

**INTERIM REPORT OF THE OVENG
ARCHAEOLOGICAL SITE 1991
EXCAVATIONS, ESTUAIRE PROVINCE,
GABON.**

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Résumé:

Les recherches à Ovang ont débuté en 1982. A partir de 1985 des fouilles sont organisées. Les premières datations permirent de situer aux premiers siècles de notre ère l'occupation de la colline. Les premières analyses de la faune, des mollusques, des céramiques, des noix, des phytolithes, des restes de travail des métaux ont immédiatement suivis ces fouilles. Les conclusions d'alors étaient que l'on était face à une seule phase d'occupation située à l'Age du Fer Ancien.

En 1991 grâce à une subvention de la Society of Antiquaries of London une grande campagne a pu être réalisée. Elle a permis l'étude de 80 mètres carrés. Les résultats préliminaires, qui seront confortés par des travaux de laboratoire en 1992 et 1993, ont en grande partie rempli les objectifs assignés.

La couche Age du Fer Ancien a permis de distinguer quatre zones d'activités: zone de rejet domestique, zones de rejet des restes de cuisine (coquilles et ossements), zone industrielle (fonte du fer), zone probablement d'habitat. Le matériel récolté est identique aux fouilles antérieures. Une première analyse de W. Van Neer a identifié deux nouvelles espèces: la tortue et le lamantin. Une autre nouveauté de ces recherches est la découverte de deux autres phases d'occupation de cette colline: un niveau Age Récent de la Pierre stratifié sous l'Age du Fer Ancien avec un débitage sur silex et quartz, un niveau Age du Fer Récent stratifié au-dessus de l'Age du Fer Ancien et semble-t-il uniquement dans la zone domestique.

Une dernière campagne d'une semaine est prévue en 1992 pour l'étude complète de la zone industrielle (fonte du fer).

1. Introduction.

Work was started at the Ovang site in May 1991. Due to administrative constraints it was stopped after a week. Work was resumed and completed in October to meet the funding Society's deadline of October 31. Considering May and October, 17 days were devoted to fieldwork.

As it will be apparent, this excavation was a success. A far more detailed and illustrated report will be completed and published elsewhere.

2. The geographical and environmental setting.

Ovang is 12 kilometres north-east of Libreville in the Estuaire Province of Gabon (00°28'43"N.; 09°31'00"E.) (fig.1). It consists of a 35 metres high hilltop. Mangroves, c.1 kilometre distant, extend in an arc from the north-west to the south-east of the site, forming large expanses through which rivers flow - like the neighbouring Bombié river - emptying into the Mondah bight. To the west, south-west and south of the site, ferrallitic soils are covered by equatorial forest nearly 100% secondary. On the low lying soils between hills, marsh forest can be found.

The hill is cut on its western edge by a road built c.1977 by Elf-Gabon. It led the way to an oil test platform which was laid a few hundred metres further north, right on the edge of the mangrove.

It is in the cut of the road artefacts were discovered. From the summit, the north side of the hill drops quite fast to the last village in the area, Ovang or Ovang. On its southern side, the slope angle is small for 40 metres before dropping more sharply to the Bombié river (fig.2). The site plan of the southern slope shows most midden layers are associated to the south west slope cut by the Elf road. Still a c.25x45 metres approximately flat surface was available for the Iron Age village on the south slope.

3. A history of previous research.

The site was maybe discovered by an Elf-Gabon man in the seventies during the road work. In 1982 B. Peyrot and R. Oslisly (re)discovered the site. They limited their survey to the road cut, speaking then of a c.40 to 60 square metres shell midden (Peyrot and Oslisly, 1983) The archaeologists and historians

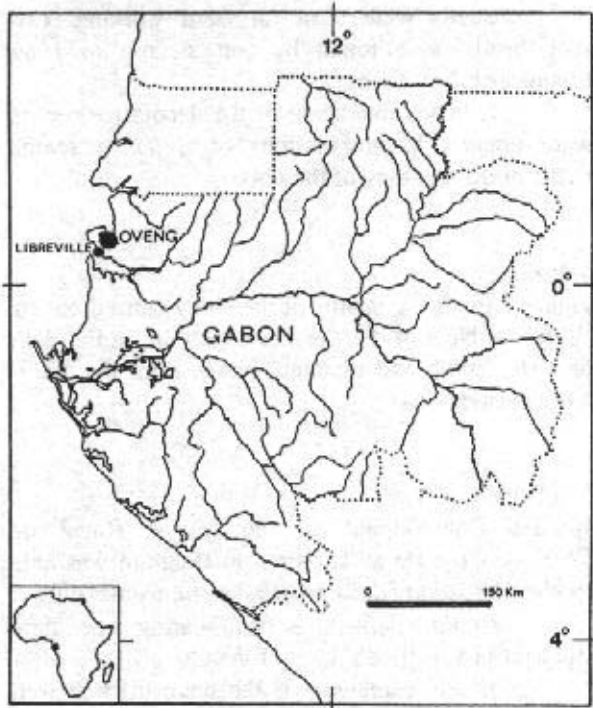


Figure 1: Location of Oveng.

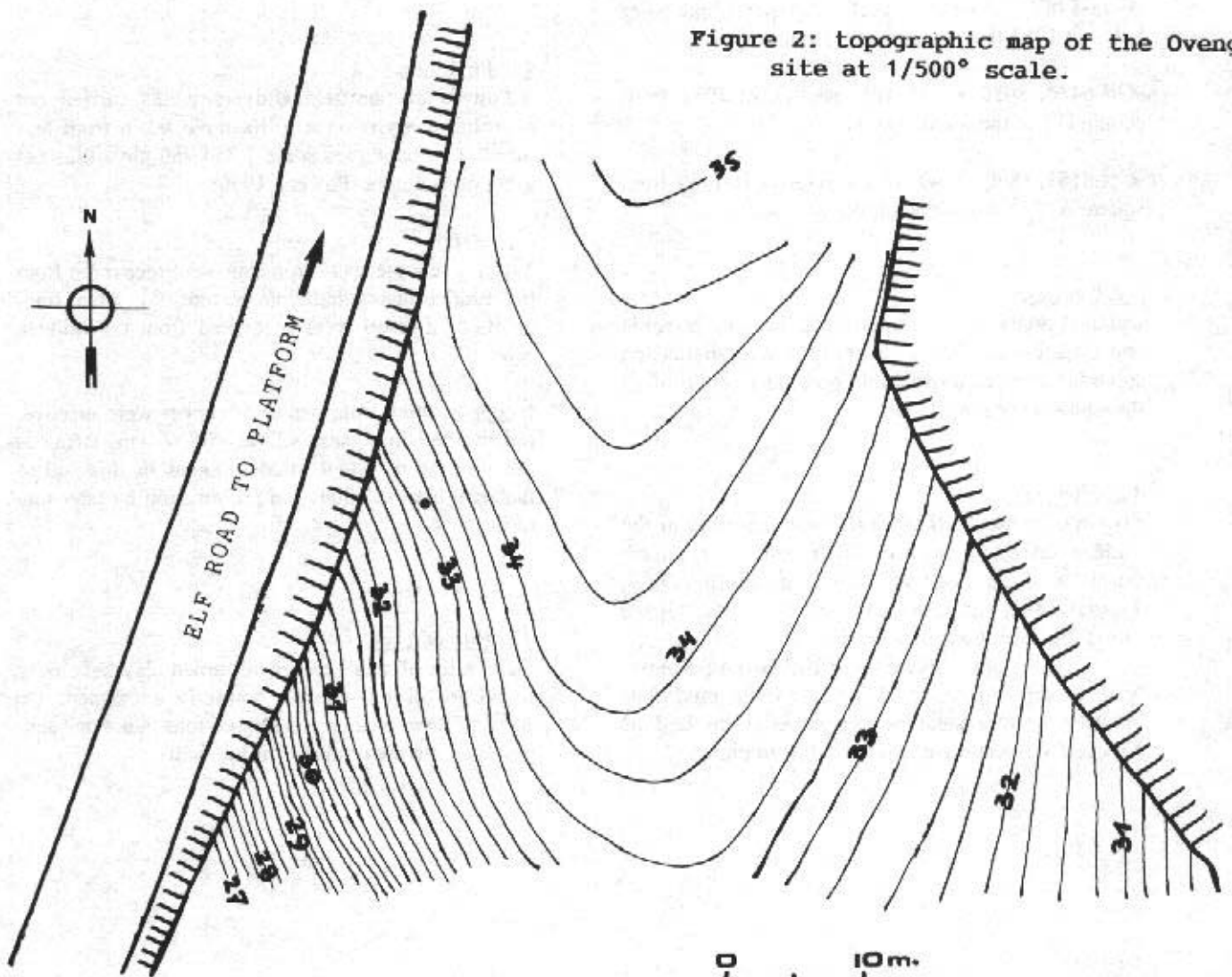


Figure 2: topographic map of the Oveng site at 1/500° scale.

interested and present at an international meeting in Libreville in April 1985 visited the site (i.e. D.Birmingham, P.de Maret, M.-P.Jézégou, R.Lanfranchi, D. Phillipson). In 1985 the first trial excavations were carried out by B.Clist, the site was dated by radiocarbon on secure grounds.

From 1985 to 1989 19 square metres were excavated; apart from 4 square metres excavated in 1989 (Clist, 1989), all the other squares were studied along the road cut.

4. Previous excavations results.

4.1. Radiocarbon dates.

Five radiocarbon dates have been processed on shell and charcoal samples:

-Arc-343, 1900 +/- 50 BP. (*A. senilis*), in 1989 from square A22 in the midden layer.

-Beta-14832, 1970 +/- 70 BP. (*A. senilis*), in 1985 from square A'1, feature n°1.

-Beta-14833, 1740 +/- 70 BP. (charcoal and palm nuts), in 1985 from square A'1, feature n°1.

-Gif-6424, 1650 +/- 70 BP. (shells), in 1984 from square D'1 in the midden layer.

-Gif-8151, 1860 +/- 40 BP. (*A. senilis*), in 1989 from square A22 in the midden layer.

4.2. Ceramics.

Detailed analysis of ceramics will be now possible and available in 1992. It can only be said sherds and some intact or reconstructible pots were found in all the squares excavated.

4.3. Shellfish.

Five species of shellfish have been identified in the midden layers of the site. Their respective importance was as follows: *Anadara senilis* 78%, *Tympanotomus fuscatus* and *T. radula* 13.5%, *Ostrea tulipa* 5%, *Semifusus morio* 3.5%.

A. senilis, *T. fuscatus*, *T. radula* and *S. morio* were found and collected either on the mud flats between the forest and the mangroves or on the flats between the mangrove and the Mondah bight.

Shells were used for bead working: two such beads were found by wet sieving in 1989 (diameter c.2 to 3 mm.!).

It is possible some of the decorative motifs were created by impressions of *Anadara senilis* shells in the wet clay of the pots.

4.4. Bones.

Figure 3 gives the results of the study carried out by Wim Van Neer of the Tervuren Museum in Belgium on fish, reptile and mammal bones from the 1985-1989 excavations.

4.5. Nuts.

Hugues Doutrelepon of the Musée Royal de l'Afrique Centrale at Tervuren in Belgium was able to identify *Coula edulis* and *Elaeis guineensis* nuts.

Coula edulis is a fruit-bearing tree quite frequent in so-called primary forest.

Elaeis guineensis is the palm oil tree well known around villages of central Africa.

4.6. Phytoliths.

A. Powers of Sheffield University has carried out phytolith analysis on a soil sample taken from feature n°1. It contained some 2,354,750 phytoliths per gram of sediment (Powers, 1990).

4.7. Metal.

* iron: a few pieces of iron slag were recovered from the midden layers and from feature n°1. Also, fragments of a towel were recovered from the midden layer.

* copper: three little pieces of copper were discovered in 1989 in square A22 at -50/-60 cm. Being at the base of the shell midden found in this square makes it hard to believe in an intrusion by later material.

4.8. Burned clay.

Quite a lot of small pieces of burned clay have been found in all the squares formerly excavated. On some of them clear wood impressions make one suggest they are the remnants of hut walls.

Carrés	A'1	A2	A'3	A22	B21	TOTAL
POISSONS						
Carcharhinidae						
<i>Carcharhinus cf. leucas</i>		1	-	1	-	2
Dasyatidae						
<i>Dasyatis</i> sp.	-	-	-	9	3	12
Elopidae						
<i>Elops</i> sp.	-	-	-	1	-	1
Clupeidae						
<i>Ethmalosa fimbriata</i>	-	-	-	14	-	14
Ariidae						
<i>Arius</i> sp.	4	1	-	126	11	142
Carangidae						
<i>Caranx cf. hippos.</i>	-	-	-	1	-	1
<i>cf. Trachinotus.</i>	-	-	-	1	-	1
Carangidae indét.	-	-	-	5	-	5
Haemulidae						
<i>Pomadasys</i> sp.	-	-	-	1	-	1
Sciaenidae						
<i>Pseudotolithus elongatus</i>			-	7	1	8
Sciaenidae indét.	2	1	-	22	2	27
Cichlidae						
Tilapiini	1	-	-	-	-	1
Monodactylidae						
<i>Psettias sebae</i>	3	-	1	14	-	18
Mugilidae						
<i>Mugil</i> sp.	6	5	-	34	2	47
Sphyraenidae						
<i>Sphyraena</i> sp.	-	-	-	1	-	1
Polynemidae						
<i>Galeoides decadaetylus</i>	-	-	-	1	-	1
Periophthalmidae						
<i>Periophthalmus papilio</i>	1	2	-	1	-	4
Tetraodontidae						
<i>Ephippion guttifer</i>	-	-	-	1	-	1
Poissons identifiés. TOTAL	17	10	1	240	19	287
Poissons non identifiés. TOTAL	202	122	15	2320	200	2859
REPTILES						
<i>Python</i> sp.	-	-	-	2	-	2
MAMMIFÈRES						
Rodentia						
Petits rongeurs non identifiés	1	-	-	4	-	5
Mammifères non identifiés	1	1	-	39	36	77

**Figure 3: fauna from the Oveng site, 1985-1989
excavations (in number of fragments).**

4.9. Single component.

The 1985-1989 excavations showed there was only one Early Iron Age occupation of the hill dated by radiocarbon (see above). No other trace of human presence was uncovered at the time.

5. Objectives of the 1991 excavations.

- a) To enlarge the ceramic sample for definitive typological analysis.
- b) To enlarge the bone sample especially for mammals.
- c) To study spatial distribution of artefacts, refuse zones and of pits to get a general idea of the village organisation.
- d) To enlarge the collection of iron-producing artefacts.
- e) To try to get further evidence of copper working.

6. Excavation strategy and excavation techniques of the 1991 work.

The south slope of the Oveng hill top extending up to the sharp descent to the Bombié river was estimated to cover between the road and the east slope some 1,600 square metres.

A 5% sample was calculated giving me 20 2x2 metres trenches. Figure 4 shows the position of the trenches which were all random sampled and subsequently excavated except for two. These two, numbers 293 and 299, proved to be impossible to excavate: trench 293 because it was occupied at 80% by a c.1 metre diameter tree with its accompanying root system and trench 299 because of a large felled tree occupying 100% of the square.

Thus two other squares were selected, trenches 19 and 20.

All the trenches were excavated in the following manner:

A 20 centimetre spit was studied putting all the artefacts in a common bag; this spit broadly corresponds with the humic layer. Then each of the 4 squares inside the trench were excavated separately either in 10 or in 20 centimetres spits depending on the presence/absence of features in the trench. The trenches were studied down to 20 centimetres minimum inside the local clay under the Early Iron Age midden. Due to the presence of features, some of the trenches went down deeper: e.g. trench 1 and 6 to -2.50/-3.00 metres.

Workers employed were the villagers of Oveng and Bombié. Usually after the first three days labor, the villagers are good excavators. All the workers were paid 2,500 CFA francs a day which is the average pay in Gabon for similar work. Only one worker, who served as foreman, was paid 3,000 CFA francs a day. Being the grand son of the Sekyani village chief eased a lot contact with the villages around.

A 6 hours working day was followed.

Except for two days with heavy rainfall (October 14 and 17), usually excavations were carried out from Monday to Saturday inclusive.

Excavations were carried out between May 14 and May 18 (i.e. 5 days) and again between October 12 and October 26 (i.e. 12 days).

The 1989 excavations had shown the importance of wet sieving. This year all sediments from shell bearing layers were wet-sieved on 1.5 millimetres mesh down at the river 500 metres away. All the other sediments were dry-sieved on the spot.

7. Provisional excavations results.

(all the results are preliminary)

7.1. The trenches.

The 1991 excavations at Oveng studied 80 square metres of deposits. They were spatially distributed among twenty 2x2 metres trenches.

a) Stratigraphies.

Two clusters of trenches can be isolated due to their stratigraphy (see also spatial analysis below pt.7.2.):

- trenches n° 1, 2, 5 and 6 with oblique layers closely corresponding to the modern topography.
- all the other trenches with more or less horizontal layers closely corresponding to the modern topography.

The Early Iron Age layer is usually buried at -40/-60 cm. depth.

Large features (=pits of c.2 metres diameter and 2.5 metres in depth) were for the first time found in trenches n° 1 and 6, while smaller features were found in trenches n° 3, 5, 10, 14 and 15. The latter trench is associated to an iron producing zone (see below pt.7.2.).

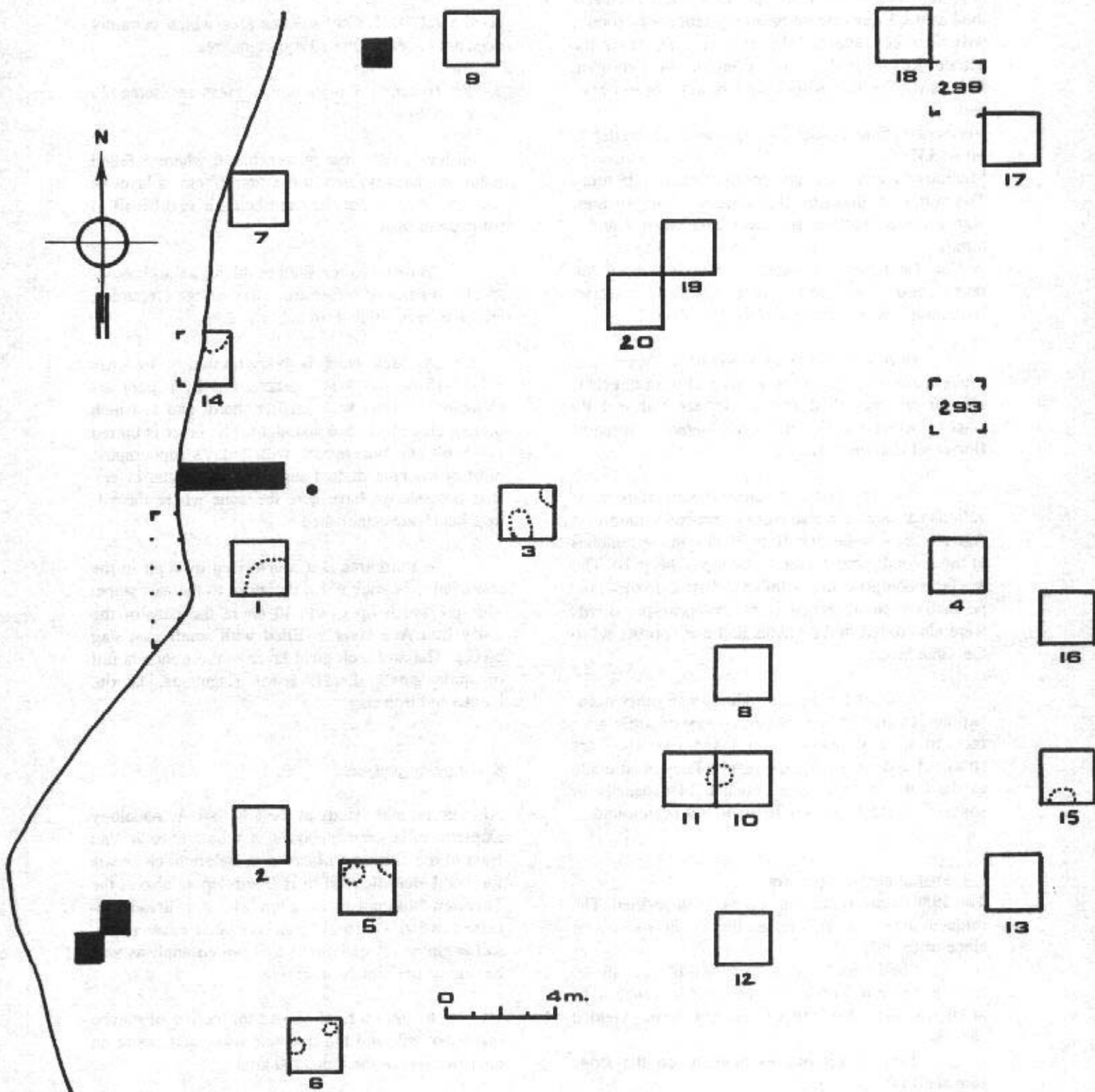


Figure 4: Location map of excavated trenches.
In black, 1985-1989 excavations. Squares n°293
and 299 unexcavated.

b) Artefacts.

The artefacts recovered do not differ in types from earlier excavations.

A one square metre shell lens from trench n°1, from the -40 / -50 cm. spit has already been studied at the Libreville archaeology laboratory (bones will then be identified by W. Van Neer from the Musée Royal de l'Afrique Centrale in Tervuren, Belgium). The following numbers have been obtained:

Vertebrae: 75, fishspine: 152, Various: 107, teeth: 3, total: 337.

Maximum length of bones does not exceed 25 mm.. The vertebrae's diameter lie between 2 and 10 mm. with a mean diameter somewhere between 2 and 5 mm.!

W. Van Neer has been able to rapidly survey the fauna and find some new species: tortoise, "lamantin" (W. Van Neer, *in litteris*, 1991).

During wet-sieving a pod of a *Cyperaceae Rhynchospora* sp. grass was recovered from trench 1, -40/-50 cm. (identified at the Herbarium National du Gabon, Libreville by Dr. G. McPherson, Missouri Botanical Garden, United States).

An important addition to the previous excavations has been the discovery of probably Late Iron Age artefacts in the first 10 or 20 cm. in the trenches of the second group (layer A and top of layer B). The artefacts comprise iron artefacts, sherds, *Ostrea tulipa* shells in small groups. Some European pot sherds were also found in the humus and can correspond to the same layer.

A second important addition to other excavations results has been the discovery of lithic artefacts in some trenches (e.g. n°4 and 14). They are stratified under the Iron Age levels. They must relate to the Late Stone Age. In trench n°14 a density of some 50 artefacts per square metre has been found.

7.2. Spatial analysis (see fig.4).

The 1989 excavations results have been verified. The midden layer with shell refuse lies on the south-west slope of the hill.

Shell lenses appear in trench n°1 at -40/-60 cm., in trench n°5 at -20/-80 cm. and in trench n°14 at 0/-20 cm. No other trenches have yielded shellfish.

This permit one to pinpoint on the slope four shellfish refuse areas:

1.- from trench 14 to trench n°1 encompassing the intermediate 1985-1989 excavations. This area measures some 25 square metres. Note: this refuse area has been cut in two by the Elf road.

2.- the A22/B21 1989 squares area which certainly does not exceed some 20 square metres.

3.- the trench n°5 area which measures some 20 square metres.

4.- an area south-west of trench n°6 where a felled palm tree has revealed in the first 20 cm. a layer of *Anadara senilis*. For the time being it is difficult to estimate its size.

In between the shell middens, an archaeological layer full of refuse from the village (ceramics, etc.) has been studied (trenches 7, 2, 6).

An area which is today limited by trenches n°3-12-15-18 and 9 is characterized by a poor archaeological layer with smaller sherds and in which burned clay pieces are abundant. The layer is buried c. -40/-60 cm. and agrees with today's topography: most of the cuts studied show sub-horizontal layers. It is possible we have here the zone where the village huts were established.

A third area is characterized by a pit in the south half of trench n°15, i.e. close to the east slope. This pit which opens at -40 cm. at the base of the Early Iron Age layer is filled with small iron slag pieces. The archaeological layer in the trench is full of quite small sherds, towel fragments, laterite blocks and iron slag.

8. Ongoing analysis.

After preliminary study at the CICIBA Archaeology Department laboratory, bones have been sent to W. Van Neer of the Tervuren Museum in Belgium, charcoals for wood identification to H. Doutrelepon also at the Tervuren Museum in Belgium who has already received wood charcoal from previous excavations, soil samples for carbon 13 and pollen analysis will be sent to Archéolabs in France.

In 1992 a final excavation period of maybe one week will end the features' study and check on the extension of the industrial area.

Aknowledgments.

Thanks must be extended to the Society of Antiquaries of London which has for the first time funded a research project in central Africa. The grant was made available with the help of D.Phillipson, P.de Maret and J.Vansina.

The villagers of Oveng and Bombié though unblessed by our archaeological spirit, worked well and especially after the Sekyani ancestors' acceptance ceremony.

I must warmly thank W.Van Neer for his ongoing assistance with faunal analysis, H.Doutrelepoint and A.Powers for their help in nut and phytolith identification respectively.

Thanks also to G.McPherson who while in and out from the field took some of his time during his Gabon mission to identify plant remains.

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