducative du patrimoine culturel, l'Equipe développe parallèlement aux travaux de terrain et aux enseignements académiques, la vulgarisation la plus large possible des résultats des recherches à travers des émissions radiophoniques, la publication d'articles, la réalisation de films en vidéocasettes et d'expositions temporaires. Nous envisageons pour bientôt la mise à la disposition des écoles et des collèges du matériel didactique élaboré à partir de données archéologiques.

Action de longue haleine, la sensibilisation du grand public à l'importance de la protection du patrimoine culturel dont les vestiges archéologiques sont une part essentiel, est possible à condition d'être soutenue par les institutions qui en ont la charge.

L'education des jeunes au respect de l'héritage culturel est une assurance d'un changement d'attitudes puisque ce seront les décideurs demain. Aujourd'hui l'"érosion du passé" est aussi rapides dans le context d'un pays en développement que dans les régions industrialisées, la différence étant dans les moyens pour y faire face.

La collaboration de recherche dans la sous-région et les relations transculturelles

Afin d'établir des habitudes d'échanges scientifiques et de collaboration, les contacts et les rencontres se multiplient avec les chercheurs des pays voisins, particulièrement avec nos collèques de l'Université du Bénin à Lomé (Devisse 1987: 50-52; Equipe de Recherche Archéologique Béninoise 1981b). Ainsi des membres de l'Equipe ont participé en Janvier 1981 aux premières fouilles archéologiques au Togo sur le site de Notsé, puis des archéologues togolais ont présenté des communications au cours de la semaine scientifique commémorative organisée par le Département d'Histoire et d'Archéologie, sur le campus d'Abomey-Calavi en Avril dernier. Nous avons de bons rapports avec nos collèques du Département d'Histoire et d'Archéologie de l'Université de Ouagadougou (Burkina Faso) et des départements d'archéologie des universités de Ibadan, Nsukka et Legon.

Il s'agit désormais de concrétiser ces dispositions favorables par la mise en route de projets communs de recherche sur des sites importants pour la compréhension des cultures qui se sont développées dans la sous-région. Le problème commun à toutes les structures de recherche archéologiques africaines est l'extrême modestie des moyens et surtout des resources financières pour conduire les travaux. Pour surmonter cet obstacle majeur, des efforts peuvent être encore faits pour rationaliser l'utilisation des disponibilités actuelles mais cela ne saurait suffire, une prospection des sources potentielles de financement s'impose. Il n'y a pas de raison pour que les grands projets d'aménagement nationaux au inter-étatiques ne prennent pars en compte la prévention ou l'étude préalable du patrimoine archéologique menacé de destruction par la construction d'ouvrages pour renforcer l'infrastructure économique. Certains organismes financiers, comme la Banque Mondiale, paraîssent attentifs à cette dimension culturelle du développement (Goodland 1988). Il appartient aux archéologues de terrain d'amener les institutions bancaires africaines (BAD, BOAD, BADEA, etc.) à y être tout aussi sensibles.

Sur un autre plan, il apparaît utile pout toutes les parties que des échanges d'informations scientifiques puissent s'intensifier entre chercheurs d'Europe, d'Amérique et d'Afrique dont les travaux les amènent à s'intéresser aux relations transculturelles. L'Equipe de Recherche Archéologique Béninoise est, quant à elle, disposée à nouer des rapports du genre, particulièrement pour une meilleur interprétation du matériel recueilli sur le site du Grand Ardres qui entretenait des liens avec les grandes centres régionaux des XVIè - XVIIIè siècles ainsi qu'avec le Portugal, l'Espagne, les Provinces-Unies, la France, le Royaume-Uni et les Antilles. De même l'élucidation de l'énigme actuelle des sculptures en pierre de Ouèssè suppose une collaboration internationale pour l'étude du site et l'analyse des pièces (Adande 1987b).

Conclusion

Au total, cette première décennie de recherches archéologiques organisées au Bénin, bien qu'elle offre un bilan somme toute encore modeste, a le mérite d'avoir révélé l'importance et la richess du patrimoine archaéologique de ce pays, connu par ailleurs pour la diversité de ses cités et monuments historiques. L'Equipe n'est certes par la première à amorcer cette quête des témoins matériels du passé (Laforgue 1925) et n'est pas non plus seule à le faire puisque des travaux importants sont parfois menés ponctuellement par des chercheurs étrangers (Petrequin 1984). Notre équipe souhaite seulement que les investigations s'organisent autour d'une programmation des actions pour une exploitation optimale des résultats. Dans ce souci l'Equipe béninoise fait le pari de l'ouverture en direction des chercheurs et des institutions de recherche en archéologie de la sous-région dou d'ailleurs pour une collaboration scientifique et des étude sur des thèmes d'intérêt commun.

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UN CAMPEMENT PALEOLITHIQUE SUR LES RIVES DU LAC NOIR DE NDENDE (Province de la Ngounié, Gabon)

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Le Lac Noir de Ndendé est, à côté du Lac Bleu de Mouila, l'un des plus importants de la province de la Ngounié, Sud-Gabon. A 72km de Mouila, chef-lieu de la province, il présente les coordonnées suivantes: 11°20' E et 2°14' S.

C'est en Mars 1984 que fut découvert ce site, lors d'une grande mission de prospections dans la Ngounié. Toutefois, il faut attendre Janvier 1987 (Digombe *et al*. 1987) pour ce site fasse l'objet d'un premier examen sérieux: récolte en surface d'une importante quantité d'artefacts lithiques et mise en place d'un sondage dans le secteur sud-est, mettant en évidence la présence d'un niveau de pierres taillées et de charbons de bois. D'autres sondages effectués rapidement dans d'autres zones confirma l'idée que, malgré quelques remaniements importants, ce site conservait des couches en place.

La date de 4500 ± 130 BC (Beta 20060) obtenue à partir d'un charbon de bois en association avec l'outillage lithique, apporte un intérêt supplémentaire à ce gisement. En effet, ce site constitue, pour l'instant, l'exemple le plus ancien du LSA au Gabon: la date, confirmée par deux autres proches (3470 bc [Beta 22081] et 3040 bc (Beta 22082), présente donc toutes les chances d'être bonne.

Une autre mission en Mai 1987, avec la collaboration du Dr. Jean Chavaillon, nous a permis d'obtenir des données nouvelles, à la suite d'une fouille sur la rive occidentale du Lac et d'une exploration de la rive orientale. Dans cette zone les renseignements obtenus permettent de vieillir considérablement le site et de lui attribuer un âge de quelques dizaines de milliers d'années. Il s'agit au stade de la présent note de fair connaître les résultats acquis.

Résultats scientifiques

Les résultats obtenus sont qualitativement importants:

1. Ndendé est un site paléolithique. Le matériel récolté est exclusivement composé d'artefacts en pierre taillée. Le lot de surface récolté sur la rive occidentale du lac[1] (1013 pièces) comprend essentiellement des éclats de débitage et des galets cassés. La densité au m^2 est très forte (la fouille partielle d'un carré nous a livré 245 pièces).

2. Une autre observation concerne la rareté des objets retouchés. Dans le carré fouillé, seules deux pièces retouchées ont été identifiées: un denticulé alterne et une lamelle retouchée. Toutefois, signalons aussi la présence d'un éclat directement utilisé, soit environ 1.22 % du total, un proportion bien faible et suggérant un atelier de taille. Cependant, des sols d'habitat avec un pourcentage d'outils semblable ont été signalés au Congo pour la même période du LSA.

3. Les roches utilisées vont du jaspe noir (le plus abondamment utilisé), au quartz, silex gris et chaille. De nos observations, il ressort que l'hypothèse d'une exploitation locale du jaspe n'est pas à exclure.

4. Cinq niveaux d'occupation ont été mise en évidence: deux dans la zone ouest du LSA, et trois autres dans la partie orientale dont deux a rattacher pour l'instant, au MSA. Dans la partie ouest du site, 72cm de sédiments sablo-argileux jaunes séparent le second niveau d'occupation de la couche de la 'stone line'. Par conséquent, d'autres niveaux plus anciens du LSA sont présents entre le niveau B et le sommet de la 'stone line' (gravillons ferrugineux).

Dans le secteur orientale, le manteau de fines colluvions argileuses de recouvrement a été disséqué. Les éclats de silex ont donc été recueillis au sommet de la surface gravillonnaire de la 'stone line'[2], c'est-à-dire à la base des argiles compactes de recouvrement. Ces objets pourraient vraisemblablement se situer chronologiquement entre la fin du MSA et le début du LSA.

En revanche, les pièces recueillies dans les gravillons ferrugineux de la 'stone line' sont dignes d'un intérêt particulier. Deux artefacts lithiques, représentant deux niveaux séparés par 10cm de sédiments, apparaissent l'un à 15cm en-dessous du sommet actuel de la 'stone line' et l'autre à 25cm. Il s'agit d'un éclat et d'un nucléus unipolaire avec trois enlèvements d'éclats. Ces pièces sont incontestablement en place, posées à plat dans la surface gravillonnaire. De plus, leur aspect très frais permet d'exclure l'hypothèse d'une percolation ou d'un transport.

La découverte de vestiges préhistoriques en place dans une formation pédologique de type 'stone line' a déjà été signalée au Congo (Bayle des Hermens *et al*. 1980). Selon les recherches menées au Zaïre, la formation de cette 'stone line' serait antérieure à 40,000 ans et se serait développée durant la phase aride maluekienne, entre 80 et 35.000 BP (Mortelmans et Monteyne 1962).

Il est donc permis de penser que les artefacts lithiques de la 'stone line' pourraient avoir un âge d'au moins quelques dizaines de milliers d'années (40 à 20.000 ans?) et signaleraient la présence d'un campement du MSA sur les rives du Lac Noir.

Par ailleurs, la présence de fragments de galets cassés et de déchets de taille dans les gravillons ferrugineux à argile rouge[3] pourrait sans doute suggérer une occupation encore plus ancien.

Conclusion

La découverte des niveux archéologiques dans la 'stone line', confère au site du Lac Noir de Ndendé un rôle désormais important dans la connaissance de la préhistoire Gabonaise. Ce site est également intéressant car il permet de suivre sur place l'évolution d'un Paléolithique pouvant aller depuis environ quelques dizaines de milliers d'années jusqu'à, pour l'heure, 3040 BC. Un énorme travail de prospections et de fouilles doit être poursuivi qui se soldera certainement par des résultats positifs, pouvant faire du Lac Noir un site de référence.

Notes

[1] Il s'agit uniquement de pièces récoltées dans le cadre du carroyage, donc provenant de carrés et de quart de carrés précis.

[2] Niveau grossier de gravillons ferrugineux typique des sols ferrallitiques d'Afrique Centrale, épais de quelques centimètres à plusieurs mètres et comprenant des blocs démantelés de cuirasse conglomératique à structure vacuolaire.

[3] Niveau encore plus profond que celui d'où proviennent les objets évoqués plus haut.

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OBSERVATIONS ON THE MOUNDS OF KOMALAND

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The fascinating research of Anquandah and Van Ham in "Komaland", has brought to light a rich cultural tradition in a neglected area of northern Ghana. Based on the published accounts of these excavations at Yikpabongo (10°15' N, 1°34' W), Anquandah's conclusions that the uncovered material remains suggest trading links with the Sahel seem thoroughly convincing. The cowry shells, terra cotta motifs and copper objects do indeed indicate that "the ancient koma were probably beneficiaries of, and participants in, the trans-Saharan caravan trade..." (Anquandah 1985). Is it valid, however, to hypothesize on this same evidence that there may have been a "kingdom of Komaland" (Anquandah in NA 27:12 and 1987:17) based on this trade? The evidence presented does suggest a dynamic, productive trading community located along a major north-south trade route, but to make the imaginative leap from such an economic entity to Anquandah's political "kingdom", with all the implications of that term, may be misleading.

It may well be that the traditions of the Kantonsi, a widely dispersed cultural group in northern Ghana, might shed some light on Komaland material. These claimed descent from Mande-speaking settlers who filtered southward from the Niger bend and found various settlements. The most important of these is known as Palwogho or Kpalewogu. All the evidence suggests that this site was somewhere in the region of the southern bend of the Kulpawn River. These northern immigrants were skilled craftspeople, associated even today with weaving and dying. Were these Kantonsi responsible for the cultural and economic links to the Sahel? Was Kpalewogu located in Komaland and were these craftspeople responsible for local production of terracottas? Indeed, the Koma terracottas do have stylistic affinities to Bernard de Grunne's Bankoni longilinear style of the 14th-16th century centered around Bamako (de Grunne 1980).

Evidence from Kantonsi traditions and Arabic manuscripts may also refer to the decline of the Koma cultural tradition and its inexplicable disappearance from the cultural map. The Kantonsi diaspora from Kpalewogu took place in the mid-17th century following internal disruption, perhaps war or disease as one manuscript suggests. Could this event, or series of

events, coincide with the terminal dating of the Komaland materials? It is also possible that the decline of Koma may be linked to the rise of Mampurugu and Dagbon to the east, Gonja to the south, and the Nakomse (Mossi) states to the north.

The Komaland mounds and terracottas have raised a number of questions about the historical processes in the Volta basin, serving as silent witnesses to the cultural richness of this area. Continued investigation will provide new data on the rise of the West African trading system and the development of Volta basin states.

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EXCAVATIONS AT ASANTEMANSO, GHANA 1987

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The preliminary work carried out at Asantemanso in 1986 (NA 28: 18-19) made it clear that the traditions which identified the site as early - i.e. pre-1699 AD - were correct. The early dates given by Carbon 14 were a surprise but there were enough of them to suggest with some confidence that the site had been occupied for a considerable time before the founding of the Asante confederacy. The new dates from samples found in 1987 suggest that the early dates are likely to be right.

The field team consisted of Peter Shinnie, Ama Shinnie, Claire Bourges and Barbara Neal and work in the field lasted from 20th August until 9th October 1987.

During the season five separate trenches were laid out and excavated, numbered 87/1 through 87/5. The first one being sited close to where Square 86/1 had been dug in the previous season. Square 86/1 had shown the greatest depth of deposit during the 1986 season and had produced a significant amount of ceramics, so it seemed appropriate to do further work in the same area. Excavation here showed that the deposit was 67 cm deep and although there was a certain amount of very recent material, plastic, metal etc. in the upper 25 cm, below that were deposits of earlier times. The earliest date from this trench was on a sample of charcoal from a depth of 50 cm which gives an uncalibrated date of 880 ± 80 A.D.which compares well with a date from a closely similar deposit in Square 86/1 of the previous season which gave an uncalibrated Carbon 14 date of 930 ± 130 A.D.(Square 86/1 spit 7 i.e. a depth of 70 cm). The ceramics from this depth are markedly different from those from other places.

A similar pattern was seen in Trenches 87/2 and 87/3 - Trench 87/2 was dug into a small mound, probably a midden, which may have been partly caused by the collapse of a house which local information told us stood nearby in the 1940's. However the presence of tobacco pipes and pipe fragments, both indigenous and imported, of mid-18th century dates suggests that there had been occupation nearby at that time. The excavation of trenches 87/1, 87/2 and 87/3 largely confirmed the tentative results of the previous season, i.e. that there had been 18th century and possibly earlier occupation at Asantemanso but that in this part of the site, in spite of the early Carbon 14 dates, there was no certain evidence that there was any major occupation much prior to the end of the 17th century.

A fragment of furnace wall with iron slag adhering was found in Trench 87/3, spit 7, which has a Carbon 14 date of 1280-1420 A.D. (uncalibrated). This suggest that there was iron smelting in the area.

Our attention had been called to Rattray's description of mounds in the area (Ashanti p. 121-122) and an unsuccessful attempt had been made in 1986 to find them. Rattray's statement that these mounds were close to a place called Nampansa finally made it possible to find them. After some questioning, it was agreed by the Queen Mother of Asantemanso that we might be shown the site which lies only a few hundred metres from the present village and to the south of the sacred forest in which only the special guardians can penetrate. We were taken to this area where it was immediately apparent, in spite of the heavy vegetation, that there were traces of collapsed buildings - some had only finally been covered with vegetation in living memory. On moving east across the road into what is now a cocoa plantation, it immediately became clear that here were many mounds, certainly those described by Rattray. Ten shovel tests were carried out on mounds at random and showed that some of them contained artifacts, mainly potsherds, whilst some were apparently natural formations. With a little experience it became possible to tell which were which.

Two trenches were laid out in this area amongst the cocoa trees in places indicated by shovel tests to be rich

Table 1
Radiocarbon Dates

Lab. number	Sample Number	C-14 Age BP	Uncalibrated dates	Trench	Spit
Beta-25081	C 7	1070 ± 80 BP	880 A.D.	1	5
Beta-25082	C10	210 ± 50 BP	1740 A.D.	2	3
Beta-25083	C16	190 ± 70 BP	1760 A.D.	2	9
Beta-25084	C20	600 ± 70 BP	1350 A.D.	3	7
Beta-25085	C22	310 ± 40 BP	1640 A.D.	2	11
Beta-25086	C26	490 ± 40 BP	1460 A.D.	4	4
Beta-25087	C28	690 ± 40 BP	1260 A.D.	4	7
Beta-25088	C30	700 ± 60 BP	1250 A.D.	5	4
Beta-25089	C34	550 ± 40 BP	1400 A.D.	5	8
Beta-25090	C36	670 ± 40 BP	1280 A.D.	4	9
Beta-25091	C43	230 ± 70 BP	1720 A.D.	5	10a
Beta-25092	C46	700 ± 80 BP	1240 A.D.	5	14

in ceramics, Trenches 87/4 and 87/5. Trench 4, very rich in ceramics was found to be 1.27 m deep whilst Trench 5 was 1.50 m. Unlike the trenches (1, 2 and 3) excavated near to the present village, no foreign imports were found nor were there any tobacco pipes suggesting that the deposits pre-date the arrival of European objects and the custom of tobacco smoking all of which post-date the arrival of the Portuguese on the coast of Ghana in 1482.

The ceramics found in Trenches 87/4 and 87/5 were quite different from those found in more recent levels and the Carbon 14 dates suggest that they are of the 13th to 15th centuries. There is one aberrant date from Trench 87/5 of 1650-1790 A.D. (Beta 25091) which comes from a depth of 1 m and is associated with an area of burnt soil, apparently the remains of a cooking hearth which may have been inserted into a mound of earlier occupation.

In addition to the excavations, work was continued on collecting oral traditions of the area, several accounts were taped and are now being transcribed and translated from Twi to English.

Oral traditions similar to those from Asantemanso were also recorded from Gyamakye and the Queen Mother of that place not only reported the finding of pot sherds in the fields there but also brought some to examined. This suggested that the place would be worth a visit and an attempt was made to reach it which was foiled by heavy rain and an impassable road.

At the end of the season, a small exhibition of the artifacts was organized and the Asantehene was invited to view it. This he graciously agreed to do and Shinnie took the opportunity to explain the nature of the project, what it hoped to achieve and how archaeological methods could be used to throw light on the early history of the Asante people.

The work was financed by grants from the Social Sciences and Humanities Research Council of Canada and the National Geographic Society.

SKELETAL MATERIAL AND ASSOCIATIONS IN SOUTHERN MALAWI: A NOTE ON FOUR UNUSUAL OCCURRENCES

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INTRODUCTION

This note describes four fragmentary skeletons and associations, all discovered by chance during a field programme (1981-83) of investigations into the fluctuating levels of Lake Malawi, its outlet the Shire River, and Lake Chilwa, during the Iron Age (Map, Fig. 1A). In each case, the skeletal material and their associations were photographed in situ, and in three cases the exposed elements were collected without further excavation, each being threatened by imminent destruction.[1]

Archaeological finds of human remains are relatively rare in Malawi. This is particularly true of pre-19th C burials, to which period two of the skeletons described here apparently belong. Of the others, one may date to around the mid-19th C and the last is probably late 19th C. Although deficient and incomplete, it may be useful to record some of this information here for the future comparative use of archaeological researchers in this region. An attempt to directly date the bone in some of these cases is envisaged.

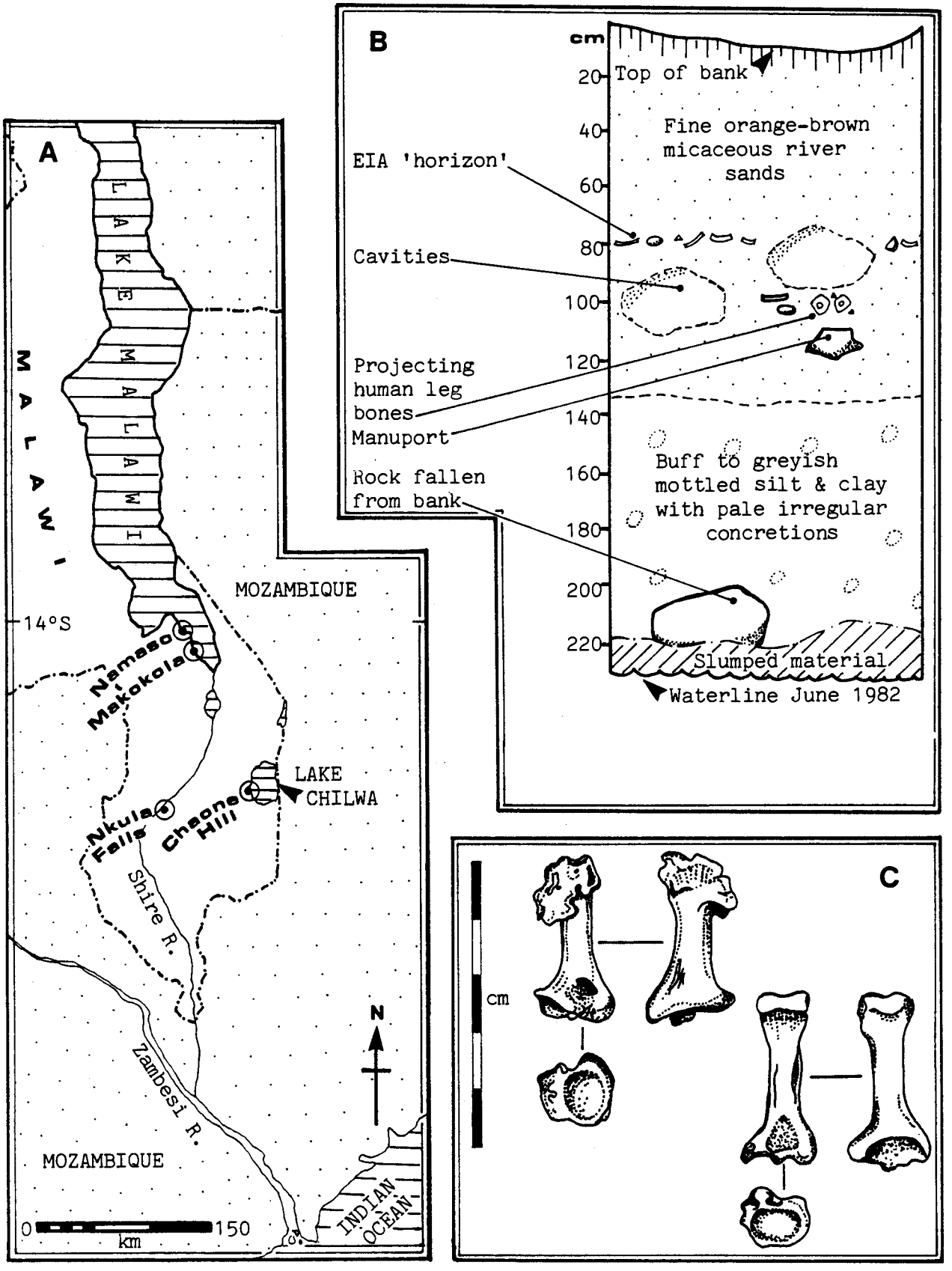

Fig. 1. A: Map, showing general location of sites; B: Nkula Falls: Schematic profile of river bank at location of skeleton; C: Nkula Falls: Two phalanges, one showing osteoarthritic spur.

I. THE NKULA FALLS SKELETON (SD-H 1982a, unpubl.)

Peak seasonal flooding of the Shire River near Nkula Falls (at XT 965838)[2] was exacerbated by the local effects of a cyclone in April 1982. The exceptional floods cut into a section of the east bank of the river leaving a cliff some 2-2.5 m high, from which were projecting 20 cm of a pair of human lower leg bones, the upper skeleton having been washed away. The bank was in the process of collapsing through continuing undercutting by the river. The bones which were still held in the deposit (comprising tibiae and articulated foot bones) were removed from the bank by digging a cavity 20 x 20 cm in diam. and about 30 cm deep around them. A few others found under water at the flooded base of the bank were not collected.

The well-compacted alluvium forming the bank around the bones was trimmed vertically with the trowel. The stratigraphy revealed at this point is shown schematically (Fig. 1B), together with the position of the bones. No outline of a pit was visible. Above and beside the bones were two large holes evidently left when rocks fell from the disintegrating bank (a rock measuring 35 x 20 x 34 cm, which matched one hole, was found at the foot of the bank). At 15-25 cm above the bones, just above the level of the uppermost cavity, was an apparently continuous, undulating horizon of thinly-spaced Early Iron Age (EIA) sherds, traceable laterally for the full 40 m of the surviving river bank. A single angular chunk of syenite (14 cm max. diam.) was still embedded in the deposit 15 cm directly below the leg bones; while between them were a few unrolled quartz artefacts (a chunk, 6 'waste' flakes, and a trimmed flake) and a small plain body sherd. 5 cm from and diagonally above the leg bones, were two plain sherds, one evidently from the shoulder of a pot. Both had some carbonate encrustation. The latter piece lay touching a lower grindstone fragment made of quartzite.

The line of cultural material exposed in the bank (at about 80 cm below the surface) above the skeletal remains comprised diagnostic EIA pottery of Nkope type, several grindstone fragments, a stone pounder, some broken river cobbles and much quartz waste. The sherds came from pots with the 'typical' Nkope thickened everted rims bearing oblique stamping or grooving. The bowl rims were generally inturned and plain. Some grooved and/or stamped decoration was present on pot neck sherds. Several body pieces were carinated, and one bore 'convolutions' (broad, slightly sinuous impressions, possibly made by the side of a finger or thumb) along the carination: this appears to be a feature of Nkope in the Shire valley and around Mulanje, in southern Malawi. Radiocarbon dates for very similar pottery range from the early 6th to the 10th Cs AD (Robinson 1973, 1977).

There was no other later Iron Age settlement evident in the vicinity.

Obviously, the circumstances of recovery are far from ideal but the fact that the leg bones survived in an articulated state, within a group of artificially placed rocks suggests a) that neither the skeletal material, nor the overlying cultural deposit, had been disturbed from deposition until the present, and b) that the burial was deliberate. The sherds closely associated with the bones are not decorated, but judging by the wall thickness, the nature of the paste (with quartz sand and grit inclusions) and the shape of the shoulder sherd, they are very likely to belong to the EIA. The EIA horizon is virtually uninterrupted and may have formed above and around the grave (suggestive of a date within the lst millennium AD for the skeleton) but a possibility also exists that it was cut through after formation. The riverbank location, the associated sherds, and the depth of the bones below an EIA horizon, are however directly comparable with the situation at Phwadzi, where an EIA date is inferred for a burial (Robinson 1973: 62-3), and so the same is tentatively assumed for the Nkula Falls remains. It is hoped this may yet be checked by direct dating of the bone.

Chronology aside, perhaps the most interesting feature of the skeleton is the presence of severe arthritis in the toes (Fig. 1C). Prof. H. de Villiers of the Witwatersrand University described the 'robust' nature of the long bones as 'indicative of ...a male ... fully adult at the time of death' whose size is 'not suggestive of a Khoisanoid individual' (pers. comm.)

II. THE MAKOKOLA SKELETON (SD-H 1984a, unpubl.)

By contrast, interest in the Makokola remains lies especially in the associations. This fragmentary skeleton was exposed by bulldozing of the lake-facing 'front' of a high beach ridge at Makokola on Lake Malawi (at YV 304178), to obtain building sand for an extension to an hotel.

The uppermost 50 cm of the ridge, which is thought to be of Holocene age, consists of poorly consolidated coarse beach sediment, 'greyed' through the addition of organic material. At a depth of between about 20 to 40 cm below the surface some darkening of the deposit occurs. Below this the sand lightens progressively until 'clean', yellowish, extremely coarse beach material is reached at about 1 m depth, the base of which could not be seen.

The quarrying had spread human bones and several beads down a 2 m high slump-slope below the crest of the beach ridge. However, in a restricted area, at 25-35

cm below the surface, a few remaining bones were found in situ above the slumping in a slightly darkened sandy deposit. Closely packed in among these bones were several glass beads, but no pottery; no beads were found elsewhere along the diggings. Potsherds were visible embedded in the darkened horizon about 3 m east of the position of the bones and beads, and beyond. The conclusion is that the beads originally adorned the body; but that there is no particular likelihood (though there is at least a fair possibility) that the pottery belongs to the period of the burial.

A considerable amount of this pottery was found displaced onto the floor of the quarry, and could in general be classified as 'Mawudzu' in type (i.e. belonging to a period dating between the late 12th and the late 17th Cs AD), but it differed from the type material in having a rather small proportion of incised sherds (Robinson 1970: 70-79, 125). In addition, a minority of the sherds suggested a relationship with earlier 'Namaso' pottery (which has recently been dated to a period around the 10th/11th Cs: SD-H 1984b, unpubl. & in prep.). The sand quarrying may have led to mixing of two or more phases of post-10th C material.

For the skeleton, the main chronological indicators (in a broad way) are therefore the glass beads. In Malawi no beads are firmly linked with the EIA. Of the three types associated with the Makokola remains, one (the Indian reds) is common in Malawi Later Iron Age (LIA) deposits dated on the lakeshore between the 13th and 17th Cs. The two other types have never been recorded here before and usefully expand the known bead sequences of the southern Malawi LIA.

Spectrographic and gravimetric analyses were performed on samples of each (Table 1), and descriptions are given below.

Indian red beads: 319 were collected, all complete. Opaque, drawn, brick-red cylinders (Munsell 7.5 R 3/6-6/6), of varying sizes (range 1.1-4.0 mm long, diam. 2.2-6.0 mm, perforation 1.2 mm), their shapes modified by reheating and by wear: at 4 or 5 per cm, they would give a string of at least 60 cm long. Most fall at the larger end of the size range. The colour is achieved by the addition of copper and iron (Davison 1972). In composition they are 'soda-lime' glass beads, with significant amounts of aluminium (Table 1). They have no outer 'skin' of clear glass.

Turquoise-blue beads: 5 complete, 5 half, some frags. These, larger than the Indian reds (largest 6 x 4.5 mm, largest perf. 1.5 mm; smallest 5 x 3 mm, smallest perf. 1.2 mm), are opaque, bright turquoise-blue (a colour often described as 'blue-green') cylinders (Munsell 5B 5/6, mod. blue), which look greener when wet. The ends are oblique and were probably reheated. Surfaces appear shattered and crystalline under magnification, and their condition obscures the method of manufacture (but it is assumed that they were drawn). Also classifiable as 'soda-lime' glass, these contain some aluminium and calcium with smaller quantitites of iron and potassium; they are coloured by copper Table 1).

Table 1
Results of spectrographic/gravimetric tests on 3 bead varieties, Makokola

Spectrographic analysis

	n	Cr ppm	Co ppm	Ni ppm	Ag ppm	Zn ppm	Cu ppm	Mo ppm	Nb ppm	Mn ppm	Sn ppm	Pb ppm
Indian reds	6	15	30	50	20	250	5000	nd	nd	1000	250	1000
Turquoise blues	3	20	200	100	30	300	10000	nd	nd	200	50	100
Pale greens	1	10	200	70	10	200	5000	nd	nd	500	150	500

Gravimetric analysis

	CaO %	Fe_2O_3 %	MgO %	Al_2O_3 %	SiO_2 %	K_2O %	Na_2O %
Indian reds	3.94	4.54	1.49	6.43	59.5	1.27	16.54
Turquoise blues	4.73	1.68	0.64	5.01	67.2	1.49	13.50
Pale greens	13.10	1.79	0.67	3.32	81.6	0.76	0.41

Pale green beads: 4 complete but heavily corroded, some frags. These are larger again than the turquoise-blues (largest measurable is 9 x 7 mm, oval perf. 2 x 1.1 mm; smallest 6 x 5 mm, perf. 1.9 mm). Colour, shape, opacity and method of manufacture are hard to determine with certainty because of alteration through decay. One has oblique ends; they appear to be cylinders, and to be opaque and greenish in colour (Munsell 10 GY 8/2), light to olive-green when wet. Surfaces are chalky or powdery where well preserved, and crumbly or 'frothy' where heavily corroded. They contain a high proportion of calcium and virtually no sodium, so that they fall outside the 'soda-lime' group. Low quantitites of iron and copper probably give the greenish colour (Table 1). An initially high ratio of calcium, together with the loss of sodium through devitrification, may account for the heavily corroded appearance of these beads (Mosley, pers. comm.)

No pale green beads are known from Malawi archaeological sites; and high calcium beads are rare in this part of Africa in general. A few (which differ from the Makokola ones in other respects) are known from LIA contexts, the earliest dating around the 14th/15th Cs at Ingombe Ilede (Fagan *et al*. 1969: 251). Although the opaque turquoise beads have not been recorded in Malawi previously they occur elsewhere in south-central Africa in the LIA, and a few translucent ones are known from Northern Malawi dated between the 11th and 15th Cs (Robinson 1982: 49, 51, 82).

The Indian reds stand in contrast with the rare varieties. It is interesting that virtually all the (usually large) Indian reds excavated from firmly dated, unmixed and/or undisturbed deposits on the southern lakeshore are associated with Mawudzu pottery of c. 15th C date, or are found within a beach unit bracketed by dates suggesting an equivalent age (e.g. Crossley & Davison-Hirschmann 1981, 1982). However, their popularity continued into later centuries and so a Recent (19th C) date for the burial cannot be absolutely ruled out, unlikely as it may seem from the other two bead types.

The skeletal remains retrieved were highly fragmentary and comprised parts of a cranium and of a mandible with several teeth; other isolated teeth; and some post-cranial fragments. H. de Villiers (pers. comm.) concluded that they belonged to a fully adult individual, probably female (judging by the 'sharp supraorbital margin and mandibular angle'), and that the only feature indicating population was 'the inferior margin of the nasal aperture ... suggestive of a broad nasal aperture and a small anterior nasal spine'.

III. THE NAMASO BAY SKELETON

At the end of 1984 a severe storm created a deep gully, exposing a burial about mid-way along Namaso Bay beach on the SE arm of Lake Malawi (at YV 138330). Its importance is mainly comparative, because Nkudzi Bay, where a group of contrastingly rich burials of possibly 'royal' (Kalonga) affiliations of mainly 19th C date was excavated (Inskeep 1965), lies just over the next promontory, about 2 km away.

The lake levels research and related archaeological excavation programme had indicated that the beach ridge into which the burial took place at Namaso had been laid down in LIA 'Mawudzu' times. Most 19th C occupation sites, however, appear to have been sited on ridges to lakeward, slightly lower than the Mawudzu crest. Some of these were flooded by periodic lake incursions in the latter half of the 19th C (as the ethnography attests), with intervening resettlement; and some were again submerged and/or eroded during the extreme lake rise culminating in 1979/80 (Crossley & Davison-Hirschmann 1981, 1982; SD-H 1982b, unpubl.).

The Namaso skeleton (length c. 168 cm) was lying at a depth of about 50 cm below the 'original' ground surface. It was fully excavated by R. Crossley and helpers (pers. comm.), and his description and photographs have been drawn on here.

The body had been placed on its back with the head end towards the east; the face was turned to 'look' south, towards the lake (Fig. 2A). Near the cranium were a fish and a bird bone; glass beads were clustered round the neck and both wrists. In the crook of the left arm (i.e. at the elbow) was a leaf-shaped arrowhead with barbed tang (Fig. 2B). Between the left humerus and the upper skeleton was an unmodified squarish quartz pebble of 2.5 cm diam., possibly a chance inclusion. Resting against the left knee was a complete Achatina shell, and a 'blob' of corroded copper was found halfway down the left tibia. Near the feet was a thistle-shaped pot.

The neck beads were mainly Indian red micro- beads (all less than 1.5 mm by 1 mm in diam.); there were also some tiny whites, rare yellows, and ?faded blues. Around the wrists were tiny Indian reds and some large spheroidal (up to 14 mm diam., perf. 2 mm), translucent 'crimson', wound beads (Fig. 2B). The collection as a whole amounted to 'hundreds' (Crossley pers. comm.) but the precise number has yet to be checked.

A 19th C date is inferred for the burial above, mainly on the evidence of the artefacts. The presence of the hunting arrow suggested a male burial, and this was confirmed by later examination of the bones by an osteologist (Crossley, pers. comm.).

Some elements of the Namaso burial are echoed in Stannus' (1910: 313) description of Mang'anja practices, in which he says 'the grave ... is always east-west, but the head of the corpse may be at either end, and the body is turned to one or the other side, facing a

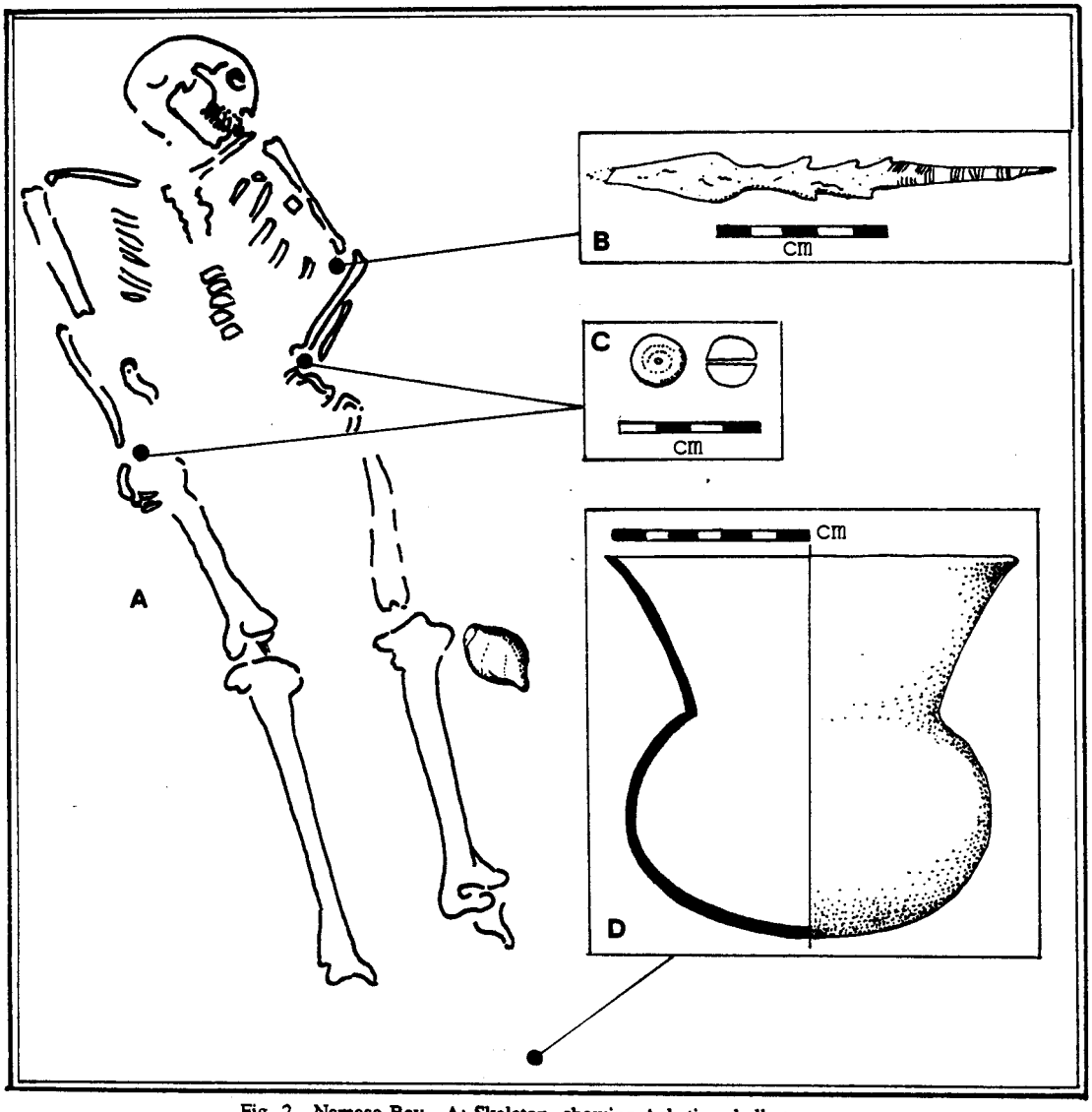

Fig. 2. Namaso Bay. A: Skeleton, showing Achatina shell at left knee, and position of B: hunting arrow, C: spheroidal bead (one of several), and D: thistle-shaped pot.

small hole hollowed out ... into which ... live pigeons and two small pots of beer are put'.

If the bones at the head of the skeleton are the remains of food offerings, this contrasts with the Nkudzi pattern, where no animal bones were found.

The large red wound beads may be the same as the 'carmine translucent' beads at Nkudzi, 40 of which were found on a single child burial, and which may date from the late 18th C onwards (ibid.: 22, 24-5), but are probably mainly 19th C. The Indian red micro-beads do not occur in Inskeep's list (unless they are classified with the 'pinhead' reds or annular reds). Future close examination of the bulk of the Namaso Indian reds may show them to have a clear outer 'skin' of glass, in which case they would be typical of the 19th C rather than the often larger Indian reds common in pre-18th C Mawudzu-phase deposits. D. Killick examined one of these beads, which had no 'skin' (possibly lost to corrosion) but were otherwise identical to beads found in 19th C sites at Kasungu, having drawn-out streaks of deep red within areas of clear glass visible under 30 x magnification (pers. comm.). It is current practice along much of this part of the shore (which is inhabited mainly by descendants of Nyanja/Mang'anja people, as opposed to mainly Yao farther south) to locate graveyards on the highest sand ridges inland of the villages: by analogy, the individual buried here may have lived in a village situated nearby on a now-drowned beach ridge. There are certainly indications of the presence of a settlement of this period: numbers of artefacts were washed onto the central sector of Namaso beach (at a point some 60 m from the burial) by the rising lake in 1979/80. These included beads; fragments of daga; both burnished and herringbone-decorated sherds; a razor, barbed arrow and barbed tang fragment, all of iron; quartz pounders and mullers; a cowrie, probably

Cypraea annulus; the base of a post-1840 French-made jar; and a spindle-whorl: SD-H, unpubl.). Of the 42 beads retrieved, half were long white cylinders with clear, 'crackled' glass outer skins (very common in the 19th C), and only 2 were tiny Indian reds, with one pale blue and one white micro-bead, the latter few similar to those of the burial.

Away from this sector of Namaso beach, tiny mid-blues are found to occur mainly in the upper levels in excavations (GT 15, GT 11) at the east end of Namaso Bay, where they are either associated with Nkudzi-type pottery, or located at the Nkudzi/ Mawudzu interface, or found in mixed Nkudzi/ Mawudzu contexts. Most of these blues at Namaso are of a darker, shiny, royal-blue colour, often larger than 'micro' size, and like the many-sized Indian reds their distribution continues from Mawudzu up into Nkudzi levels. At the east end of the Bay only one yellow (mixed level) and one white (with Nkudzi pottery) were excavated. Yellows are not in fact common, and whites rare, at several other sites investigated in the course of the lake levels project; it appears that they may be chemically more subject to corrosion.

The arrowhead like the beads also has its Recent parallels elsewhere. In its lack of a pronounced midrib, and in its barbed tang with imprints of binding, it is similar to two sketched in the Blantyre Museum (unlabelled, but evidently from the Nkudzi cemetery), and also to the hunting arrow, no. 44 in the Nkudzi report (Inskeep 1965). At Nkudzi copper was retrieved in the form of loose bindings and as leg rings; and thistle-shaped pots were the most common form among the 'coarse' ware (21% of the collection: ibid.).

The Achatina may or may not have been a deliberate inclusion in the grave. Ethnographic reports say shells have on occasions been used as containers, especially for medicines, and in this form operate as charms against theft or intrusion.

IV. THE CHAONE HILL SKELETON (SD-H 1981, unpubl.)

Finally, in contrast to the 'ordinary' Nyanja burial at Namaso, there is the case of a 'cleft burial' and shrine on an island in Lake Chilwa, a large shallow lake (area c. 700 km^2 in 1984) in Southern Malawi. Lake Chilwa has no outlet and is highly sensitive to rainfall variations: at times it dries up altogether. The margins of the lake tend to be swampy and with a few exceptions do not preserve good evidence of early high levels. This is best sought around the shores of Chilwa (Nchisi) Island, a carbonatite complex representing the core of an extinct volcano. The island is only 4 km long and wide, and consists mainly of steep and rocky mountains. On the very limited land available for settlement are crowded as many as 11 villages, whose headmen derive from two major Nyanja lineages (Chirwa 1969). The population fluctuates around 2000 people, a proportion of these being migrant fishermen.

Chaone Hill (YU 813011) is a small teardropshaped promontory, about 220 m long, at the SE end of the island, reached by a narrow neck of land which may be flooded when the water level is high. Chaone is mainly thicket-covered and has a few larger trees, including scattered baobabs; it rises to c. 30 m above the modern lake level. The hill is considered sacred and tree cutting is not allowed. It is said to be connected with rain ceremonies but is not now specifically designated a burial ground (Chief Chuka, pers. comm.).

While examining shorelines in 1981, human remains and pottery were noticed in two groups in a series of clefts between carbonatite boulders on the NE edge of Chaone promontory, about 4-6 m above the current waterline. Because the hill is still venerated the objects were recorded in situ and were not touched or removed.

The uppermost group lies in a horizontal cleft which amounts to a miniature 'rock shelter'. Human bones are distributed mainly along a slightly sloping ledge towards the rear. They appear to represent a single individual but are now scattered and incomplete, having been dislodged by the activities of mainly hyraxes and monitor lizards. The skull has disappeared but some vertebrae and ribs remain; towards the front of the 'shelter' a crossed femur (length 45 cm) and tibia overlie a complete vessel (a pedestalled cup: Fig. 3C); other bones have fallen into cracks in the rock below the upper ledge. Dispersed fragments of split bamboo matting also survive, on the ledge and in crevices below it: the body was evidently originally rolled in the matting and placed on the upper ledge. Most of the pottery (at least 14 vessels) is concentrated in small vertical clefts towards the 'shelter' opening (Fig 3A).

The second group of about 12 more pots is visible in a deep vertical cleft extending below and to the south of the upper assemblage. Access to the lower cleft has to be gained from below. It appears that most of the first group of pots may have been deposited at the same time as the body, and that the lower group accumulated later.

The bone which survives is unusually well preserved, possibly an effect of the alkaline (feldspathic carbonatite) rock environment as well as the protection of the overhang.

The pottery in the upper 'shelter' could be sketched and partly photographed but it was too dark to properly record the pots in the lower cleft. Those of the upper level vessels which were clearly visible are sketched in Fig. 3B. The pots exposed beyond the overhang had suffered weathering and pitting; those under shelter were very fresh in appearance. Noteable was the fact

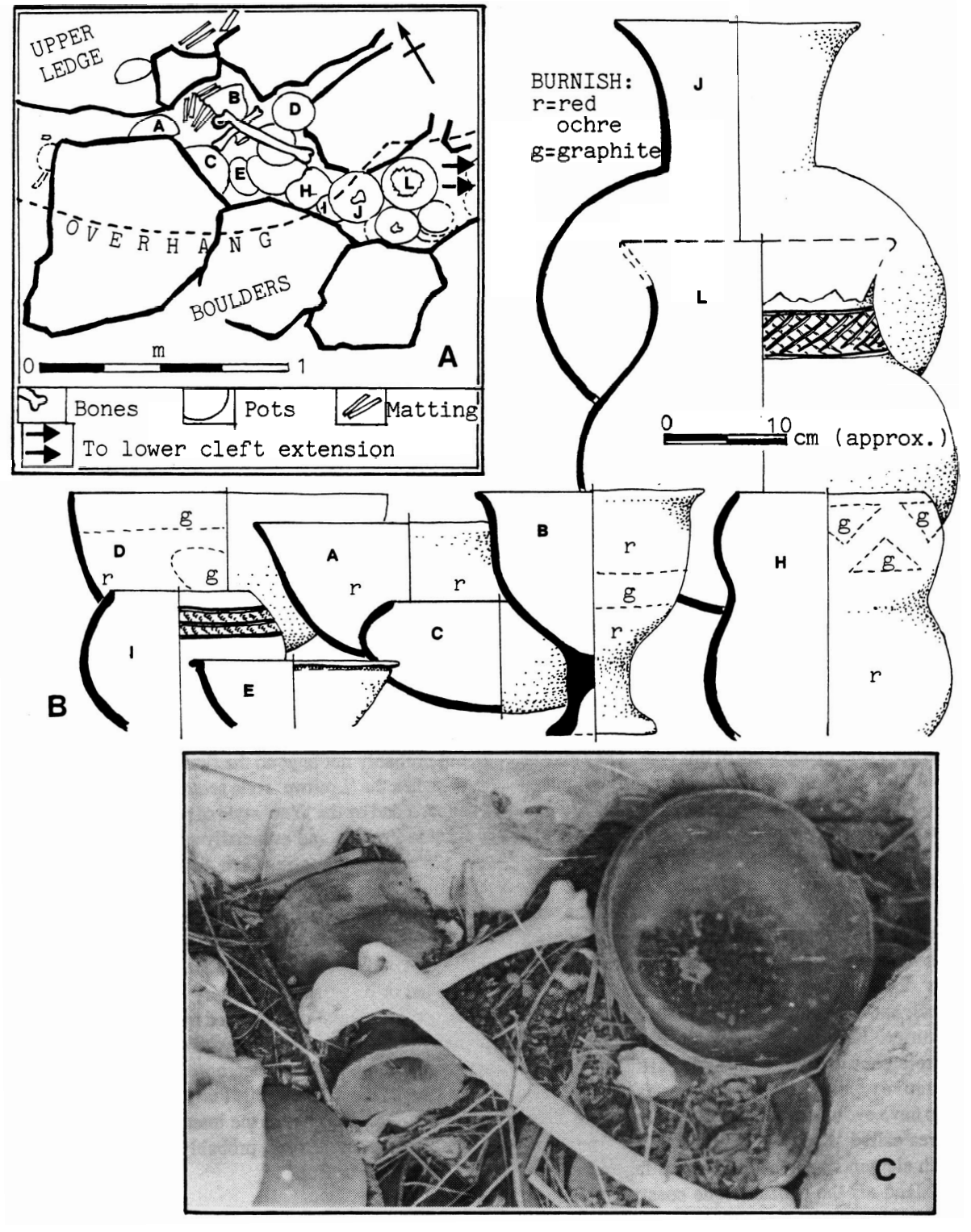

Fig. 3. Chaone Hill. A: Position of bones and pots of upper group; B: Visible vessels of upper group; C: Crossed femur and tibia over pedestal-based vessel B, with D to right.

that holes were visible in the bases of many vessels: several ethnographic records testify to the practice of piercing or breaking the pots of the deceased to place in or on the grave (e.g. Buchanan 1885: 238, etc.), and this has been noted in old cemeteries elsewhere on Nchisi Island, as well as archaeologically (e.g. at Nkopola, Lake Malawi: SD-H 1980, unpubl.; and the Nkudzi cemetery: Inskeep 1965). In addition, pots placed at a shrine for pouring libations may be pierced (Amanze 1980: 19-20).

It was a surprise to find that most of the upper level pottery could be characterised in form and finish as of the Nkudzi cemetery 'fine ware' type (i.e. red ochre- and graphite- burnished), since rather few and isolated vessels in this style have previously been traced in the Lake Chilwa-Mulanje area (Robinson 1977: 22, 30 & unpubl. sherds in Antiquities Stores). The pedestal is a fairly uncommon form but is known from the ethnography (e.g. Kirk's illustration of 1859, made among the Mang'anja on the upper Shire, in Foskett 1965: Pl.15/16) and archaeologically (at Nkudzi, Inskeep 1965: 17; at Michesi, Robinson pers. comm.). Some pedestalled dishes are still made in the Lower Shire valley (Robinson 1973: 99).

At Nkudzi there was a second component of 'coarse' pottery; here, likewise, there are unburnished vessels which have decorative bands of ?cord or cloth impressions, outlined by grooves, but they are quite different in style from the 'coarse' Nkudzi ware. One such vessel was visible in the upper group ('I' in Fig. 3B), and many of the lower group were of this type. They may be assigned to the Recent ceramics Robinson designated 'traditional Lomwe' in the Mulanje area (1977, passim) because it was found on ancestral sites of the Mihavani and Khokola (Lomwe groups).

Ethnically the people around Lake Chilwa are very mixed: they include Nyanja, Mang'anja, Yao and Lomwe, all matrilineal. Mutual influences, contact through trade, interpenetration of occupation areas (usually claiming kinship; and in the later period as refugees), and changing ethnic affiliation have existed for centuries. The use of 'Lomwe' is therefore limited here to reference to a particular style of Recent pottery. Comparative typology however indicates that it is very likely to have evolved from an earlier (LIA) style in the same area called 'Longwe' (Robinson 1977: passim), of which elements have been found as far east as Angoche Island off the Mozambique coast; but analysis and dating have yet to closely define the 'border' between the two.

Cleft burials have never been closely examined in Malawi, but they were probably not uncommon where graveyards were located, for a variety of reasons, on rocky islets and promontories. Local knowledge has it that this practice existed on Boadzulu Island in Lake Malawi. Pottery of several periods is indeed found in clefts on this and other islands in Lake Malawi (ibid.). In addition, a shrine (not a cleft burial, and without surface evidence of bones), with associated Nkudzi pottery was located on Boadzulu, and can be dated on the basis of glass and china imports from Europe to after the mid-19th C (SD-H 1984b, unpubl.). Some modern cleft burials around Midima Hill in the Blantyre district are reputed be of lepers (one body seen in 1980 was said to have been deposited within the last two decades; the green cotton cloth and matting enveloping it, and the bamboo poles by which it was transported, were still well preserved). The choice of an isolated cleft over an earth grave was thought to be one way to avoid spreading the disease (Stannus 1910: 315); islands were chosen, rather, to avoid the possibility of witchcraft (Robinson 1970: 12), but on a more practical level would have saved valuable living and cultivating space on the often limited lake shorelines.

Territorial shrines were often associated with ancestral graveyards, which in turn may be the sites of founders or early chiefs (e.g. Molomba, connected with Kaphwiti, one of the early rulers of the Maravi 'empire': Robinson 1973: 67-9, etc.). Similarly, on a local scale, rain ceremonies were commonly conducted at the graves of ancestors, and given the 'sacred' nature of Chaone Hill, this may be such a case. It is likely then that the Chaone pots represent both gravegoods (the Nkudzi wares closest to the bones) and later shrine offerings; they may have accumulated over many years, but probably not beyond the first quarter of this century, when the 'Lomwe' style seems to have been largely superseded by the 'Yao' style of pottery currently made around Zomba, and especially at Thondwe nearby.

The earliest possible date for the Chaone cleft assemblages is usefully provided by the lake levels research. Buried beach sediments representing a lake level which rose to some 9 m above the 1984 mean, around 1790 AD (or c. 1880 at the latest), would have destroyed or dispersed the pottery had it been deposited before this. This date is derived from two charcoal samples from a single pit at Sonkho on the east side of the island, which gave radiocarbon ages of 160 ± 90 BP (Har-4701) and 160 ± 50 (Pta-3316: both in Shaw *et al*. 1984), for a level at the interface of the beach deposit and an underlying, probably eroded, LIA (Longwe) settlement 'floor'.

NOTES

[1] All except the Namaso skeleton have been described in more detailed reports to the Dept. of Antiquities, Malawi. These, and also annual reports etc., are not fully cited here but referred to merely as 'SD-H [date], unpubl.'

[2] Grid references given are taken from the 1:50,000 series sheets, Malawi Dept. of Surveys.

ACKNOWLEDGEMENTS

The support of the Dept. of Antiquities, Malawi, and the Research and Publications Committee of the Univ. of Malawi, as well as the help of the following at various times is gratefully acknowledged: D. Killick, K.R. Robinson, M. & D. Hirschmann, T. Huffman, H. de Villiers, P. Shaw and especially P.N. Mosley and R. Crossley.

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BROKEN SHERDS: COLLECTIONS AROUND KANO STATE, NORTHERN NIGERIA

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I suppose that being wedged tight next to a 22 stone man on a Greyhound bus was not the ideal laboratory condition for analysis of Kano's pottery sherds; but that uncomfortable analysis raised interesting queries about Kano's past culture and state formation. In 1982 one original intention of research in the Kano State area had been to produce a culture sequence chronology from surface sherd collections. Some strengths and limitations of seriation techniques had been apparent in analysis of southern Nigerian sherds, where systematic collecting had not guaranteed representative sampling; and long-term settlements within primary earthwork enclosures had weakened seriation analyses assuming ephemerality of nucleated loci.

The Kano area held additional problems. Manuring mixed up sherds on the infields and removed potential settlement middens (NA 27). The consequent high degree of sherd wear in cultivated areas of the Kano close-settled zone posed classification problems, these being unhelped by high proportions of 'non-diagnostic' sherds. As Hausa potters rarely use temper (Ahmed 1981; Mutter 1985 pers. comm.), sherd fabric usually reflected local clay variations, which limited its use as a chronological indicator, though at least one fabric (goldenbrown with feldspathic grit and often decorated by twisted string roulette) may prove useful. Widely varying sherd 'visibility' (cf. Ray 1983) detracted from the representativeness of area-based sampling techniques, and was particularly poor on uncultivated areas - including those in deserted walled settlements. For the excavator, this left mainly the hills; but even here deposits were often reworked.

Ever since the 1960's, such problems had been obvious to Mortimore (1982 pers.comm); and after a few field trips I realised that attempts at seriation analysis based only on systematic or random surface sampling in Kano's close-settled zone would be an inefficient use of time, effort and funds. The accuracy of site location or dating of past farmland settlement patterns in such conditions relied on the strength of two controversial assumptions. One was that of a strong discontinuity between traditional pottery and the easiliy recognizable modern Bambadawa pottery, a concept already qualified by Ahmed (1981). Another

was that the Kano close-settled zone, with its dispersed compounds and infield manuring, resulted from a rapid, post-Jihad influx in the C19th (Polly Hill 1970); but Mortimore argued for a natural population growth continuum over the centuries. If Ahmed or Mortimore were largely correct, then the promises of seriation analyses, per se, to be useful were promises destined to be broken.

More rewarding avenues of archaeological research lay with fresh 'discoveries' of large-scale iron-smelting, past and present walled settlements, and ubiquitous rock shelters. In view of the correlation between sherd provenance and chronology (Darling 1985), it was decided to relegate sherd seriation to a secondary role aligned to the absolute dating of these features. This switched the emphasis from area-based sampling (requiring a high proportion of sherds from the problematic cultivated land) to function/provenance-based sampling, particularly in areas marginal to the close settled zone. Funding limitations favoured TL dating of features in different provenances, possibly a fortunate choice in view of the later ^{14}C calibration crisis. In iron-smelting areas, hopes of extending dated furnace typologies to other sites lay in establishing West Africa's first archaeomagnetic dating curve. (Report forthcoming).

As these features covered a wide area around Kano, it was planned to use the associated sherd collections to map sherd variable distributions (cf. Darling 1984:283-297). This was one reason for not focussing just on the early settlement area within the Challawa river bend (Last 1982), although the first fieldwork was conducted here. Another reason was that this area's historical opposition to Kano precluded it from Kano's direct state formation processes, one objective of Kano archaeological research. Also, my aim to survey the Kano region representively meant including the younger granites, the range of older granites, a metamorphic suite with quartzite ridges and lateritic mesas, Chad deposits, sief dunes, seasonal rivers and lakes, and sandstones: it would have been quite dishonest to pretend that the Challawa river bend area was a true microcosm of the main ecological zones in Kano State or its close-settled zone, since it only contained high plains, older granite inselbergs and a perennial river.

Of 260 sherd assemblages made, 236 from 37 main locations contained the decorations used in interim analysis maps and tables. Without confusing systematic sherd collection with statistical representiveness, deliberate collection of sherds from different site provenances within most locations provided a useful range of chronological and functional variation. Ironically, the more statistically acceptable procedure of random location selection - sometime involving accidental survey opportunities - attracted covert criticism. The interim analysis tables and distribution maps provide some response to the thinking behind that criticism.

Most of the decoration variables categorized here have been selected and grouped for this analysis. Rocker fibre (Fig. 1) has impressions very similar, but fainter, than those made with a walking/rocking comb; but this terminology has been adapted to take account of discerable fibre marks. Knotted strip roulettes (Fig. 2), *peigne fileté souple* (Fig. 4), twisted string roulettes (both S and Z twist) and carved roulettes (Fig. 3) are as described by Soper (1974 pers. comm., 1982, 1985), though grouped with the *peigne fileté souple* were a few decorations using the same coarse fibre, the same ware, and occurring on many of the same sites. Comb jab/stamp and scraping/dragging, as well as stick jabs/incision (Fig. 3) contain a wide variety of techniques and motifs, some comb jabs and certain punctates (? on bottom right map key) may need to be reclassified (using photographs and specimens) into carved roulettes or grid stamps. Single punctate impressions were scattered over thick, plain sherds. Red and gold mica slip have been grouped with burnished ware, as they are found on similar sites, but will be split for later analysis. The *dauda* roulette made at Dawakin Tofa today, uses a special knobbled plant stem. Stippling has been mapped but not included in the tables as only four sites were involved. Finger nail milling, pie-crust pinching, grooving, unidentified roulettes and other minor or problematic categories have also been omitted. All but one of the sherds photographed here have plasticine impressions placed to their right to assist interpretation.

Sherd collection and classification are two steps in the journey into Kano's past; and to check that this journey proceeds in the right direction, the first interim analysis has been made quick and simple, using only a few variables capable of being checked elsewhere, some distribution maps and a simple table. These are a blunt, but useful, tool for picking out key variable distributions and their likely chronology. Refinement of sub-categories during matrix construction, as well as the inclusion of forms, fabrics and associated artefacts, should sharpen this tool; so vindicating a common sense regional approach to sherd collection. For this survey, at least, has tried not to spend its time collecting too much rubbish; and it should need no other props on its way to reading yesteryears' discards-broken sherds.

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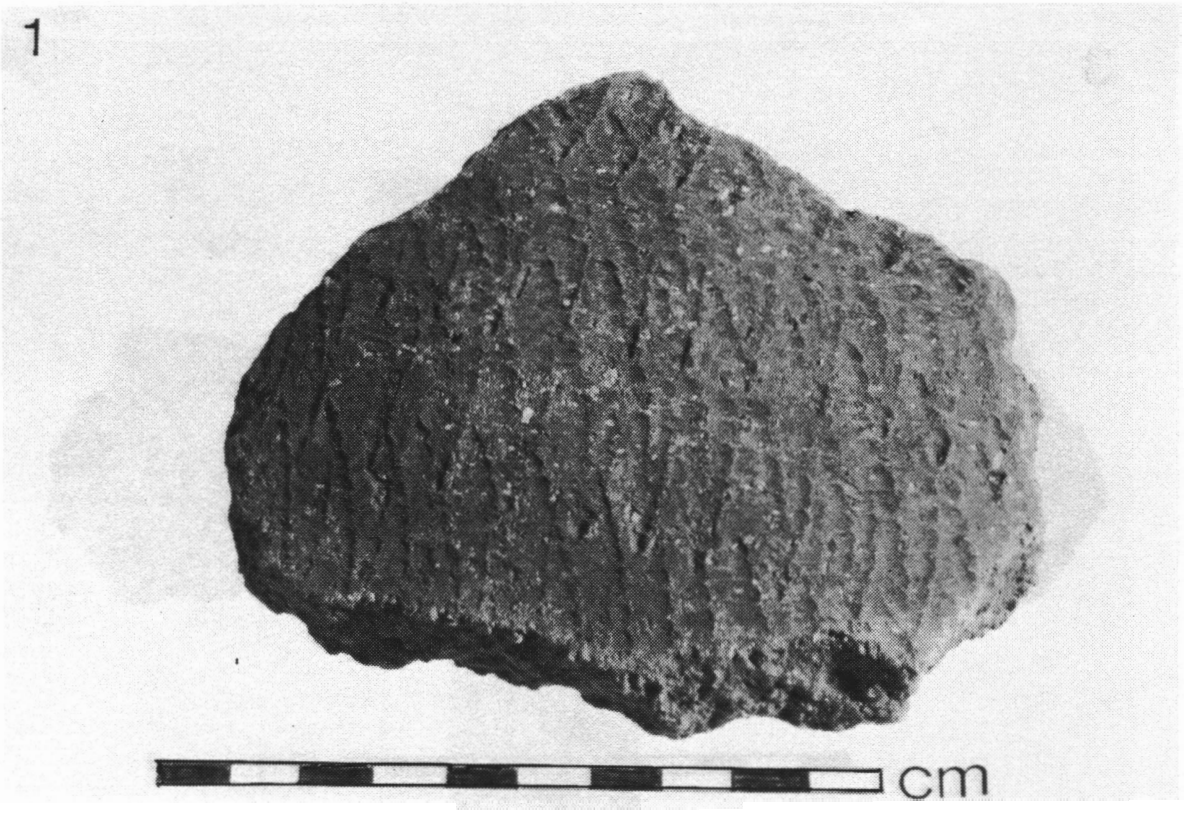

Fig. 1. Rocker fibre was found only in rock shelters in southern Kano.

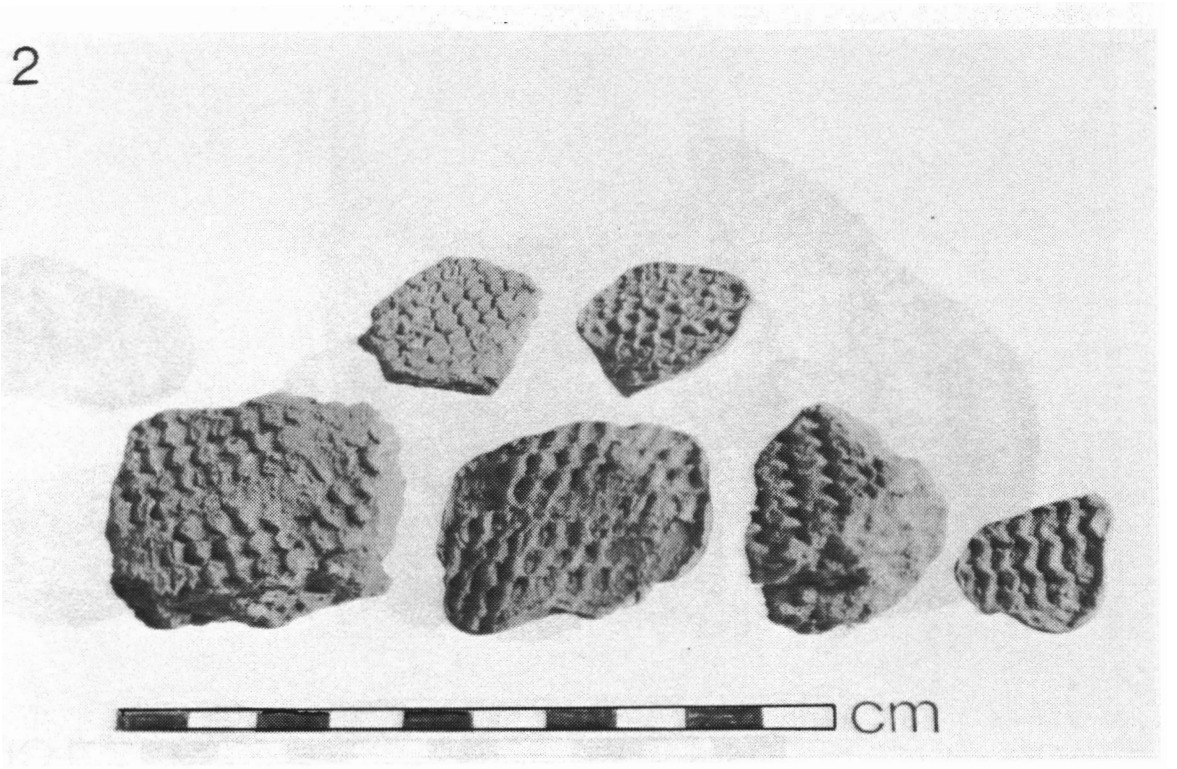

Fig. 2. Knotted strip roulettes seem to be most closely associated with southern rock shelters despite later and widespread persistence.

Fig. 3. Diagonal incisions on neck, carved roulette outlined by stick jab on shoulder, and curvilinear stick jab pattern on upper body.

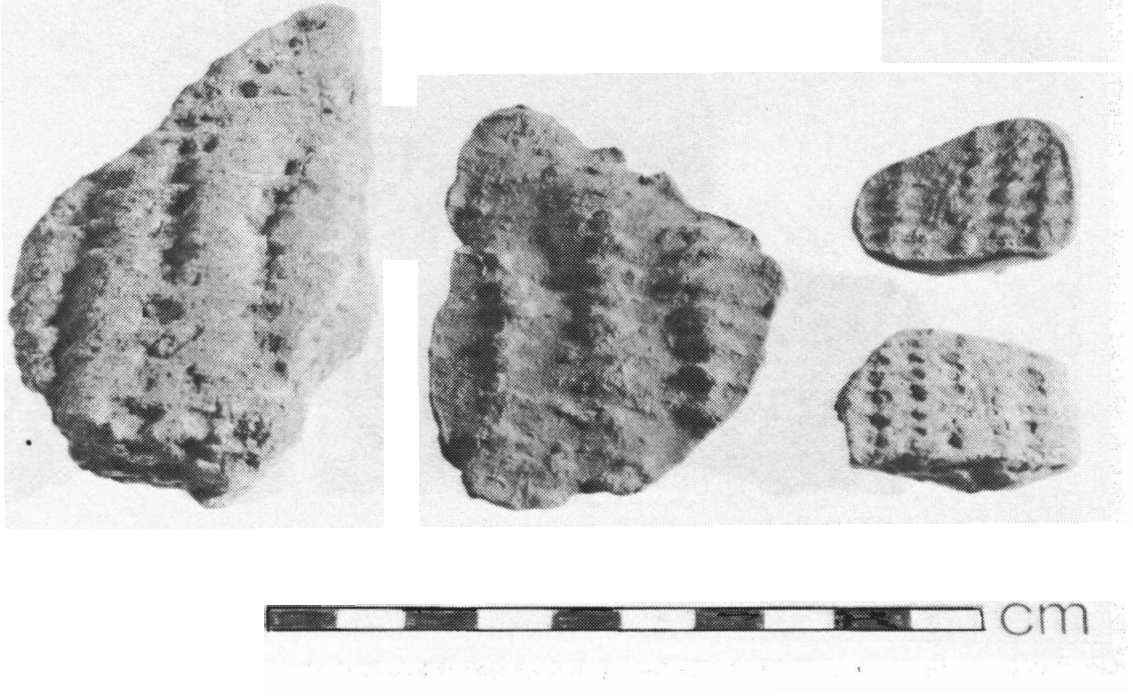

Fig. 4. Peigne fileté souple occurs in the Saharan Neolithic and is found associated with iron-smelting sites in western Kano.

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BROKEN PROMISES: FIRST INTERIM ANALYSIS - SHERD DECORATION KANO, NIGERIA

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Interim reports record progress: interim analyses serve to confirm or qualify the promises of that progress. For very practical reasons, given in the previous article, sherd collections in the Kano area had 'regressed' from strict statistical procedures to a common sense rationale based on previous survey experience. Seriation and other analyses hold out various promises to those that kept the rules; so had these promises already been broken by the unusual circumstances of the Kano close-settled zone, or had new viable ground rules been established by my procedures? The answer to the first question is being investigated independently elsewhere. The maps and tables of this interim analysis check for signs of hope in answering the second question.

The distribution maps (Fig. 1) only depict the presence of each decoration variable in broad locations: spatial studies of individual sites in those locations using absolute or proportioned occurrence of all artefacts and wider regional spatial analyses are later possibilities (cf. Foley 1981; Sinclair 1982, 1987). From these maps alone, little can be said about the more widespread variables; but wider geographical comparisons, further classification requirements, and careful consideration of the tables, would elicit more useful data. However, most interest is attached to the most spatially discrete distributions - rocker fibre to the south, the *peigne fileté souple* group to the west, single punctate in the northwest, and stippling to the east. Clearly these clusterings have some significance, but their potential to interpret the past can be roughly assessed by categorization and interim analyses of the complete sherd assemblages themselves.

The sites have been roughly grouped into provenances. Rock shelter sites were usually disturbed by later occupation or children, so efforts were made to obtain samples from inaccessible crevices and many other parts of any outcrop surveyed. Iron smelting sites include samples in close proximity to smelting activities and all sherds were encountered in surveys around quartzite ridges and lateritic mesas, so are capable of further definition. Walled area sites posed collection problems; sherd 'visibility' was unsatisfactory in deserted fallow areas and occupied sites, and contaminated by modern sherd scatters in cultivated fields. Farm field sites, suffering from the same scatters, are only differentiated by being unenclosed cultivated areas. The exposed strata of gully sites near perennial rivers were examined for signs of 'hydraulic civilization', but with little success. Complex seasonal patterns of outwash deposition and re-erosion in main gullies confused stratification, and the consequent reworking of old and recent sherds meant that gullies could not be used as broad chronological indicators in interim analyses. Other sites included hill-top collections, sherds associated with the Dan Baure terracottas, and odd collections.

Table 1 indicates the percentage of sites on which any decoration was present. The first four columns have ordered the site provenance groups into their most reasonable chronological sequence - rock shelters, iron smelting sites, walled settlements and farmland. Percentages have been calculated as the number of sites on which the decoration was present out of the total number of sites in each group of site provenances. Taking each decoration in turn, the percentages of the four site provenances have been compared, and the highest percentage(s) emboldened. It is then a simple job to gather all emboldened rock shelter percentages to the top of the first column, then those from iron-smelting sites, and so on. Where minor problems occur, as in the stick/incision category, the 'oldest' provenance group is accorded precedence, and cross-reference made to Table 2, which deals with numbers of sherds in the same way. Generally speaking, site

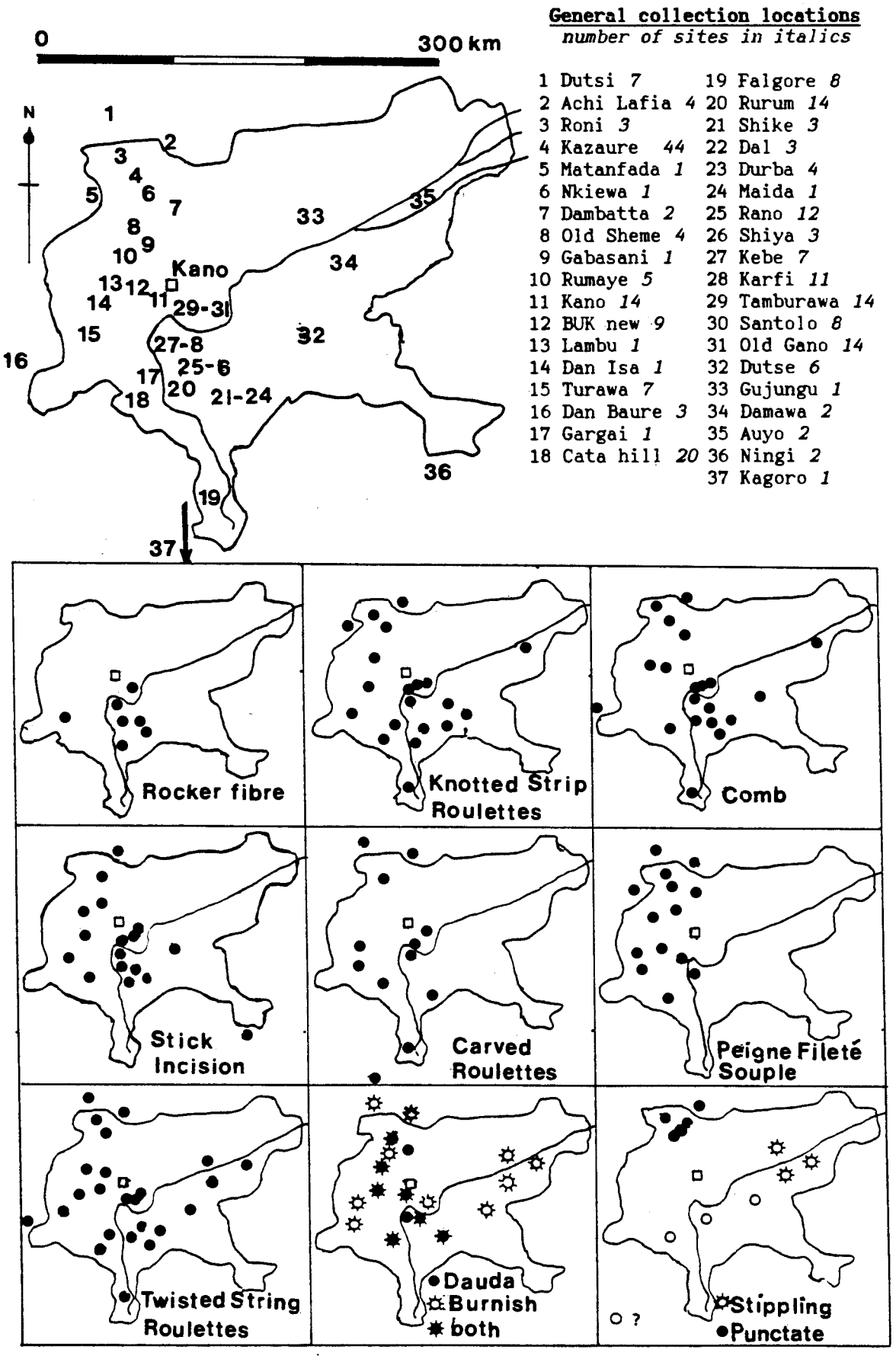

Fig. 1. General collection localities; number of sites in italics.

Table 1
Percentage of selected decoration variables by number of sites

Decoration\Site	Rock	Iron	Wall	Farm	Gully	Other	Total	Absolute dating of decorations
	%	%	%	%	%	%	n	
Rocker fibre	12	-	-	-	-	-	12	
Knotted strip roulettes	47	36	14	9	5	20	77	Karfi 2640 BC
Comb jab/scrape	45	18	29	30	26	20	76	
Stick/incision	30	36	14	27	26	20	70	
Carved roulettes	9	6	-	6	-	-	15	Nok 200 AD Diama 900 AD
Peigne fileté souple	4	46	-	9	42	20	47	Kazaure 800 AD BUK 1550 AD
Single punctate	1?	19	7?	-	-	-	15	
Twisted string	25	37	64	30	11	20	71	Used today
Burnished	9	10	64	49	16	-	44	Used today
Dauda roulettes	2	2	21	49	5	-	23	Used today
Total number of sites	98	67	14	33	19	5	236	
Dated Sites	2640 BC	c500 BC -1550 AD	-		mixed & modern	-	-	

occurrence percentages are more reliable and less susceptible to very unusual variations than sherd occurrence percentages, but interpretation is best based on using both.

Now, if maps and tables are read together, crude time-space hypotheses can be established for each decoration, and these raise wide questions for investigation by further research. The main rockshelter variables (rocker fibre, knotted strip roulette, comb, stick/incision and carved roulette) seem to have flourished to the south and beyond in early times, with all but rocker fibre spreading northward later. One knotted strip roulette sherd from a rockshelter has been TL dated to 2640 ± 920 BC (DurTL 67-1AS) but, although widespread, the decoration occurs in very reduced percentages on iron-smelting sites (one ^{14}C date at 870 ± 70 ad; HAR 6258). Enquiries are being made to check if knotted strip roulettes are the same as the "xxx roulette (made I know not how, but similar to that from Birnin Gazargamu)" from the Kebbi valley in northwest Nigeria (Connah 1981; Daniels 1975). They occur later in these sequences (ca. 900 AD at Daima), more evidence for a northward spread. Being both widespread and persistent, the use of comb, stick and incision techniques need sub-categorization by motifs to be more useful. Carved roulettes in the far south of Kano State have similar nodular patterns to those found much further south at Kagoro and Samun Dukiya (210 ± 95 BC), and much later to the northwest (Kebbi valley) and northeast (Daima ca. 900 AD onwards). Different patterns distinguish carved roulettes in the middle Kano rock shelters (previous paper, Fig. 3) from those found in north Kano State. At this stage there is not enough evidence to establish an early southern cultural heartland based on rockshelters and perennial rivers, but the questions are pointing in that direction.

The main iron-smelting areas to the northwest are characterized by two discrete variables. Single punctates, found around Kazaure, seem fairly recent and

Table 2
Percentage of selected decoration variables by number of sherds

Decoration/Site	Rock %	Iron %	Wall %	Farm %	Gully %	Other %	Total sherds n
Rocker fibre	5	-	-	-	-	-	20
Knotted strip roulettes	38	13	23	9	4	6	341
Comb jab/scrape	27	4	6	15	3	1	190
Stick/incision	10	4	1	11	3	1	105
Carved roulettes	3	1	-	2	-	-	17
Peigne filété souple	2	55	-	2	54	60	667
Single punctate	*?	8	1?	-	-	-	66
Twisted string	11	13	21	13	5	31	238
Burnished	4	3	44	14	31	-	190
Dauda roulettes	1	*	5	34	*	-	57
Total number of sherds	437	869	134	131	242	78	1889

KEY: - = absent; * = less than 0.5%; ? = uncertain punctate

may have been produced during the assertion of independence by the Kazaure emirate in the last century. The *peigne fileté souple* group has strong associations with iron-smelting sites and west Kano State, possibly coincident with the distribution and traditions of the Maguzawa (Last 1985, pers. comm. 1987): it was on the 9th C ad (HAR 6240) smelting site, in gully deposits dated at 1550 ± 85 AD (Dur86TL80-1AS) on the Bayero University new site, and on a hill top location (*iskoki* shrine?) at Cata. This decoration accords with other evidence indicating a distinct cultural entity over the western part of Kano State during at least the last millenium. It may prove to be identical to the "grid-like wide corded roulette" found on the Bunza mounds in the earliest part of the Kebbi valley sequence much further west. But what makes this decoration and its distinctive ware more significant is its occurrence in the Saharan Neolithic (Soper 1983). So the questions posed here are much bigger: they relate to the origins of the Maguzawa, the southward spread of iron-smelting (and of the Hausa language from the northwest with new trading links created, *inter alia*, by the smelters), and of the growth and state formation of Kano itself.

Twisted string roulettes occur throughout the Kebbi valley sequence, appear suddenly about the 5th-7th centuries AD in the Daima sequence, are found on exposed hillsides rather than rockshelters in southern Kano and, together with burnish, seems to be the most characteristic decoration of past Kano area walled settlements during the 2nd millenium AD. Here the independence of variables can be stressed, since twisted string rouletting seems to have spread (from west to east?) long before the major period of wall construction, and Kanuri loan words in Hausa suggest that political structures of Kano urbanization came from the east (Phillips 1985).

A major lacunae exists in the survey of the Chad Deposits to the east; and the stippling of sherds recovered from seif dune cuttings near Gujungu and Dam-

awa, as well as those found at Auyo, might trace back to another zone of ancient past culture east of Kano. If so, and if the other sherd decoration indicators are correct, thne questions about Kano's early growth need to examine both past trading and marketing networks between the main ecozones, and the way any networks would have been affected by at least three major cultures - the ancient southern population based, the catalytic role of desert fringe smelters moving south, and the forces of urbanization from the east.

To those making obeisance to the strictures of statistical formulae in this era of computer determinism, the whole survey methodology and interim analysis must seem suspiciously simple. It is, but with so much of Africa undersurveyed and only limited funds available, it is simple, inexpensive and above all workable methodologies that are required by those seeking to discover their own past. Rough and ready survey flexibility has a long and distinguished record in archaeology, as its commonsense praticality makes it ideal for all stages of fieldwork analysis - particularly for the scale at which I have attempted to work. Sophisticated approaches imported from elsewhere should have only a qualified part to play. Not only are they much more expensive, but they carry a higher risk factor of being inappropriate and failing to achieve their primary objectives. Rigid adherence to the meticulous dictates of textbook methodologies can still play an important complementary role alongside adaptable pioneering surveys, but both need to heed the lessons of the other. Otherwise, wheels are reinvented, time and funds are inefficiently employed, and computerised seriation of broken sherds for culture sequence chronologies falls back on destructive excavation to prop up its broken promises.

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MORE IRON WORKING SITES IN NSUKKA OWERE-ELU AND ISIAKPU

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Archaeological investigations in the north of Igboland have consistently revealed abundant evidence of ancient iron working at sites such as Abakaliki, Ameri Ameka and Awgu (see reports in NA 23, 24/25; Okafor 1984; Anozie 1985). The greatest concentration of sites is found around old Nsukka division: Umundu and Lejja (Anozie 1979); Orba (Okafor 1984), Aku (Njoku 1986), Opi and Eha-Alumona (Onyeke 1986) and Ukehe (Itanyi 1985) all testify to this. None of these communities is still engaged in iron smelting; in the past both smelting and smithing were common, but today only traditional black smithing is practiced.

Recently, (April 1987) I discovered another iron working site in this zone at Owere-Elu and Isiakpu (at the Nsukka new timber shade). The site appears to have been devoted solely to iron smelting, and there is no evidence as yet for black smithing. We observed large amounts of iron slag scattered on the surface, and were able to ascertain that these had not been transported from elsewhere. A three day survey of the area in August 1987 revealed that the site covers more than $54m_2$ - it spread to the village square of Owere-Elu and to part of Isiakpu village.

Apart from the remains within the timber shade which were destroyed by bulldozers during construction, two other areas of the sites have been destroyed in recent months. One, a mound of iron debris at Owere-Elu village square, was destroyed by local youths in July 1987. They did not understand the significance of the remains and their elders could not enlighten them. In fact, no one in the village today knows that these remains are the debris of iron working by earlier inhabitants. Although they refer to the slags as "nsi Igwe" (the common Igbo name for iron slag), they believe the mounds of debris to have been created by God. The second area damaged was the slag mound that runs N-S from Isiakpu, which was cut through by road construction.

There are still some intact mounds, but during our survey we observed no remains of furnaces, tuyères or forges. As a result, we cannot say definitely if this was a smelting or a smithing site. However, based on the nature of the slags (heavy, compact, and clearly solidified molten gangue), we are inclined to think of it as a smelting site. We observed none of the metal flakes normally associated with the debris of black smithing.

All the raw materials necessary for iron smelting were available locally. The hills surrounding the communities contain abundant haematite, and the local forest cover contains oil bean and locust bean trees, both hardwoods used for fuel by ancient iron smelters.

We are continuing intensive rescue investigations.

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ARCHAEOLOGICAL RESEARCH IN THE WUSHISHI AREA, NIGER STATE, NIGERIA

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In NA 27 I reported the situation concerning the publication of the field research I conducted in the Wushishi area of the Kaduna Valley from 1975 to 1978 on behalf of the Centre for Nigerian Cultural Studies, Ahmadu Bello University, Zaria. In the same issue, David Aiyedun reported on his Wushishi Reconnaissance Survey 1985.

Subsequently I completed my report on the survey work I had been responsible for, and on the excavation of the sites of Rafin Ndoko and Kongon Makeri. This report consisted of some 72 pages of typescript, including appendices (one of which was of 19 pages by Keith Ray), together with 56 photographs and 19 figures.

Copies of the report were deposited with the Nigerian Museums and Monuments Commission, and with the Centre for Nigerian Cultural Studies, Ahmadu Bello University, Zaria. A copy was also sent to Mr. David Aiyedun to use in connection with his Ph.D. dissertation -- in which, with full permission, more than three quarters of my report was quoted. That dissertation, entitled *Subsistence and Settlement Patterns in the Wushishi Area of the Kaduna Valley, Niger State, Nigeria*, was accepted by the University of California, Berkeley, in part fulfilment of the requirements of the Ph.D. degree, which was awarded in November 1987.

ARCHAEOLOGICAL RESEARCH IN SOMALIA IN THE 1930s

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In the late 1930s, the Italian Petroleum Company (AGIP), was prospecting in central and southern Somalia. In 1938 or 1939, stone age implements collected by AGIP personnel (most probably Dr. G. Tavani and Mr. G. Cecioni) were shipped to the Istituto di Geologia at Pisa University which, under the direction of Prof. G. Stefanini, had become a well-known center for the study of geological and related sciences in East Africa. A.C. Blanc was assistant to Stefanini (who died in 1938).

The material was given to A. Malatesta for study and publication, and some pieces were illustrated. However, with the start of the Second World War, the work was abandoned and the whole collection lost. Much later, Malatesta was able to recover drawings of some fifty tools along with the name of the location where they had been collected. Following the spelling then in use, they were from Daror, Sassabaneh, Mersin-Galgadò, Bohad, Bur Daris, Uarandab, Cumdi, El Dere, Danan and Bur Hoamai.

To properly understand the importance of these surface collections, it is worth remembering the state of prehistoric research in Somalia in the 1930s. From the end of the 18th century, implements had been collected (and to some extent published) by people such as Seton-Karr, Robecchi-Bricchetti, Puccioni, Cipriani and Barrington-Brown. However, the first detailed report was not done until 1936 (by Puccioni).

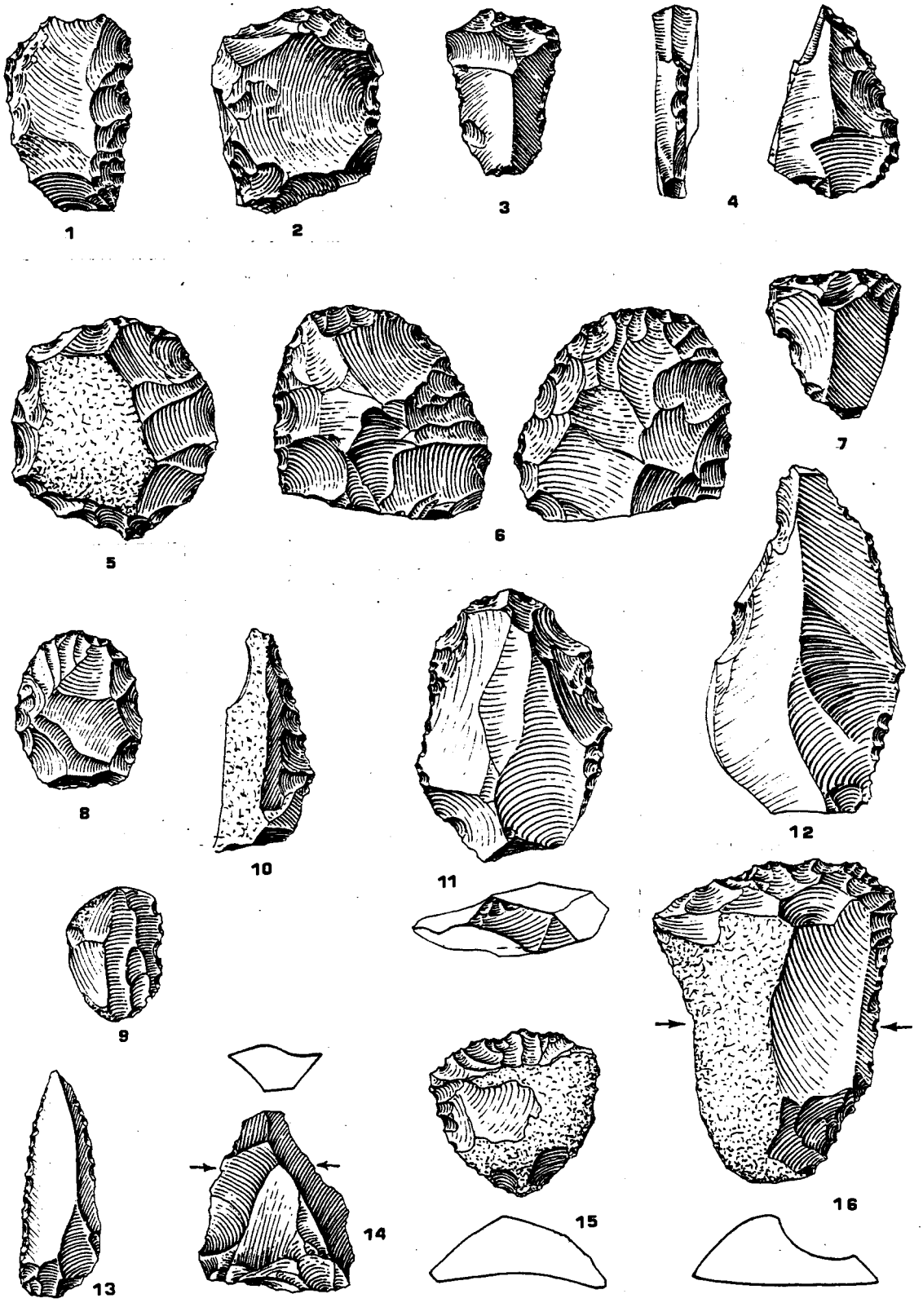

Fig. 1. Selected illustrations: 1-4 from Bur Daris; 5 from Danan; 6-7 from Daror; 8-10 from El Dere; 11-13 from Bohad; 14-16 from Cumdi. All to natural size.

Most of the stone tools studied by Puccioni had been found in 1924 during the Stefanini-Puccioni expedition to southern Somalia. In 1934, Breuil and Kelley also published a description of the prehistoric implements collected in the Ogaden and on the Harar Plateau by the du Bourg de Bozas expedition at the beginning of the 20th century. Breuil, Teilhard de Chardin and Wernert carried out two archaeological surveys of the Harar Plateau and French Somaliland in 1928-29 and 1932, but publication was delayed until 1939-40. In 1938, Blanc and Tavani published a paper on surface collections from some twenty localities in central and southern Somalia (the fieldwork was done by Tavani who had been mapping there in 1936-37 for AGIP). In 1935, extensive surveys and, for the first time, excavations, were undertaken by Graziosi accompanied by Puccioni but the main publication of the results did not appear until 1940.

The stone tools presented here were therefore collected in a time of great interest and of many researches into the prehistory of the Horn of Africa. The war, sadly, interrupted the activities centred upon Pisa University. The knowledge of the collection faded away almost completely, and was preserved only in the unpublished plates kept by Malatesta, a selection from which is included here as Fig. 1. I gratefully acknowledge Professor A. Malatesta (Dpt. di Scienze della Terra, Università di Roma "La Sapienza") who gave me the illustrations of this previously unknown archaeological collection.

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ARCHAEOLOGICAL MISSION OF THE UNIVERSITY OF GENEVA TO KERMA (SUDAN)
Final Report of the 1987-1988 Season

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The research project of the Swiss Archaeological Mission to the Sudan was continued at Kerma between 3.12.87 and 28.1.88. Two rais from Tabo directed the 50 to 80 workmen on six sites, covering different periods from the protohistoric to the Christian.

The remains of several large circular huts were discovered in the pre-Kerma settlement (ca. 3000 BC), adding a new dimension to our knowledge. In the ancient town (2400-1500 BC), our ongoing stratigraphic study enabled us to complete the unravelling of the chronology of the religious quarter and to analyze the complex evolution of the urban center. Intensive effort was put into clearing the defensive system. In the eastern necropolis, two areas of the Middle Kerma period (2050-1750 BC) were excavated. A chapel was discovered to the west of a princely tumulus. Finally, urban expansion of the modern town made several rescue excavations necessary. A second Napatan residential building was discovered as well as a vast Christian cemetery.

The pre-Kerma settlement

Newly discovered pits, dug into the alluvial silt as granaries or stores, produced material identical to that recovered in the last season. It is still difficult to determine the organization of these structures. Previously a rectangular hut was discovered. However, on the edge of the zone marked by the greatest concentration of pits, the preserved post holes belonged to circular constructions with diameters varying from 4 to 8 m.

Unfortunately, as with other traces of the habitation, severe erosion has destroyed the occupation levels. To date, an area of 55 m by 20 m has been entirely stripped, but the remains of huts and granaries certainly extend well beyond this. The plan of this complex is very spectacular, and is reminiscent of certain more recent African towns.

The ancient town

The site chosen for the stratigraphic study was close to the northeast corner of the Deffufa, the temple of the ancient town. In this sector, the ground had been

disturbed almost to the level of the foundations of the great monument, which allowed us to discover, by stages, the plan of the first structures at Kerma and to follow their development until Egyptian colonization during the 18th dynasty. Six successive stages were analyzed, showing the transformation of a small collection of buildings from the Middle Kerma period up to the Classic period. The earlier arrangements will be studied in subsequent seasons.

Two buildings, one square and one rectangular, seemed to already be part of the religious quarter. This was to progressively occupy the whole of the center of the town, as shown by several deposits connected with foundation rites. These two buildings were modified several times before being joined during an enlargement. At the end of the kingdom these primitive buildings were covered by the Deffufa and its chapels.

The eastern quarter of the town developed at the expense of ancient fortifications, the walls of which were levelled. In order to understand these different phases it was necessary to follow the traces of successive ditches which restored, in negative, the general outline of the defensive system. A large rectangular frontage (> 40 m long) constructed over a filled in ditch, delimits an extension to the south of what seems to be one of the principal entrances to the built up area. Installed in this projection were the bakeries the products of which were, in all probability, intended as the offerings for the various places of religion or perhaps for the king.

The pottery found at the foot of the town walls gave a fairly precise dating to these developments which took place over several centuries.

The western necropolis

The Middle Kerma sectors CE15 and CE16 had been quite badly disturbed by looters, but we were able to detail the evolution of the forms and decoration of the pottery. The cleaning of the ground to the west of a large tumulus (CE15) revealed the first foundations of a chapel with sides of 5m. A central tie strengthened the row of three wooden columns, each placed on a stone base. The layout, comparable to that of the chapel found near the eastern Deffufa, represents an important stage in the evolution of the religious buildings.

The fifteen tombs studied this season were those of a relatively poor population. Several inhumations are probably related to nearly important tombs; it is possible that some of the individual graves were those of sacrificial victims. The apparent absence of grave goods supports this hypothesis.

Tomb 133 in sector CE15 is fairly representative of the funerary customs of this epoch. The corpse, of a man between 20 and 30 years, was in a crouched position on a bed with the head to the east and had been wrapped in a cloth shroud. He wore two bracelets made of faience beads, and had a dagger with an ivory pommel attached to a belt. There was a headrest placed beside it the body, and there was also a red-painted wooden box contained several everyday objects (an ivory harpoon, a pierced lion's tooth, a knife with a hardwood sheath). Two bowls and three jars, placed at the north side of the grave, formed the offerings. One was on a little four-footed wooden support. On the same side were also eight joints of meat from a young sheep. A 4 to 5 year old child and an adult accompanied the dead man, together with two sheep and a dog curled up in a balls under the western end of the bed. Attached to the horns of one of the sheep were bead ornaments in the form of triangles and lozenges. Once again there was a bone from a large bird.

The modern town

An investigation at the south of the Napatan building which was studied from 1982-1984, revealed part of the southern annexes of the earliest phase of the building. Eighty meters away the badly preserved remains of a second contemporary building gave new information about the first millennium BC town. These remains formed the northeast corner of a structure with substantial walls that had been repaired at least twice. The abundant material from a stratigraphic trench seemed quite similar to that found during the excavation of the Napatan building.

A little to the south of this site, a rapid inspection was made of a large Christian cemetery in an area around a recently constructed mosque. The few tombs uncovered had superstructures of mud brick forming a small vault with a well on the eastern side and a low wall closing off the burial vault. The ceramic material was too eroded to allow the dating of the cemetery, but the tombs seemed to be of medieval type.

Restoration work

Important work was undertaken to protect the site of 'kom des bodegas' where damage is occurred yearly. Columns of fired brick should strengthen the enclosure.

EXCAVATIONS AT KADERO

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The tenth season of excavations at Kadero (Khartoum Province) took place in January 1987. Our aim was to continue testing the Neolithic settlement and its cemetery. In particular, we hoped to use wet flotation to obtain macrobotanical samples from the settlement middens as well as to investigate the burial ground situated in the centre of the mound.

In the southern settlement midden we excavated a series of 15 $1m^2$ test pits arranged in three rows, covering a total of $375m^2$. These contained typical Neolithic settlement debris, including chipped lithic artifacts, fragments of grindstones, potsherds and animal remains. Sterile substrate was reached at a depth of 0.4m. The soil from these tests was first screened through 3mm mesh to separate the artifacts, and the residue then floated. We hope the study and identifaction of the botanical remains recovered will shed light on the ecology and subsistence economy of the Kadero Neolithic population.

The northern midden was tested with a pit 2m x 5m, excavated to sterile substrate at a depth of 0.5m. Various metrical data were collected on the artifacts from this pit, and we hope that they will shed more light on the lithic raw material economy and technology, as well as on processes of pottery fragmentation at the site.

The Neolithic burial ground situated in the centre of the mound was further tested by a series of trenches covering a total area of $712m^2$, dug to a maximum depth of 0.8m. Nineteen Neolithic inhumations were found within the excavated area, and three others were recovered from the heavily eroded surface of the mound in this area. All were found in contracted position, lying either on the left side or the right side, and almost always with the head towards the west. Most contained no grave goods, but a few were richly furnished. The items from these graves include ground stone mace-heads and palettes; lumps of red and yellow ochre and of green malachite; carnelian beads forming necklaces or bracelets; marine shell beads forming a diadem; broken pots; armlets and bracelets made of elephant ivory; pebbles of raw quartz; barbed bone harpoon or spear heads. The oval pits of these richly furnished graves reached a depth of 0.8m and contained abundant red ochre, perhaps an indication that the contained for the corpse was painted, or in some cases even filled, with this pigment.

One of the burials is thought to have been part of the local Meroitic burial ground found previously. This conclusion is based on the position of the skeleton and the bone preservation. There were no grave goods associated.

The results of this season's work seem to indicate that the two middens may not be Neolithic remains in primary context, but rather were dumping areas for habitation waste, removed some distance from the actual settlement. It also appears that the Neolithic cemetery is quite large, occupying much more of the mound than it was thought to on the basis of previous work. The next season is planned for January and February, 1989.

EXCAVATION OF A COASTAL EARLY IRON AGE SITE IN KISARAWE DISTRICT, TANZANIA

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This report is based on research that took place between June and July 1987, and which was intended to fulfill partial requirements of the MA degree in Anthropology at Brown University.

Kisaware District is located along the coast south of Dar-es-Salaam. Site KI/NY 9, the central focus of the research, is located at Mkiu village, about 80 miles south of Dar-es-Salaam on the Dar-Kilwa road. It is among several other iron age sites identified in the district by the University of Dar-es-Salaam field school, led by Dr. P.R. Schmidt and Mr. N.J. Karoma.

Site KI/NY 9 is located on a small hill called Limbo. The hill slopes down to a grassland plain on north and east, and to marshland on the south and west. The flat hill top is a rich EIA site with a strong industrial component.

Placement of some excavation units was determined by a magnetometer survey and by augering. Five units were excavated, three in an area of high magnetometer readings (to find a smelting furnace), one outside that area (to find out what lay beneath a baked earth mound which the auger test showed to have ash, chunks of charcoal, slag and potsherds), and a fifth in an area with exposed pieces of baked brick (also detected below surface by augering).

Most units contained significant amounts of iron slag. For example, in unit 3 (1 x 2m and dug by 10cm

levels) the deposits between -80 and -150cm produced 20kg of slag, yet no furnace was found.

All units also yielded substantial amounts of potsherds of which there were two distinct types: an EIA ware with affinities to Urewe ware of East and Central Africa, and an undecorated LIA ware we have called Zakwati Plain ware. The latter appears in the top strata of the units, mainly above -80cm. More than 1100 potsherds were collected, including pieces of tuyères, many coated with slag or showing the reducing conditions of the furnace.

Charcoal samples were collected from nearly every level of every unit. Four samples from units 3 and 4 (one meter apart and the deepest of the five units excavated) were analyzed, and the results are given in Table 1. From these dates we see that while smelting activities might have taken place during the first three centuries AD, there is a clue from the earliest date that iron smelting along the coast might have started in the first century AD. This is the earliest date obtained so far for the practice of iron technology on the coast of East Africa.

Table 1
Radiocarbon dates for site KI/NY 9 units 3 and 4.
Corrected dates follow Klein *et al*. (1982).

Lab number	$^{13}C/^{14}C$ Age	Corrected date
Beta 24623	1700 ± 60 BP	265 AD ± 93
Beta 24624	1980 ± 90 BP	120 AD ± 103
Beta 24625	1610 ± 60 BP	406 AD ± 83
Beta 24626	1970 ± 60 BP	27 AD ± 93

These finds are significant. We now have a substantial number of EIA potsherds recorded from a site that is well stratified. Potsherds from this site are being compared to others from sites in East and Central Africa in an attempt to further Soper's (1971) comparative work. We shall also attempt to see how they can be fitted into the categories developed by other researchers for this region (Chittick 1974; Sinclair 1982; Wright 1984), and thus hope to shed light on regional distributions and to examine further the idea of diffusion of iron technology and Bantu migrations.

A second significance is rooted in the problem of trying to establish the relationship between the East African coast and the orient in ancient times. Now, with a date that goes to the first century AD, we have a wider arena within which to discuss more comfortably the anonymous 1st or 2nd century AD "Periplus of Erythrean Sea". We can start to question whether Kisarawe might have been linked to the so-called "emporium" of Rhapta in terms of trade, and whether East African coastal groups traded smelted iron bloom during the medieval period as claimed (Chittick 1977; Shepherd 1982). The amount of slag and broken tuyères found indicated unequivocally that the area must have been a very active industrial zone with either served an active commercial society or an active agricultural society in need of tools or weapons.

A third significance is the study of the type of iron technology itself for comparison with other regions (as, e.g. Schimidt 1978 did for Kagera). While no furnace was found, the fragments of tuyères and slag can be used to construct some tentative hypotheses.

It is obvious that there is need for further research, both at this site and throughout the area, to resolve problems about African iron technology and to answer questions about ancient and medieval trade along the East African coast. While these questions remain unresolved by the present research, it has shown that established views may not be correct.

Acknowledgements

I am grateful to the following for the successful accomplishment of this research: University of Dar-es-Salaam; Antiquities Department of Tanzania; Kisarawe District officials; Foundation for African Prehistory and Archaeology; Ford Foundation; Caltex Corporation; the residents of Mkiu village.

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EASTERN EXPRESSIONS OF THE "MWITU" TRADITION: EARLY IRON AGE INDUSTRY OF THE USAMBARA MOUNTAINS, TANZANIA

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The first field school conducted by the new Archaeology Unit of the University of Dar es Salaam was held in the Usambara Mountains of NE Tanzania during April, May and June, 1986. While one goal was to instruct BA level students in the techniques of archaeological survey and excavation, this program was done within the context of a research program designed to gather evidence for prehistoric and historic sites in the Western Usambara Mountains. This research followed up on a quick reconnaissance of the Usambara Mountains made by Robert Soper (1967a). It also relates to the research of David Collett (1985). In the Teita Hills of SE Kenya he has documented Early Iron Age (EIA) smelting, or the "Mwitu" tradition, similar to that of the Interlacustrine Region.

In this case the research area was a survey block of 5 by 12 km to the SW of the district headquarters of Lushoto, with a natural boundary on the west, the escarpment overlooking the Masaii Steppe. Survey was conducted by parallel transects on the tops and flanks (not exceeding 40% slope) of ridges, along their long axes within the intermontaine zone; movement up and down steeper slopes was prevented by the constantly wet conditions. Sample transects across valleys quickly established the total absence of surface indications of sites on valley floors.

A wide variety of sites, most of them Iron Age, were delimited. Of particular interest was the discovery of EIA sites at altitudes between 4800 and 5400 feet. We relocated one of Soper's sites, Mlaza, and found that it included three distinct settlement loci, one with the remains of burnt mud and wattle houses brought to the surface by recent hoe agriculture.

The intense erosion caused by recent and contemporary land use has caused the removal of most archaeological materials, especially those dating to the EIA. For example, one long ridge (called Nandege - with four site loci) overlooking the Masaii Steppe at the edge of the escarpment showed signs of widespread occupation during the EIA, but soil has been removed along the hill crest, often to the gneiss bedrock. This has created the apparent artificial appearance of discontinuous sites on the landscape today.

The site of greatest interest dates to the EIA and is located at Nkese village (38°18'00"E, 4°50'42"S), situated on a spur at 4000 feet altitude running below and perpendicular to the edge of the escarpment. Here Audax Mabulla, a student in the Archaeology Unit, observed and defined pieces of furnace brick and tuyère protruding from the edge of a house platform at the top of Nkese Hill. This feature was subsequently selected for excavation. In its upper portions it was filled with domestic debris, among which were EIA sherds. Interestingly, the highest frequency of rim sherds comes from heavy-necked jars that are morphologically similar to the classic Urewe globular pot, only 2-3 times larger. The occurrence of such jars, also common in Kagera region (Schmidt 1980), and the low frequency of pottery that is distinctly Kwale ware, suggests that these early Usambara communities may have more in common with the Interlacustrine peoples than the EIA peoples of SE Kenya.

Excavation of the prehistoric smelting furnace showed that it was an EIA furnace pit, similar in morphology and function to the EIA smelting furnaces of western Tanzania, Rwanda and Burundi (Schmidt 1983; Schmidt and Childs 1985; Van Grunderbeek *et al*. 1983; Van Noten 1979). The presence of decorated bricks from the furnace superstructure showed close affinities to the bricks excavated by Van Grunderbeek in Rwanda.

Wood charcoal from the furnace has been dated by radiocarbon (Table 1). A weighted average (Long and Rippeteau 1974) of the three dates, all from the sealed bottom of the furnace, yields an average of 1798 ± 51, or mid 2nd century AD. The Nkese furnace is now the most securely dated EIA structure in the far eastern Bantu zone.

Table 2
Radiocarbon dates for the Nkese furnace.
Corrected dates follow Klein *et al*. (1982).

Lab number	$^{13}C/^{14}C$ Age	Corrected date
Beta 17046	1780 ± 70 BP	220 AD ± 88
Beta 17047	2020 ± 100 BP	80 BC ± 148
SMU 1818	1800 ± 30 BP	185 AD ± 70

If we compare the Nkese dates to those obtained by Soper (1967b: 3) for the Kwale ware type sites (N-291 and N-292) in southeastern Kenya, we see that the Kenya dates are later; once they are calibrated and given a weighted average of 321 AD ± 91, it is clear that they are almost two centuries latger than the Usambara dates. Collett (1985) has excavated smelting sites in the Teita Hills that date to the EIA, but radiocarbon dates are not available for those excavations. The EIA ceramics from the Teita Hills industrial sites are Kwale ware, suggesting that the Western Usambaras have a ceramic tradition distinctive from that of the north. The furnace bricks found associated with the Teita Hill furnaces in Kenya suggest that the Teita industry is indeed part of the Mwitu tradition that we have long known in the interlacustrine area, but the affinities are much less clear, at this point in our knowledge, than the strong similarities between the Usambara and Interlacustrine or Mwitu decorated brick tradition.

The Nkese excavation has pointed out the pressing need to expand our knowledge about the range and variability of EIA technology in Tanzania. Thus far it appears that the Mwitu tradition is confined to zones with high rainfall and the presence of well established montaine, sub-montaine forests, or even mature savanna woodland. However, this hypothesis, first put forward in Collett's use of the term "Mwitu", must now be subjected to rigorous testing through survey in low lying areas where there were adequate resources - both iron ore and, say, open woodland forests - to support iron smelting 1500 to 2500 years ago.

Acknowledgements

The Archaeology Unit of the University of Dar es Salaam extends its thanks to the Antiquities Division and Dr. S.A.C. Waane, Director, for permission to survey and excavate. Thanks also goes to the Foundation for African Prehistory and Archaeology for funding, as well as to the Ford Foundation. We are also grateful for Debbie Wallsmith's assistance in the field, along with the help provided by Audax Mabulla, Charles Saanane and Lucy Rutabanzibwa. This research was conducted under a permit issued by the University of Dar es Salaam, and was made possible through the cooperation of the Lushoto District authorities in the Tanga Region.

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THE INTERLACUSTRINE REGION: A PROGRESS REPORT

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In the last issue of NA (no.29) John Sutton outlined the British Institute's new initiative on the later Iron Age of the interlacustrine region and Uganda in particular. He also briefly reported on his excavations at Ntusi, located in the rolling grasslands near that other important site, Bigo, about a hundred miles west of Kampala. The purpose of the present note is to report upon the Institute's excavations under my direction at the site of Mubende Hill, some 40 miles north of Ntusi. However, before proceeding to the details of this later work, a postscript may be added to the summary of the Ntusi excavations. Several radiocarbon dates on charcoal samples from Ntusi have been processed at the Harwell laboratory. The results are spread between about the 11th and 17th centuries AD. The large mound called 'Ntusi female' seems to belong mostly in the earlier part of this sequence, around the 11th to 13th centuries. Thus, the radiocarbon chronology modifies the supposition, inferred from the range of pottery styles, of a relatively restricted period of occupation. If settlement at Ntusi does indeed span several centuries, then careful and extensive excavations at this site (planned for late 1988) should go far towards establishing the ceramic sequence and

economic history of the western Ugandan grasslands.

Whereas on the basis of size alone the site of Ntusi should figure prominently in any attempt at understanding the later Iron Age of Uganda, Ntusi is scarcely mentioned in the region's oral traditions. As John Sutton remarked, no shrine associated with the cult of a named Cwezi hero exists at Ntusi. However, such a shrine does exist at Mubende Hill, where preliminary archaeological investigations were undertaken some thirty years ago by Marshall and Lanning (Lanning 1966).

The shrine at Mubende is a huge tree (known as the 'witch tree'), dominating a grove on the flat top of Mubende Hill, itself a very prominent landmark roughly halfway between Lake Victoria and the Ruwenzori Mts. Mubende is remembered in oral tradition as the settlement site of the most successful of the Cwezi leaders, Ndahura. The shrine, which is dedicated to Ndahura, was cared for until the early years of this century by a priestess, who was said to have lived with her attendants in the vicinity of the tree. Offerings are still occasionally made at the shrine. Cwezi settlement in western Uganda has been dated by some historians to around the 14th/15th centuries, viz. immediately prior to the establishment of the later kingdoms.

Lanning's excavations had revealed an archaeological site around the 'witch tree', containing prodigious amounts of pottery, including some unusual vessel types, but most of it being generally similar to pottery recovered at Bigo and Ntusi. Our 1987 excavations were aimed at clarifying the dating of the site, recovering well-stratified samples of the artefacts and faunal remains and attempting to delineate features.

As excavations proceeded it became clear that we were dealing with two settlements, one to the south of the 'witch tree' and the other around the tree and to the north of it. The former, judging by the presence of bottle glass and clay smoking pipes, most likely dates to the early 20th century. The northerly settlement is much older; two radiocarbon dates on charcoal samples indicate occupation in the late 13th or 14th century. The pottery from here seems very similar to that of Bigo. As well as rouletted decoration there is much use of paint, not only red but also black and white and possibly bluish. Occasional sherds reminiscent of Early Iron Age Urewe pottery hint at a much earlier occupation, as does a single radiocarbon result of the 2nd century AD. However, the charcoal yielding this date was collected from a pit (see below) whose contents are undoubtedly from the later Iron Age.

Several stone features were uncovered in this northerly settlement. Each comprised a single uneven layer of stones of various sizes. One such feature when completely exposed covered an area of about 3 x 1.5 m. A similar, but more extensive, stone concentration was found by Lanning at the earthworks site of Kibengo, near Lake Albert (Lanning 1960). However, the function of these stone features remains unclear.

Also found at Mubende were numerous pits, ranging in size up to 2 m in diameter and 2 m deep. They usually contained several rubbers and large saddle-shaped querns, as well as occasional broken pots and bones. However, most of the fill of the pits consisted of soil or reddish loam rather than domestic refuse.

Analysis of the finds from Mubende is proceeding. Of particular interest will be the identification of the faunal remains. Meanwhile, it is clear that broad similarities in pottery styles exist between Mubende, Bigo, Ntusi and several sites north of Mubende, some of which possess extensive earthworks. Thus, any understanding of the later Iron Age of western Uganda, particularly this period around the 14th and 15th centuries, for which the name the 'Bigo Culture' was coined in the early 1960s, will be enhanced by investigations at a range of sites. To this end a quick reconnaissance was made in February this year of sites north of Mubende. Excavations are planned at several of these, notably Munsa and Semwema, in mid-1988. This work will be conducted with Andrew Reid, now a graduate student at Cambridge, and colleagues in the Uganda Department of Antiquities, in particular Ephraim Kamuhangire and George Ndaati, whose help and fruitful cooperation throughout the project is gratefully acknowledged. Our work at Mubende was also assisted by the presence of David Kiyaga-Mulindwa from the University of Botswana and by the enthusiasm of student assistants from Makerere University.

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Oliver Davies 1905-1986

Oliver Davies, who died in August 1986, played a significant and individualistic part in the study of African archaeology. He began as a classical scholar, writing an important work, *Roman Mines in Europe*, published in 1935. His first academic appointment was to teach Classics at Queen's University, Belfast where in addition to his regular work he also became actively engaged in local Ulster archaeology. In 1948 he went to South Africa as Professor of Classics at the University of Natal and whilst there developed a life long interest in the archaeology of Africa, particularly the Stone Age.

When the opportunity of an appointment to specialise in African Stone Age studies was made possible by the founding of the Department of Archaeology at what was then the University College of the Gold Coast, later the University of Ghana, Davies seized it and from then on his activities were almost exclusively concerned with the African Stone Age.

His years in Ghana (1952-1966), at a time when there was almost no teaching commitment, were largely spent in travelling the country by Land Rover, finding sites and making collections of artifacts and the results of these wide ranging travels are embodied in three volumes mimeographed field notes which, idiosyncratic as they often are, have remained indispensable to all those working in Ghana.

For some time as Reader, and later as Associate Professor, Davies continued to travel widely and to publish. His two books arising from his West African experience, *The Quaternary of the Coastlands of Guinea* (1964) and *West Africa Before the Europeans* (1967) as well as a collection of excavation reports *Archaeology in Ghana* (1961), remain required reading for all those working on the archaeology of West Africa. Perhaps his most important contribution was the finding and excavating of a sites at Nteresa, in northern Ghana, where he first firmly identified the Neolithic material known as the Kintampo. It was he who first gave the name 'terra cotta cigars' to the rasps (?) which have become the type artifact of the Kintampo. It was characteristic of Davie's brand of humour that he should have given this name to objects which are, in the main, not made of terra cotta nor do they resemble cigars. The name, however, has stuck and its use will remain as a permanent memorial to a brilliant but quirky colleague.

Another important contribution was Davies's very active part in organising the Volta Basin Research Committee, founded to plan and carry out research work in a number of disciplines before the flood that would be caused by the building of the Volta dam. Not only did he organise surveys and arrange for new posts to be created for archaeologists and others, but he also became secretary of the committee and worked hard to ensure that funds were available for a wide range of research activity.

Maggs, in his obituary in the *South African Archaeological Bulletin* (1986), has already drawn attention to some of Davies's unusual customs - his clothes were always worn and old and self washed and seldom ironed. His passion for economy, both personal and professional, led him always to use old pieces of previously used paper for his notes - often the back of letters dealing with his personal finances. He was also determined that there should be economy in use of numbers when registering objects in the department collection. When I once asked him why he gave all objects from one site the same number (and it was not a site number), he explained that it was to economise in the use of numbers.

Rather solitary, Oliver Davies was a character who became well known on the campus at Legon and his devotion to the task of elucidating the African past was known and appreciated by his colleagues. He left Ghana in 1966 to retire to South Africa, but he left an indelible mark on the department at Legon and his contribution to our knowledge of the Stone Age of West Africa will remain a permanent one.

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RECENT FILMS AND PUBLICATIONS ON AFRICAN METALLURGY

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There has been a marked surge of activity in the 1980's in the study of indigenous African metallurgy, but publications are scattered among many different journals and publishers, some of which are unlikely to be scanned by Africanist archaeologists. I hope that the following list will be of use to many readers of NA; it provides references to 3 films and 65 publications in English, French and German, all of which have appeared in the last five years. To save space, I have not provided separate listings for chapters in edited volumes wholly concerned with African metallurgy (i.e. Brincard 1982, Echard 1983, Haaland and Shinnie 1985); nor have I included items appearing in NA. This list does not cover the field of African art history; per-

haps some reader more familiar with that literature than I would care to correct this deficiency. I thank Eugenia Herbert, Terry Childs, Danilo Grébénart, Nicole Echard and Henno Friede for alerting me to some of these references. I have also drawn upon the excellent abstracts on African metallurgy that appear in each issue of the Journal of the Historical Metallurgy Society.

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PUBLICATIONS

CAMBRIDGE MONOGRAPHS IN AFRICAN ARCHAEOLOGY

Several monographs in this series published by British Archaeological Reports have appeared recently. Space and time do not permit full reviews, but we note them here with short summaries of the contents.

Archaeology and Environment in the Libyan Sahara (CMAA 23, BAR International Series 368, 1987), is edited by Barbara Barich and reports on the interdisciplinary project she directed in the Tadrart Acacus between 1978 and 1983. This volume contains seven chapters by Barich (introduction and methodology, site and assemblage descriptions, conclusions), and eight by her colleagues Baistrocchi (pre-Islamic megalithic monuments), Belluomini and Manfra (radiocarbon dates), Caneva (pottery decoration), Close (lithics), Gautier and Vons-Comis (archaeozoology), Marcolongo (palaeoenvironment), Palmieri (chemical analysis of pottery), and Schulz (palynology). It is extremely well produced with excellent illustrations (some in colour), and the data are of considerable importance for an understanding of the prehistory of northern Africa.

Prehistoric Cultures and Environments in the Late Quaternary of Africa (CMAA 26, BAR International Series 405, 1988) is edited by John Bower and David Lubell. It contains the published versions of most of the papers given at a day-long symposium held during the 1984 SAAAM meetings in Portland and several others contributed by scholars unable to attend. Included are: Hassan (Holocene Nile floods and their implications for the origins of Egyptian agriculture); Petit-Maire (Climatic change and man in the Sahara); Williams (The Neolithic landscape of North Africa); Mohammed-Ali and El-Anwar (Neolithic adaptations on the Central Nile); Marks and Sadir (Holocene environments and occupations in the southern Atbai); Bower (Stone age food-producing cultures in East Africa); Robertshaw (Environment and culture in the Late Quaternary of Eastern Africa); Miller (Patterns of environment utilization by late prehistoric cultures in the southern Congo basin); J. Deacon (Scale and timing of technological and environmental changes over the last 20,000 years in the Southern Cape); Mitchell (Human adaptations in South Africa during the Last Glacial maximum); Parkington (The Pleistocene/Holocene transition in the Western Cape); Sampson (Seasons of occupation inferred for sub-recent bushman sites). There are numerous maps, charts, figures and photographs accompanying the text.

L'art rupestre préhistorique des massifs centraux sahariens (CMAA 16, BAR International Series 318, 1986) by Alfred Muzzolini is a revised version of Muzzolini's doctoral dissertation (Université de Provence, 1983) and a comprehensive treatment of his interpretations of the prehistoric rock art of the central Sahara. It is profusely illustrated by drawings and black and white photographs (all of excellent quality).

The Capsian of North Africa (BAR International Series 353, 1987) by Peter J. Sheppard, is a revised version of Sheppard's PhD dissertation (University of Toronto, 1984). Sheppard uses decision theory and analyses of numerous excavated assemblages (some previously unpublished) to construct a model based on distinctions between stylistic, functional and technological characteristics that allows one to better understand the variability present in the Capsian (a far less detailed treatment is given in the article by Lubell, Sheppard and Jackes in *Advances in World Archaeology 3*).

Spheroids and Battered Stones in the African Early and Middle Stone Age (CMAA 17, BAR-S321, 1987) by Pamela Willoughby is, again, a revised version of a PhD dissertation (University of California at Los Angeles, 1985). This is the detailed version of the ideas summarized in Willoughby's paper in *World Archaeology* (Vol. 17, No. 1, 1985). The study analyzes the distribution in space and time of battered pieces and suggests ideas about their function in palaeolithic technology and economy.

The Early Farming Communities of Southern Mozambique

This 1988 monograph by João Morais (ISBN 91-7192-708-5) is the published version of a D.Phil. thesis presented to Oxford in 1987. Morais assesses environmental patterns and present-day human interactions as well as the potential of available ethnohistorical sources. He evaluates and describes a number of sites, relating these data to the accepted framework for archaeological traditions in southern Africa, interprets them in terms of regional physical and cultural parameters, and proposes an outline of early farming community economy and organization. This is presented in a comparative framework incorporating both regional and local processes and developments. No price is given. Enquiries should be directed to the Central Board of Antiquities, POB 5405, S-114 84 Stockholm, Sweden, or to Eduardo Mondlane University, Department of Archaeology and Anthropology, CP 257, Maputo, People's Republic of Mozambique.

Conference in Honour of Professor Thurstan Shaw

(75th Birthday Anniversary)

IBADAN, NIGERIA, NOVEMBER, 19TH — 23RD, 1989.

FIRST CIRCULAR

The Central Theme of this Conference will be "Fifty Years of Archaeology in Africa with emphasis on West Africa Attention will be focussed on the state of the discipline and its prospects with reference to Cultural Resource Management and Societal Development.

Programme of the Conference

(1) Opening Ceremony (Keynote Address: "Thurstan Shaw and African Archaeology")
(2) Plenary session: "Archaeology and the Cultural History of Africa: The State of the Discipline."
(3) Thurstan Shaw, the Pioneers and the Archaeology of Africa, especially West Africa: Hominid Origins and Dispersal, Hunting and Gathering; Farming and Metallurgy; Language & Population History; Ethnoarcheology and Ethnohistory.
(4) Environmental Archaeology in Africa: Geoarchaeology, palaeoclimate, palynology, palaeontology, dating etc.
(5) Society and Ecology in Africa: Ecological Anthropology; Science and Technology; Settlements and Landuse; Cultural Ideology and Practice etc.
(6) Public Archaeology and Cultural Resource Management in Africa: Survey and Salvage Archaeology; Resource Conservation and Development, Tourism (Zoos, parks, wild life resources etc.); Communication of Cultural Information; Museums; Legislation and Training.
(7) Problems, Prospects and Future Directions for African Archaeology with reference to Societal Development

On the basis of the recommendations of conference participants a committee will prepare a programme of cultural action which will be sent to the OAU, various African Governments, ECA, ECOWAS, UNESCO, etc.

Further Information

(1) Accomodation will be available within the University and hostels/hotels near the University campus.
(2) Visits will be arranged to archaeological sites and places of historical and archaeological interest.

Registration fee: US $50 or its eqiuvalent: Cheques are to be made payable to the West African Journal of Archaeology

Participants

Those interested in attending the conference whether or not they intend to give papers, should send the following information as soon as possible to the conference secretariat.

NAME
Profession
Home and Work Address
Telephone Number or Telex
Theme of Interest–Specific Topic and Abstract

More information will be sent in a second circular

In North America, contact Kit W. Wesler, Wickliffe Mounds Research Center, PO Box 155, Wickliffe, KY 42087 (Tel: 502-335-3681).

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AUGUST 1988

SOCIETY OF AFRICANIST ARCHAEOLOGISTS IN AMERICA 1988 MEETINGS, PHOENIX ARIZONA: FINAL PROGRAM

COLLABORATION AND TRAINING: EXPERIENCES AND PROSPECTS

Chair: Garth Sampson

- Running African field schools
  Discussants: Peter Schmidt and Merrick Posnansky

- Archaeology curriculum development at African Universities
  Discussants: Peter Schmidt and Nicolas David

- Promoting public archaeology and CRM programs at African Museums
  Osman Mohamed: Preservation of Africa's cultural heritage: a Somali case
  Discussant: Steven Brandt

- Special problems for African students at North American universities
  Discussant: Merrick Posnansky

- Human origins research and training program at the University of Wisconsin, Milwaukee
  Jack Harris

PLIO-PLEISTOCENE

Chair: Jack Harris

- Jack Harris and Sileshi Semaw. Further studies of the Gona Pliocene archaeology, Afar depression, Ethiopia

- Jack Harris, Martha Tappen, Randy Bellomo, and Tom Spang. New Pliocene archaeological occurrence in the Western Rift, Eastern Zaire

- Mzalendo Kibunjia. Archaeology of West Turkana, Kenya

- Michael Berman. An analysis of Palaeolithic faunal assemblages from East and South Africa: using minimum numbers of individuals and numbers of identified specimens to investigate the past

STONE AGE PAPERS

Chair: Steven Brandt

- James Ellison. Preliminary report on Late Quaternary settlement behavior in the Buur Heybe region, Southern Somalia

- Robert Benson. Lithic raw material procurement and Late Quaternary Hunter/Gatherer mobility patterns in Southern Somalia

- Steven Brandt and Thomas Gresham. Stone age settlement patterns in the Upper Jubba River valley, southern Somalia

- Hussein Ahmed. An archaeological reconnaisance of protohistoric settlements in Northwestern Somalia

- Steven Brandt. Patterns of mobility and pottery use amongst contemporary horticulturalists and pastoralists of Southern Somalia

- Karim Sadr. The transition to pastoral nomadism in the southern Atbai, East Central Sudan

- Tom Chadderdon. 1983 excavations at HcJe1 (Gol Kopje), a multi-component LSA/PN site in the Seregenti plains of East Africa.

- Fiona Marshall. New evidence for the presence of *Bos indicus* in East Africa by 2,000 years ago.

- Larry Robbins. The Tsidilo depression site, Botswana 1987.

IRON AGE AUDIOVISUALS AND PAPERS

Chair: Peter Schmidt

- Nicolas David. Video entitled "Dokwaza: Last of the African Iron Masters"

- Nicolas David. Social contexts of Marfa ironworking

- David Killick. Video entitled "The Blooms of Banjeli: Technology and Gender in African Ironmaking" by C. Saltman, C. Goucher and E. Herbert

- Peter Schmidt. Film entitled "Tree of Iron"

- Peter Schmidt. Ancient iron technology in Gabon

- David Killick. The technical basis of ironsmelting in central Malawi, 1910-1930

- Terry Childs. Influences and outcomes of resource selection in ceramic manuifacture in the Early Iron Age of Tanzania

- Christopher DeCorse. Recent historical archaeological research in Ghana

- Pierre Maas. The architecture of Djenne, morphological continuity in time

STONE AGE PAPERS

Chair: Alison Brooks

- Gerald Schaber. Radar characteristics of the Radar Rivers (Egypt)

- John McCauley. The Trans-African drainage system (TADS)

- Willam McHugh. Acheulian sites along the Radar Rivers

- Glen Cole. The Sangoan of the Sango Hills

- Sally McBrearty. The nature of the Sangoan to Middle Stone Age transition in western Kenya

- Alison Brooks. The post-Acheulian record in Central Africa

- Mike Mehlman. The evidence for ESA-MSA transitional industries in the Lake Eyasi basin, Tanzania

- Tim Dalbey. A post-Acheulian palaeo-environmental sequence from Haaskraal Pan, South Africa

- Britt Bousman. Palaeoenvironmental studies in the Blydefontein basin, South Africa

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NEWS AND REQUESTS

THE CONFERENCE FUND OF THE PREHISTORIC SOCIETY

The Society awards a limited number of scholarships intended to further the development of prehistory as an international discipline by assisting prehistorians attending international conferences. In making awards from the Conference Fund particular attention is paid to the needs of those prehistorians, particularly from developing countries, who would otherwise have difficulty in acquiring funds to attend international meetings. Application forms and further information are available from the Hon. Secretary, Dr. Frances Healy, Norfolk Archaeological Unit, Union House, Gressenhall, East Dereham, Norfolk NR20 4DR, U.K.

PROCEEDINGS OF THE PREHISTORIC SOCIETY

Professor Thurstan Shaw, President of the Prehistoric Society, has asked us to bring to the attention of readers that, in accordance with its world-wide interests, the Prehistoric Society will welcome articles for its Proceedings on African topics. Those interested should correspond with the Hon. Editor, The Prehistoric Society, Department of Archaeology, University College, Cardiff CF1 1XL, U.K.

ENVIRONMENTAL CHANGE AND HUMAN CULTURE IN THE NILE BASIN AND NORTHEAST AFRICA THROUGH THE 2nd MILLENIUM BC

This international symposium, the third in the series organized by Lech Kryzyzaniak and Michal Kobusiewicz, was held at Dymaczewo (near Poznan) in Poland from 5-10 September. Those wishing further information should contact the organizers directly at the Muzeum Archeologiczne, ul. Wodna 27, 61-781 Poznan, Poland. The cable address is MUZARCH Poznan, the telex is 041-36-00 PL PAN (attn. Dr. Krzyzaniak), and the telephone numbers of the organizers in Poznan are 52.64.30 and 52.81.51.

REVIEW ARTICLE OF EASTERN AFRICAN ARCHAEOLOGY

Paul Sinclair (Institutionen för Arkeologi, Uppsala Universitet, Gustavianum, S-752 20 Uppsala, Sweden) has been asked by the editors of the *Journal of African History* to prepare the next review article on Eastern African Archaeology for publication early next year.

The geographical coverage will be virtually the same as Robertshaw's article in Vol. 25 (1984) with the addition of Zimbabwe, Mozambique, Comores and Madagascar. As with previous articles, there will be an appendix listing dates not previously quoted in the Journal.

Sinclair will appreciate receiving data and, if possible, offprints of relevant articles. All references to research and radiocarbon dates within the text will give acknowledgement to the researchers responsible.

The specific information requested for radiocarbon and other dates is as follows (those wishing a form to complete should request one from Sinclair):

Submitted by (captials);
Name/No. of site and Lat/Long;
District/Province and Country;
Dates (bp using Libby halflife) and Lab. Nos.;
Material dated;
Whether or not ^{13}C corrected;
Significance of date(s);
Published or to be published (with full reference);
Any other information.

ERRATUM

Iwo Eleru Report

Thurstan Shaw has asked us to include the following note.

Volume 14 of the *West African Journal of Archaeology* is No. 1 in that journal's Monograph Series, and consists of the final report of the excavations at the rock shelter of Iwo Eleru in southwestern Nigeria. Unfortunately the scales provided for the drawings of the stone artifacts, and for one page of pottery drawings, were omitted. Without these scales the drawings do not communicate their meaning correctly; accordingly the scales are given herewith:

Figs. 28-31, 35, 37-38a, 39-41 and 43 are on a scale of 13/15 natural size; Figs. 14-27, 32-34, 36, 42, 44-48 and 63 are on a scale of 5/9 natural size.

A.M. Khabir asks that the following corrections be made to his article in NA 29: 59-60.

1. The title should have read "Molluscan remains from Sarurab 2 Site";

2. The first three lines on p. 59, col. 2 should have read "The report is on the molluscan remains from Sarurab-II site of Early Khartoum Tradition. Sarurab-II is a part of a larger Neolithic settlement referred to as Sarurab site";

3. P. 59, col. 2, line 9 should read $2800m^2$ rather than $280m^2$;

4. P. 59, col. 2, line 14 should read April 1978 rather than April 1987.

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