

■ BENIN

Archaeological reconnaissance in Northwestern Benin: the 1997/1998 and 1999 seasons

Lucas P. Petit
Johann Wolfgang Goethe-Universität,
Frankfurt am Main
Archäologie und Archäobotanik Afrikas
Robert Mayerstr. 1
60325 Frankfurt am Main, Germany

Introduction

In 1997 and 1998, the author and Dr. K.P. Wendt, both from the Johann Wolfgang Goethe Universität, Frankfurt am Main, as well as O. Bagodo of the Université National du Bénin, conducted a preliminary archaeological survey in the northwestern part of Benin. This was part of the *Kulturentwicklung und Sprachgeschichte im Naturraum Westafrikanische Savanne (SFB 268) Project*. Since Benin has hardly been explored by archaeologists, the aim of this research was first, to document historic and prehistoric sites and second, to excavate them stratigraphically. This was done in 1998 and 1999.

Survey

We concentrated on the Gourma Plains, because the surface was free from natural vegetation and was accessible by car. Due to excessive farming, surface finds were visible to collectors and show a rich occupation history. During two seasons, our team has discovered about 65 sites (Figure 1). The oldest was probably occupied in the Middle Stone Age. Our major discoveries were some open air sites dating to the Later Stone Age, and several Iron Age settlement mounds. These have become the pillars of an archaeological bridge between Togo, Burkina Faso and Nigeria.

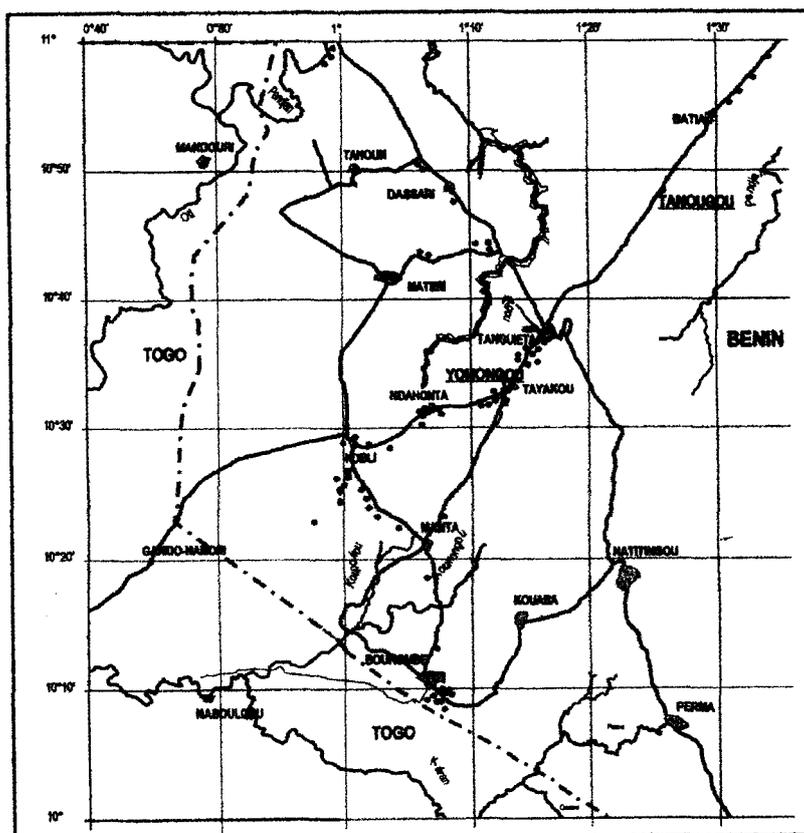
Excavations

Excavations have been carried out to date on two sites: Tanougou, a stone age cave site, and Yohongou, a group of Iron Age settlement mounds.

Tanougou: Middle/Late Stone Age. The oldest stratigraphical remains were discovered inside a cave near the Tanougou waterfalls at the northern slope of the Atakora mountains. In front of this cave, a small lake provides water year round, with excellent possibilities for hunting watering animals. The waterfall, the lake and the luxuriant tropical vegetation provide a relaxing and fertile atmosphere; this was an ideal place to settle and live in prehistoric times. A small trench was made in the slope near the entrance during the 1999 campaign, which gave a good picture of the condition and outlook of the prehistoric remains. The uppermost occupation layers have been disturbed by a huge collapse of the roof, as born out by the loose and unstable character of the sediments and the 1.5 m thick layer of stone debris on top. To date, the excavation has yielded almost 1100 stone tools and flakes made of quartzite (65.5%), flint (31.9%) and quartz (2.6%). Scrapers, flakes, blades, points and core tools could be identified, often made using the Levallois technique. Unfortunately, no absolute dates are available. However, the absence of microliths and the similarities with Middle Stone Age industries from the Mékrou (Marchesseau 1966: 575-594; Vernet 1996:71-89) makes an estimated date of the mixed layers somewhere at the end of the Middle Stone Age or beginning of the Later Stone Age reasonable.

Yohongou: Iron Age around 1000 A.D. Four grouped settlement mounds were discovered during our survey in 1998 in the vicinity of a small village called Yohongou. The modern inhabitants have erected a fetish place on top of the highest mound, coincidentally protecting the archaeological deposits from farming activities. Due to the presence of large settlement mounds (approximately 200 x 300 m), we conducted stratigraphic excavations in 1998 and 1999. Four excavation trenches have been opened during the two seasons of digging: three on the largest hill and one on the smaller southern mound for internal comparison (Figure 2). We were able to distinguish different stratigraphic units. Several phases could be identified, all with their own characteristics and cultural identity (which does not imply different social groups!). Building phases, occupation phases and periods of regression alternate. This sequence could be established in all excavation units.

Figure 1. Northwest Benin.

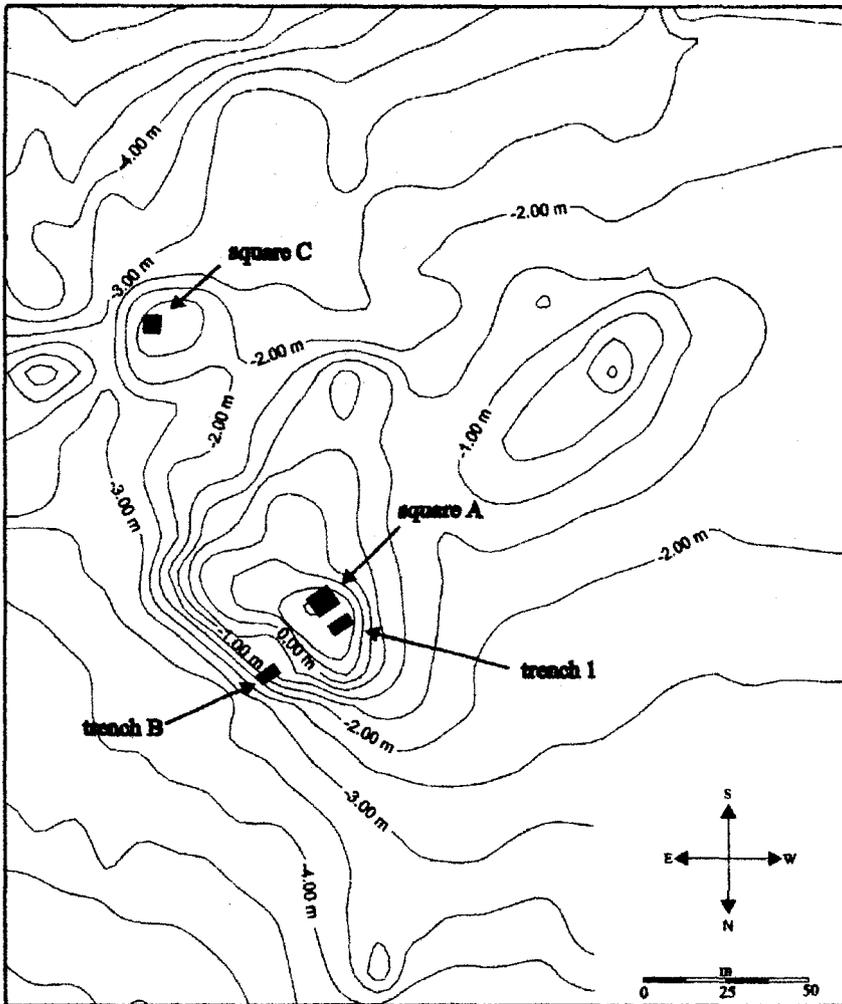


The earliest remains, built on top of hard laterite-rich sediment, make up a thick layer of mudbrick debris. The excavated area is too small to present a detailed picture of this occupation. In the succeeding phases small living units were erected, all made of sun-dried mudbricks. Both round and rectangular structures were discovered. Small intermediate walls might have served as a partition between compounds or properties. During all periods pottery, grinding stones, sharpening stones, ornaments and iron tools were used. The small amount of material from iron production, such as hematite, laterite or slag fragments, makes it unlikely that iron was being processed on the site. However the existence of these materials points to a production unit in the vicinity. The excavated Yohongou settlement shows a domestic character which probably represents a completely self supporting way of life. But this system does not exclude contact with, or influences from neighbouring groups, as the discovery of cowry shells shows.

The pottery is relatively homogeneous in shape [almost 80% of the ceramic sherds belong to the simple open vessel type with a simple unrestricted open rim (e.g. McIntosh 1994:130-213)], but it shows a surprisingly wide range of decoration types and patterns. Several different Twisted String Roulette (TSR), Twisted Strip Roulette (TSP) and comb impressions show the importance of aesthetic value. Two main pottery groups can be distinguished: a formal (well fired under high temperatures, brown or black burnished with in most cases comb decoration or incisions) and an informal type. The latter is built up with coarse clay, medium fired and has been decorated mainly with TSR and TSP. No functional, cultural or social differences can yet be extracted from these technical distinctions.

The archaeobotanical sampling by Alexa Hoehn furnished charcoal as well as charred fruits and seeds. The charcoal assemblage of the later settlement phase points to a woody vegetation, which is rich in species, not very different from the vege-

Figure 2. The Yohongou settlement mounds.



tation of today. An anthropogenic selection shows in the dominance of species with good burning qualities: *Vitellaria paradoxa*, *Anogeissus leiocarpus*, *Terminalia* sp., *Prosopis africana* and probably *Burkea africana* as well. All of these species also deliver excellent charcoal, and possibly represent remnants of a blacksmith's forge in the settlement, since iron-smelting on the site has been ruled out by the archaeological finds. The millets *Sorghum bicolor* and *Pennisetum glaucum* were found among the charred fruits and seeds. Their abundance points to the differentiated cultivation of millet as it is still customary nowadays, with the less demanding pearl millet (*P. glaucum*) being cultivated on poorer soils and as insurance for drier years. No other remains of cultivated plants have

been found so far. However, as in the case in West Africa today, the fruits of certain trees (*Celtis* sp., *Vitellaria paradoxa*, *Adansonia digitata*) must have played an important role in the diet. Seed shells of the baobab (*Adansonia digitata*) are present in almost all layers examined up to now.

Intermediate phases, as well as wash and debris layers, show that the occupation history at Yohongou was not continuous. Phases of abandonment of the site have resulted in heavy erosion on the top. Unfortunately, we are still not able to establish the relationship of the three different smaller mounds to the bigger one. The southern hill was used as a cemetery for children in its latest phase, but when and by whom is still unclear.

Conclusions, discussion and (pre-) historical implications

In the Middle Stone Age and the beginning of the Later Stone Age, hunter-gatherers lived in the mountain area at sites like the Tanougou cave, leaving stone artifacts and other material. The number of objects and occupation layers presupposes a long (continuous?) occupation, with good living conditions and abundant food supplies. During the Later Stone Age people moved to the open plains, in all cases close to permanent water sources (Pendjari and Mékrou). Triangular microliths, scattered over the Gourma Plains may indicate an increase in the number of inhabitants, finally resulting in a more sedentary living pattern during the Iron Age. This transition may also have been influenced by other factors, such as changes in climate or migration activities.

In the Iron Age, Yohongou was a domestic settlement, with living compounds widely spread over the area. Changes in living location may explain the existence of the different hills, with their erosion phases. The archaeological finds in the Gourma Plains point to the existence of non-centralised societies, made up of sedentary farmers. Between approximately 1000 A.D. and the arrival of the recent inhabitants, who do not seem to have any cultural relation with earlier people, the southern hill at Yohongou was used as a cemetery for children. So far the settlement mounds show, except for these burials, no other occupation remains after 1000 A.D. The latest evidence for occupation was found during our survey near Batia and has unfortunately not yet been excavated. Slag hills, tuyère fragments and furnace remains show the importance of iron industry in this region during the historical period. Besides our archaeological work, ethnological and ethnohistorical research will hopefully provide us with answers for questions of origins as well as with information on missing archaeological periods.

Acknowledgements

We are deeply indebted to the people of Yohongou and Tanougou for their hospitality, friendship and co-operation during our fieldwork. Also the GTZ and the Museum in Natitingou deserve more than one line in an acknow-

ledgement. Several archaeologists and archaeobotanists have participated in the last two years including Menno Welling, Antonia Walther, Alexa Hoehn, Peter Wendt, Didier N'Dah, Banni Guene S. Oumarou, Sabi Monra Sèidou, Balo Yaori Yves, Aristide Dakpangou, Didier Marcel Hoeunoude, Horace Akouedenouffe and Charlemagne Segbedji. In one word: thanks! Last but not least, I want to honor our project leader Prof. Dr. Peter Breunig, who supported me from the beginning.

References

Marchesseau, J.

1966 Sur la découverte d'un gisement à l'industrie Paléolithique dans le Nord-Ouest du Dahomey. *Bulletin de l'Institut Français d'Afrique Noire* 28, série B: 575-594.

McIntosh, S.K., editor

1994 *Excavations at Jenné-Jeno, Ham-barketolo, and Kaniana (Inland Niger Delta, Mali), the 1981 season*. Berkeley: University of California Press.

Vernet, R.

1996 *Le Sud-Ouest de Niger. De la pré-histoire au début de l'histoire*. Etudes Nigériennes 56. Niamey, Paris.