CHAPTER 12

The Mound of *Tombo*: Introduction to the Site

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The site of Birnin Lafiya consists of a set of large settlement mounds occupying 26 hectares, called *tombo* by the inhabitants of the present village of Birni Lafia. The location is 14km south of Karimama in the *département* of Alibori, Benin.

Geologically, the site is located on Quaternary formations represented by alluvial deposits constituted by quartz sands and clays. From a geomorphological point of view, the site sits on the middle terrace of the valley of the Niger River, as defined by Heide (1977: 19–22), who distinguished three geomorphological levels for the Niger valley.[1] Surveys conducted around the site illustrate this situation well: to the east it is limited by the flood plain, and to the west by an elevation which consists of the upper terrace. In terms of hydrography, the only permanent river close to the site is the Niger River, but there are also temporary streams draining rainwater and temporary pools around the site. Climatically, the region is characterised by a Sudano-Sahelian climate with a wet season (May–October) and a dry season (October–April), the latter being the season during which our team encountered the mound each year. During the dry season, the whole area of Birni Lafia is under the influence of warm winds and dry northeastern Sahara winds, the Harmattan. Annual rainfall varies between 700 and 900mm.

The site stands out for its extent and height. Site limits are clearly visible to the north and south, based on topography and surface artefact distribution. On the east side, the modern road creates an artificial boundary, and geophysical work showed that subsurface materials occurred right up to, and under, the road. However, the fact that the terrain slopes down towards the road indicates the main part of the mound is largely terminated by this point. On the west of the site, its limits are less clear, and indeed the question of whether further mounds, components of the same site, continue westwards, was a question debated in the 2014 field season and explored through two brief test pits (Trenches 19 and 20, not discussed here).[2] The only other car track or local route near the site skirts around its western side. There are no site boundaries in the form of earthworks or ditches, and the only really anomalous features are a number of relatively small and steep mounds, located in the southern area of the site, the nature of which is unexplained (see N'Dah & Mardjoua, this volume for discussion). Overall the topography of the site is fairly undulating, with distinct zones of topographic peaks and troughs, rather than one continuous sloping mound with the highest point in its centre. Significant erosion gulleys are present at several areas of the site, often where the topography of the mound is at its steepest, in particular around Trenches 6 to 8.

As far as vegetation is concerned, a number of plant species were inventoried on the site: *Acacia macrostachya, Adansonia digitata, Anogeissus leocarpus, Balanites aegyptiaca, Calotropis procera, Diospyros mespiliformis, Ficus platyphylla, Ficus thonningii, Lannea microcarpa, Mytragina inermis, Piliostigma reticulatum, Pterocarpus erinaceus, Tamarindus indica, Vitellaria paradoxa, Ziziphus mauritiana* and *Ziziphus spina-christi* (Jourand 2013: 71–85). Baobab trees (*Adansonia digitata*) seem to be mainly confined to western and southern portions of the site. In certain areas, visibility is impeded by tree cover but other than this there is very limited surface grass and a sparse coverage of low-lying shrubs. Although large areas of the site are seasonally cultivated, some are left entirely uncultivated; the decision not to farm some areas was explained by local inhabitants as a result of their being too difficult to cultivate, difficult to plough and less productive. In uncultivated areas, the soil is relatively compact and largely undisturbed, while in cultivated areas furrows line the land surface and the soil is loose.

Distinct features of the site are "raised pits", that is, pit features from which surrounding soil has eroded, leaving the pit fill standing higher than the surrounding matrix.

1 That is, the lower terrace and the floodplain (elevation under 160m), the middle terrace (160–165m) and the upper terrace (165–170m IGN) (see Laïbi et al. this volume, and figures therein).

2 For Trench 19, see C. Magnavita, this volume. Trench 20, basically aimed at investigating the nature of archaeological deposits in an area of Birnin Lafiya not yet examined by excavations, was the westernmost test pit placed at the site and its main purpose was to recover material remains, particularly pottery, that could be used for addressing spatiotemporal issues. Whilst the spot selected for laying down this 1 × 1m cutting had been covered by the geophysical survey accomplished in that sector of the site, the unit did not deliberately target any magnetic anomaly visible at the geophysical map. Instead, it was placed in an area where archaeological deposits seemed to be undisturbed.

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These present as a small mound about 0.5m high, standing above the surrounding site surface. These features are naturally primarily found in areas of erosion, being most clearly identifiable on the eastern area of the site and around the heavy erosion gulley found near Trenches 6, 7 and 8. The excavation of Trench 4 (Haour & Mardjoua this volume) provides a good illustration of the nature of these features. As well as rising above the surrounding surface, these pits have a distinctive soil type and colour: ashy, or with a darker brown or greenish appearance. Other similar features were characterised by a large proportion of burnt earth debris and we were unsure, at first, whether these represented furnaces or infilled pits.

Erosion also exposed areas of other anomalies in soil composition. This was the case in an area at the northeastern end of the site where an extensive area of ashy deposits was observed (eventually excavated as Trench 5). In some areas of the site, localised digging by a lone looter searching for large stone beads (the large, roughly circular discoid shapes with tapering edges referred to by S. Magnavita, this volume, as "Type 1") had revealed ash features below the surface, possibly burials. There seemed to be a particular density of looters' pits south of the S3/10 complex. Elsewhere on the site, rat hunters or individuals excavating medicinal roots had created small-scale pits.

The most obvious features of the surface archaeology, apart from anomalies of topography or soil colour/nature, were potsherd pavements. These were occasionally associated with burnt mud walls, both *in situ* and dismantled. There is a strong correspondence between the presence of pavements and areas of the site which are not cultivated, and it may well be that pavements were once much more widely distributed across the site. Ploughed-up pavement traces would manifest as dense pottery scatters, indistinguishable from any other pottery scatters, and thus go unnoticed.

In addition to indicating the presence of architectural features, surface pavements also allow insights into the nature of the original mound surface, and into erosion processes which occurred after the site's abandonment. Firstly, in terms of the original surface of the site, it is noteworthy that in some areas at the edges of the mound paved surfaces are arranged on a slope rather than horizontally (Nixon, this volume). The pavements also provide important insights into the extent to which the site has eroded, and the degree to which the upper levels of the mound have been lost through erosion. This is illustrated by the fact that in some areas small patches of pavements still subsist around the bases of trees or shrubs, elevated from the surrounding ground surface; clearly these are the last remnants of larger paved surfaces which have disappeared through erosion, surviving because they have been protected by the proximity of the tree or shrub. This in turn suggests the loss, through erosion, of at least the terminal occupation of the site in some areas. Related to this observation is the fact that at present people come from the modern village of Birni Lafia to quarry potsherd pavements for modern building materials, in order to crush them to produce flooring.[3] This occurs, naturally, in areas of the site where exposed pavements occur, namely at the eastern edge of the site. This contributes to, and escalates, the process of erosion, working together with water action. It is unclear how long this process has been happening and how much of the mound has been lost.

Complete or semi-intact pots can also be seen eroding out of the site surface. These can inform us about the presence of *in situ* living surfaces below the surface, or indeed of pits into which vessels may have been thrown. In a few instances, extremely fragmented bone remains were observed, perhaps indicative of urn burials, but in much too poor a state of preservation to be investigated or conclusively identified. Again, these features also illustrate processes of erosion. Other than this, no other distinct archaeological features were noted on the site surface.

Surface material culture, on the other hand, was relatively abundant. This mainly consisted of potsherds, although a range of other artefacts were encountered, including pounders, beads (stone and occasional glass), slag, ceramic figurines and other other ceramic objects, and also occasional lithic scatters.

As detailed elsewhere (C. Magnavita, this volume), the extensive geophysical survey undertaken at Birnin Lafiya was crucial for reliably inferring the actual size, limits and nature of that massive mound. In addition to those aspects, the survey was successful in identifying areas on which intensive and less intensive past human activity and settlement had taken place, as well as in locating discrete evidence of potential living areas. Another important outcome relates to the recognition that specific settlement activities appear to have been performed in low-lying, flood-liable portions of the site. For instance, this is shown by a 10 × 10m archaeological Trench 12, set on the northeastern base of the settlement mound. Drawing upon geophysical evidence that hinted at the presence of subsurface anomalies in the area, a zone of fire-hardened clay associated with two deposited iron

3 We attempted to slow this practice through several meetings with the women gathering the sherds, during which the value of the archaeological heritage was highlighted. We also made available to collectors the potsherds which had been "desampled" in the course of the ceramic analysis.