Patterns of Spatial Behavior Among the Nchumuru

E. Kofi Agorsah
Portland State University, agorsahe@pdx.edu

# A Newsletter of African Archaeology

**Editorial**

**9th PanafriCan Congress**

**Botswana**
- L. Robbins: Recent research

**Cameroon**
- P. de Maret et al.: Belgian archaeological mission, 1983 season

**Ghana**
- K. Agorsah: Nchumuru spatial behavior
- F. Kense: 1983 report on Daboya
- M. Talbot: Lake Bosumtwi

**Ivory Coast**
- J. Rivailain: Recherches archéologiques

**Kenya**
- J. Barthelme et al.: Lake Baringo archaeological survey

**Nigeria**
- E. Okafor: Metallurgy in ancient Igholand

**Portugal**
- M. Ramos: Center for prehistory and archaeology at Lisbon

**South Africa**
- N. van der Merwe: News from the University of Cape Town

**Sudan**
- L. Costantini et al.: Gash Delta archaeological project, 1982 season
- C. Donadoni: 1982 & 1983 seasons at Jebel Barkal
- D. Geraads: Faunal remains from the Gash Delta
- F. Geus & P. Lenoble: Excavations at Gerief East
- F. Geus & J. Reinold: Excavations at Gerief West
- F. Hinkel: 1982-1983 reconstruction and restoration work
- E. Kleppe: Archaeological research in the Upper White Nile

**Togo**
- P. de Barros: Iron industry of the Bassar
- P. de Barros: A Kintampo rasp fragment from Bassar
- C. Goucher: Technological change in Bassar iron production

**Archaeoichthyology**
- W. Van Neer: Archaeoichthyological research at Leuven University

**Publications**

**Meetings**

**Announcements**

**Errata**

**Obituary**

**ISSN 0713-5815**
Obobogo all the way up to Nkog-Edzen, 60km north of Yaoundé.

Another survey was made along the first 40 kilometers of the Yaoundé-Douala road which is to be opened shortly. Only one site (Okwa, km 19) was discovered.

A four-meter test pit was excavated in Mimboman, one of the eastern-most suburbs of Yaoundé. Charcoal and potsherds of what appears to be later Iron Age were recovered. Finally, we tested a small rock shelter called Mbeg-Woa (literally “the fall of the chimpanzee”) near the village of Obak, northwest of Yaoundé. Charcoal, quartz artifacts and a few potsherds were collected.

PATTERNS OF SPATIAL BEHAVIOR AMONG THE NCHUMURU

Dr. Kofi Agorsah
Department of Archaeology
University of Ghana
PO Box 3, Legon, Accra, Ghana

My Ph.D. research at UCLA consisted of a study of the Nchumuru, a Guang people who, in prehistoric times, inhabited large parts of Ghana and still maintain their traditional social system and subsistence practices. The study used ethnographic data from the settlement of Wiae in the Banda traditional area of the northern Volta region in Ghana (Fig. 1) to predict and explain spatial behavior in Nchumuru archaeological village sites. The predicted patterns were tested by archaeological survey and excavation at early Nchumuru sites.

I had done an ethnographic study of the Banda-Wiae for my M.A. program of the University of Ghana. This was a pilot project, designed to select a village which had not been resettled under the Volta Lake scheme, and in which traditional economic, political and social life had been minimally disturbed by industrial activity. One aim of this project was to study the location and distribution of visible material remains within the village in order to estimate how much would remain in the archaeological record.

This initial survey listed 17 settlements, and I finally chose Wiae as the location for study on the basis of size, accessibility, and because I was reasonably familiar with the local dialect.

Following my first research in 1972, I made two brief trips to the area in 1975 and 1978 to observe changes in the spatial development and physical conditions of modern and Old Wiae. It became clear to me that the area had great potential for ethnoarchaeological study which could be used to discover rules that might explain the dynamics of spatial distribution of cultural remains within the framework of prehistoric Nchumuru social behavior. As well, I realized that the oral tradition in the area contained a great deal of information useful for observing the process of the decay of abandoned settlements. Subsequently, while a member of the West African Trade Project centered at the village of Hani in the Brong-Ahafo region, I further developed my interests in this aspect of the research which eventually developed into the Wiae ethnographic study.

This work raised additional questions. What predictions can be made about the spatial behavior patterns at Nchumuru prehistoric sites, and how can one determine whether or not the predictions and tests are accurate? What generalizations can be made about Nchumuru prehistoric site behavior?
It was predicted that an early Wiae settlement should consist of houses and associated features arranged in groups, or clusters, each separate for an integral part of the settlement carrier space. The clustering is attributed to the kabuno system. Differences in appearance between Old and New Wiae are explained in terms of different, pre-existing, conditions of development. A gradual shift from circular to rectangular house forms was also predicted. For Old Wiae, 57 individual houses were predicted, each housing approximately 6.2 persons.

For each house, I predicted there would be at least two main types of room – an all-purpose and common room traditionally referred to a limbu, and a sleeping room. As regards location and distribution of features related to subsistence activities, I predicted a complete absence of kitchen structures inside Old Wiae houses. Consequently, features such as hearths, grinding stones and mortars were expected to be located in the courtyard, and several of these were expected to be for communal use. In view of the predicted compact nature of the settlement, it was expected that many of the communal features would be located on the periphery of the settlement. No fish-smoking ovens were expected. Finally, I predicted that most household objects would be lined up along the house walls.

Nchumuru settlement history in the Banda-Wiae area is reconstructed into four phases and indicates a gradual shift from circular to rectangular house structures. The balance of evidence suggests that the Nchumuru settled in family groups in small villages of approximately four to five hectares. They lived in circular mud houses, two or three of which often formed a compound. The houses clustered into quarters, each representing a clan (kabuno); an ancestral shrine was located in the center of the house of the clan head. Compared to house forms in modern Wiae (Fig. 2), early Nchumuru houses (Fig. 3) did not have the L- and U-shaped configuration which defines a field of space with an inward and an outward orientation. This indicates that over time the spatial potential of the settlement space was being invoked to make up for what the social resources could not provide.

The Nchumuru social system operates at the individual, clan and phratry (kasuro) levels. Using the local rule (L-R) model of spatial behavior, my research shows that each of these levels of behavior follows spatial patterns that can be explained by an understanding of the opportunities offered by the social relationships (social resources) and the environment (natural resources). It is generalized that the organizational rules of the Nchumuru are not as rigid as those operating in the physical world, but that they exhibit sufficient regularity to be recognized and described, firstly as Guang and then as Nchumuru, and also to explain social and cultural continuities in the archaeology of the Guang as a whole and of similar traditional societies in general.
The 1983 field season marked the fourth year of archaeological work at the town of Daboya (9°31'N, 1°22'W) in northern Ghana. Since preceding investigations had enabled a fairly complete reconstruction of the cultural sequence at the site for a period covering the last 3000 years (Kense NA 15:20-21; 17:38-39; 21:17-18; 22:10-11 1981), it was decided to focus the work this season on two specific issues. One was to examine further the Kintampo component at the site, particularly in terms of clarifying the processes of deposition affecting the Kintampo assemblage recovered last year, collecting larger samples of charcoal for more accurate dating, refining the relationship between the Kintampo material and the later Ware B material (the latter unique to Daboya) found overlying it, and seeking evidence for the subsistence strategies practiced by the Kintampo peoples through flotation of soil samples. Although evidence for the Kintampo culture at Daboya had been recognized since 1978, it was only last year that a concentrated effort was made to excavate in an area where it would be recovered under controlled conditions. The relevant unit in 1982, designated DbR, yielded material that was Kintampo in the lower spits and Ware B in the upper ones. In the later spits of the Kintampo phase, however, several new elements appeared in the decorative styles and techniques of the pottery that suggested some modification of the more “classic” Kintampo. It was partly to verify the authenticity if this tentatively labelled “Kintampoid” material that an additional area was investigated this season.

The study of the Kintampo component at Daboya constitutes, in fact, quite a distinct problem from that of the major interest in the later Iron Age and historical material, specifically that associated with the mid-seventeenth century conquest by the Gbanya. Responsibility for the excavation and analysis of the Kintampo material was assumed this season by Mr. Kodzo Gavua, a graduate student in the Department of Archaeology at Calgary who will incorporate his analysis within his Masters thesis on the Kintampo. The excavated area this year, termed DbV, consisted of three adjacent 2X2m squares located along the northern edge of the trench dug about 10 years ago to install a waterpipe from the...